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38th Year of Publication

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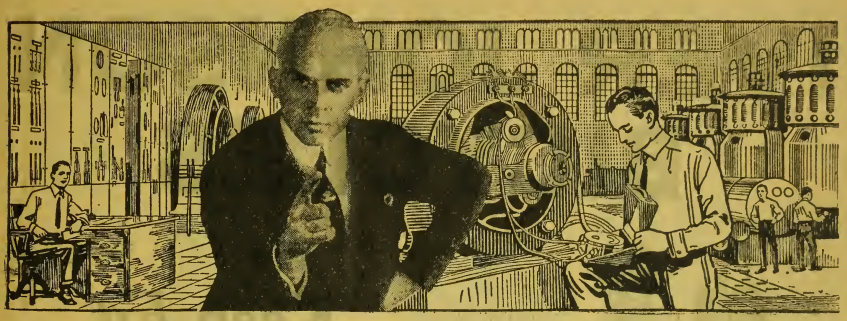


# Electricity Needs You

## I Will Train You At Home

Stop right here. This is YOUR opportunity! Electricity is calling you, and the Electrical Business is in for a tremendous increase. But it needs more trained men—at big pay. By my **Home Study Course** in **Practical** Electricity I can train you for these positions.

## FREE!

### BIG ELECTRICAL OUTFIT

A fine outfit of Electrical Tools, Instruments, Materials, etc., absolutely FREE to every student. I will also send you FREE and fully prepaid—Proof Lessons to show you how easily you can learn Electricity and enter this splendid profession by my new, revised and original system of Training by Mail.

## Radio Course FREE!

Special newly-written wireless course, worth $45.00, given away **free. Full particulars when you mail coupon at right.**

### Earn Money While Learning

Early in my **Home Study Course** I show you how to begin making money in Electricity, and help you get started. No need to wait until the whole course is completed.

### EARN $70 TO $200 A WEEK

You've always had a liking for Electricity and a hankering to do electrical jobs. Now is the time to develop that talent; there's big money in it. Even if you don't know anything at all about electricity you can quickly grasp it by my up-to-date, practical method of teaching. You will find it intensely interesting and highly profitable. I've trained and started hundreds of men in the Electrical Business, men who have made big successes. YOU CAN ALSO

### Be a Big-Paid ELECTRICAL EXPERT

What are you doing to prepare yourself for a real success? At the rate you are going where will you be in ten years from now? Have you the specialized training that will put you on the road to success? Have you ambition enough to **prepare** for success, and get it?

You have the ambition and I will give you the training, so **get busy.** I am offering you **success** and all that goes with it. Will you take it? I'll make you an ELECTRICAL EXPERT. I will train you as you should be trained. I will give you the benefit of my advice and 20 years of engineering experience and help you in every way to the biggest, possible success.

**Valuable Book Free**

My book, "How to Become an Electrical Expert," has started many a man on the way to fortune. I will send a copy, free and prepaid, to every person answering this advertisement.

**ACT NOW!**

Good intentions never get you anywhere. It is action alone that counts. NOW IS THE TIME TO ACT.

**L. L. Cooke, Chief Eng.**
**CHICAGO ENGINEERING WORKS**
**2150 Lawrence Ave.**
**Dept. 6660**
**CHICAGO, U. S. A.**

**CHIEF ENGINEER COOKE**
**Chicago Engineering Works**
**Dept. 6660, 2154 Lawrence Ave.**
**CHICAGO, ILL.**

*Dear Sir:* You may send me, entirely free and fully prepaid, a copy of your book, "How to Become an Electrical Expert," and particulars about your **Home Study Course in Electricity.**

Name .....

Address .....

City..... State.....

# IVER JOHNSON BICYCLES

*Ask your dealer to show you an Iver Johnson Champion single barrel shotgun Accurate, dependable, moderately priced.*

## *Keep Fit*

After a few weeks of bicycle-riding you'll eat better, sleep better, feel better, and work better.

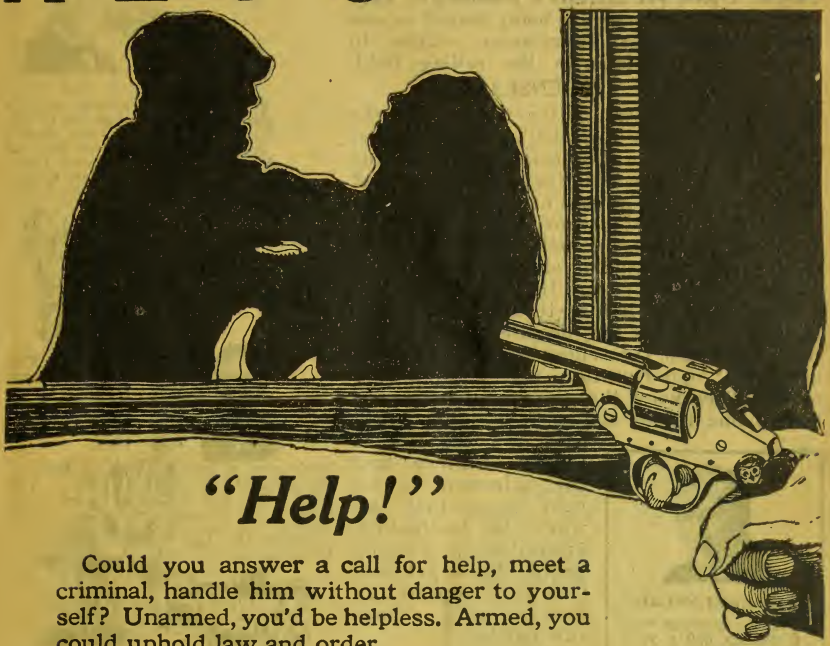
An Iver Johnson Bicycle so combines natural exercise with pleasure as to make the exercise enjoyable rather than tiresome.

The truss-bridge frame, seamless tubing of nickel steel, drop-forged parts, two-piece crank set—these are some of the features that guarantee the strength, speed and durability of every Iver Johnson Bicycle. The oldest firm in America making bicycles continuously.

***Write at once for free bicycle catalog "B 30." Firearms catalog "A 30" also sent on request.***

**IVER JOHNSON'S ARMS & CYCLE WORKS**
**30 River Street, Fitchburg, Mass.**
**New York Office: 99 Chambers Street** **San Francisco Office: 717 Market Street**
**Chicago Office: 108 W. Lake Street**

# IVER JOHNSON
## SAFETY AUTOMATIC
# REVOLVER



## *"Help!"*

Could you answer a call for help, meet a criminal, handle him without danger to yourself? Unarmed, you'd be helpless. Armed, you could uphold law and order.

Keep an Iver Johnson in your home. No fear of accident—knocks, jolts, jars, thumps cannot discharge it. You can even "Hammer the Hammer."

When needed, the Iver Johnson responds with lightning quickness to the *intentional pull* of the trigger.

Hammer and Hammerless models in all calibres. Regular, Perfect Rubber, and Western Walnut grips. If your dealer hasn't the particular model you want, write us.

**FREE!** Two interesting booklets full of information. Send at once for the one that interests you.

"A 30" Firearms
"B 30"—Bicycles

**IVER JOHNSON'S ARMS & CYCLE WORKS**
**30 River Street, Fitchburg, Mass.**
**New York Office: 99 Chambers Street** **San Francisco Office: 717 Market Street**
**Chicago Office: 108 W. Lake Street**

# Millions Can Sell Goods — *but Don't Know It!*

**Through a vicious superstition thousands have been kept poor. They think Salesmanship is a gift, yet there is a remarkably easy method whereby men are being helped in one swift stride from monotonous routine to magnificent earnings in the selling field.**

***By* J. E. GREENSLADE**

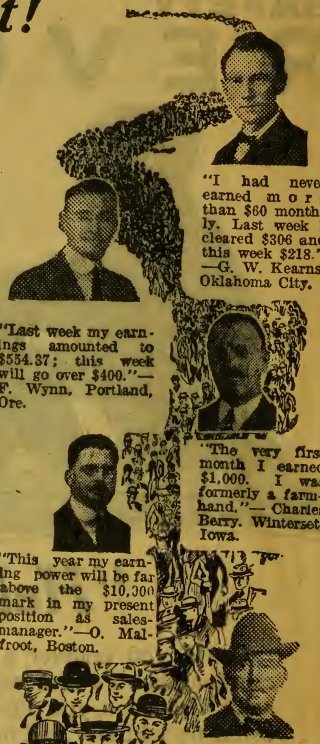
NO man knows better than I do the extent to which the superstition prevails that a salesman is "born" and not made. True enough, they are "born," but they are born babies and not salesmen.

This "born" idea is at once the most ridiculous and the worst of all superstitions. It is the most harmful of all because it **keeps thousands poor.** Because they **think** they are not endowed by nature to sell goods, they stay in a hopeless rut, despite the fact that they know that the selling field offers them unlimited opportunities for making big money. They know that the opportunities are ten to one in the selling field—that salesmen top the list of money makers—that the salesman is his own Boss—that his work is fascinating, interesting, and highly profitable — yet they pass up opportunity because of a vicious superstition.

Millions can sell goods but don't know it. You can—anyone of average intelligence can. And you can become a first class, money-making salesman in an amazingly easy way.

**J. E. GREENSLADE**

TO the average man the $10,000 a year job is only a dream. Yet to-day there are a surprising number of men earning five-figure salaries who were merely dreaming of them a short while ago. The secret of their success should prove a startling revelation to every ambitious man who has ever aspired to get into the $10,000 a year class. Let me show you how you too can step into the ranks of these big money-makers of business. At least, you can not afford not to investigate this great field and see what it offers you. It will only cost you a two-cent stamp, and the facts and proof you will receive will surprise you.



"I had never earned more than $60 monthly. Last week I cleared $306 and this week $218." —G. W. Kearns, Oklahoma City.

"Last week my earnings amounted to $554.37; this week will go over $400."—F. Wynn, Portland, Ore.

"The very first month I earned $1,000. I was formerly a farmhand."—Charles Berry, Winterset, Iowa.

"This year my earning power will be far above the $10,000 mark in my present position as sales-manager."—O. Malfroot, Boston.

"After ten years in the railway mail service, I decided to make a change. My earnings during the past thirty days were more than $1,000." — W. Hartle, Chicago, Ill.

## Proof That Salesmen Are Made—Not "Born"

You might laugh if I told you that in a few weeks or months you could be making good in a big way in the selling field. Thousands before you have laughed —perhaps bitterly—at the idea, but many of these thousands are now making big money as salesmen.

Five men who once thought salesmen were "born," who did not believe they were "cut out for selling," tell you on this page how they quickly shattered the superstition—and what the results were.

Thousands of men like these five—men who had never sold a dime's worth of goods in their lives—men who formerly thought salesmen were "born," are now enjoying magnificent earnings in the selling field. Formerly they were bookkeepers, mechanics, farmers, clerks—even doctors, lawyers, and ministers—but in a few months after writing to the National Salesmen's Training Association they were out in the field selling — and making more money than they had ever hoped to make in their former vocations.

Sounds remarkable, doesn't it? **Yet there is nothing remarkable about it.** Salesmanship is governed by rules and laws. There is a certain way of saying and doing things, a certain way of approaching a prospect to get his undivided attention, certain ways to overcome objections, batter down prejudice, overcome competition, and make the prospect act.

Just as you learned the alphabet, so you can learn Salesmanship. And through the NATIONAL DEMONSTRATION METHOD—an exclusive feature of the N. S. T. A. System of Salesmanship Training—you can gain actual experience while studying in your home or elsewhere.

That NATIONAL DEMONSTRATION METHOD gives you experience and knowledge that will enable you to overcome sales obstacles of all descriptions—easily. It is one of the reasons why N. S. T. A. members make good as salesmen right from the start.

### A Lifetime of Selling Experience in a Few Weeks—Then Success

No matter how bad that vicious old superstition may have you in its grasp, I can prove to you that it is superstition and nothing else. I can prove to you that you can gain years of selling experience in a few weeks—that you can go out and successfully sell goods—that you can make more money than you ever dreamed possible.

The N. S. T. A. System of Salesmanship Training and Employment Service will enable you to quickly step into the ranks of successful salesmen—will give you a big advantage over those who lack this training. It will enable you to jump from small pay to a real man's income.

## Remarkable Book, "Modern Salesmanship," SENT FREE

With my compliments I want to send you a most remarkable book, "Modern Salesmanship." It will not only shatter the vicious superstition about "born" salesmen, but will portray to you the wonderful opportunities in the selling field for you. It will show you how you can easily become a Master Salesman—a big money maker, how the N. S. T. A. System of Salesmanship Training through the NATIONAL DEMONSTRATION METHOD will give you years of selling experience in a few weeks; how our FREE Employment Service will help select and secure a good selling position when you are qualified and ready. And it will give you success stories of men—once victims of that superstition—who are now earning amazing salaries as salesmen. Mail the coupon today for the interesting FREE Book. **It may be the turning point in your life.**

**NATIONAL SALESMEN'S TRAINING ASSOCIATION**

**Dept. 50-B, . . . Chicago, Ill.**

**National Salesmen's Training Association**
**Dept. 50-B, Chicago, Ill., U. S. A.**

Please send me, without any obligation on my part, your free Book, "Modern Salesmanship," and full information about the N. S. T. A. System of Salesmanship Training and Employment Service. Also a list showing lines of business with openings for salesmen.

Name .....

Street .....

City .....

Age..... Occupation.....

# SOME $1000.00 FOR A SINGLE DRAWING

# RECEIVE

Think of it! Leading illustrators and commercial artists are frequently paid $250, $500, $1,000 and more for single illustrations or designs—and their work is eagerly sought.

Everyone may not achieve such remarkable success—but the opportunities before you now in this splendid profession **have never been excelled.** Commercial artists—both men and women—who have developed their ability **through proper training** readily earn **$50, $75, $100, $150** a week and up.

## Millions Paid Yearly for Commercial Art

The demand for high-class commercial art is growing by leaps and bounds. Thousands of advertisers, periodicals and publishers buy millions of dollars' worth of designs and illustrations every year. Good commercial art is vital to modern business—and artists who can produce it **earn extraordinary incomes.**

## Develop a High-Salaried Ability Through Federal Training

**If you like to draw,** learn in your spare time through the Federal home-study method—a proven result-getter by the success of hundreds of Federal students. The course is fascinating, easy to learn and apply, and endorsed by leading illustrating companies, designers and commercial artists as **America's Foremost Course in Commercial Designing.**

## Send Today for "YOUR FUTURE"

a 56-page book beautifully illustrated in colors, showing remarkable work by Federal Students, telling of their successes, and of opportunities in this field that will open your eyes. Why hesitate? If you would succeed, every day, every hour is precious to you. Get this book—send the coupon NOW without obligating yourself in any way.

**Federal School of Commercial Designing**

**1312 Federal Schools Bldg.**
**Minneapolis Minn.**

W. A.
1312

**FREE**
**Book Coupon**

**Federal School of Com'l Des.**

1312 Federal Schools Bldg., Minneapolis.

Gentlemen. Please send me "Your Future."

Name.....
(Write your address in margin.)

# HOME-STUDY COURSES

## THAT LEAD TO BUSINESS CAREERS

***More Than 50,000 Enrolled Annually—Why?***

LaSalle training means specialized business education of University grade.

LaSalle training has directly helped many thousands of ambitious men to worth-while advancement the world over.

LaSalle trained men can be found in responsible positions with every large corporation and business firm in America.

The LaSalle "Problem Method" of home study has proved itself to be the speediest and most practical plan of business training known to educational science. What LaSalle training has done for men in all walks of business life is proof of what it can do for you. Find out about it to-day.

***350,000 Enrolled*** ***Resources $7,500,000***

## *LaSalle Extension University*

***The Largest Business Training Institution in the World***

*INQUIRY COUPON*

**LaSALLE EXTENSION UNIVERSITY Dept. 6316-RA CHICAGO, ILL.**

Please send me catalog and full information regarding the course and service I have marked with an X below. Also a copy of your booklet, "Ten Years' Promotion in One," all without obligation to me.

[ ] **Business Management:** Training for Official, Managerial, Sales and Executive positions.

[ ] **Modern Salesmanship:** Training for Sales and Advertising Executives, Solicitors, Sales Promotion Managers, Salesmen, Manufacturers' Agents and all those engaged in retail, wholesale or specialty selling.

[ ] **Law:** Training for Bar; LL. B. Degree.

[ ] **Commercial Law:** Reading, Reference and Consultation Service for Business Men.

[ ] **Modern Business Correspondence and Practice:** Training for Sales and Collection Correspondents; Sales Promotion Managers; Credit and Office Managers, Correspondence Supervisors; Secretaries, etc.

[ ] **Higher Accountancy:** Training for positions as Auditor, Comptroller, Certified Public Accountant, Cost Accountant, etc.

[ ] **Traffic Management—Foreign and Domestic:** Training for positions as Railroad or Industrial Traffic Manager, etc.

[ ] **Industrial Management Efficiency:** For Executives, Managers, Office and Shop Employees and those desiring practical training in industrial management principles and practice.

[ ] **Modern Foremanship and Production Methods:** Training in the direction and handling of industrial forces—for Executives, Managers, Superintendents, Contractors, Foremen, Sub-Foremen, etc.

[ ] **Railway Accounting and Station Management:** Training for Railway Auditors, Comptrollers, Accountants, Clerks, Station Agents, Members of Railway and Public Utilities Commissions, etc.

[ ] **Personnel and Employment Management:** Training for Employers, Employment Managers, Executives, Industrial Engineers.

[ ] **Banking and Finance.**

[ ] **Expert Bookkeeping.**

[ ] **Business English.**

[ ] **Commercial Spanish.**

[ ] **Effective Speaking.**

[ ] **C. P. A. Coaching for Advanced Accountants.**

Name.....Present Position.....

Address.....

# Be a Traffic Manager

Over a half million shippers need men who know how to route shipments, obtain shortest mileage and quickest deliveries; how to classify goods and obtain lowest rates. These are two vital factors in business competition. The man who can classify commodities and figure routings most economically can name practically his own salary. Concerns gladly pay competent traffic men

## $50 to $200 a Week

Many pay a great deal more, because the knowledge of a trained Traffic Expert saves them many times his salary. Train to enter this new profession. Positions are permanent; work is pleasant; salary is large.

### Train by Mail

in your **spare time—at home**—while holding your present position. The LaSalle Course is endorsed by railroads and big concerns everywhere. Covers thoroughly every phase of shipping and transportation. Write at once for our Free Traffic Book and full details. The coupon will bring them without obligation.

*INQUIRY COUPON*

## LaSALLE EXTENSION UNIVERSITY

***The Largest Business Training Institution in the World***

**Dept. 6316-T, CHICAGO**

Please send me catalog and full information regarding the course and service I have marked with an X below. Also a copy of your book, "Ten Years' Promotion in One," all without obligation to me.

[ ] Traffic Management Foreign and Domestic — Training for positions as Railroad or Industrial Traffic Managers, Etc.

[ ] Railway Accounting and Station Management — Training for Railway Auditors, Comptrollers, Accountants, Clerks, Station Agents, Members of Railway and Public Utilities Commissions, Etc.

Name .....

Present Position.....Address.....

**Easy to Get a Government Position Like This**

"To-day received notice from the Superintendent of the 9th Railway Mail Division asking if I would accept position. You can bet I didn't hesitate long to say 'Yes.'

"You may be sure that I cannot too highly endorse your methods of coaching and I will gladly recommend your School without hesitation."

Frank H. Brownyard,
75 Pearl Street,
Rochester, N. Y.

EVERYWHERE throughout the country the U. S. Government Civil Service needs men to fill splendid positions. Liberal salaries are offered, with big chances for advancement.

Choose the kind of work you like best among the different branches of the service; enjoy all the special advantages of working for Uncle Sam—the steadiest, most dependable "boss" in the world. There are no hard times in the Government service—no layoffs, no salary cuts, no strikes, no discharges for personal, religious or political reasons. Get a job you can be sure of; give yourself and your family the protection of certain, continuous pay all the year round.

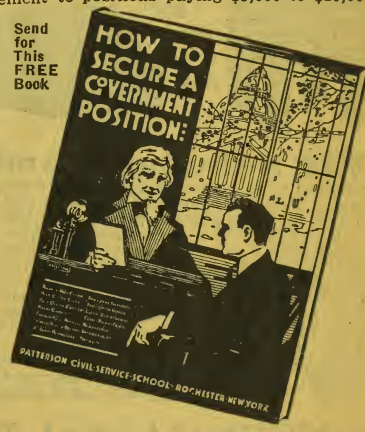
## Earn $120 to $190 a Month

From the very first day you enter the Civil Service you receive a good salary—$120 to $190 a month—and you are in line for advancement to positions paying $3,000 to $10,000 a year. And besides its good salaries, the Civil Service offers you advantages to be found in no other field of work. Hours are easy—eight or less a day. You get a vacation every year with full pay. There are positions in your home town, in Washington, at the Panama Canal, or travel if you desire.

If you are an American citizen, 18 years old or more, with an ordinary 4th grade education, you are eligible for a Government position. It is easy to pass the Civil Service Examination as soon as you are prepared to answer the kind of questions asked.

In just a little spare time at home you can prepare, under the personal coaching of Arthur R. Patterson, Principal of the Patterson Civil Service School and for years a Civil Service Examiner. Mr. Patterson, therefore, is in the best possible position to help you to the Government position you want. In fact, Mr. Patterson is so sure of your success under his coaching that he GUARANTEES to coach you until you actually get a position.

Send for This FREE Book




### Send for This Book Today

Do not miss this opportunity to learn all about the many splendid positions open in the Government service. A big, interesting book has been prepared which gives full particulars of the openings in the Railway Mail, Post Office, Rural Carrier Department, Internal Revenue, Immigration, Custom House or Postmaster Services and tells you just how to go about obtaining the position you want. This valuable book will be sent to you without cost or obligation. Simply send the coupon or write a letter or postcard NOW, while the matter is before you.

**PATTERSON CIVIL SERVICE SCHOOL**
**Arthur Patterson, Principal**
**Dept. 1723, Wisner Building, Rochester, N. Y.**

**Patterson Civil Service School**
**A. R. Patterson, Principal**
**Dept. 1723, Wisner Building**
**Rochester, New York**

Please send me without cost or obligation your book about Government positions.

Name .....

Address .....

City ..... State .....

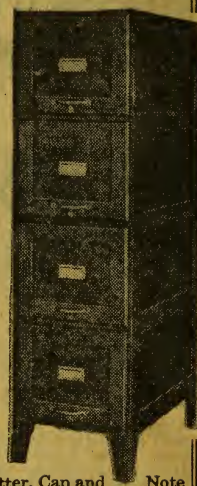
# Let us send you FREE Catalog of Weis Office Equipment

## Filing Supplies and Sectional Bookcases

## This Low Priced Letter File

Is the result of a desire to produce a paneled side, flat top, vertical filing cabinet that can be sold at a popular price and at the same time embody a method of construction that guarantees long life and satisfaction for the product. Made in two, three and four drawer heights in both Letter and Legal Cap widths. Drawers operate easily on hard fibre rollers; will not pull out accidentally but can be readily removed from frame by slight upward tilt. Each cabinet is complete—not sectional—and is made from best grade of well seasoned, kiln dried lumber. Golden or Natural Oak finish. Birch Mahogany 10% extra.

**$20** (See Note)

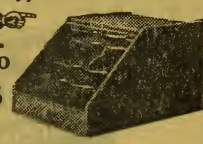


## Weis Sectional Card Index Cabinets

Logical equipment for a card file subject to expansion. The top section can be used as a regular two drawer file, capable of holding more than 2500 cards and necessary guides, then Bottom sections can be added as needs require. Made in 3x5,4x6,5x8,8x5 and 6x9 card sizes also 4x9 check size. Golden or Natural Quartered Oak or Birch Mahogany finishes. For a card file not liable to expansion and requiring less than 1400 cards and guides use the Weis Single Drawer Card Index Cabinets. Catalog tells all.

## Weis Stationery Cabinets

No. 140 **$6**

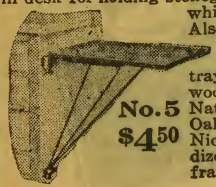


Are money earners because they are stationery savers. Have compartments for Letter, Cap and Note size papers, long and short envelopes and drawer for carbon papers, etc. Golden or Natural Oak or Birch Mahogany. No. 140 with drop lid $6.00. No. 150 with open vertical front $5.00.

## Weis Swinging Stand

Attached to desk provides additional working space. Much more practical than slide shelf in desk for holding stenographers' note book while taking dictation. Also handy for holding dictionary, typewriter, card index tray, etc. The 14"x18" wood tops in Golden, Natural or Weathered Oak or Birch Mahogany. Nickel plated or Oxidized copper metal frame 50 cents extra.

**No. 5 $4.50**



## Weis Legal Blank Cabinet

Contains six drawers as shown in illustration, each 1⅛" high, 8⅝" wide, 14¼" long. Cabinet outside is 10¼" high, 10" wide, 15½" deep. Made in Golden or Natural Plain Oak or Birch Mahogany. Also made with full length horizontal partitions and without drawers. No. 814 $8.00

## Weis Sectional Bookcases

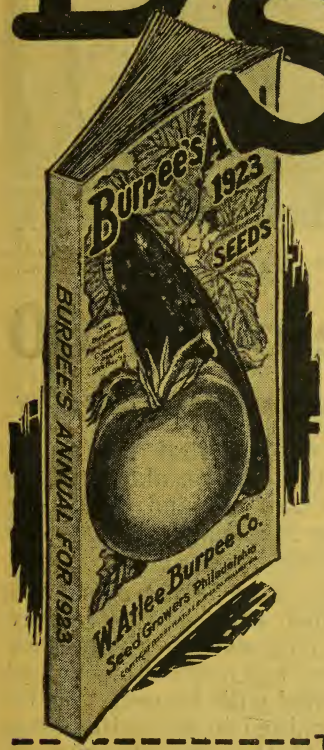
Are the ideal book storage equipment for school, office or home. The sectional construction provides a method for taking care of your present as well as future requirements. You can start with one top, section and base and add other sections as needs demand. Made of very best grade of Plain and Quartered Oak, any standard finish, also in the red or brown Birch and Genuine Mahogany. A catalog devoted exclusively to Bookcases, will be sent on request.

**Filing Suggestions:** Heloful Booklet sent with Catalog. All that its name implies.

**Note:** Prices quoted in this ad apply in North, Central and Eastern States. Consistently low in South, Southwest and West.

**The Weis Manufacturing Co.** 150 Union St. **Monroe, Mich.** New York Office 52 Park Place

# Burpee's Seeds Grow




**Burpee's Annual** is The Leading American Seed Catalog. It tells the plain truth about the best Seeds That Grow.

Burpee's Annual is a book of 188 pages, with a hundred of the finest vegetables and flowers illustrated in color. It describes the Burpee Quality Seeds.

If you are interested in gardening Burpee's Annual will be mailed to you entirely *free.*

Write for your copy of Burpee's Annual today. Just tear off the coupon and fill in your name and address below.

TEAR HERE

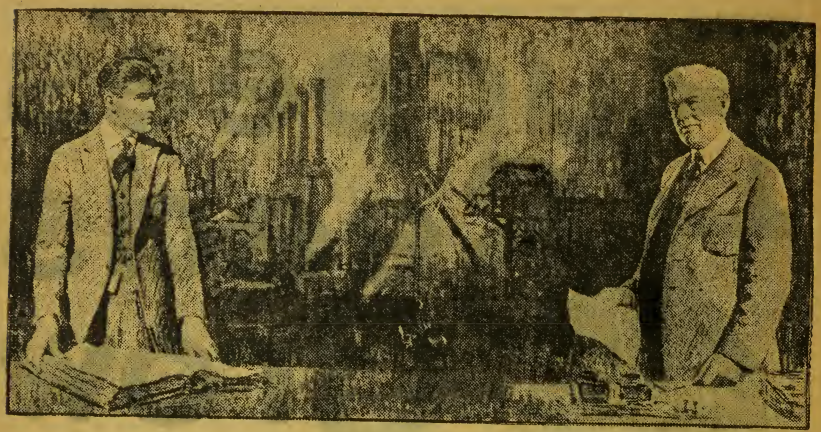
## W. Atlee Burpee Co.
### Seed Growers Philadelphia

35

NAME _____

R.D. or STREET _____

POSTOFFICE _____ STATE _____



The youngest man enrolled yesterday is 22 and bookkeeper in a Trust Company

The oldest man enrolled yesterday is 60 and Treasurer of a successful corporation

# One is 22—the other 60

***Both Enrolled in the Alexander Hamilton Institute the Same Day***

IN salary, in age and income, there is a business man whose business situation is almost precisely like yours.

Yesterday that man enrolled for the Modern Business Course and Service of the Alexander Hamilton Institute; every day men like you are enrolling; and in that way are shortening their path to increased income and business success.

## A single day's enrolments

One day's mail brought in enrolments representing youth and middle age, and all degrees of position and salary. Glance at the two pictures at the top. One represents the youngest man enrolled that day in the Institute—alive, alert, twenty-two years old and determined to be *something* and *somewhere* at thirty.

The other is the oldest man enrolled that day—treasurer of a corporation, giving satisfaction to his directors but not satisfied with himself. He has determined to know the essentials of the *other* departments of business as well as his own.

That same day 611 men asked for fuller information about the Alexander Hamilton Institute by clipping a coupon like the one at the right. Can you afford to let these 611 men secure a business advantage

*Canadian address, C. P. R. Building, Toronto;*



*Copyright, 1923,*

over you? Isn't it worth while to make the little effort required to clip the coupon and get the facts?

### Just what will the Institute do for me?

This is what the Institute does! By texts and lectures prepared by business leaders, by practical business problems, and personal guidance it gives you the principles and practices of each department of modern business.

It takes the practical experience that you have in one department and adds to it the working knowledge of all the other departments to fit you, as an executive, to understand and direct the work of men in those departments.

Practical experience alone, taking you from one department to another, would give you that training *in years;* the Alexander Hamilton Institute offers it to you *in months.* And the record of the men it has enrolled is evidence that its training *does* train.

### You are paying whether you accept or not

The cost of the Modern Business Course and Service is a little investment in money and time. But think of the price which those men pay who do not secure business training.

Think of the years of routine progress or petty salary increases when the progress might be rapid and sure. Think of the opportunities that pass by because men have not the knowledge and self-confidence to reach out and grasp them.

Six hundred and eleven men wrote in one day for the facts. Will you invest a two-cent stamp in your future as these men did in theirs?

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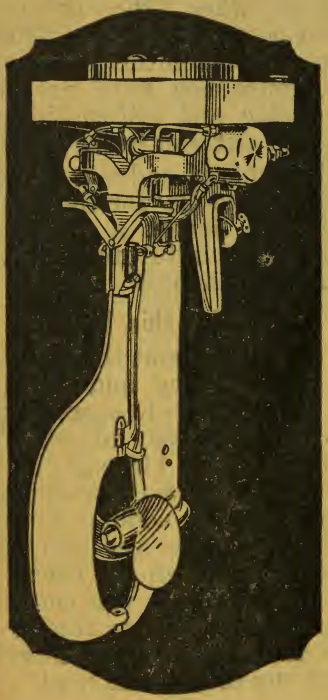

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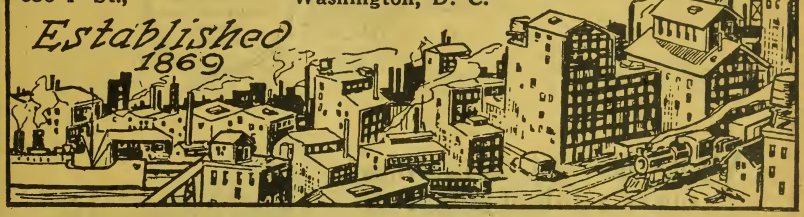

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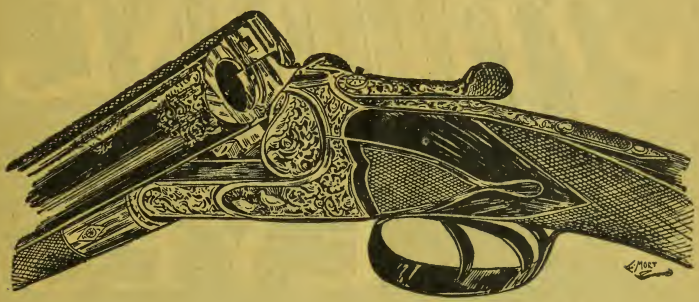

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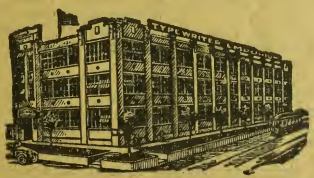

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# "I Must Earn $200 Quickly" Said Mrs. Snow and SHE DID

Mrs. Frank Snow surveyed ruefully the list before her. She knew it by heart, had written it down a score of times, and each item seemed to grin and mock her as if to say, "Get me if you can."

Clothes for the children, $25; the insurance, $12.50; that long-past-due doctor's bill, a new davenport for the living room, that dress she needed so badly, shoes for Frank, and then there would have to be something to keep the family larder well-supplied when those visiting relations arrived. She added it up again—$198.50, and no less would do.

But how to get this money? She thought of working in an office for a while or clerking in a store, even sewing or housework would enable her to overcome this everlasting need of more money than Mr. Snow's slender earnings could supply.

Reluctantly she put aside each idea as impractical, for had she not the home and the children to look after? If only there was something she might do at home, piece-work sewing, for instance. But the nearest factory was miles away and, then again, they paid such small prices for the work.

Mrs. Snow was very nearly at her wit's end until one day she chanced to pick up a magazine, and there, before her eyes, seemed to be the very thing she was looking for, the Gearhart Plan of Home Knitting. She read of how she could knit famous Allwear Hosiery in the comfort and privacy of her own home, utilizing the spare time which every housekeeper finds each day. Or she could devote all her time, as she wished.

Mrs. Snow investigated and found the Gearhart Company to be a fine old concern with a reputation for doing exactly as they promise and thousands of satisfied women home knitters, and men, too, who had seized the *opportunity* Gearhart offered.

Like many another woman who has felt the urge of necessity, Mrs. Snow sent for a Gearhart Standard Knitter and the splendid 3-year work-contract sent with each machine. Soon she was turning her spare time into a tidy weekly income.

She was delighted with the ease and simplicity with which she was able to knit the loveliest hosiery, and still more delighted when the checks from the Gearhart Company began to arrive in ever increasing amounts. The liberal pay per dozen, just for knitting, urged her to greater efforts, as it seemed to her hardly more than a pleasant occupation, with none of the back-breaking, soul-rending strain of hard domestic labor.

## So *YOU* Can Succeed

Can you picture how delighted they were when the $200 was earned and the bills all paid? Can you picture the joy that you, too, would feel after you had accumulated the wherewithal to buy the hundred and one things every woman wants, to help tide the family over financial troubles or to lay away a nest egg for a rainy day?

Does this hypothetical case of Mrs. Snow mean anything to you? Are you in a position where it would be desirable to turn your spare time into dollars and cents? If so, here is the opportunity which perhaps you have been long awaiting, a home occupation so easy and fascinating that you will regret not coming upon it before.

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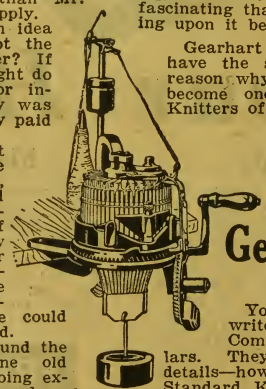

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Don't wait, write today. Delay may be dangerous to your opportunity. Can you, or any other woman who is really anxious to earn money at once in the privacy of her own home, afford to wait a single day? Write now for the Free Profit Guide Book, including samples of knitting and full particulars. Address the

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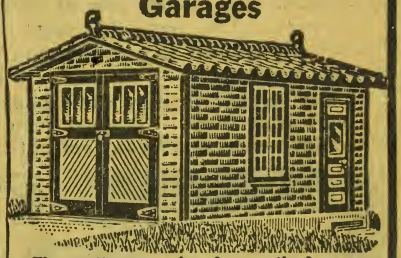

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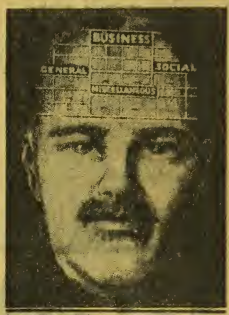


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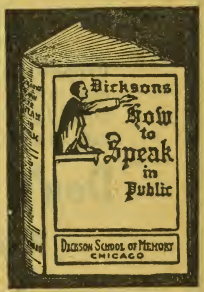


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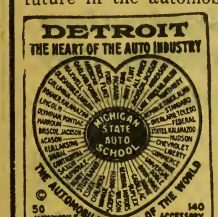


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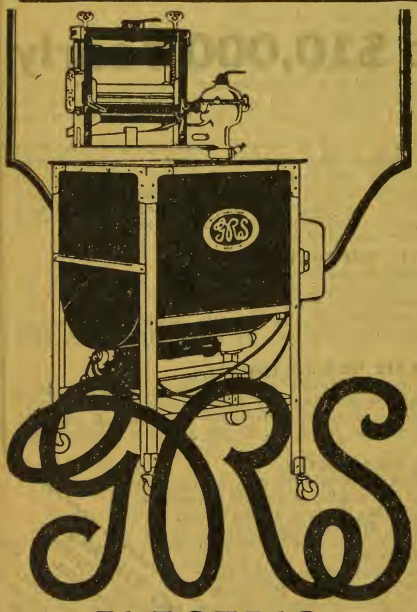

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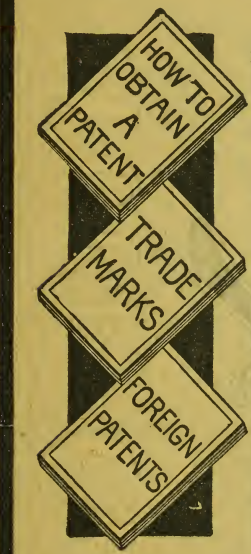


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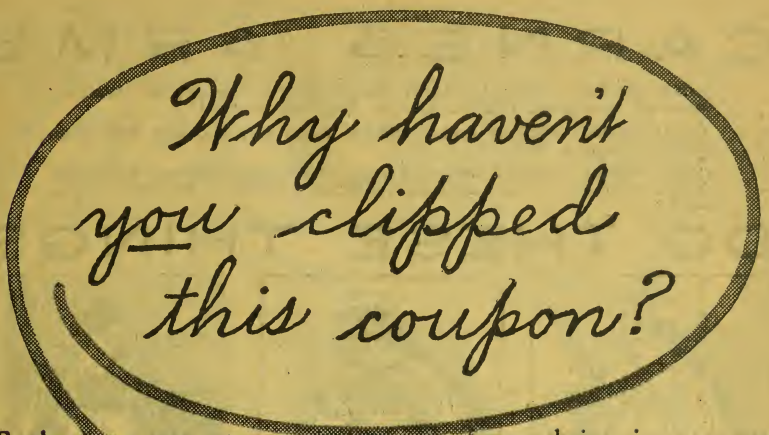


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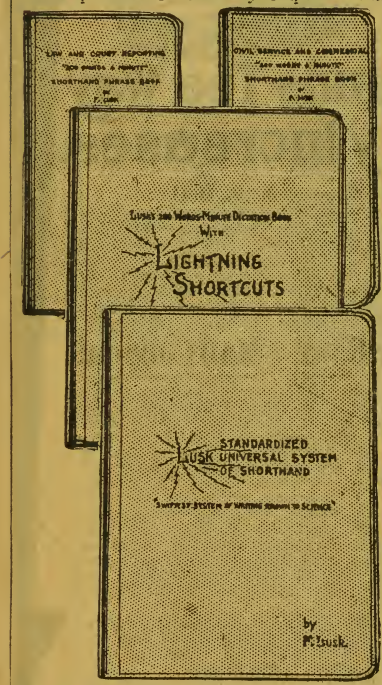


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By the arrangement of these wonderful text books, beginners knowing absolutely nothing about shorthand are required to commence the dictation of letters at 100-words-minute in the briefest reporting style, after five lessons. By the marvelous Simplification of Pitmanic Shorthand, only one-third of the time is now required to obtain double the speed.

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Only a trained musician can learn a tune without hearing it—by merely studying the printed notes. But almost any one can learn a tune by listening to it several times. It is the same with languages. The Rosenthal Language Phone Method enables any one to learn a foreign tongue as easily as a new tune. You merely put a Language Phone record on your phonograph and listen; then repeat the sentences aloud. In a surprisingly short time you are yourself actually speaking a foreign language and understanding what is said to you.

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You need give only a few minutes of spare time a day to study—in the privacy and comfort of your own home. Select your own time—when you are in the mood. No arbitrary lesson-hour or waiting teacher to consider.

Whether you are an employer or employee, man or woman, boy or girl, clerk, executive, salesman, manufacturer, wholesaler, retailer, lawyer, doctor, minister, teacher, author, artist, actor, musician—familiarity with another language will add to your success—as it has done in thousands of cases. Hundreds and hundreds of owners of Rosenthal Language Phone outfits, in all these professions, have written us enthusiastic letters about their interest and pleasure in this fascinating study; and of the great benefit it has been to them—enlarging their business or winning promotion and bigger salaries.

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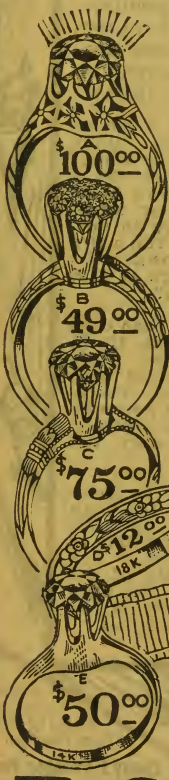


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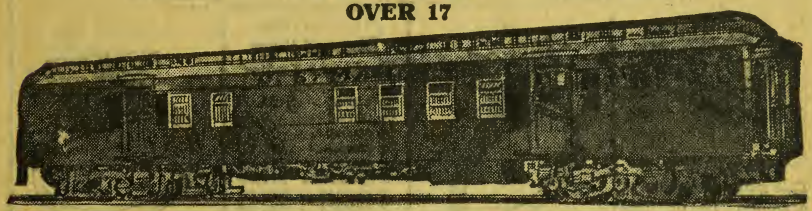

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Six blue-white perfectly cut diamonds set on sides of the ring. Large center stone is fine blue-white color. Ring is exquisitely hand-carved and pierced, **$395**

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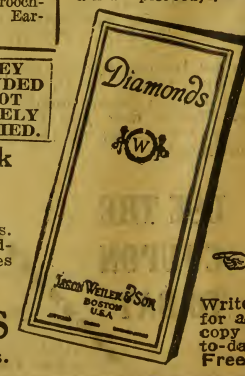
**Send your name and address for free copy.**

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What will *you* be doing with *your* spare time in the coming months? First thing to do, we should say, would be to *get the facts about LaSalle training.*

The coupon below will bring them to you without obligation, together with details of our convenient payment plan; also your copy of "Ten Years' Promotion in One," a book that has proved the inspiration of thousands of ambitious men. "Get this book," said a prominent Chicago executive, "even if you have to pay five dollars for it." We will send it *free.*

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*Name* .....*Present Position*.....*Address* .....

# He Starts at $5,200 a Year

One hundred dollars a week! And only a few years ago his weekly wage was less than $30. Didn't dream he could do it when he first took up the study of Higher Accounting under the LaSalle Problem Method; but he just couldn't *help* getting ahead—so he wrote—because he found it the most interesting thing he ever tackled.

Knew nothing about bookkeeping, but LaSalle quickly gave him the necessary foundation. Then, step by step, he was trained in the practical work of Cost Accounting, Auditing, Business Law, Organization, Management, Finance, Income Tax Procedure—*not* theoretically, mind you, but by the solving of actual problems lifted bodily from business life. As a result, he sits as Auditor at a big mahogany desk and commands a salary of $5,200 a year.

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Typical, this man's experience, of that of thousands of ambitious men who have found their path to success in the LaSalle Problem Method. Never in the history of business has the need for trained accountants been so great or the rewards so attractive. The files of LaSalle Extension University contain literally thousands of letters reporting rapid advancement—incomes doubled, tripled and quadrupled as the result of home-study training. During three months' time, 1,089 LaSalle members wrote to the University telling of the "raises" they had got as a result of their training. *The average increase per man was 56 per cent.*

These men were not unusual; they had no "pull" or "luck"; they got their start by signing just such a little coupon as appears directly below this text. Mark the coupon, sign and mail today—*and get the facts.* We will promptly send you complete information regarding the training you are interested in; also a copy of that inspiring book, "Ten Years' Promotion in One." "Get this book," said a prominent Chicago executive, "even if you have to pay five dollars for it." We will send it *free.*

Remember, the cost of LaSalle training is small and can be covered in easy monthly payments, if you so desire. The *decision* that you make this moment is *important.* Mail the Coupon *now.*

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Present Position .....

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Perhaps you have thought that the man who lands such a contract is a superman.

That is not true—neither was he born with a "gift for selling."

He holds the right of way to big success and tremendous earnings for one reason and one reason only—he has mastered the principles of *salesmanship*.

And you, just as well as he, can *learn* those principles and go out and increase your income in a way that will actually amaze you.

## *Your Opportunity to Master Salesmanship*

For twelve years LaSalle Extension University has been gathering and analyzing the selling methods used by the ablest salesmen in America. Some of the most aggressive sales organizations in the country have generously turned over to LaSalle their complete procedure in the field—have thrown back the curtains and revealed in detail the scientific selling methods responsible for their success.

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We have prepared an interesting booklet entitled "Modern Salesmanship," telling just how you can get this training in your spare time—by the famous LaSalle Problem Method. It contains also a wealth of information that should have a tremendous bearing upon your future. We recommend that you send for this booklet TODAY. The coupon will bring it to you without obligation.

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Please send me without obligation copy of your booklet, "Modern Salesmanship," together with full information regarding LaSalle training and service.

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Name Address Present Position

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**THE READING OF LAW** has brought swift, sure success to thousands of men who without the benefit of this specialized knowledge would probably never have progressed beyond ordinary achievement. A practical working knowledge of LAW is a short cut to personal power in every walk of life.

**LAW** is a factor of prime importance in every business. To-day's conditions, involving a mass of statutes, decisions, rulings—changes from old precedents—new interpretations of commercial law—all make the legal expert of vital importance, a positive necessity in every large business house. Never before were prospects so bright for men who can answer the puzzling legal questions which come up daily in business. Important positions carrying executive responsibilities with large salaries are always seeking legal experts.

**LAW** training often leads to a big executive position, because it enables a man to dictate policies that are legally sound—to make quick, correct decisions on intricate points, puzzling to the untrained man. Every large corporation has a well equipped legal department, and smaller concerns have their retained legal advisers. The presidents of many corporations (for example: Pullman Co., American Sugar Refining Co., National Biscuit Co., etc.) are law-trained men.

**LAW** is a stepping stone to personal prestige and social standing. The successful practising lawyer, or law-equipped business man, has open to him a prosperous career in a dignified, influential profession. No other profession opens up greater opportunities for rapid and profitable advancement. And never before has it been so easy to acquire a thoro law training of university grade as now.

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## Convenient Tuition Terms

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Without cost or obligation to me, please send me full information about your Home Study Course in Law and your Free Consulting Service; also particulars of your easy-payment plan and free copy of your book, "Ten Years' Promotion in One."

Name .....

Present Position ..... Address .....

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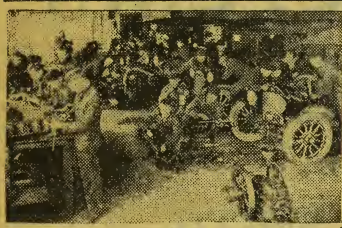

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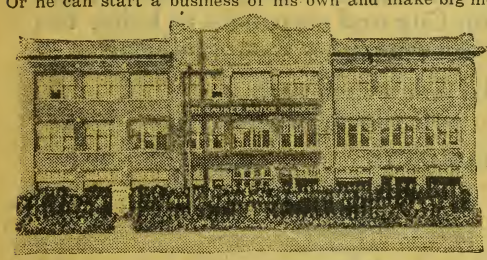
"**LEARN WITH TOOLS**—An expert with tools can always get a good job, and keep it. Or he can start a business of his own and make big money. Our expert instructors teach you by the "**Arhelger System of Practical Training.**'



**In This Big School** *each year hundreds of men, young and old, make the start that leads to a big salary or a business of their own.*

"Thousands of our graduates are now earning big salaries or running garages of their own.

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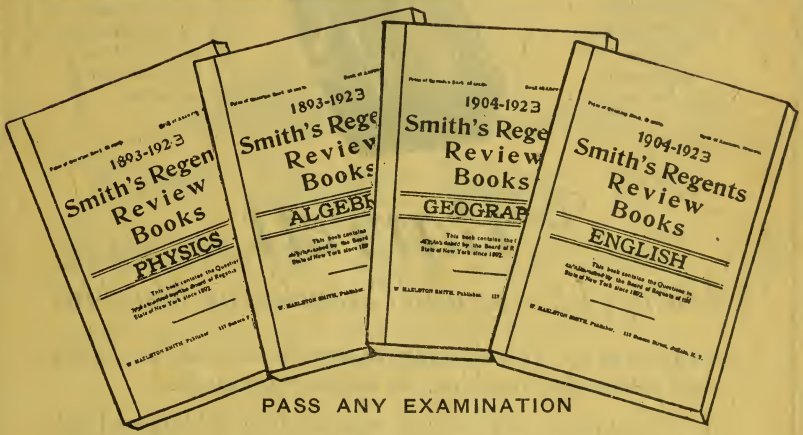


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# *We Teach* COMMERCIAL ART

## Consider this vital point *before* enrolling in any school

*—the Meyer Both College has 1114 students who previously have been enrolled in other art schools. Find one Meyer Both student who has ever changed from the Meyer Both College to any other art school.*

*The Meyer-Both College is the only art school operated directly in contact with and as a part of a great advertising art organization—its students are in continuous FIRST HAND touch with the pulse of the art field.*

Make sure the school you select is actually engaged in today's commercial art field—for commercial art and commercial art methods progress constantly. Make sure your contact will not be of the "proxy" or "canned" variety. Make sure of the experience and abilities of your actual instructors—and exactly how *practical* your instructions and criticisms will be. Make sure that you will be in direct touch with the faculty and personnel the school claims. Good instruction is necessary—but experienced criticism and good teaching are vital. In short make sure you will not only get what you pay for—but that you will get a foundation and co-operation that will fit you with earning power when you graduate.

The Meyer-Both College—as a department of the Meyer-Both Company (the largest Commercial Art organization in the world—who annually sell over ten thousand drawings to Advertisers in the U. S. and Canada) offers a training based upon their 20 years of success—and today's active leadership. We can refer you to merchants or newspapers in your own or nearby towns, who are *now using* our art work. Commercial Art is a highly paid, intensely, interesting vocation—equally open to men and women. The *right school* is vitally important if you would succeed. The Meyer-Both College has a definite sincerity of purpose. Our book "Your Opportunity," will be sent you for half the cost of the postage—4c in stamps. *You should read it carefully before you enroll in any school.*

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"Four years ago you and I worked at the same bench. We were *both* discontented. Remember the noon we saw the I. C. S. advertisement? That woke me up. I realized that to get ahead I needed special training, and I decided to let the I. C. S. help me. When I marked the coupon I asked you to sign with me. You said, 'Aw, forget it!'

"I made the most of my opportunity and have been climbing ever since. You had the same chance I had, but you turned it down. No, Jim, you can't expect more money until you've trained yourself to handle bigger work."

There are lots of "Jims" in the world—in stores, factories, offices, everywhere. Are *you* one of them? Wake up! Every time you see an I. C. S. coupon your chance is staring you in the face. Don't turn it down.

Right now, thousands of men are preparing themselves for bigger jobs and better pay through I. C. S. courses.

You can join them and get in line for promotion. Mark and mail the coupon, and find out how.

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| ☐ Business Management | ☐ Civil Engineering |
| ☐ Foreign Trade | ☐ Chemistry |
| ☐ Stenography | ☐ Metallurgy |
| ☐ Business English | ☐ Railroad Positions |
| ☐ Civil Service | ☐ Automobiles |
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Reach the end of your trip fresh and rested instead of too fagged out to enjoy your visit. Enjoy the pure air, the beautiful scenery, as you ride along intead of pumping away tread-mill fashion on your old-style bike. By using the SHAW MOTOR ATTACHMENT you can easily change your bicycle into a speedy, easy-running, light-weight motorcycle.

## *Low In Price—Fits Any Bike!*

The Shaw Motor Attachment is very low in price. Your old bicycle equipped with the Shaw Attachment will represent a big saving over any motorcycle of equal speed and dependability. Anyone who can use an ordinary wrench and a screw driver can fit the Shaw Attachment to any single or double bar bicycle in 30 minutes!

## *The Shaw Attachment*

will take you up the steep hills and through sandy and muddy roads. Its pulling power will surprise you, its speed amaze you. It sets the pace for others to follow. Every part is made of highest grade materials. The Shaw Attachment consists of the famous Shaw Super-Motor, 2½ H.P., all finished, assembled and tested, ready to be clamped to any bicycle frame. Motor is sturdily built, air cooled, of the 4-cycle type. High tension magneto and automatic lubrication. Chain drive and free engine clutch enables it to be started gradually. Under full control of the operator at all times. Control is simple, dependable and safe.

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We want to send you a copy of our booklet fully describing and illustrating the Shaw Motor Attachment and Shaw Super Motorbicycle. Join the happy family of Shaw owners and you will always be a Shaw enthusiast. Motorcycling is the greatest sport in the world. Write us today. **Use the Coupon**--fill it in and mail it NOW and receive by return mail full information, prices, etc

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# Do You Make These Mistakes *in* ENGLISH?

**Does your English reveal your lack of education or does it prove that you are a person of culture and refinement? Are you handicapped in your speech and writing or does your command of English rise to meet every occasion and every situation? English is the one weapon you must use every day. Here is how you can improve it almost at once.**

MANY people say, "Did you hear from him to-day?" They should say, "Have you heard from him to-day?" Some people spell calendar "calender" or "calander." Still others say "between you and I," instead of "between you and me." It is astonishing how many people use "who" for "whom," and mispronounce the simplest words. Few people know whether to spell certain words with one or two "c's" or "m's" or "r's," or with "ie" or "ei," and when to use commas in order to make their meaning absolutely clear. And most people use only common words—colorless, flat, ordinary. Their speech and their letters are lifeless, monotonous, humdrum. Every time they talk or write they show themselves lacking in the essential points of English.

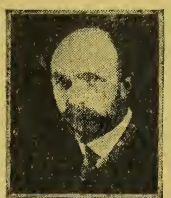
Every time you talk, every time you write, you show what you are. When you use the wrong word, when you mispronounce a word, when you punctuate incorrectly, when you use flat, ordinary words, you handicap yourself enormously. An unusual command of English enables you to present your ideas clearly, forcefully, convincingly. If your English is incorrect it hurts you more than you will ever know, for people are too polite to tell you about your mistakes.

## Wonderful New Invention

For the past five years Mr. Cody has been working almost day and night on the study of the problem, "How to make correct habits in speaking and writing stick in your mind." After countless experiments he finally invented a simple method by which you can acquire a better command of the English language in only 15 minutes a day. Now you can stop making the mistakes in English which have been hurting you. Mr. Cody's students have secured more improvement in five weeks than had previously been obtained by other pupils in two years!

## Learn by Habit—Not by Rules

Under old methods, rules are memorized, but correct habits are not formed. Finally the rules themselves are forgotten. The new Sherwin Cody method provides for the formation of correct habits by constantly calling attention only to the mistakes you make.



Sherwin Cody

One of the wonderful things about Mr. Cody's course is the speed with which these habit-forming practice drills can be carried out. You can write the answers to fifty questions in 15 minutes and correct your work in 5 minutes more. The drudgery and work of copying have been ended by Mr. Cody. You concentrate always on your mistakes until it becomes "second nature" to speak and write correctly.

## Write for Free Book

A booklet explaining Mr. Cody's remarkable course is ready. If you are ever embarrassed by mistakes in grammar, spelling, pronunciation, or punctuation, if you cannot instantly command the exact words with which to express your ideas, this book will prove a revelation to you.

Write for this new free book, "How to Speak and Write Masterly English." Merely mail the coupon or a letter, or even a postal card. You can never reach your greatest possibilities until you use correct English. Write to-day for the free booklet that tells about Mr. Cody's simple invention.

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SHERWIN CODY SCHOOL OF ENGLISH
67 Searle Building, Rochester, N. Y.

Please send me your new Free Book "How to Speak and Write Masterly English."

Mr. .....

Address .....

City ..... State .....

# *Why Some People Are Never At Ease Among Strangers*

PEOPLE of culture can be recognized at once. They are calm, well-poised. They have a certain dignity about them, a certain calm assurance which makes people respect them. It is because they know exactly what to do and say on every occasion that they are able to mingle with the most highly cultivated people and yet be entirely at ease.

But there are some people who are never at ease among strangers. Because they do not know the right thing to do at the right time, they are awkward, self-conscious. They are afraid to accept invitations because they do not know what to wear, how to acknowledge introductions, how to make people like them. They are timid in the presence of celebrated people because they do not know when to rise and when to remain seated, when to speak and when to remain silent, when to offer one's chair and when not to. They are always uncomfortable and embarrassed when they are in the company of cultured men and women.

It is only by knowing definitely, without the slightest doubt, what to do, say, write and wear on all occasions, under all conditions, that one is able to be dignified, charming and well-poised at all times.

## How Etiquette Gives Charm and Poise

Etiquette means good manners. It means knowing what to do at the right time, what to say at the right time. It consists of certain important little laws of good conduct that have been adopted by the best circles in Europe and America, and which serve as a barrier to keep the uncultured and ill-bred out of the circles where they would be uncomfortable and embarrassed.

People with good manners, therefore, are people whose poise and dignity impress you immediately with a certain awe, a certain respect. Etiquette makes them graceful, confident. It enables them to mingle with the most cultured people and be perfectly at ease. It takes away their self-consciousness, their timidity. By knowing what is expected of them, what is the correct thing to do and say, they become calm, dignified and well-poised—and they are welcomed and admired in the highest circles of business and society.

### Do You Know

**how** to introduce men and women correctly?
**how** to word invitations, announcements, acknowledgments?
**how** to register at a hotel?
**how** to take leave of the hostess after an entertainment?
**how** to plan home and church weddings?
**how** to use table silver in the proper way?
**how** to do all times, under all conditions, the cultured, correct thing?

## Here's the Way People Judge Us

Let us pretend that we are in the drawing room and the hostess is serving tea. Numerous little questions of conduct confront us. If we know what to do we are happy, at ease. But if we do not know the correct and cultured thing to do, we are ill at ease. We know we are betraying ourselves. We know that those who are with us can tell immediately, simply by watching us and talking to us, if we are not cultured.

For instance, one must know how to eat cake correctly. Should it be taken up in the fingers or eaten with a fork? Should the napkin be entirely unfolded or should the center crease be allowed to remain? May lump sugar be taken up with the fingers?

There are other problems, too—many of them. Should the man rise when he accepts a cup of tea from the hostess? Should he thank her? Who should be served first? Is it good form to accept a second cup? What is the secret of creating conversation and making people find you pleasant and agreeable?

It is so easy to commit embarrassing blunders, so easy to do what is wrong. But etiquette tells us just what is expected of us and guards us from all humiliation and discomfort.

## Etiquette in Public

Here are some questions which will help you find out just how much **you** know about the etiquette that must be observed among strangers. See how many of them you can answer:

When a man and woman enter the theatre together, who walks first down the aisle? When the usher points out the seats, does the man enter first or the woman?

There is nothing that so quickly reveals one's true station and breeding than awkward, poor manners at the table. Should the knife be held in the left hand or the right? Should olives be eaten with the finger or with a fork?

*Many embarrassing blunders can be made in a public restaurant. Should the young lady in the picture pick up the fork or leave it for the waiter to attend to? Or should one of the men pick it up?*

How is lettuce eaten? What is the correct and cultured way to eat corn on the cob? Are the finger-tips of both hands placed into the finger-bowl at once, or just one at a time?

When a man walks in the street with two women, does he walk between them or next to the curb? Who enters the street car first, the man or the woman? When does a man tip his hat? On what occasions is it considered bad form for him to pay a woman's fare? May a man on any occasion hold a woman's arm when they are walking together?

Some people learn all about etiquette and correct conduct by associating with cultured people and learning what to do and say at the expense of many embarrassing blunders. But most people are now learning quickly and easily through the famous Book of Etiquette— a splendid, carefully compiled authentic guide towards correct manners on all occasions.

## The Book of Etiquette

The Book of Etiquette makes it possible for you to do, say, write and wear what is absolutely correct and in accord with the best form on every occasion—whether you are to be bridesmaid at a wedding or usher at a friend's private theatre party. It covers every-day etiquette in all its phases. There are chapters on the etiquette of engagements, weddings, dances, parties and all social entertainments. There are interesting chapters on correspondence, invitations, calls and calling cards. New chapters on the etiquette in foreign countries have been added, and there are many helpful hints to the man or woman who travels.

With the Book of Etiquette to refer to, there can be no mistakes. no embarrassment. One knows exactly what is correct and what is incorrect. And by knowing so definitely that one is perfect in the art of etiquette, a confident poise is developed which enables one to appear in the most elaborate drawing-room, among the most brilliant and highly cultured people without feeling the least bit ill at ease.

### Send No Money

To enable every one, everywhere to examine the famous Book of Etiquette without obligation, we make this special offer to send the complete two-volume set free for 5 days to any one requesting it. Entirely free—no money in advance. All that is necessary is your name and address on the coupon below, and the Book of Etiquette will be sent to you at once at our expense. You have the privilege of examining it, reading it, and deciding for yourself whether or not you want to keep it.

Send for the Book of Etiquette to-day. Read some of the interesting chapters. Surprise your friends and acquaintances with your knowledge of what to do, say, write and wear on all occasions. And when you have been fully convinced that etiquette widens your circle of friends, makes you admired and respected, increases your knowledge of society and its requirements, gives you poise, self-confidence and charm—keep the set and send us $3.50 in full payment. But if you are not utterly delighted after the five-day free trial, simply return the books and you won't be out a cent.

The Book of Etiquette is published in handsome cloth binding, decorated in gold. Send for your set to-day. Just the coupon, remember—no money. But get your coupon off NOW. Nelson Doubleday, Inc., Dept. 8323, Garden City, N. Y.

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Without money in advance, or obligation on my part, send me the Two-Volume set of the Book of Etiquette. Within 5 days I will either return the books or send you $3.50 in full payment. It is understood that I am not obliged to keep the books if I am not delighted with them.

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☐ Check this square if you want these books with the **Beautiful Full Leather Binding** at $5.00, with 5 days' examination privilege.

# I Want 235 Salesmen Who Want to Earn at Least $5000 a Year

**Mr. B. M. Oliver, President of the Oliver Oil-Gas Burner & Machine Company**

KNOWING that this publication is read by the progressive type of men, I take this means to "tell the world" that I want to get in touch with some live-wire fellows—I am not looking for supermen—just fellows who have confidence in themselves—and particularly the ones who want to make real money; say about $5,000 a year or more.

Right on my desk here I've got a letter from F. W. Bentley of Philadelphia, telling how he made $215 in one day—and one from A. M. Russell of Hartford, Conn., who made $660 in one month. I have scores of other similar letters in my files—from R. Berger of Ontario, who makes $250 a week; from J. Carnegey of South Dakota, telling how he is making $1,000 a month; from W. Drew of Michigan who makes $85 a day. There is no reason under the sun why you should not make a minimum of $100 a week right from the start.

I want you to be the representative of the famous OLIVER OIL-GAS BURNER—an invention that instantly turns any cook-stove, heating-stove or furnace into an oil-gas stove, giving an even oil-gas fire—an intense clean flame—in any stove or furnace at the turn of a valve, **with three times the heat of coal** and wood and none of the bother or dirt.

## Every Home Wants This New Invention

The Oliver Oil-Gas Burner does away with coal and wood. Banishes all worry about strikes, scarcity and high prices. Turns any range, furnace or stove into an oil-gas stove. 16 different models. Burns 5 per cent. kerosene (coal oil) and 95 per cent air. Think of the appeal you can make in every community. Cheaper than coal, wood or gas. Absolutely safe, and always dependable.

Does away with drudgery—no fires to make, no ashes, dirt, smoke, chopping, carying coal and wood. Easy to install.

Doesn't change stove. Protects health from exposure and uneven heat. Easy to demonstrate—slips in any stove in one minute. Show any woman what it will do and the sale is made.

### AND THE OLIVER IS AN ALL-SEASON SELLER

In Winter the Oliver gives three times the heat of coal or wood and does away with the worry about their exorbitant prices, poor quality, dirt and muss. In changeable Spring and Fall the Oliver also sells big because it offers immediate heat at turn of valve—without the need of keeping a fire going just to meet the needs of chilly days. In Summer the Oliver does away with the labor and drudgery of a sweltering kitchen.

No wonder the Oliver brings salesmen big profits in every season.

# This Proposition Brings Some Men $1,000 a Month

These men know a good thing when they see it and they know that the time is ripe for this new Oliver Improved Oil-Gas Burner. They know that this age of high-priced coal and wood makes it necessary for some substitute. They see ships and locomotives being run by oil, and big buildings being heated by it. And they know that an invention that makes effective use of this cheap fuel for every home is the thing they want to tie up to. You too can use this secret of big money. You do not need to be a high-powered salesman. The Oliver's amazing features sell it for you. When people see it they know at once that it is the thing they want. You will realize that this is a proposition that will pay you as big money as it does others. We have a definite number of open territories which we are ready to dispose of. Every territory allotted is filled with big-money opportunities. And this big money comes easily. Because not only does this invention practically sell itself on sight but when you have sold one this one will sell several others as soon as your customer's friends and neighbors see it. And thru our special plan you get credit and commissions for every sale in your territory.

### Coupon Brings Full Offer

Mail this coupon now for my offer. We are not making any extravagant claims about this. We do not have to. We believe that your common sense will indicate a good proposition to you when you know about it. We want to give you the facts. Won't you write us? And by doing so promptly you will be allotted an exclusive territory with private selling rights. **You can use either spare or full time. Many are making fine money in their spare moments.**

The coupon will bring you the facts and will save you writing a letter. But mail the coupon now.

**Oliver Oil-Gas Burner & Machine Co.**
**2192-M Oliver Building**
**ST. LOUIS, MO.**

#### $1,000 in Four Weeks

"Am making $1,000 per month. I have made big money before, but did not expect so much. Your Burner is just the thing."—J. Carnegey, S. D.

#### Buys Car with Profits

"Have earned enough in one month to buy me a new auto."—S. W. Knappen, Calif.

#### $7 Profit Per Hour

"I started out and made $21.50 in about 3 hours. The Oliver does the work. It certainly is the real thing."—L. Zucker, Ohio.

#### "Sells Like Beer in a Dry Town"

"Am sending to-day for 7 Olivers. This is one day's orders ($85 profit). Selling like beer in a dry town."—W. H. Drew, Mich.

#### Mr. T's 28th Order in Six Months

"Ship 52 Olivers; 10 No. 30; 6 No. 1; 12 No. 2; 24 No. 4." (Mr. T's profit on this order alone is $711.)—G. T. Ottawa, Ont.

#### $215 in One Day

"Ye gods—some seller! I made $215 today!" F. W. Bentley of Phila.

#### $660 a Month

"Have averaged $660 profit a month for last six months."— A. M. Russell, Conn.

#### Berger—$258.50 Per Week

"Send following weekly hereafter: 10 No. 1; 8 No. 2; 4 No. 5."—R. Berger, Ont.

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Please send me full facts about how I can make big money representing you in my territory. Also your plan if I wish to make big money in my spare time.

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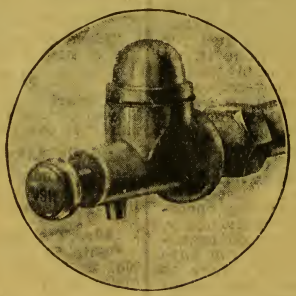
# SOAPARATUS
## GRAVITY BATTERY TYPE

is the ultimate development in liquid soap dispensing systems for heavy service demands, where a large number of people must be supplied without interruption.

Pure, cocoanut oil liquid soap conveyed by gravity from a supply tank mounted on the wall, through a feed pipe extending the entire length of the row of washstands, to taps equipped with Soaparatus Valves, centred over each basin.

An exclusive feature of the Soaparatus Valve is the reservoir chamber, located in the dome, which controls the amount of soap delivered into the hand when the plunger is pushed. The reservoir is automatically refilled by the action of the plunger in resuming position.

*The Valve with the Dome*



*The Valve with the Dome*

The Soaparatus keeps pace with the latest developments in plumbing appliances and washroom appointments. Where absolutely sanitary conditions are required with a desire to create an atmosphere of tone, the Soaparatus becomes an essential feature, worthy of the high consideration it deserves.

That the Soaparatus assumes a place of deservedly high rank as an important modernizing factor in the up-to-date washroom is evidenced by the rapidity with which it has been adopted by most of the leading Hotels, Theatres, Banks, Office Buildings and Factories.

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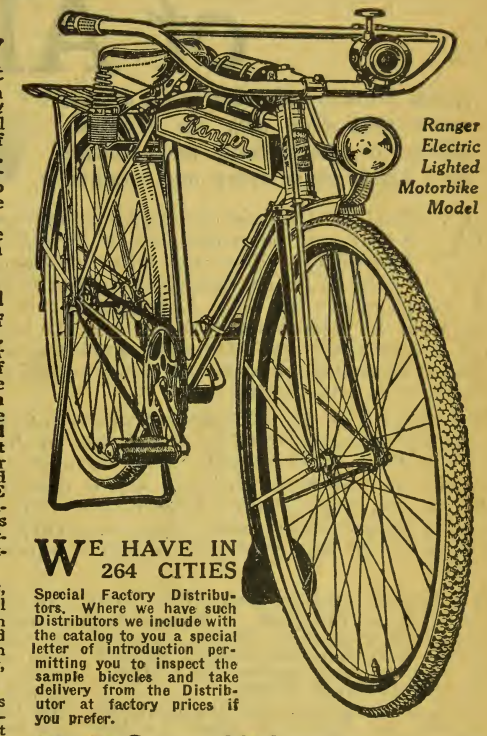


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**Tires,** electric lamps, horns, parts, repairs, and equipment of all kinds; built-up wheels with coaster-brake, ready to put in your old bicycle. Everything for bicycles and in the bicycle line, ready for at-once delivery, at Factory prices.

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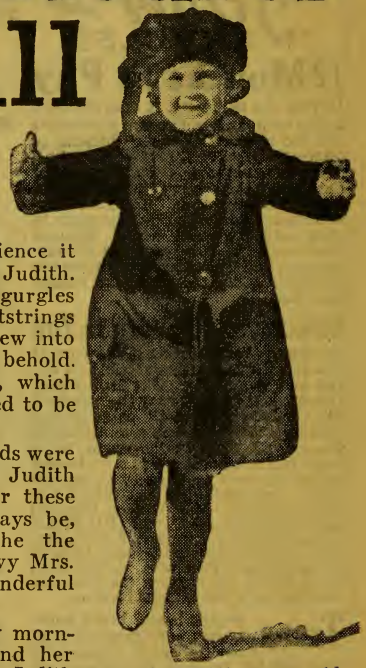
# The Child Who Won The Hearts of All

***A true life-story showing how a woman successfully dealt with the responsibilities of motherhood and brought up a child whom every one admired***



A BEAUTIFUL and wonderful experience it was to see the growing-up of little Judith. The pink, chubby tot with her gurgles and soft coos of delight tugged at the heartstrings of every one who saw her. As babyhood grew into girlhood, the blossoming forth was a joy to behold. All the lovable traits and good qualities, which parents hope their children will have, seemed to be combined in little Judith.

The joy of it all was that the mother's friends were as completely captivated by the charms of Judith as was the mother herself. For whenever these friends met their first remark would always be, "Have you seen Judith lately?—Isn't she the most adorable child!"—and "Oh, how I envy Mrs. Garrison!—A wonderful mother and a wonderful child!"

One bright, sunshiny day, while taking my morning walk in the park, I found Judith and her mother playing hide-and-seek. Judith's mother and I were old friends. We sat down on the grass together for a visit—and Judith played around.

Of course, we talked about the child, for I loved her almost as much as her mother did. As I watched this remarkable child playing I thought of the tremendous responsibility of the mother. I asked her how she had met it. And this is what she told me:

"When Judith was born, my first feeling was one of utter helplessness. I knew nothing about caring for a child. I was afraid—afraid that I might do the wrong thing. I wondered if other mothers had felt that same haunting fear for their child's welfare. And even though Judith thrived under my care, I never could quite shake off the feeling that I might do the wrong thing.

"Never shall I forget the day when my helplessness overwhelmed me completely. Judith was about 2½ years old—just old enough to begin to play, to notice things and to ask questions.

"I had corrected her for striking me in the face with a ball. Then I went to get the ball and had my back to her for a moment. As I turned around with the ball, I saw something that nearly broke my heart! There was Judith, in an attitude of defiance, making a face at me!

"For a moment I couldn't move nor speak. Was it possible that Judith didn't love me and had lost confidence in me?

"For days I struggled with the problem, haunted by the fear that my child didn't love me. Then I realized that something had to be done and done quickly. So I went to my friends and asked frankly for advice. If I had followed all that advice I shudder to think of what might have happened to Judith!

**Would You Like to Know How—**

- to obtain cheerful obedience always?
- to correct mistakes of early training?
- to keep child from crying?
- to suppress temper in children without punishment?
- to succeed with child of any age without display of authority?
- to discourage the "Why" habit in regard to commands?
- to prevent quarreling and fighting?
- to cure impertinence? Disrespect? Sauciness?
- to teach unselfishness? Carefulness? Fairness?
- to teach child self-control?
- to cure a child of the habit of whining?
- to keep a boy at home in the evening?
- to cure a child of saying, "I don't want to"?
- to teach a child to go willingly to bed?
- to treat a child who laughs at commands?
- to overcome obstinacy?
- to cultivate mental concentration?
- to teach honesty and truthfulness?

These are only a few of many questions explained in a way that makes application of the principles involved easy.

"By good fortune I learned of The Parents' Association, formed for the purpose of giving the very information I was seeking. I was astounded! They told me all the things I'd been puzzling over, and lots of surprising things I'd never even thought of.

"These revelations gave me a most wonderful feeling of confidence. I learned how to control Judith—to break naughty little habits just taking root, and to nourish the sweet ways which every one loved. And then—but there's no need to go into details, for you can see what it has done. I give The Parents' Association full credit."

The heart of every mother thrills with pride when she hears some whole-souled, notable man proudly stand up and say, as Lincoln said, "All that I am and that I hope to be I owe to my mother." Never was a greater truth uttered than this, for the course of one's whole life is shaped in childhood.

There is no greater responsibility in the world than that of being a parent. A child is what its parents make it. Heredity, environment and education all count, it's true. But all these points are as nothing compared with the right training in a child's tender and flexible years.

To love and cherish one's children is the joy of parenthood. But something more than love is due a child. And this is the right training—training that will not only give health and brightness, but will equip the child to become a power in the world.

The Parents' Association is an organization devoted to scientific child training which has over 30,000 members in twenty-one countries. It was founded by Ray C. Beery, A. B. M. A. (Harvard and Columbia), after years of scientific research and practical experience in child training. President Beery is regarded by those who know his work as one of the greatest authorities in child culture. No man has better knowledge of human nature or a more sympathetic understanding of children.

And now—through The Parents' Association—for the first time there is a scientific method in child training, founded on the principle that confidence is the basis of control. This new system shows you how in your own home to correct the **cause** of disobedience, wilfulness, untruthfulness and other dangerous habits which, if not properly remedied, lead to dire consequences. The trouble in most cases now is that children are punished or scolded for what they do. The new method **removes the cause**—*not* by punishment or scolding but by confidence and co-operation along lines which are amazingly easy for any parent to instantly apply. This new system, which has been put into the form of an illustrated Course, prepared especially for the busy parent, is producing remarkable and immediate results for the thousands of parents in all parts of the world. It is also **endorsed by leading educators.** It covers all ages from cradle to eighteen years. Through this course avenues of knowledge which will astound you are opened up. Things which have worried you will become as clear as day. You will be amazed at the tremendous possibilities of child training. And best of all you can get this vital information immediately. You will marvel at the remarkable and instant results.

For in these lessons you will find definite suggestions for securing results with children of all ages, from babyhood to maturity, as a glimpse at the contents will tell you. Here are a few of the subjects dealt with: Understanding your children; Fundamentals in child training; How to procure obedience; Common mistakes—how to avoid them; The right and wrong way of punishment; How to be a successful parent, etc., etc.

If your child disobeys, you can turn to these lessons and you will learn just how to secure willing and immediate obedience, for President Beery cites exactly the steps to take by telling just how other mothers have, through his methods, solved the very same problem.

And in the same way by actual illustrations he shows how to overcome, almost instantly, selfishness, boastfulness, shyness, cowardice, deceitfulness—all practically without punishing.

**FREE BOOK**

**"New Methods in Child Training"** is the title of a startling booklet which describes this new system and outlines the work of The Parents' Association. The coupon below will bring you this booklet—without cost or obligation.

Simply to send your request may mean so much to you in pointing the way to a new and wonderful success in training your children that you will be prompted to take advantage of this opportunity at once. Surely you owe it to your children's welfare and happiness to investigate, especially since there is no expense or obligation whatever involved. It is only a matter of sending the coupon or a post card. May we suggest that you do this now while the matter is before you?

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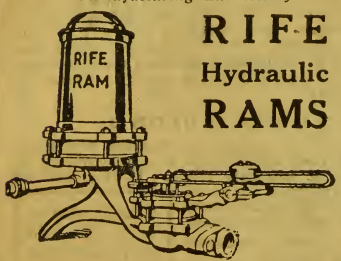


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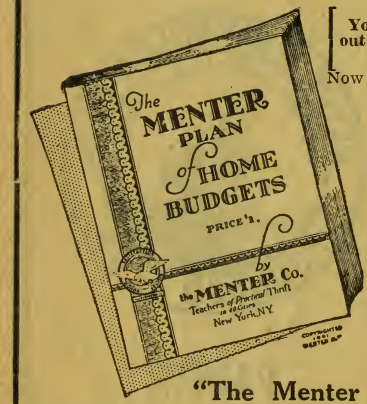


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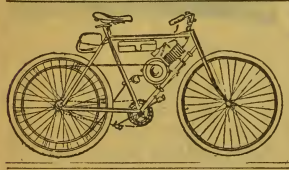

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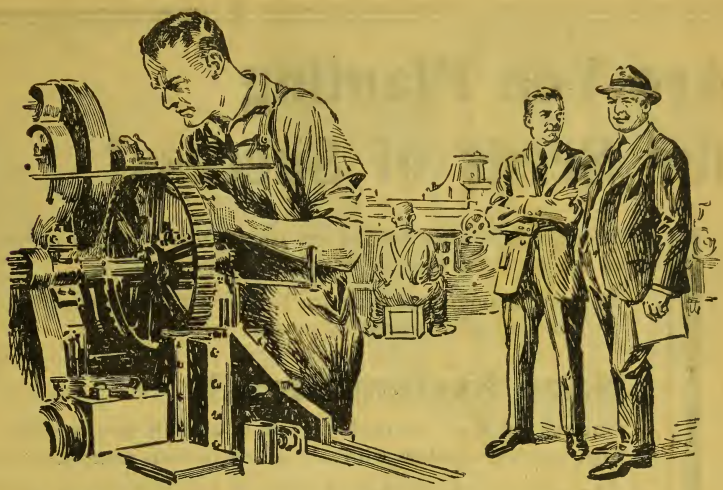

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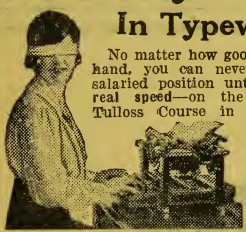

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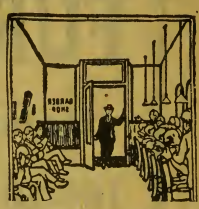

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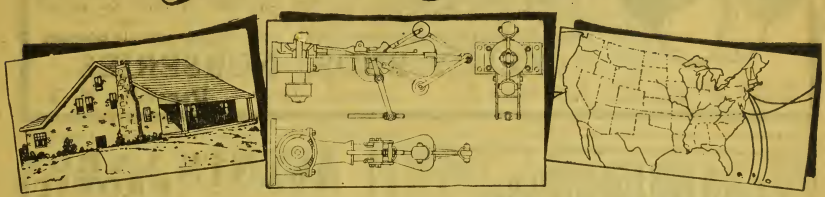

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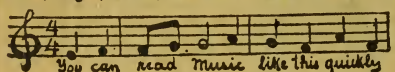


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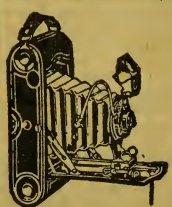

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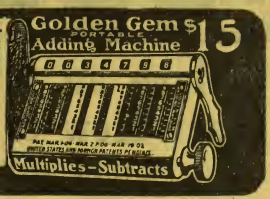


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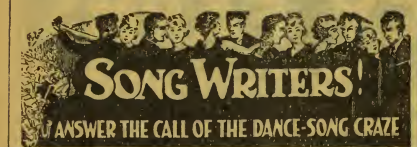


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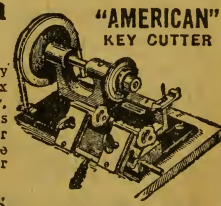

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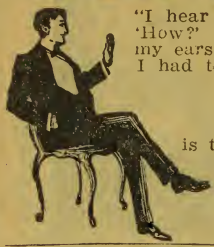

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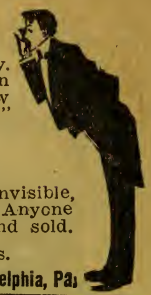

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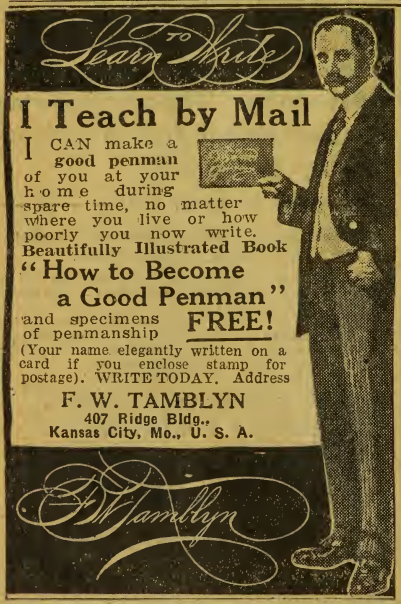


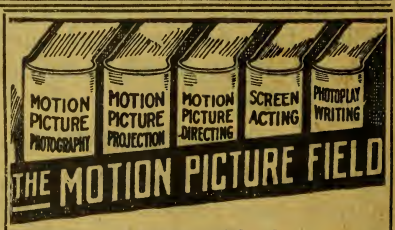


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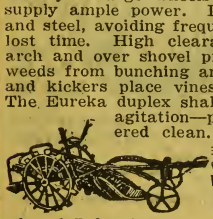

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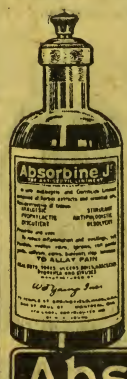


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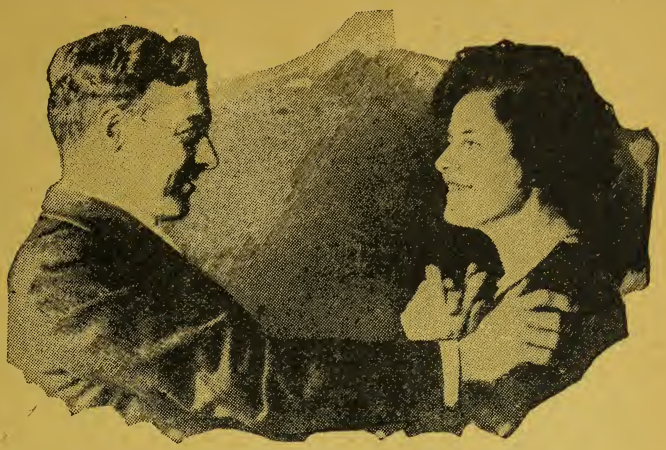

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"I want to talk to you about promotion, John. How do you expect to gain it? What are your plans? You are the best man in this organization for your particular job. But you are just as much of a machine as that adding machine over there. You do one thing well and that is all. I've watched you. Several times I tried you out on different jobs but you always fell down on anything not connected directly with your work. If you ever expect to be general manager of this concern you've got to know a lot besides everyday accounting. What do you know about the other branches of our business—production, finance, sales and advertising? Not a blessed thing."

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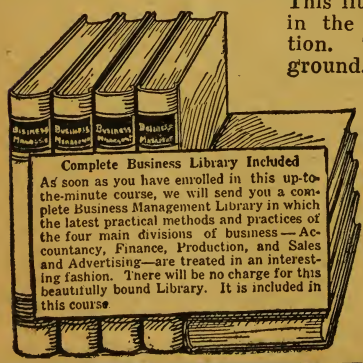

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Accounts—Form and Use.
Procedure in Accounting.
Special Journals; Divided Merchandise Account; Recording Sale of Business.
Commercial Paper of Accounting for Cash.
Apportionment of Expense and Income.
Managerial Use of Balance Sheet.
Changing from Single Proprietorship to Partnership Accounting.
Note Registers and Shipment and Consignment Accounts.
Formation and Dissolution of Partnerships.
Transfers from Partnership to Corporation Accounting, and Proprietorship Reserves.
Calculating Bond and Sinking Fund Requirements.
Manufacturing Accounts and Records.
Functional Control and Factors Involved.
Forecasting the Results of Projected Operations.
Collections of Data Touching Business Conditions.
Analyzing Data and Application to Business Conditions.

### Financial Management

Importance of Financial Management.
Requirements for fixed capital.
Requirements for working capital.
Sources of capital.
Surplus as a source of capital.
Capital secured by means of bonds and notes.
Promotion and underwriting.
Selling Securities.
Data necessary in acquiring capital.
Legal requirements, and control over disbursements.
Control and disbursements, maintenance of plant and equipment.
Control over disbursements for plant and equipment.
Control over disbursements for expenses.
Cash budget as a basis of executive control.
Procedure for establishing and enforcing credit limitations.
The controllership, reorganization, and financial abuses.

### Production Management

Use of Scientific Methods in Industry.
Location and Lay-Out of an Industry.
Standardization of Industrial Management.
Conduct of Purchasing Departments.
Types and Methods of Organizing Management.
Methods of Organizing Managerial Control of Production.
Application of Scientific Methods of Office Work.
Organization and Management of Drafting, Inspection and Tool Room.
Application of Scientific Methods of Packing and Shipping.
How to Adjust Payment to Work.
Selecting and Dealing with the Human Element in Industry.
Dealing with People in Industrial Groups.
Methods and Principles of Industrial Training.
Building and Maintaining Team-Work in Industry.
Control of Working Conditions and Fatigue.
Leadership and Service in Management.

### Sales and Advertising Management

The salesmanager—what he handles.
The manufacture of the product, the package and trade-mark.
The sales territory and agencies through which the product is to be sold.
Setting a price on the product and building up an organization to sell it.
Methods of training salesmen and steps in making a sale.
How to properly control the work of the salesman and to determine his compensation.
Survey of advertising as it relates to personal selling.
The three stages through which the advertisement should lead the reader.
What the advertisement should accomplish.
The two types of advertising appeals.
The periodicals in which the advertisement is to be run.
The use of booklets, folders, etc., for advertising purposes.
Preparation and arrangement of various elements of advertising.
Styles of type and methods of printing.
An illustration of the preparation of copy for an advertising campaign.
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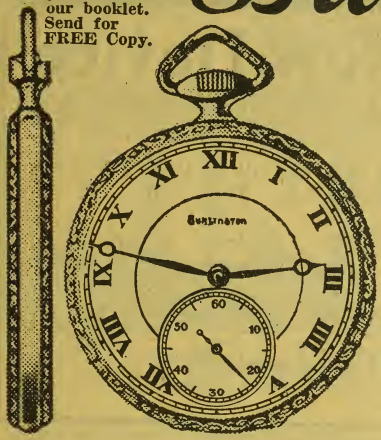


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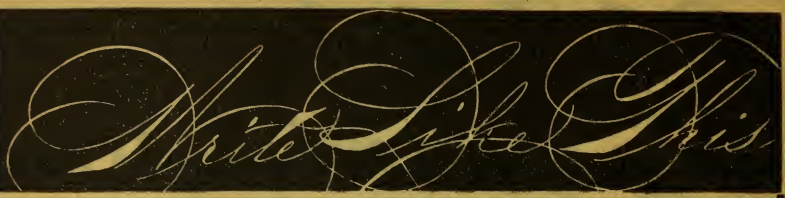


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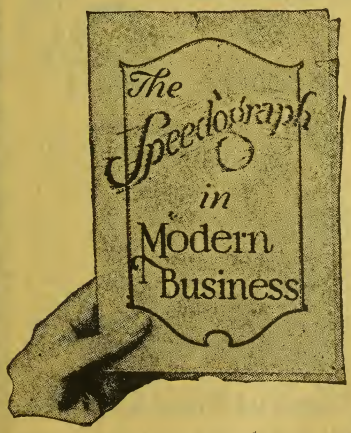


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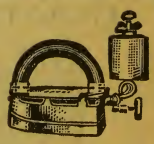

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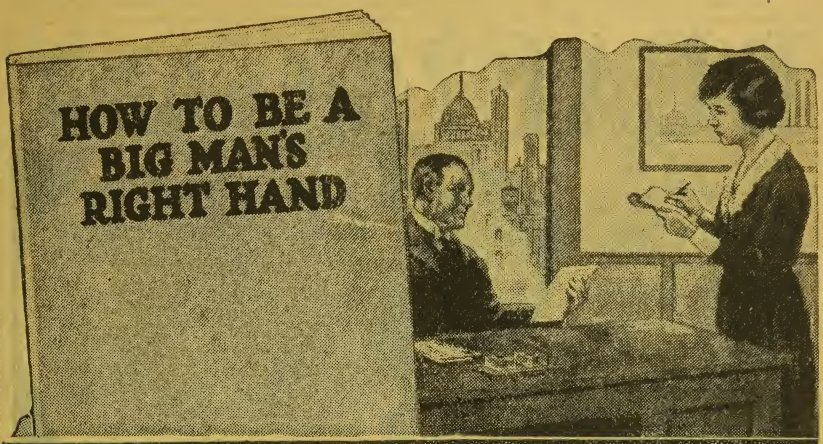


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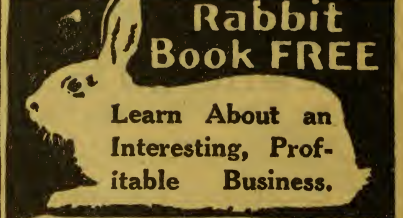

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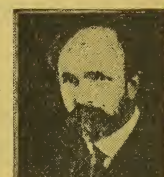

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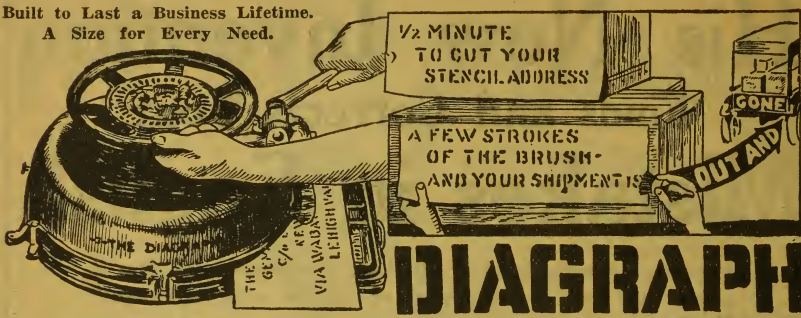


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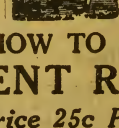

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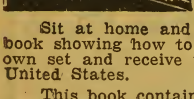


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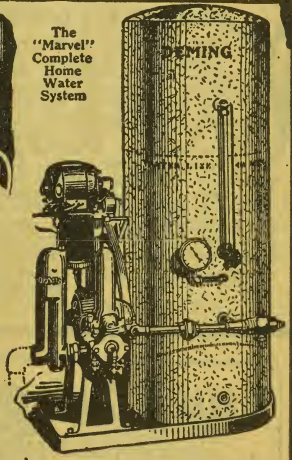


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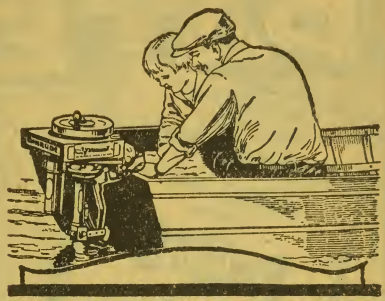

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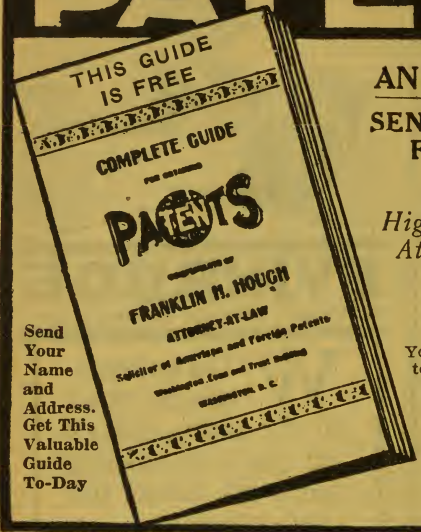


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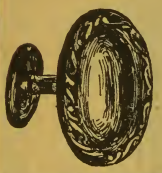

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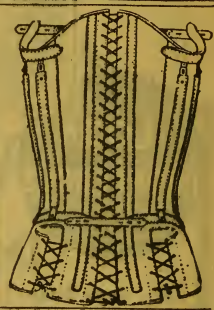

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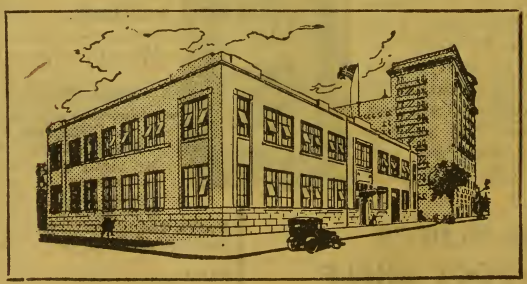

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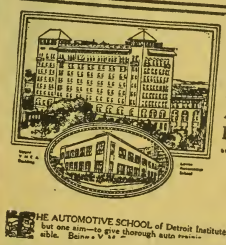

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It's wonderful what a difference a little extra money can make. I now have better clothes. I can often spare the money for a little trip for myself or the family. I have many comforts that I did not enjoy before. And every month I put a little in the bank.

Every penny I earn myself—just in spare time. And without stepping out of the house.

### Surprisingly Easy

These checks are my pay for knitting wool hose—not by hand but on a wonderful little knitter. Whenever I have an idle moment I sit down at this machine — my "magic purse filler"—and almost before I realize it I have three or four or more pairs of hose finished—adding just that much to my week's earnings.

I can make any style and size of hose, also sweaters, babies' Teddy Bear outfits and many other articles.

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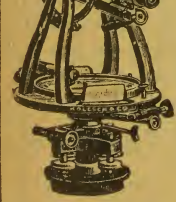

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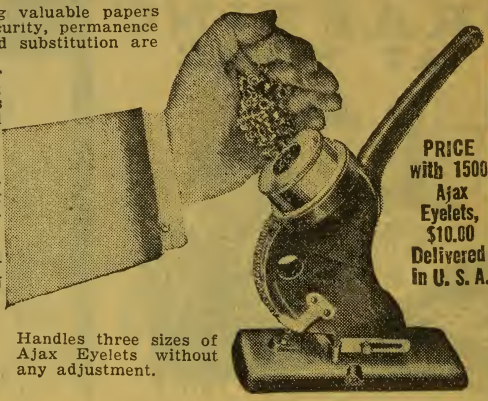

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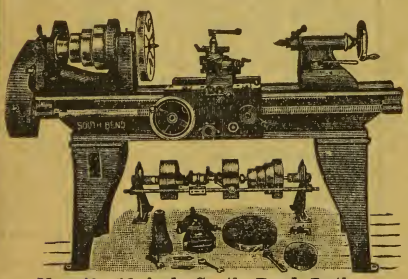

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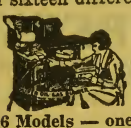

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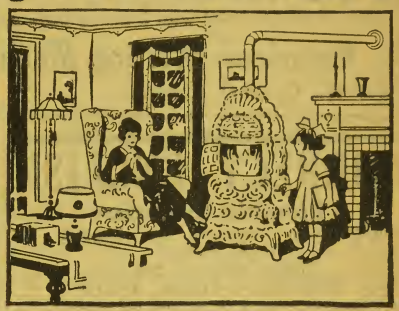

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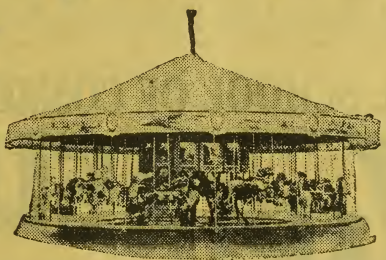

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Simply get an ounce of Othine—double strength—from any druggist or toilet goods counter and apply a little of it night and morning and you should soon see that even the worst freckles have begun to disappear, while the lighter ones have vanished entirely. It is seldom that more than an ounce is needed to completely clear the skin and gain a beautiful, clear complexion.

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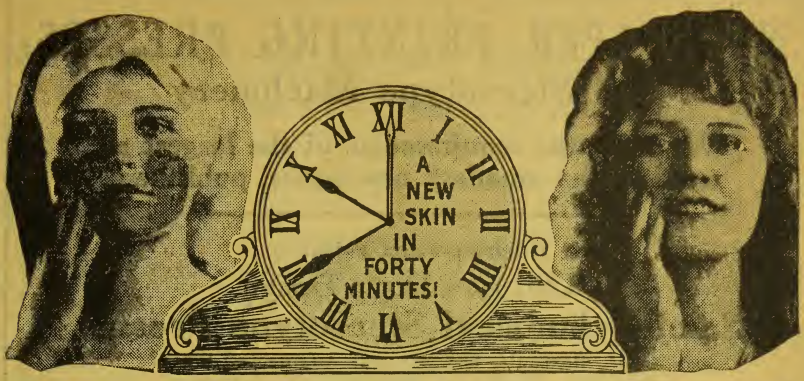


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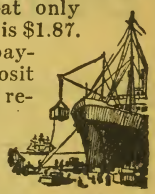

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DO you know how to start a profitable poultry plant? Do you know the best breeds to start with? Do you know how to get the most economical start? Do you know the size of the flock best suited to your needs and capital? Do you know how to master and apply the unit of operation?

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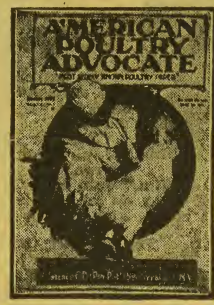
"Pleasure and Profit from Poultry," written by Dr. N. W. Sanborn and revised in 1922 by Prof. L. N. Gilmore, of Syracuse University, contains 48 pages of practical poultry information. Read the following table of contents and then you will be able to judge of its value to YOU.




**Chapter I.** The advantage of buying day old chicks; the most economical way to start.

**Chapter II.** Making money with incubators. The kind of incubator to install; how to make money in hatching; most popular breeds to hatch; money in one-pounders.

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**Chapter VII.** Money in eggs. How to market to best advantage; how to make money in summer eggs; winter eggs; breaking up broody hens.

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**Chapter XVI.** Selection of breeding stock. High standard; trap nesting; breeding for eggs; selecting breeders; breeding pens.

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Mrs Taylor was worried, for Jim was seldom late for supper Finally she heard footsteps outside and Jim opened the door.

"I couldn't help it, Polly—just couldn't help it," said Jim, as he put the bank book on the table, "we are going to have our new poultry house this winter. I have just paid off the mortgage on the place and bought the lumber for the new building, and see," as he took up the bank book, "we still have $2,100 in the bank."

"Just think, Jim," said Mrs. Taylor, "the chickens and **The National Poultry Institute** did it all."

"You are right. Polly It was a lucky day for us when we enrolled for their poultry course."

"It doesn't seem possible, does it, Jim," said Mrs. Taylor, "that two years ago you were working for someone else, and today we own our own home and poultry plant; we are able to put up a new poultry house, and have a good bank account besides. It beats working for the other fellow."

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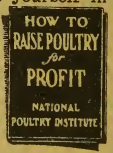


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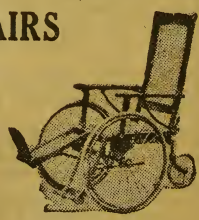

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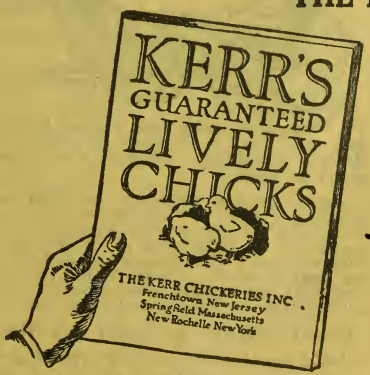


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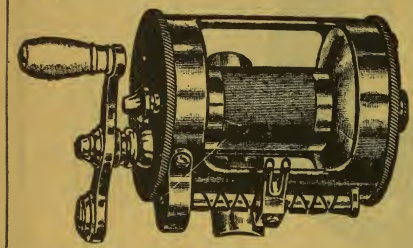

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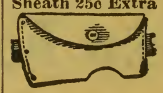

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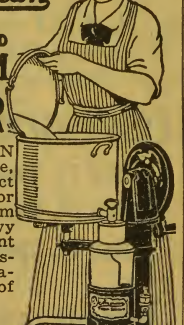

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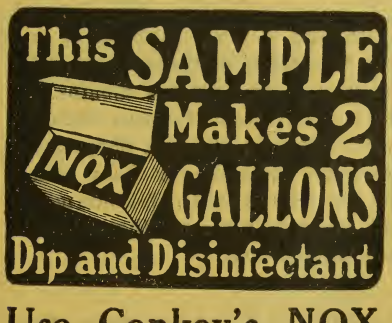


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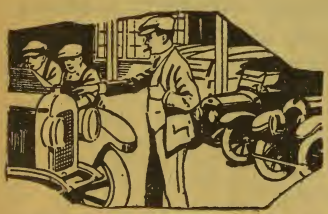

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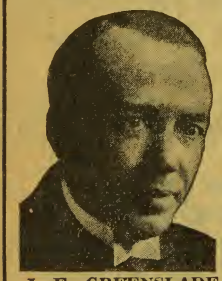
# It's a Crime to Slave for Low Pay—

## *When It's So Easy To Earn Big Money*

***If You Are Making Small Pay, Then You Ought to Investigate This Simple Plan That Has Shown Thousands the Way to Magnificent Earnings.***

IT is little short of an actual crime for a man to struggle along trying to make ends meet when he can easily step into a position with better pay and unlimited opportunities for making money.



J. E. GREENSLADE

**A Foolish Notion About Salesmen**

The average man imagines that, in order to make good in selling, he must be a "born" salesman. Nothing could be further from the truth. There is no such thing as a "born" salesman. Thousands of clerks, machinists, bookkeepers, factory hands, firemen and farmhands, to-day, are making big money in the selling field through the simple plan you are invited to investigate.

The sentence for a crime of this kind is "a lifetime of drudgery." Trying to make ends meet is a much harder task than making from three to ten times as much money as you are now making. For you can just as easily take advantage of the experience of countless others who, in one swift stroke, have jumped from small pay in blind-alley jobs to incomes of anywhere from $5,000 to $10,000 a year.

## The Secret Revealed

Take this situation: A man who had worked all his life in a routine job at low pay suddenly surprises his friends by moving into a better neighborhood, taking a big house, buying a car and blossoming out as a well-to-do and influential citizen in his new community. How did he do it? What is the secret that he used? Simple enough. He knew that the biggest money in business is in Selling, and though he felt that he couldn't sell a thing, he suddenly learned the secrets that make Master Salesmen and then began to make big money.

A whole book could be filled with stories equally amazing of men who have taken this new, quick road to big pay. A few extracts from actual letters are given in the panel on this page. Nor is there anything exceptional about these men. They were once in the same circumstances that you may be in now. They were discouraged, tired of working for small pay, and disgusted with their prospects. And then, as though by a

touch of magic, they were earning salaries that they had never dared hope for.

## Easy Work—Big Pay

For they entered this new field—a field that they had never dreamed of as theirs—one that is not only the most interesting, but the best paying branch of all business—Selling. Sounds remarkable, doesn't it? Yet there is nothing remarkable about it. There are certain ways to approach different types of prospects to get their undivided attention — certain ways to stimulate keen interest — certain ways to overcome objections, batter down prejudices, outwit competition and make the prospects act.

**These Men Investigated and—**

As an office worker in Detroit, Mr. B. H. Voss slaved away for $125 a month. But he saw his one big opportunity — grasped it —and increased his pay to $500 a month.

As a farmhand, George W. Kearns, of Oklahoma City, grasped the same opportunity. He writes: "Last week I cleared $306, and this week $218." And Mr. Kearns earned $60 a month previously.

Mr. J. L. DeBonis, Chicago, now enjoying magnificent earnings. Before investigating, he was earning $16 a week as a clerk.

When Charles Berry, of Winterset, Ia., decided that it was a crime to slave for low pay, he was earning $18 a week. And then the very first month he earned $1,000.

## Secrets That Make Master Salesmen

No matter what your earnings may be, you can quickly learn the secrets of Selling that have put thousands into the big-pay class. For the past fifteen years the National Salesmen's Training Association has successfully trained thousands for the selling field and through its Free Employment Service helped thousands to secure good selling positions. And through the National Demonstration Method you gain actual experience in overcoming sales problems of all descriptions while studying in your spare time at home. Then, through the National Salesmen's Training Association System of Electives, you get specific instructions in how to sell the line or lines you want to handle. In other words, the proved selling plans of master salesmen in all lines are laid before you.

# Send for This FREE Book

## *"Modern Salesmanship"*

Without cost or obligation, we will gladly mail you a copy of a very interesting book, "Modern Salesmanship." In addition to many interesting facts about salesmanship, it will also give you full information as to how you can become a highly paid salesman. No matter what you may think now, this book will prove to you that it's a crime to slave for low pay when magnificent earnings are within easy reach. There is no obligation, so just fill in the coupon and mail it to-day.

**NATIONAL SALESMEN'S TRAINING ASSOCIATION**

**Dept. 50-C** **Chicago, Ill.**

**National Salesmen's Training Association**

**Dept. 50-C, Chicago, Ill.**

Send me FREE, your book, "Modern Salesmanship," and proof that I can become a Master Salesman. Also send me list of lines with openings for salesmen.

Name .....

Address .....

Age..... Occupation.....

# The World

## Morning Sunday Evening

THE "WORLD" GROUP, comprising THE WORLD, Morning and Sunday, and THE EVENING WORLD, with a combined circulation in excess of 1,200,000, solves the problem of distribution in Greater New York.

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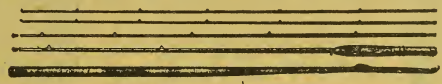
"Fishing Tackle that's Fit for Fishing"

This is Our 103rd Year

## OUR BEST FLY ROD



**Centennial Fly Rods**—These are our highest quality six-strip bamboo fly rods. Light and resilient, for long and accurate casts. Reserve power without stiffness. Selected split Tonkin cane. Hand-made nickel silver ferrules and reel seat. Agate guide on butt and tips, other guides snake pattern. Three pieces and extra tip; case for tips. Canvas partition bag. Lengths and weights: 8½ feet, 4¾ ounces; 9 feet, 5¼ ounces; 9½ feet, 5¾ ounces; 10 feet, 6¼ ounces. Two grades, "A" and "B," difference being in quality of cane and care used in fitting, gluing and finishing. Grade "A" retails at $35; Grade "B" at $25. Stiffened leather case for either rod, $9.60.

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## Banta Minnow Pail

Note the air pump at the side. The Banta is aerated simply by pressing this button occasionally. No changing of water—no trouble—no loss of minnows through stale water. The Banta is self-cooling. Pail is covered with cloth. A wick inside pail is connected with cloth cover and keeps it damp. Evaporation of water from the cloth cools water in pail—it's the principle of the desert water jar. Capacity 10 quarts. Retails at $3.00.

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## "Glowbody" Minnow

(Patented)

Every fisherman should have a "Glowbody," one of our famous Centennial features, in his tackle box. It is one of the best bass catchers we have ever put out. Attracts bass day or night. Crystal body contains tube of permanently luminous material. Bass see it in all waters from afar as it spirals toward the angler. Double hook easily detached and single hook substituted if desired. Crystal body protected by wires. Retails at $1.00.

**Ask your dealer for Abbey & Imbrie quality tackle. Catalog of 16,400 items—a Fishing Handbook—on receipt of 10 cents.**

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**Division of Baker, Murray & Imbrie**
**97 Chambers Street. New York**

THE SIGN OF THE LEAPING DOLPHIN

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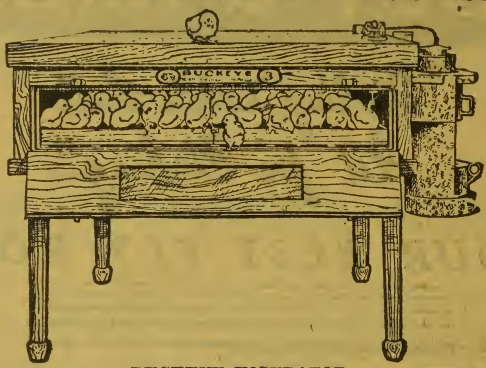
## HATCH MORE and STRONGER CHICKS

**Simple to Operate**

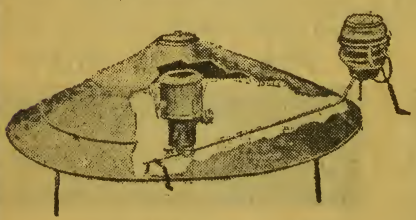



**Perfect in Results**

**BUCKEYE INCUBATOR**

The **BUCKEYE** will hatch more chicks and stronger chicks than any other make of incubator. It requires no artificial moisture; will operate satisfactorily in any climate, and requires no attention to the regulator from the time a hatch is started until it is finished.

**BUCKEYE "STANDARD" INCUBATORS** are equipped with every desirable device that could possibly add to the efficiency of an incubator. Only the best of materials are used and each machine is inspected by the National Board of Insurance Underwriters before it leaves the factory.

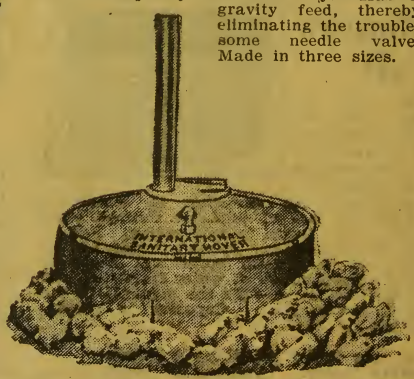


### Blue Flame Colony Brooder

Pronounced a "Winner" from its inception. Plenty of heat equally distributed to all parts of the brooder. Will accommodate a large number of chicks as well as small. The real thing in simplicity and efficiency. Has a gravity feed, thereby eliminating the troublesome needle valve. Made in three sizes.

### International Sanitary Hover

There are advantages in the **SANITARY HOVER** that cannot be found in other makes. Possesses qualifications in heating and ventilation which make it perfection in brooding devices. It has the highest percentage for broods raised to maturity.

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# Learn WHY YOU STAMMER

***—and how you can be quickly and permanently cured***

**This 288-page Book Tells**—Here is a book worth its weight in gold to you if you stammer, stutter or have any speech trouble. It is a book fairly overflowing with the **real, definite, tangible, hard-to-get** facts about stammering. It is packed with **priceless pointers** that have **never before appeared in print**—tells dozens of things you have long wanted to know—tears away the veil of doubt, mystery and guesswork and **reveals the plain truth** about speech and its defects.

## Would You Like To Know

- —Why you are better at some times than at others?
- —Why you have trouble talking over the phone?
- —Why there is a difference when you talk to strangers?
- —Why you can sometimes sing without trouble?
- —Why you are more nervous at sometimes than at others?
- —Why some cases cannot be cured?
- —Why you talk differently when very angry?
- —Why you are sometimes free from your trouble?
- —How stammering is cured?
- —How to determine whether you can be cured?
- —How the author cured himself after stammering for 20 years?
- —How stammering causes nervousness?
- —How stammering affects the mind?
- —How stammering affects the health?
- —How stammering can be cured?
- —How we learn to speak?

This 288-page cloth-bound book, "Stammering--Its Cause and Cure" tells you all these things and--hundreds more. Send the coupon.

## Some of the Chapter Headings

The Secret of Curing Stammering
A Successful Method of Cure
Cases That Cannot Be Cured
How to Determine Whether You Can Be Cured
The Real Cause of Stammering and Stuttering
The Peculiarities of Stammering
The Intermittent Tendency
Can Stammering Be Outgrown?
Effect of Stammering on the Mind
Child Stammering -- Advice to Parents
Speech Disorders of Youth--and Their Dangers
Where Does Stammering Lead?
Some Cases I Have Met
The Cure of Stammering by Mail

## Based on 30 Years Experience

This book is the condensed and crystallized experience of America's greatest speech specialist, Benjamin Nathaniel Bogue, who gives to the stammerer in this book the result of more than thirty years' constant study, research and investigation, during which time he has met more than 20,000 stammerers, diagnosed 76,000 cases of speech trouble and corresponded with more than 190,000 others who stammer.

## A Remarkable Volume

No matter how long you have stammered or stuttered, no matter how old you are, what caused your trouble, how many courses you have taken, how many schools you have attended, how many books you have read or how much studying you have done, you need this book "Stammering—Its Cause and Cure"—with its wealth of new facts, late discoveries and startling revelations on stammering and kindred speech disorders. This book is clearly written, easy to understand and goes straight to the point, telling the HOW and the WHY and the WHEREFORE.

**"STAMMERING—Its Cause and Cure**

Contains 288 pages of facts, printed in clear, clean, readable type on Antique Book Paper. Bound in Maroon Book Cloth, cover and back stamped in Gold.

## Use This Coupon

**Get This $3 Book For Only 10 cents**

If you stammer or stutter or have any impediment in your speech, you are losing if you don't get this book. Find out how the author cured himself after being pronounced incurable by famous specialists; what causes your own trouble and whether you can be cured; get all these valuable pointers, these vital facts. Merely send the coupon with 10 cents coin or stamps to cover postage and packing and this $3 book will come to you all charges prepaid -- nothing to pay later--the book is yours to keep--to use--to profit by.

BENJAMIN N. BOGUE
1211 N. Illinois St., Indianapolis

Please send me by return mail, all charges prepaid, your big 288-page cloth-bound book, "Stammering--Its Cause and Cure." To cover postage and packing I enclose 10c which is to be payment in full.

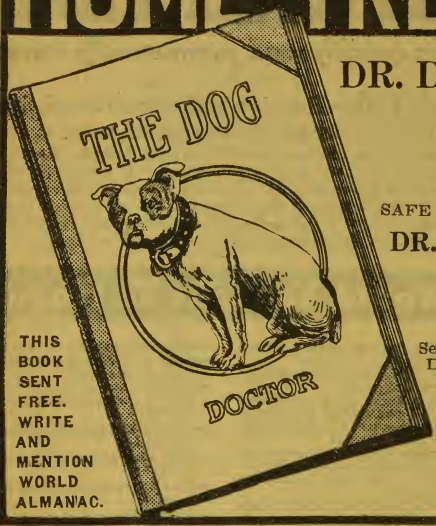
Name_____

Street_____

City_____ State_____

Send to BENJAMIN N. BOGUE, 1211 N. Illinois St., Indianapolis

# HOME TREATMENT

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With a Divine Rod in your hand, whether casting flies or dropping bait, you get all the thrill there is in fishing.

So sensitive and flexible is the rod that every faintest nibble or sudden strike is instantly sensed and many times amplified down to the butt.

So staunchly built and so skillfully proportioned that in the tightest pinch the rod survives and the fish is landed.

Divine Rods are made for any kind and all styles of fishing, in 6 and 8 strip Bamboo. Silk-wrapped if you choose. 2½ ounces for the "Fairy Fly" to 16 ounces for deep sea fishing. Rods to order if you wish.

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Here's a Reel that gives you everything you've ever wanted in a Free-spool Reel. You can cast it 'way over the surf line, over the second bar, where the big ones are. Compare it with any other reel on the market selling for twice as much. Beautiful—symmetrical—practical.

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29K856—Another wonderful bargain. Three heavy woven extra fine blue chambray work shirts. Attached collar. Faced cuffs, reinforced seams. One large pocket. Double stitched throughout. Fast color. Sizes 14 to 17. Val. $3.98. Sale price, 3 for $2.69.

29K793—Brand new. From manufacturer to you. Two genuine 10½ ounce flannel shirts. Army style. Double elbows. Reinforced seams. Double stitched throughout. Faced cuffs. Double yoke. Cut extra full. Color: Khaki only. Sizes 14 to 19½. Value $8.00. Sale price, two for $5.39.

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9x199 — Brand new U. S. Army finest quality balbriggan shirt and drawer. Sandard makes. Reinforced seams. Double stitched throughout. Double seat. Absolute bargain. All sizes. Value $2.50. Sale price: Shirt, 79c; Drawer, 69c; or, complete set, $1.49.

3E993—Brand new U. S. Army extra fine quality pajama check nainsook knee drawer, highest class of tailoring. Reinforced crotch. Standard makes. Fine pearl buttons. All sizes. Value $1.25. Sale price, 69c.

3E997 — Finest quality Pajama Check Nainsook athletic union suit with a reinforced crotch and elastic knit web insert at waist Closed crotch. Fine pearl buttons. Unusually tailored. All sizes. Value $1.50. Sale price 99c.

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Corrects fundamental faults by inducing proper mental attitude, harmonizing physical with mental effort and supplying inspiration and assurance necessary to make permanent habit of normal, natural speech. Is revelation to hear our students talk before large audience at monthly Kingsley Club events. Hopelessness, self-consciousness, fear, nervousness give way to hope, confidence and assurance under our system. Marvelous results with shell-shocked war veterans. No other course so deep, so fundamental, so thorough, yet so simple in principle.

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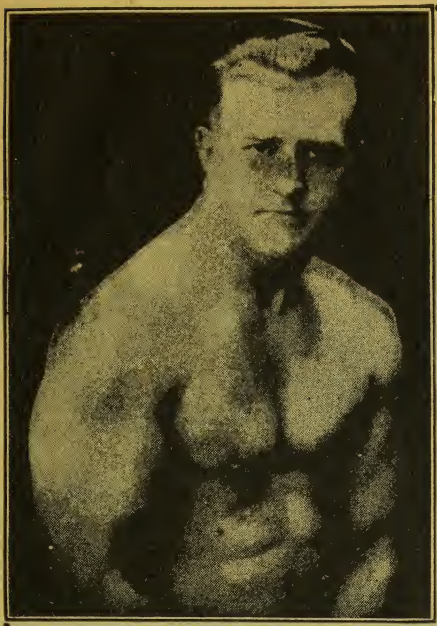

Earle E. Liederman as he is today

# How Strong Are You?

## Can You Do These Things?

**Lift 200 or more overhead with one arm;**
**Bend and break a horseshoe;**
**Tear two decks of playing cards;**
**Bend spikes;**
**Chin yourself with one hand?**

Can you do any of them? I can and many of my pupils can. It is remarkable the things a man really can do if he will make up his mind to be strong. **Any man.** It is natural for the human body to be strong. It is unnatural to be weak. One leading writer on physical culture says: "It is criminal to be weak." I have taken men who were ridiculed because of their frail make-up and developed them into the strongest men of their locality.

## I WANT YOU FOR 90 DAYS

It once took four weeks to cross the ocean—now it takes less than one. In olden days it took years to develop a strong, healthy body. I can completely transform you in 90 days. Yes, make a complete change in your entire physical make-up. In 30 days I guarantee to increase your biceps one full inch. I also guarantee to increase your chest two full inches. But I don't quit there. I don't stop till you're a finished athlete—a real strong man. I will broaden your shoulders, deepen your chest, strengthen your neck. I will give you the arms and legs of a Hercules. I will put an armor plate of muscle over your entire body. But with it comes the strong, powerful lungs which enrich the blood, putting new life into your entire being. You will have the spring to your step and the flash to your eyes. You will be bubbling over with strength, pep and vitality.

### A DOCTOR WHO TAKES HIS OWN MEDICINE

I was once a frail weakling in search of health and strength. I spent years in study and research, analyzing my own defects to find what I needed. After many tests and experiments I discovered the secret of progressive exercising. I have increased my own arm over 6½ inches, my neck 3 inches and other parts of my body in proportion. I decided to become a public benefactor and impart this knowledge to others. Physicians and the highest authorities on physical culture have tested my system and pronounced it to be the surest means of acquiring perfect manhood. Do you crave a strong, well-proportioned body and the abundance of health which go with it? Are you true to yourself? If so, spend a pleasant half hour in learning how to attain it. The knowledge is yours for the asking.

### Send for My Book "MUSCULAR DEVELOPMENT"—It is FREE

It contains dozens and dozens of full page photographs of myself and my numerous pupils. This book is bound to **interest** you and **thrill** you. It will be an **impetus**—an **inspiration** to every **red-blooded man.** I could easily collect a big price for a book of this kind just as others are now doing, but I want every man and boy who is interested to just send the attached coupon and the book is his—**absolutely free.** All I ask is the price of wrapping and postage—10 cents. Remember, this does not obligate you in any way. I want you to have it. **So it's yours** to keep. Now don't delay one minute. This may be the turning point in your life. Tear off the coupon and mail at once while it is on your mind.

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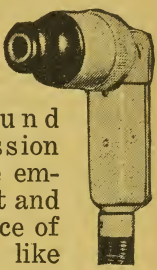

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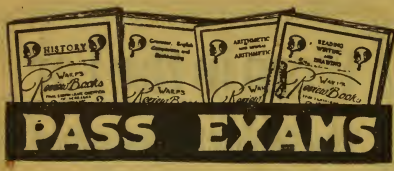


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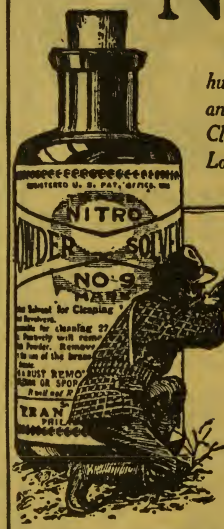


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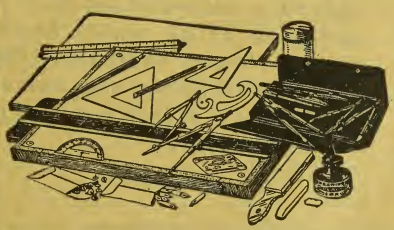

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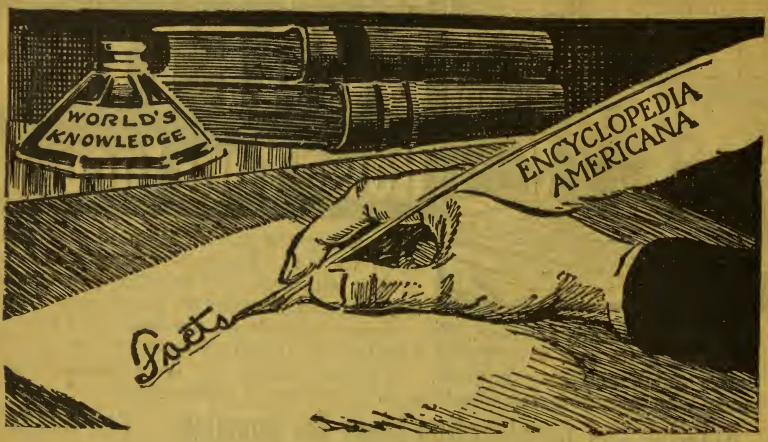


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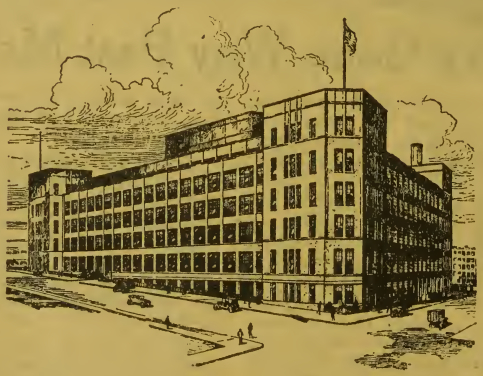

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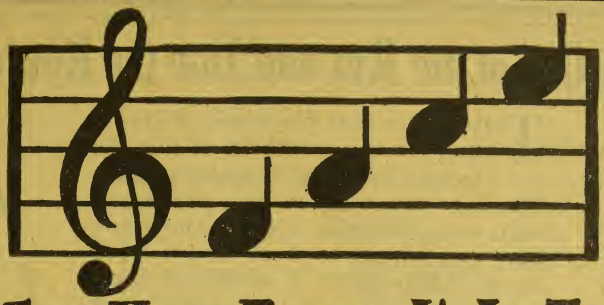

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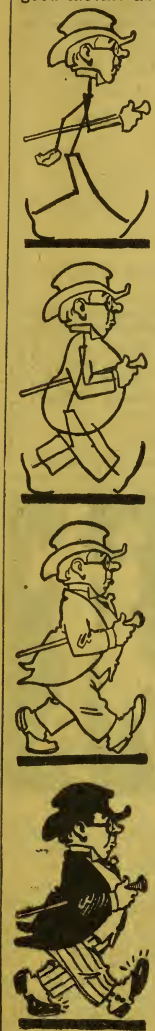

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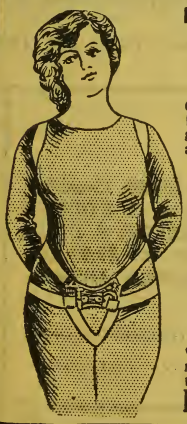

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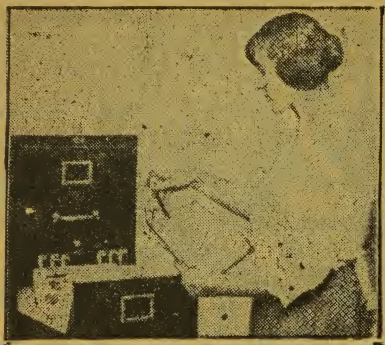

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# THE WORLD ALMANAC

AND

# BOOK OF FACTS

FOR

# 1923

EDITED BY

ROBERT HUNT LYMAN

*Officier de l'Instruction Publique*

*Fellow of the American Geographical Society, Etc.*

THIRTY-EIGHTH YEAR

OF PUBLICATION

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PULITZER BUILDING, 53-63 PARK ROW, NEW YORK

# PREFACE.

The World Almanac and Book of Facts is presented to the American public for the thirty-eighth year of its publication improved in form, handier to consult, easier to read, better printed and on better paper.

Readers who in constantly increasing numbers have testified to its value as a book of daily and constant reference will find the tables of statistics revised up to the latest possible date by heads of departments in the National Government, in the States, in the cities (and particularly in New York City); and by men of authority in banking, trade and industry; and in social, educational and religious activities throughout the country. To each and all of these men and women the editor takes pleasure in here acknowledging his indebtedness and expressing his keen appreciation.

New statistical tables present the latest Census figures on population, vital statistics and industries, which are supplemented by those of the Departments of Agriculture, Commerce, Labor and the Interior, all setting forth in form the material growth of the Republic.

In addition The World Almanac presents this year descriptions of the several States of the Union and its dependencies, and descriptions of all the foreign countries with their colonies and dependencies, carefully prepared in most condensed form from the best available authorities here and abroad. Much of this material has been furnished or revised by the embassies, legations and consulates of the countries concerned and by The World Almanac's correspondents abroad, and to them our thanks are due.

In this connection the editor wishes to present his especial thanks to Sir John Scott Keltie, long editor of the Statesman's Year Book; to Col. C. W. Whitaker, editor of Whitaker's Almanack; to Mr. Sayre, editor of Hazell's Annual, and to Francis W. Hirst, formerly editor of The Economist of London, for their most valuable advice and assistance. Thanks are also due to the officials in Washington of the Pan-American Union for information regarding the Latin-American states.

The record of the year 1922 is given with greater fulness than heretofore. The reader will find the carefully compiled chronology or diary of the year, the death roll, the benefactions, the record of scientific progress, the tariff law and other new and important laws, the full election returns, and the complete sporting events and records to which he is accustomed. He will also find new features in authoritative reviews of the financial world and bond market with the range of prices for stocks on the Exchange up to Dec. 1, 1922; also special reviews of labor and strikes, American relief work in Europe, the great progress made in aviation, the creation of the Irish Free State, the rise of the Fascisti; the platform of the British Labor party, and in another field, reviews of the year in the book world, art, music and the drama, and in wireless telegraphy and telephony.

Big problems of the year past and the year beginning are presented in special articles which will be welcomed for quick reference as the day's news will demand. The Reparation Commission furnished the figures showing exactly what Germany has paid in cash and kind and what the armies of occupation have cost.

The exact figures of the interallied debts owed to the United States with unpaid interest are furnished by the Secretary of the Treasury. The treaties of the Washington Arms Conference are given in full with resultant effects on the great navies of the powers. The progress of the League of Nations is shown by the Secretariat. The statement of Soviet Russia's finances is that given out officially at The Hague. The essential points of the Soldiers' Bonus Bill veto are recorded, and so also are those of President Harding's message on the Ship Subsidy Bill, together with a statement of the affairs of the United States Shipping Board, and some facts on the enforcement of the Prohibition law.

Readers will find The World Almanac more complete than before and better than ever. It has profited greatly in the past from their suggestions and will welcome any that may be made for its future betterment.

R. H. L.

Pulitzer Building,
53-63 Park Row,
New York City.

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## GOLD AND SILVER PRODUCTION OF THE WORLD.

| Period. | Gold, Ozs. Fine. | Gold, Value. | Silver, Ozs. Fine. | Period. | Gold, Ozs. Fine. | Gold, Value. | Silver, Ozs. Fine. |
|---|---|---|---|---|---|---|---|
| | *Total for period.* | *Dollars.* | *Total for period.* | | *Total for period.* | *Dollars.* | *Total for period.* |
| 1888..... | 5,330,775 | 110,196,900 | 108,827,606 | 1905..... | 18,396,451 | 380,288,700 | 172,317,688 |
| 1889..... | 5,973,790 | 123,489,200 | 120,213,611 | 1906..... | 19,471,080 | 402,503,000 | 165,054,497 |
| 1890..... | 5,749,306 | 118,848,700 | 126,095,062 | 1907..... | 19,977,260 | 412,966,600 | 184,206,984 |
| 1891..... | 6,320,194 | 130,650,000 | 137,170,919 | 1908..... | 21,422,244 | 422,836,900 | 203,131,404 |
| 1892..... | 7,094,266 | 146,651,500 | 153,151,762 | 1909..... | 21,965,111 | 454,059,100 | 212,149,023 |
| 1893..... | 7,618,811 | 157,494,800 | 165,472,621 | 1910..... | 22,022,180 | 455,239,100 | 221,715,673 |
| 1894..... | 8,764,362 | 181,175,600 | 164,610,394 | 1911..... | 22,348,313 | 461,939,700 | 226,192,923 |
| 1895..... | 9,615,190 | 198,763,600 | 167,800,960 | 1912..... | 22,549,335 | 466,136,100 | 224,310,654 |
| 1896..... | 9,783,914 | 202,251,600 | 157,061,370 | 1913..... | 22,249,596 | 459,939,900 | 223,907,843 |
| 1897..... | 11,420,068 | 236,073,700 | 160,421,082 | 1914..... | 21,240,416 | 439,078,260 | 168,452,942 |
| 1898..... | 13,877,806 | 286,879,700 | 169,055,253 | 1915..... | 22,674,568 | 468,724,918 | 184,204,745 |
| 1899..... | 14,837,775 | 306,724,100 | 168,337,453 | 1916..... | 21,970,788 | 454,176,500 | 168,843,000 |
| 1900..... | 12,315,135 | 254,576,300 | 173,591,364 | 1917..... | 20,289,546 | 419,422,100 | 174,187,800 |
| 1901..... | 12,625,527 | 260,992,900 | 173,011,283 | 1918..... | 18,556,520 | 383,605,552 | 198,163,408 |
| 1902..... | 14,354,680 | 296,737,600 | 162,763,483 | 1919..... | 17,664,910 | 365,166,077 | 174,517,414 |
| 1903..... | 15,852,620 | 327,702,200 | 167,689,322 | 1920..... | 17,695,037 | 365,788,796 | 176,459,609 |
| 1904..... | 16,804,372 | 347,377,200 | 164,195,266 | 1921..... | 15,959,643 | 329,915,101 | 175,268,234 |

**Gold coinage of nations in 1921 totalled $43,130,055; silver coinage, 148,036,313 ($93,436,081).**

**Stock of money in the world, as of Jan. 1, 1922, totalled $8,561,921,000 gold; $2,170,460,000 silver; $159,543,335,000 paper, not including 17,543,000,000,000 rubles of Russia.**

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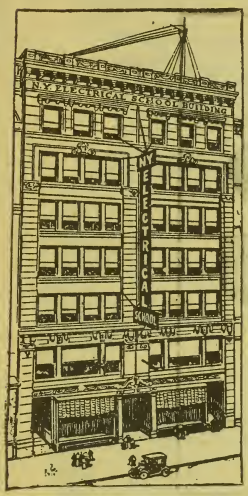


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26—A

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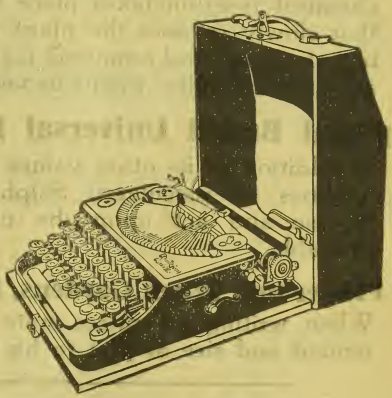

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1884 38th Year 1922

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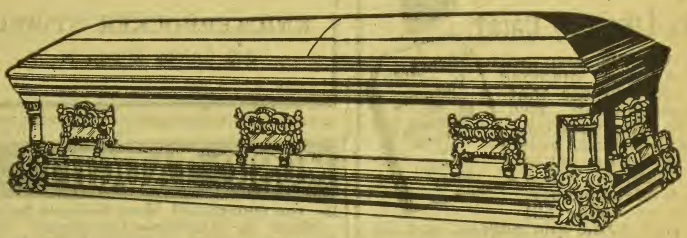

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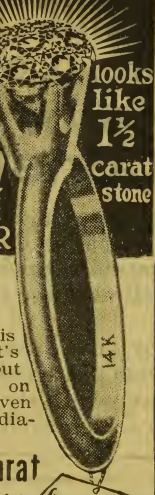


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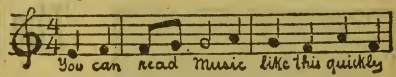


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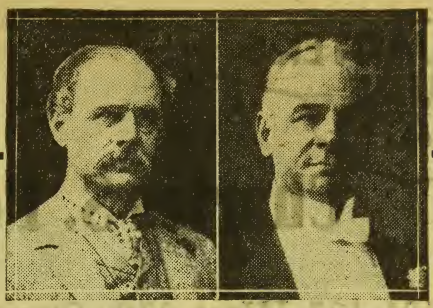

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W. A. 23

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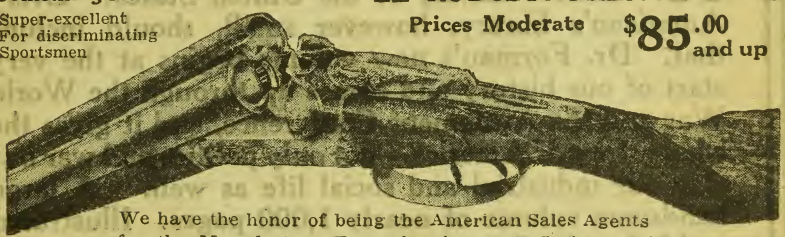

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26—Q

# The World.

**JOSEPH PULITZER.**

**April 10, 1847 ✝ October 29, 1911.**

THE WORLD, as established by JOSEPH PULITZER, May 10, 1883:—

"An institution that should always fight for progress and reform, never tolerate injustice or corruption, always fight demagogues of all parties, never belong to any party, always oppose privileged classes and public plunderers, never lack sympathy with the poor, always remain devoted to the public welfare, never be satisfied with merely printing news, always be drastically independent, never be afraid to attack wrong, whether by predatory plutocracy or predatory poverty."

As must be the case for years to come, The World's editorial policy in 1922 included anxious thought for the improvement of international relations in a world harassed by the after-effects of the great war. In its domestic policy it fought, with some success in the event, against a normalcy which in an abnormal condition could be but a pretense.

What The World thought necessary to the restoration of real peace it stated in July, in the following platform:

**The Reduction of the Reparations.**
**The Reduction of the Debts.**
**The Reduction of the Armaments.**

In the pursuit of a better understanding between nations it never ceased to stress the responsibility of the United States for its share in the turmoil of Europe, in having abandoned its associate nations to their fate as soon as the war was over and having turned its back upon the League of Nations.

In American politics 1922 was a year of retribution for the hypocrisy of the 1920 campaign. Then the Republican Party rolled up a plurality of 7,000,000 votes by promising the impossible to men on both sides of almost every pending issue. The natural reaction two years later was the repudiation of that hypocrisy at the polls. In the campaign The World took a leading part, spreading abroad the details of the Fordney-McCumber tariff, in which the wool schedules were fixed by wool-selling Senators the glove schedules by a glove Senator from New York, the textile schedules by super-lobbyists from New England.

A victory that was much more than personal to its victim was achieved by The World in forcing Truman H. Newberry out of his bought seat in the United States Senate. Practically alone among newspapers it kept up the fight upon him when the Supreme Court had absolved him from the penalty affixed by a Republican Federal Judge in Michigan, solely upon technical grounds, and when Charles E. Hughes, Secretary of State, came to his defense during the campaign. When, for the first time in seventy years, Michigan elected a Democratic Senator and when in other States the issue of Newberryism was proved potent to lose Republican votes, the handwriting on the wall was plain. Newberry resigned.

In a year characterized by gigantic strike movements at home, The World pleaded for a better understanding between labor and capital in services essential to the country. It urged the ascertainment of the facts affecting the production and distribution costs of coal, unfortunately covered from view by a Federal Court decision in the District of Columbia. The Fact-Finding Commission on Coal Supply was named in accordance with its urgency. In a kindred and parallel field it sustained the cause of free speech, even in Kansas, in West Virginia and in the coal mining regions of Pennsylvania. It led the Nation-wide fight upon the Ku Klux Klan as a dangerous attempt to set up, in the cause of an outdated illiberalism, a super-government within the Government of the United States.

The World, in State policy, strongly supported the nomination and election of Alfred E. Smith as Governor; urged further consideration for his policy of reorganization of the State's spending agencies, and continued to indicate the dangers as well as the manifest injustice of the rotten borough districting of legislative constituencies, which gives the legislative power in Albany to the representatives of a minority of the people. Both in Albany and in the City Hall it urged the pressing need of economy at a time when it has been estimated that half the national income is called for in taxation, direct and indirect, local, State and national.

Upon the editorial page of The World the "Looker on in Washington" has brilliantly and with acid wit punctured shams in public life and sustained the cause of international sanity and accord. The daily cartoons of Rollin Kirby have continued to hold the high regard of students of affairs. To Mr. Kirby's cartoon, "On the Road to Moscow," the Pulitzer prize of $500 was awarded last spring. As has been said of Punch in England, the course of history for the year could be traced by a reminiscent reading of the Kirby cartoons.

## WON PRIZE FOR PUBLIC SERVICE.

On June 7, 1922, the trustees of Columbia University awarded to The World the "Pulitzer Prize in Journalism for Public Service in Its Articles Exposing the Ku Klux Klan."

This recognition was but the consummation of a series of acclamations, public and private, official and semi-official, that came to The World during the year for its contributions to the common welfare. It is The World's pride that in the minds of so many people in so many quarters, both here and abroad, its name is synonomous with the description "First in Public Service," accorded it by the votes of three colleges of journalism.

The World's opposition to the Ku Klux Klan, begun in the fall of 1921 and renewed again in the closing weeks of 1922, was merely the most conspicuous of its contributions in this field.

Early in the spring it made a survey of conditions on the rapid transit lines of New York City. So absolutely did it demonstrate the inadequacy of the service on which more than 7,000,000 passengers a day must depend that orders were issued by the Transit Commission directing immediate improvement.

As the result of a similar survey the depreciation of the quality of illuminating gas under the projected change from the long-established candle-power standard to that of the British thermal unit was demonstrated.

An exhaustive inquiry into conditions in the

"pushcart" markets of the city brought to public knowledge the complete disregard of the law that supervisors should be chosen under the Civil Service, that the fees paid by the peddlers should be paid into the city treasury instead of going for "expenses" and that certain goods only should be offered for sale. As an almost immediate consequence of The World's articles the authorities announced their intention to comply with the law.

## AIDING THOSE OUT OF WORK.

When unemployment was at its height during the late winter, The World by agitation brought about the opening of nearly a score of churches and parish houses as lodging places for these unwillingly idle men. This agitation followed the conclusion of The World's "Give-a-job" campaign. As a result of this campaign the heads of 129 families found permanent employment at a time when thousands sought work in vain.

For years The World has conducted a "department" of missing people. During 1922 an unprecedented number of appeals for assistance was addressed to it. More than 500 requests came from the United States, Germany, Austria, Italy, Czechoslovakia and Russia. So well known has this service of The World become that it is turned to by police departments, by charity societies and by banks and similar institutions throughout the country.

Closely related to these public service endeavors were inquiries by The World into conditions in the mining districts of Central Pennsylvania, where issues were sharply drawn during the coal strike and scores of families were evicted. First in a series of articles by McAlister Coleman and then by Elizabeth Houghton, a staff correspondent, these conditions were depicted, with the result that large contributions of money and supplies were made.

An graphic a portrayal of social conditions was made in a series by Lester A. Walton who studied the circumstances of Southern Negroes since the war. For this series and for the assignment of Mr. Walton, himself a Negro, to the picturesque convention of the followers of Marcus Garvey, The World received the commendation of many leaders of the race.

The World cherishes an interest in the affairs of the average man, of which this attention to the concerns of the Negro is but a single instance. Alone among the newspapers of New York it "covered" especially the Farm Conference in Washington last spring, Theodore M. Knappen writing a series that vividly set forth the growing solidarity among agriculturists that has found expression already in the first economic bloc in Congress.

## LAID BARE TARIFF BILL INIQUITIES.

In the field of politics as it affects the day-by-day interests of the average man, The World won marked distinction during 1922. Articles by Elliott Thurston, of the staff, which were published in a dozen other cities, laid bare the extraordinary nature of the Fordney-McCumber tariff bill. So complete was the revelation of the business and industrial rather than the popular interest served by this bill that it became a definite and powerful factor in the revulsion at the polls in November.

As a partner to this series came an unveiling by Charles S. Haud, also of the staff, of the part played by the beet sugar interests of the United States in dictating the cane sugar schedules in the new tariff bill. It was shown that these schedules were drawn after the beet sugar men had attempted to set an arbitrary limit on the Cuban crop, and republication of the articles in Cuba created no less a sensation than they did here.

During the early summer there came also a poll of sentiment in New York City on the question of a soldiers' bonus. A marked sentiment in opposition to a bonus for all service men but an unqualified demand for generous provision for the disabled was revealed, and popular opinion was definitely affected.

In the same way The World was first to crystallize sentiment throughout the State in support of Alfred E. Smith as the Democratic candidate for Governor instead of William R. Hearst. At the other end of the record of this contest came a story by Mr. Hand of the victory wrested by Gov. Smith at the Syracuse convention. Not only did this story give the only complete account, stage by stage, of the fight that culminated in this victory but it was so brilliant a narration that it has already become a classic of reporting—a classic even of The World, known as it is for the consistent excellence of its writing and editing.

## COMPLIMENTED FROM LONDON.

This is not an empty boast. It is a tribute paid abroad as well as at home, as may be illustrated by this excerpt from the New Statesman of London, last summer:

"In New York the first place for vigor and intelligence belongs unmistakably to The World, which in recent years has made remarkable strides. Its staff includes a group of clever writers at present unequalled in America. Its tone is courageously liberal."

The World's interest in politics was far from being confined to New York State. Mr. Hand and Charles Michelson, head of its Washington bureau, were sent during the primary campaigns into the States where the progressive elements were at grips with the reactionaries. Again, just before the general election in November, Mr. Michelson visited these States, with the result that readers of The World knew, almost to the division of the Congressional delegations, what the outcome would be.

No other American newspaper, and few in the European capitals, gave so illuminating and so expert a review of international affairs as did the World last year.

## H. G. WELLS, REPORTER.

This began with the closing days of the Arms Conference at Washington, where H. G. Wells, best known of authors writing in English, served as a reporter for The World. Complementing him were Joseph W. Grigg, of the London bureau of The World, Adachi Kinosuke, a well known Japanese journalist, Henry W. Nevinson, of the Manchester Guardian (whose news service, by the way, is the exclusive property of The World in the United States), Charles Merz, an acknowledged authority on affairs in the Far East, and Mr. Michelson.

Soon after the Arms Conference Mr. Merz wrote a series on the crisis in India, the first comprehensive and understanding statement that had appeared in the United States. Later in the year he followed this with a series of letters from Europe that was most enlightening.

Not since the war has there been so brilliant, so sympathetic, so penetrating a study of life in Europe as that which is still being set forth by Mrs. Clare Sheridan, whose genius as a sculptor is rivalled by her facility as a diarist, now bids fair to be transcended by the reputation she is establishing as a correspondent.

Mrs. Sheridan's contributions to The World began with her interview with Rudyard Kipling in September, when he bitterly declared that the United States had garnered the gold of the world but had lost its soul. Two continents flamed with the controversy that followed this declaration, and while Mr. Kipling disclaimed the permission of the interview he did not deny the fact.

## MRS. CLARE SHERIDAN IN EUROPE.

Into the heart of the fighting in Ireland, Mrs. Sheridan went from this interview, and on across Europe until she reached Turkey, where she was when the Turkish Nationalists seized Constantinople and whence she crossed to Smyrna while the city still burned. She talked with Kings and Viceroys and Ministers; she talked with soldiers and merchants and beggars; she saw and told of the lives of women and children.

Country by country, The World covers Europe as it does these more general aspects of life after the war on the Continent.

In Russia, The World has Samuel Spewack, a member of its staff. Supplementing his despatches last year was Emma Goldman's own story of her experience—and her disillusionment—with Bolshevism. There were intimate pictures of life and conditions by Herbert Pulitzer and Michael Farbman, and vivid descriptions of the sweep of the famine by Arthur Ransome.

In Germany, The World has as head of its Berlin bureau, Arno Dosch-Fleurot, an eminent authority on affairs in the territory of the old Central Empires. A striking addition to his despatches came in the form of the interview by Ferdinand Tuohy with Gen. Ludendorff that created a sensation no less profound in Germany than in the United States.

Each Sunday there comes to The World an article of comment on affairs in general from Maximilian Harden, best known of the liberal editors of Germany.

## ARTICLES BY CAILLAUX.

In France, the Paris bureau is headed by Mr. Tuohy. To the day-by-day despatches of himself and his staff is added at fortnightly intervals a "leader" by Joseph Caillaux, former Premier of France, whose engagement by The World for this purpose provoked a storm of discussion throughout the republic. Each week there is, too, an article by Andre Tardieu, editor of L'Echo Nationale and former High Commissioner to the United States.

In Rome Beatrice Baskerville is chief of The World's bureau. Miss Baskerville, through long residence in Italy, is exceptionally well informed

regarding political and social and ecclesiastical conditions.

In London the central European bureau of The World is directed by James M. Tuohy, dean of the correspondents for American newspapers and equipped with a profound knowledge of British affairs. With him is Joseph W. Grigg, whose standing was evidenced by the fact that he was the first correspondent of any nationality to be accredited to British general headquarters in France during the war. To their view and record of the progress of events is added a weekly letter by A. G. Gardiner, formerly editor of the Daily News, and, as has been said, the service of the Manchester Guardian, the foremost liberal newspaper in Great Britain.

In Ireland, P. J. Kelly serves as staff correspondent of The World. During the fateful days when the issue between the Free State and the republic was being fought out in the Dail Eireann, J. M. Tuohy wrote a truly historic series of despatches. These were displayed against a background formed by a remarkable sequence of intimate portraits of the leaders of the Irish cause by Samuel McCoy, of The World's staff, who wrote from personal acquaintance with them.

## CLEMENCEAU'S CONTRIBUTIONS.

Throughout the year The World has enjoyed the services of a company of "occasional correspondents" that has never been paralleled by an American newspaper. A fortnight ago it concluded a series of articles by Georges Clemenceau, with which the Tiger of France amplified and perfected the arguments he put forth at his public meetings in support of his appeal for American support of France. This was a historic newspaper achievement, for since the war Clemenceau had refused to write even for his own paper, L'Echo Nationale.

During the economic conference at Genoa the "occasional correspondents" of The World included John Maynard Keynes, the great British economist, and Frank A. Vanderlip, former President of the National City Bank. Mr. Vanderlip followed his Genoa articles with a series based on personal study of conditions in the principal countries of the Continent.

In "Somewhere in Europe," Francis Hackett wrote—and is still writing—each week a delightful monograph under the title "The Rolling Stone," which has been read with an eagerness easily to be understood by those familiar with his graceful style and friendly viewpoint.

At the close of the year The World began a series by Emile Coué, the great French exponent of auto-suggestion, which will continue for some time into 1923.

This engagement was in keeping with a consistent policy of maintaining a current record of the progress of science. The World was first among American newspapers to elucidate popularly the now famous Steinach operation.

## TEST OF PHOTOGRAPHY BY WIRELESS.

It also lent its auspices to a test of the wireless transmission of photographs by the Korn process, receiving by way of Bar Harbor and publishing a portrait of the Pope sent from Rome.

Now The World has secured American rights to the Belin process of transmission of pictures by wire and wireless. Demonstration of this process was made here more than a year ago by The World, and now, in its perfected form, it will soon institute what may well prove to be the greatest advance in the dissemination of news since the invention of the telegraph.

Not unrelated to these records was the publication by The World of "Our American Adventure" by Sir Arthur Conan Doyle, in which he set forth the results of his missionary tour in behalf of spiritism. Recalling that Sir Arthur regards spiritism as a religion, attention may be called in this connection to the fact that each Monday morning The World prints the report of a sermon preached the day before, the only New York newspaper to attempt a systematic account of the doctrines preached in the pulpits of the metropolis.

## SOME FEATURE WRITERS.

In the departments devoted to the arts, The World has never reached so high a plane as that attained in 1922. Franklin P. Adams (F. P. A.) brought his Conning Tower to The World with the beginning of the year, beyond question the best known and best liked of the "colyums" that mark American newspapers. A daily neighbor of the Conning Tower is "It Seems To Me," in which Heywood Broun writes of plays and books and intellectual affairs in general, with quizzical excursions into a wide variety of other fields.

Mr. Broun is, as well, dramatic critic of The World, with Lawrence Stallings as an assistant, and with Quinn L. Martin adding daily to his reputation as a critic of the increasingly important motion picture. Deems Taylor is the music critic, with a steadily growing following among those who know the worth of real knowledge, sound judgment and unfailing grace of expression.

E. W. Osborn is still in charge of the book pages of The World, where Mr. Broun, John L. Heaton, Vivian Radcliffe and others as well known are represented regularly. Henry Tyrrell continues as the art critic of The World with new distinction.

Frueh spread the whimsical humor of his caricatures through the year, and to Gene Carr, who draws the "Metropolitan Movies," came not only the publication in book form of a collection of these inimitable glimpses of child life in the streets but a series of public exhibitions of them—and a sermon about them by the Rev. Percy Stickney Grant in the Church of the Ascension. Joseph van Raalte won new encomiums during the year for his sometimes humorous, sometimes appealing, but always perfected vignettes of life.

It is one of the recompenses of newspaper work that real excellence needs little other commendation to attention than its own worth. This has been strikingly demonstrated by the success that has marked the daily publication on the editorial page of The World of "News Outside the Door." This "news" is of birds and flowers and stones and trees, all the things and creatures of the realm of nature. "J. O. S.", who reports this "news," calls them essays; scores of readers have written in to acclaim them poems.

## FONTAINE'S FINANCIAL COMMENT.

The financial pages of The World established themselves as the best ordered and best printed in the city. A new feature during the year was a daily column of comment and gossip by S. S. Fontaine, financial editor, wherein he sounds a note entirely new in Wall Street chronicles. Burton L. Read continues as bond editor, and C. F. Hughes as business news editor, his page having been made still more notable by serial contributions on the science of retailing by Prof. Norris A. Brisco of New York University.

And not least among the developments of the year was the adoption of leaded brevier as the type in which the first page of The World should be set. This page stands to-day the cleanest, most attractive, most legible in the United States—a fit vehicle for its contents.

## UNUSUAL SPORTING FEATURES.

Sports in The World for 1922 have been based on authority and accuracy, and marked by variety. Daily happenings have been carefully chronicled by members of the regular staff, who are writers recognized as authorities in their several lines. Furthermore, big stories have been treated in a big way by calling on writers of prominence to contribute special articles on golf, baseball, boxing, football and lawn tennis.

Among the unusual features provided during the year were a series of analytical articles on The World's Series baseball games by Christy Mathewson, who came out of enforced retirement at Saranac Lake for the first time as a guest of The World.

Another striking feature was furnished by G. F. T. Ryall of The World staff, who made the journey from the Jamaica track to Louisville, Ky., in the car with Morvich, the horse of the hour at that time and the one which, following this journey, won the Kentucky Derby. It was the first time that full details on the travelling of a famous horse were recorded.

L. de B. Handley, also of The World staff, was responsible for bringing about the international swim for women at three and a half miles, which was won by Miss Gertrude Ederle, and in which Miss Hilda James, an English girl, finished third.

Among the men of prominence who contributed to the sporting page during the year were Walter Hagen, open golf champion of Great Britain, Gerald L. Patterson, Captain of the Australian Davis Cup lawn tennis team; Francis Ouimet, one of the leaders in amateur golf; W. W. Roper, coach of the Princeton football eleven; T. A. D. Jones, coach at Yale; John Heisman, coach at Pennsylvania; Christy Mathewson in baseball, and Mlle. Suzanne Lenglen, the French lawn tennis wonder.

George Daley's Sport Talk each Monday morning has aimed to make constructive suggestions in an effort to keep sports up to the highest standard and free from abuses. Monitor in baseball, Igoe in boxing, Patterson McNutt in golf and other sports, William Hennigan in baseball and track athletics, and George Daley in racing and football, have kept the readers of The World well informed from day to day, while Heywood Broun has added a punch in touching on the high spots here and there.

## RELIGIOUS NEWS A FEATURE.

As a constructive feature in present day journalism The Morning World maintains a department devoted to the activities of local churches, and each Monday morning prints a stenographic report of a Sunday sermon with a picture of the preacher. The department is also a clearing house for religious news from all parts of the world.

The regular department of religious news on Saturday mornings to quote a former Moderator of the General Assembly of the Presbyterian Church, has "become a force and a distinct advance on all the religious features of other papers (New York). It has lifted the religious feature to a dignified and challenging position and ministers are rejoicing in it."

## OUTSTANDING FEATURES IN THE SUNDAY WORLD MAGAZINE.

The Sunday World Magazine during the year achieved an unprecedented record in the quality and quantity of features presented. Perhaps the most outstanding achievements were the publication, in special supplements illustrated in color, of "The Story of Mankind," by Hendrik Van Loon, and "The Story of the Irish Nation," by Francis Hackett. Two other notable features were stories written especially for The Sunday World Magazine by the three most popular stars of the movies, "Hollywood to Paris" by Mary Pickford and Douglas Fairbanks, and "The Mirror of My Life" by Pola Negri.

The most striking narrative of the year was "The Tragic Story of the Castaways of the Dumaru," being a diary kept by two of the survivors.

Branching into the realm of fiction, the magazine offered four of J. S. Fletcher's most thrilling mystery stories, a novel by P. G. Wodehouse, and a series of detective stories by E. Phillips Oppenheim.

The expert criminologist, E. H. Smith, contributed regularly fascinating stories of the underworld, including a valuable series on bucket shops, while Karl K. Kitchen, the intrepid traveller, brought back from the west, "The Mirrors of Hollywood," and from Europe "Capital Nights' Entertainments."

Among the regular features to be found in the magazine were reproductions of songs from current musical successes, by such famous composers as Victor Herbert, Irving Berlin and Jerome Kern; two pages of odd and interesting information on new discoveries and inventions; a page of Ingenuities including the popular cross-word puzzle; a monthly article on the astrological significance of birthdays. The World staff writers in Europe frequently contributed thrilling and colorful stories from abroad, and Arthur Benington wrote many valuable articles on the new discoveries in the world of science and psychical research.

The cover designs maintained an unusual standard of artistry, presenting the work of such well known men as Coles Phillips, Halmi, Remisoff, Soudekine, Joseph Cummings Chase, Howard Chandler Christy, Fabiano, Haskell Coffin, and others.

For wide range of subject the magazine offerings for the year have been unequalled. Articles on art, music, sports, fashions, adventure, romance, the theatre, have appeared on its pages, and among the staff writers not already mentioned are Sarah MacDougall, Prosper Buranelli, Ernest Brennecke, Charles Welton and Milton Raison.

The Sunday World Magazine aims to be truthful, interesting and informative. It is well written, well illustrated and lives up to its slogan, "The Best Weekly Magazine in New York."

## SUNDAY WORLD SCHOOL PRIZES.

The Sunday World has actively promoted athletics in the city schools under the auspices of the Board of Education and the Public Schools Athletic League for seventeen years, and the development they have reached each year is the most important that has been accomplished in New York schools. Millions of boys have received training through the field days which began in 1906. The class banner, a cherished trophy each year, is hung in a conspicuous place in the schools, and upward of a hundred thousand young men and boys in the city are wearing medals of silver and bronze provided annually for winners of each school that had a field day, and gold, silver and bronze for the city-wide "Final Meet." The Sunday World final meet, this year, was the largest athletic event in the history of the city, having more than three thousand boys with fine records made in the schools engaged in the various events, distinguished officials and a great assemblage of spectators.

Athletic activities, supported by The Sunday World, under the supervision of city teachers, are carried on at vacation playgrounds that give every child opportunities for pleasure and mental and physical benefit by baseball tournaments, basketball track and field events, swimming, etc. The Parks and Playgrounds Association maintains games and athletic sports for which The Sunday World provides prizes.

The Sunday World encourages school garden clubs, for which prizes are given to promote interest in practical gardening and cultivate a love of nature and outdoor work. Crops this year in seventy outdoor gardens, reported weekly by teachers, showed a season total crop valuation, according to market prices, of $21,139.56.

A walking club is open to boys and girls above the fifth grade, which provides means of getting wholesome exercise for those who cannot engage in strenuous sport.

Swimming contests, ice and roller skating, tennis and marble shooting have attracted a large share of pupils that have profited by the support of the Sunday World.

## BUREAU OF ACCURACY AND FAIR PLAY.

The World's Bureau of Accuracy and Fair Play completed the ninth year of its existence in July. Its primary purpose, as declared at the outset, is to promote accuracy and fair play in the columns of The World, to correct carelessness, and to stamp out fakes and fakers. All complaints involving these questions, including libel actions, are turned over to this bureau and carefully inquired into and, if they are found to be well grounded, corrections are made. A record is kept of each case investigated, with a card index of those responsible for articles complained of. Faking and chronic carelessness are punished by dismissal. In practice the idea has worked out well. Members of The World staff, and its correspondents everywhere have, with very few exceptions worked in harmony with the bureau. The World's example has been followed by many other newspapers throughout the country.

The bureau has made a practice of opposing attacks and complaints that have no merit. In the early stages of its operation it learned that there are lawyers in New York who make a specialty of stirring up libel litigation and who seemingly are not adverse to representing criminals and otherwise disreputable characters who sometimes bring suits on false and perjured complaints. A card index covering a period of more than twenty years reveals the names of lawyers who have made a practice of stirring up libel litigation, and whenever attempts are made to recover damages in these cases The World has spared neither trouble nor expense in fighting to the last ditch. As a result some lawyers have been disbarred or suspended from practice, several notoriously crooked litigants have been sent to prison and there has been a very material decrease in libel suits.

The bureau has also waged war against false and misleading advertising and occasional swindlers who have attempted to use The World's advertising columns to ensnare victims. It has successfully cooperated with public prosecutors and the police in bringing many of these swindlers to justice.

## EVENING WORLD EDITORIAL PAGE.

True to its principle of working primarily for the best interests of the 7,000,000 people in metropolitan New York, The Evening World editorial page in 1922 devoted much space to discussion of the transit problem, advocating co-operation between State and city authorities and denouncing obstructive political tactics.

In the interest of public safety The Evening World worked for the taxi-bonding law and demanded its enforcement. It has also emphasized the need for a motor code and more efficient licensing and registration of drivers.

As the result of an Evening World editorial suggestion, the Garment Workers' Union applied for and were granted an injunction against the contract-breaking employers in the industry, the first case on record in which union labor had made such use of the equity provisions of the law.

This newspaper was also instrumental in securing extension of the rent laws it previously sponsored.

For the health and pleasure of New Yorkers now and in years to come, The Evening World has insisted on the need for foresight in provision of playgrounds, parks and public golf courses. It has kept before the public the need for a seat for every child in the public schools. It exposed the unbusinesslike conduct of the public markets and secured correction of some of the worst abuses.

John Cassel's cartoons, famous for their finely drawn, straight-aimed thrusts into the meaning of current events, have been a daily feature widely reproduced.

## EVENING WORLD'S ACHIEVEMENTS.

The Evening World, constant and insistent in its support of every project for the public good, has

during the year made some notable fights; among the most outstanding are:

1. For the passage of a law bonding all taxicabs, and the enforcement thereof. More than 10,000 judgments against taxicab companies were returned unsatisfied during 1921. Under the new law, secured by Evening World efforts, each taxicab must carry insurance at the rate of $2,500 against accidents.

2. Through an exhaustive investigation and analysis conducted by Sophie Irene Loeb, it was demonstrated that the increase in the price of gas to the consumer, from 80 cents per thousand to the rate of $1.25 and $1.50, was not justified by any increase in gas oil or wage costs. The Evening World demanded an adjustment of these rates and the discontinuance of the antiquated methods of gas-making. Results have been obtained in a change of methods and a reduction of 10 cents per thousand. The Evening World figures demonstrate that gas, at a reasonable profit, can be furnished the consumer at a rate between 90 cents and $1.00. The fight for a fair price will be continued.

3. The Evening World exposed the astounding nepotism in Congress. Thousands of relatives of Congressmen were carried on the Government pay-rolls, many of whom did not render service. During this exposure the news was broadcasted throughout the country, and was responsible for the defeat of many of the offending candidates for re-election.

4. The Evening World urged and secured extension of the rent laws, which were originally passed following a long fight made by this paper in the interests of the tenant.

5. The Evening World has disclosed reasons for the need of a general and thorough investigation of coal conditions, along the lines of the plan finally adopted by Congress. The published investigations as to the visible coal supply for New York City, in smaller sizes, and substitutes, coupled with the reluctance of coal dealers to avail themselves of these, has resulted in new rulings by the Fuel Administrator, which materially eased the situation.

6. Insistently, The Evening World has demanded increased and better transit facilities, and the editorial policy has been supported in the news pages by articles bearing on every phase of the transit situation.

7. The plans and articles published in The Evening World urging a great war memorial and recreation park and public swimming pool in Central Park have borne fruit, the recommendation by the Committee of Estimate that $600,000 be appropriated by the city for this purpose.

8. The Evening World has rendered signal service by calling attention to the gasoline and oil surpluses. Following these expositions the price of these essentials has been reduced.

In the late fall an eight-page illustrated Brooklyn Section was added to the regular edition of The Evening World, dealing exclusively with the local activities of that borough.

## EVENING WORLD'S FEATURE PAGES.

The Evening World's Daily Magazine Page, carefully developed to combine every chief interest of woman and the home, included in its large staff of special contributors some of America's most widely recognized authorities on the subjects covered. The trend in fashions was accurately and interestingly forecast and followed by Margery Wells and Mildred Lodewick in illustrated articles which, on Saturdays, were expanded to a full page. Mrs. Christine Frederick's articles covered every common problem in home economics and household engineering. Doris Doscher, in several series of articles, pointed the way to health and beauty by natural means, supplementing her writings with talks broadcasted by radio. Inspirational articles by Sophie Irene Loeb sympathetically and helpfully touched every phase of human emotion in every walk of life. Caroline Crawford's love serials penned fascinating and accurate word pictures of modern youth in its greatest adventure. Betty Vincent's keen understanding of lovers' problems gave her special articles and "Courtship and Marriage" correspondence column a wide popularity. Neal O'Hara's sparkling humor, Roy McCardell's inimitable Jarr Family and Marguerite Mooers Marshall's Fables for the Fair and Maxims of a Modern Maid gave lightening touches of genuine entertainment. Other writers as ably conducted a wide range of special departments, including home decoration, recipes, sewing suggestions, and informative matter of several interesting kinds.

Marguerite Mooers Marshall, Fay Stevenson, Ruth Snyder, and other special writers regularly contributed feature articles and interviews for the news pages of The Evening World. Notable among these features was the "Daily Movie" strip of pictures of prominent people, usually combined with interesting interviews.

During the year The Evening World published nearly a score of the best novels of the day as serials, the names of the best known writers of both America and England being represented in the list. A complete novelette, an unusual short story, by a well known author was a feature of each Saturday edition.

The Evening World's Comic Page every day provided a variety of real laughs that somewhere caught every fancy. An ever-growing following of fun-loving fans has daily looked for "Joe's Car", "The Big Little Family," "Little Mary Mixup" and "Katinka." Maurice Ketten's "Can You Beat It," "Such is Life" and "The Day of Rest," cartoons that accurately mirror the funniest side of human life, every day "struck twelve" on humor's clock.

The "What Did You See To-Day?" page, which made "Every Reader a Reporter," met with instantaneous public response. Roughly, half a million readers from the city and neighboring States have been contributors to this page, requiring a large staff of discriminating readers to handle the immense mail, so that the automobile and cash prizes might be properly awarded. Thousands of readers have "tipped off" The Evening World to first big news events.

Other special features of The Evening World included: Charles Darnton's criticisms of the New Plays, Don Allen's motion picture Screenings, Bide Dudley's the Stage and Good Evening, Frank H. Warren's In the Realm of Music, R. R. Batson's Daily Wall Street Report, and W. G. Bowdoin's art criticism and news, E. W. Osborn's literary comment and Capt. Robert Schofield Wood's radiophone service column.

## EVENING WORLD'S SPORTING PAGES.

The Evening World promptly recognized the pronounced trend toward athletics by printing every day two full pages of interesting sport cartoons and articles by Robert Edgren, Bozeman Bulger, Vincent Treanor, William Abbott, Richard Freyer, Robert Boyd and Joseph Gordon. Special attention was paid to amateur sports. During the year The Evening World donated many handsome trophies to encourage young athletes toward greater efficiency in all lines of sport.

Every important sport event during 1922 was ably reported by staff experts, while clever cartoons by Robert Edgren, Bud Counihan and Thornton Fisher furnished a pictorial review of all big doings in the field of sport.

## THE KIDDIE KLUB.

The Evening World Kiddie Klub, which is under the direction of Eleanor Schorer, gave a benefit performance at the Astor Theatre on Feb. 26, 1922, for the Kiddie Klub Country Fund. With the money raised at this performance and through public subscription, the fund was able, by working in co-operation with Health Commissioner Copeland and the New York City Department of Health, to give vacations of from six weeks to three months each to over 300 city children suffering with whooping cough and to send them home well. These 300 children were guests of the city at Riverside Island, under the immediate care of Dr. Thomas F. Joyce and a staff of eight doctors and forty-two nurses, between June 25 and October 15. Diversional teachers, playground equipment, toys, books, extra clothes, etc., were supplied by the Kiddie Klub Country Fund. Through Mr. I. Elkin Nathans of the New York Milk Conference over 9,600 quarts of Grade A milk were donated by five milk concerns: Borden's, Beakes' Model Dairy, Clover Farms and Levy Co. Happiness Candies supplied the thousands of Cutie Pops eaten by the youngsters throughout the summer.

Two outings, one at Luna, Coney Island, July 12, and the other at Starlight Park, Bronx, on July 26, supplied midsummer fun for well Klub members. Eighteen thousand Brooklyn children attended the Luna outing and over 10,000 Bronx youngsters went to Starlight Park. All the attractions were free to members on Kiddie Klub Days at Luna and Starlight.

The Seventh Annual Kiddie Klub Christmas Show was given at the Casino Theatre (courtesy Messrs. Lee and J. J. Shubert) on Dec. 28 and 29. There were over 50 kiddie acts, selected from the Klub membership. Two seats were sent free of charge to each member who applied. The Evening World Kiddie Klub boasts a membership of over 142,000 children under 16 years of age.

The Boy Scout Weekly Department covered the activities of that organization. The Girl Scout and Camp Fire Girls were handled in many illustrated stories.

# Postal Information.

**Domestic Letter Rate**—2 cents an ounce or fraction thereof. Includes letters or other first class matter addressed for local delivery or for transmission from one place to another within the United States, or to or from or between the possessions of the United States, Hawaii, Porto Rico, Virgin Islands of the United States, Canal Zone, the Philippines, Guam, Tutuila, (U. S. Samoa), United States naval vessels, United States Naval Hospital and United States Navy Fuel Depot at Yokohama, Japan, and United States forces in Germany. The U. S. Postmaster General announced Sept. 25, 1922, that on Dec. 31 he would abandon the United States postal agency at Shanghai, China, and that the 2-cent letter rates would not include Shanghai after Nov. 30, 1922.

The limit of weight for first-class matter is the same as for fourth-class parcel post. 70 pounds, local, or in the first, second or third zone; 50 pounds in the other zones.

First-class matter includes written matter, matter sealed against inspection, postal cards, and private mailing cards.

**Aeroplane** letter rate is 2 cents an ounce or fraction thereof.

**Domestic Postal Card Rate**—1 cent as to each country and place in the above paragraph; reply card, 2 cents. The rate for private mailing cards is 1 cent each.

**Second-Class Matter**—Periodical publications, no limit of weight. The rate to the public is 1 cent for each 4 ounces or fraction thereof, for complete copies. Incomplete copies are subjected to third-class or fourth-class rates, according to their physical character.

**Third-class Matter**—Printed paper matter other than books, and other than such periodical publications as are entitled to second-class rates. The limit of weight is 4 pounds. The rate is 1 cent for each 2 ounces or fraction thereof. Packages over 4 pounds in weight go as fourth-class parcel-post matter.

**Fourth-class Matter** (domestic parcel post)—Includes all mailable matter not in the preceding classes. It may be insured and may be sent C. O. D.

**Rates of postage on fourth-class or parcel-post matter—to be fully prepaid—unsealed**—are as follows: (a) Parcels weighing 4 ounces or less, except books, seeds, plants, etc., 1 cent for each ounce or fraction thereof, any distance; (*b*) Parcels weighing 8 ounces or less, containing books, seeds, cuttings, bulbs, roots, scions, and plants, 1 cent for each 2 ounces or fraction thereof, regardless of distance; (*c*) Parcels weighing more than 8 ounces, containing books, seeds, plants, etc., parcels of miscellaneous printed matter weighing more than 4 pounds, and all other parcels of fourth-class matter weighing more than 4 ounces, are chargeable, according to distance or zone, at the pound rates shown below, a fraction of a pound being considered a full pound:

**Local rates**—1 lb., 5 cts.; 2-3 lbs., 6 cts.; 4-5 lbs., 7 cts.; 6-7 lbs., 8 cts.; 8-9 lbs., 9 cts.; 10-11 lbs., 10 cts.; 12-13 lbs., 11 cts.; 14-15 lbs., 12 cts.; 16-17 lbs., 13 cts.; 18-19 lbs., 14 cts.; 20-21 lbs., 15 cts.; 22-23 lbs., 16 cts.; 24-25 lbs., 17 cts.; 26-27 lbs., 18 cts. 28-29 lbs., 19 cts.; 30-31 lbs., 20 cts.; 32-33 lbs., 21 cts.; 34-35 lbs., 22 cts.; 36-37 lbs., 23 cts.; 38-39 lbs. 24 cts.; 40-41 lbs., 25 cts.; 42-43 lbs., 26 cts.; 44-45 lbs.; 27 cts.; 46-47 lbs., 28 cts.; 48-49 lbs., 29 cts.; 50-51 lbs., 30 cts.—and so on up to 70 lbs., 1 cent additional for each 2 lbs. or fraction.

**1st zone** (up to 50 miles)—1 lb., 5 cts., and 1 cent extra for each added pound, up to 74 cts. for 70 lbs.

**2nd zone** (50 to 150 miles)—1 lb., 5 cts., and 1 cent extra for each added pound, up to 74 cts., for 70 lbs.

**3rd zone** (150 to 300 miles)—1 lb., 6 cts., and 2 cents extra for each added pound, up to $1.44 for 70 lbs.

**4th zone** (300 to 600 miles)—1 lb., 7 cts., and 4 cents extra for each added pound, up to $2.03 for 50 lbs.

**5th zone** (600 to 1,000 miles)—1 lb., 8 cts., and 6 cents extra for each added pound, up to $3.02 for 50 lbs.

**6th zone** (1,000 to 1,400 miles)—1 lb., 9 cts., and 8 cents for each added pound, up to $4.01 for 50 lbs.

**7th zone** (1,400 to 1,800 miles)—1 lb., 11 cts., and 10 cents for each added pound, up to $5.01 for 50 lbs.

**8th zone** (over 1,800 miles)—1 lb., 12 cents., and 12 cents for each added pound, up to $6 for 50 lbs.

**Registered Mail**—The fee is 10 cents over the regular postage. Articles admissible—Any mailable articles, except unsealed fourth-class matter (parcel-post) for domestic destinations, may be registered. Domestic parcels containing fourth-class matter may also be registered if sealed and the usual fee and postage at the first-class rate are paid. The amount recoverable from the Government in case of loss is limited to $50.

**Money Orders**—The maximum is $100, but there is no limit to the number that can be issued in one day to the same remitter. The fees for domestic orders are: $2.50 or less, 3 cents; $2.51 to $5.00, 5 cents; $5.01 to $10.00, 8 cents; $10.01 to $20.00, 10 cents; $20.01 to $30.00, 12 cents; $30.01 to $40.00, 15 cents; $40.01 to $50.00, 18 cents; $50.01 to $60.00, 20 cents; $60.01 to $75.00, 25 cents; $75.01 to $100.00, 30 cents. International money orders cost 10 cents for $10.00 or less, and 10 cents extra on each additional $10.00 up to $1 for $100.00. Domestic money orders are payable within 30 days at any United States Post Office (continental); after that, only at the office designated. In the United States insular possessions, colonies of Great Britain, etc., the orders are payable only at the office drawn upon.

**Unmailable Matter**—Includes not only all legitimate matter not conforming to the rules as to legibility of address, size of package or certificates of inspection, but also game, etc., killed out of season; poisons, explosive or inflammable articles, or bad smelling; all spirituous and malt liquors; all liquor advertisements to or from prohibition localities; indecent matter, written or otherwise; dunning postals and lottery, endless chain and fraud matter. In addition, sealed mail to a *foreign country*, except it be obviously letters, cannot be sent, nor can publications in violation of the copyright laws of the country of destination.

**Postal Savings**—The limit of an individual deposit has been increased from $1,000 to $2,500. No sum of less than $1 will be accepted for a deposit. Interest is allowed at the rate of 2 per cent.

**Foreign Letter Rates**—2 cents an ounce or fraction thereof, to the following countries:

Argentina, Bahamas, Barbados, Bermuda, Bolivia, Brazil, British Guiana, British Honduras Canada, Colombia, Costa Rica, Cuba, Dominican Republic.

Dutch West Indies (Aruba, Bonaire, Curacao, Saba, St. Eustatius, and the Dutch part of St. Martins); Ecuador, Great Britain, Ireland, Haiti, Honduras, Republic of.

Jamaica (including Turks, Caicos, and Cayman Islands).

Leeward Islands (Antigua with Barbuda and Redonda, St. Kitts, or St. Christopher, Nevis with Anguilla, Dominica, Montserrat, and British Virgin Islands), Martinique, Mexico, Newfoundland, New Zealand, Nicaragua, Panama, Peru, Salvador, Spain (including the Spanish colonies), Trinidad (including Tobago).

Uruguay, Western Samoa.

Windward Islands (Grenada, St. Vincent, the Grenadines, and St. Lucia).

Members of the American Army of Occupation in Germany.

Members of the United States Navy in foreign waters, when addressed care of the Postmaster at New York or San Francisco, as the case may be.

United States Naval Hospital, Yokohama, Japan.

*The rate to all other* foreign countries and places in foreign countries for letters is 5 cents for the first ounce or fraction thereof, and 3 cents for each additional ounce or fraction thereof.

**Foreign Postal Card Rate**—1 cent each to Argentina, Bolivia, Canada, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Honduras, Mexico, Nicaragua, Panama, Peru, Salvador, Uruguay, and Spain and her colonies. The rate is 2 cents each to other foreign countries.

**Rates on other matter** for foreign countries—Postal cards, double (with paid reply), 4 cents;

Newspapers and other printed matter, each 2 ounces or fraction, 1 cent.

Printed matter in relief for use of the blind, each 18 ounces or fraction thereof, 1 cent.

Commercial papers, first 10 ounces or less, 5 cents; each additional 2 ounces or fraction, 1 cent; (limit of weight, 4 pounds 6 ounces).

Samples of merchandise, first 4 ounces or less, 2 cents; each additional 2 ounces or fraction, 1 cent; (limit of weight, 18 ounces).

# Astronomical Calculations for 1923.

THE Astronomical Calculations, beginning on the next page are given in local Mean Time, except as otherwise indicated, and were made expressly for THE WORLD ALMANAC by Arthur Newton of the United States Naval Observatory, Washington, D. C.

## CALENDAR FOR 1923.

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
|---|---|---|---|---|---|---|---|
| Jan.... | .. | 1 | 2 | 3 | 4 | 5 | 6 |
| | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| | 28 | 29 | 30 | 31 | .. | .. | .. |
| Feb.... | .. | .. | .. | .. | .. | 2 | 3 |
| | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | .. | .. | .. |
| March.. | .. | .. | .. | .. | 1 | 2 | 3 |
| | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 |

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
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| April... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| | 29 | 30 | .. | .. | .. | .. | .. |
| May... | .. | .. | 1 | 2 | 3 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
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| | 27 | 28 | 29 | 30 | 31 | .. | .. |
| June... | .. | .. | .. | .. | .. | 1 | 2 |
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| | 24 | 25 | 26 | 27 | 28 | 29 | 30 |

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
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| July... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| | 29 | 30 | 31 | .. | .. | .. | .. |
| Aug.... | .. | .. | .. | 1 | 2 | 3 | 4 |
| | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
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| | 26 | 27 | 28 | 29 | 30 | 31 | .. |
| Sept... | .. | .. | .. | .. | .. | .. | 1 |
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| | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
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| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
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| | 28 | 29 | 30 | 31 | .. | .. | .. |
| Nov.... | .. | .. | .. | .. | 1 | 2 | 3 |
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| | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | .. |
| Dec.... | .. | .. | .. | .. | .. | .. | 1 |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| | 30 | 31 | .. | .. | .. | .. | .. |

## CALENDAR FOR 1922.

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
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| Jan.... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
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| | 29 | 30 | 31 | .. | .. | .. | .. |
| Feb.... | .. | .. | .. | 1 | 2 | 3 | 4 |
| | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | 26 | 27 | 28 | .. | .. | .. | .. |
| March.. | .. | .. | .. | 1 | 2 | 3 | 4 |
| | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
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| | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | 26 | 27 | 28 | 29 | 30 | 31 | .. |

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
|---|---|---|---|---|---|---|---|
| April... | .. | .. | .. | .. | .. | .. | 1 |
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| | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| | 30 | .. | .. | .. | .. | .. | .. |
| May... | .. | 1 | 2 | 3 | 4 | 5 | 6 |
| | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| | 28 | 29 | 30 | 31 | .. | .. | .. |
| June... | .. | .. | .. | .. | 1 | 2 | 3 |
| | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | .. |

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
|---|---|---|---|---|---|---|---|
| July... | .. | .. | .. | .. | .. | .. | 1 |
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| | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| | 30 | 31 | .. | .. | .. | .. | .. |
| Aug.... | .. | .. | 1 | 2 | 3 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| | 27 | 28 | 29 | 30 | 31 | .. | .. |
| Sept... | .. | .. | .. | .. | .. | 1 | 2 |
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| | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| | 24 | 25 | 26 | 27 | 28 | 29 | 30 |

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
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| Oct.... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| | 29 | 30 | 31 | .. | .. | .. | .. |
| Nov.... | .. | .. | .. | 1 | 2 | 3 | 4 |
| | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | 26 | 27 | 28 | 29 | 30 | .. | .. |
| Dec.... | .. | .. | .. | .. | .. | 1 | 2 |
| | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
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| | 31 | .. | .. | .. | .. | .. | .. |

## CALENDAR FOR 1924.

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
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| Jan.... | .. | .. | 1 | 2 | 3 | 4 | 5 |
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| | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| | 27 | 28 | 29 | 30 | 31 | .. | .. |
| Feb.... | .. | .. | .. | .. | .. | 1 | 2 |
| | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| | 24 | 25 | 26 | 27 | 28 | 29 | .. |
| March.. | .. | .. | .. | .. | .. | .. | 1 |
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| | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
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| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
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| April... | .. | .. | 1 | 2 | 3 | 4 | 5 |
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| | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| | 27 | 28 | 29 | 30 | .. | .. | .. |
| May... | .. | .. | .. | .. | 1 | 2 | 3 |
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| | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| June... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| | 29 | 30 | .. | .. | .. | .. | .. |

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
|---|---|---|---|---|---|---|---|
| July... | .. | .. | 1 | 2 | 3 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| | 27 | 28 | 29 | 30 | 31 | .. | .. |
| Aug.... | .. | .. | .. | .. | .. | 1 | 2 |
| | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | 31 | .. | .. | .. | .. | .. | .. |
| Sept... | .. | 1 | 2 | 3 | 4 | 5 | 6 |
| | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| | 28 | 29 | 30 | .. | .. | .. | .. |

| | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
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| Oct.... | .. | .. | .. | 1 | 2 | 3 | 4 |
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| | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | 26 | 27 | 28 | 29 | 30 | 31 | .. |
| Nov.... | .. | .. | .. | .. | .. | .. | 1 |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
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| | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| | 30 | .. | .. | .. | .. | .. | .. |
| Dec.... | .. | 1 | 2 | 3 | 4 | 5 | 6 |
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| | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| | 28 | 29 | 30 | 31 | .. | .. | .. |

## THE SEASONS.

IN the temperate zones, these are four in number: Spring, Summer, Autumn and Winter; beginning respectively at the vernal equinox, the summer solstice, the autumnal equinox and the winter solstice; for which, in the north temperate zone, the approximate dates are March 21, June 21, September 23, and December 21. In the south temperate zone, the vernal equinox or the beginning of spring is September 23, the summer solstice or the beginning of summer is December 21, and so on.

The earth's axis continually points in the same direction and if the axis were perpendicular to the plane of the earth's orbit around the sun, there would be no change of seasons. Day and night would everywhere be of equal length and equable conditions of temperature would prevail throughout the year. But the axis is tilted 23° 27′ away from a perpendicular to the orbit, and only in March and September is the axis at right angles to the direction of the sun. In those months occur the equinoxes, when day and night are equal the world over. In June, the North Pole is tilted 23° 27′ toward the sun and the days in the northern hemisphere are longer than the nights; at the same time, the days in the southern hemisphere are shorter than the nights. In December the North Pole is tilted 23° 27′ away from the sun and the nights in the northern hemisphere are longer than the days; at the same time the nights in the southern hemisphere are shorter than the days.

The heating influence of the sun increases with the length of the day and with the sun's altitude at noon. The greatest daily accession of heat is, therefore, at the time of the summer solstice; and the least is at the time of the winter solstice. In June, in the north temperate zone, the heat received by day far exceeds the loss through radiation by night and it is not until July or August that the two become equal and the maximum temperature of the year is experienced. In December, the heat received by day fails to make good the loss by night and it is not until January or February that gain and loss become equal and the thermometer ceases to show a downward tendency.

The seasons, in 1923 (Eastern Standard Time—old) begin as follows: Vernal equinox (Spring), March 21 (10.29 A. M.); summer solstice (Summer), June 22 (6.03 A. M.); autumnal equinox (Autumn), Sept. 23 (9.04 P. M.); winter solstice (Winter), Dec. 22 (3.54 P. M.).

1st Month. **JANUARY.** 31 Days.

| Day of the Month | Day of the Week | Calendar for Boston, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for New York City, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for Washington, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for Charleston, Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | M | 7 30 | 4 38 | 5 44 | 7 24 | 4 43 | 5 40 | 7 19 | 4 48 | 5 36 | 7 2 | 5 4 | 5 24 |
| 2 | Tu | 7 30 | 4 38 | rises. | 7 24 | 4 44 | rises. | 7 19 | 4 49 | rises. | 7 3 | 5 5 | rises. |
| 3 | W | 7 30 | 4 39 | 5 42 | 7 24 | 4 44 | 5 46 | 7 19 | 4 50 | 5 51 | 7 3 | 5 6 | 6 3 |
| 4 | Th | 7 30 | 4 40 | 6 46 | 7 25 | 4 45 | 6 50 | 7 19 | 4 51 | 6 54 | 7 3 | 5 7 | 7 5 |
| 5 | Fr | 7 30 | 4 41 | 7 54 | 7 25 | 4 46 | 7 57 | 7 19 | 4 52 | 8 0 | 7 3 | 5 8 | 8 8 |
| 6 | Sa | 7 30 | 4 42 | 9 3 | 7 25 | 4 47 | 9 5 | 7 19 | 4 52 | 9 7 | 7 3 | 5 8 | 9 12 |
| 7 | S | 7 30 | 4 43 | 10 12 | 7 25 | 4 48 | 10 13 | 7 19 | 4 53 | 10 14 | 7 3 | 5 9 | 10 17 |
| 8 | M | 7 29 | 4 44 | 11 21 | 7 25 | 4 49 | 11 22 | 7 19 | 4 54 | 11 22 | 7 3 | 5 10 | 11 21 |
| 9 | Tu | 7 29 | 4 45 | A.M. | 7 24 | 4 50 | A.M. | 7 19 | 4 55 | A.M. | 7 3 | 5 11 | A.M. |
| 10 | W | 7 29 | 4 46 | 12 30 | 7 24 | 4 51 | 12 30 | 7 19 | 4 56 | 12 29 | 7 3 | 5 12 | 12 25 |
| 11 | Th | 7 29 | 4 47 | 1 39 | 7 24 | 4 52 | 1 38 | 7 19 | 4 57 | 1 36 | 7 3 | 5 13 | 1 29 |
| 12 | Fr | 7 28 | 4 48 | 2 47 | 7 24 | 4 53 | 2 44 | 7 19 | 4 58 | 2 42 | 7 3 | 5 14 | 2 32 |
| 13 | Sa | 7 28 | 4 50 | 3 52 | 7 23 | 4 54 | 3 50 | 7 18 | 4 59 | 3 46 | 7 3 | 5 14 | 3 35 |
| 14 | S | 7 27 | 4 51 | 4 55 | 7 23 | 4 55 | 4 51 | 7 18 | 5 0 | 4 47 | 7 3 | 5 15 | 4 34 |
| 15 | M | 7 27 | 4 52 | 5 52 | 7 23 | 4 56 | 5 48 | 7 18 | 5 1 | 5 44 | 7 3 | 5 16 | 5 31 |
| 16 | Tu | 7 27 | 4 53 | sets. | 7 22 | 4 58 | sets. | 7 17 | 5 2 | sets. | 7 3 | 5 17 | sets. |
| 17 | W | 7 26 | 4 54 | 5 50 | 7 22 | 4 59 | 5 54 | 7 17 | 5 3 | 5 58 | 7 2 | 5 18 | 6 9 |
| 18 | Th | 7 26 | 4 55 | 6 50 | 7 21 | 5 0 | 6 53 | 7 17 | 5 4 | 6 57 | 7 2 | 5 19 | 7 6 |
| 19 | Fr | 7 25 | 4 56 | 7 50 | 7 21 | 5 1 | 7 52 | 7 16 | 5 6 | 7 55 | 7 2 | 5 20 | 8 2 |
| 20 | Sa | 7 25 | 4 58 | 8 48 | 7 20 | 5 2 | 8 50 | 7 16 | 5 7 | 8 52 | 7 1 | 5 21 | 8 57 |
| 21 | S | 7 24 | 4 59 | 9 46 | 7 20 | 5 3 | 9 47 | 7 15 | 5 8 | 9 48 | 7 1 | 5 22 | 9 50 |
| 22 | M | 7 23 | 5 0 | 10 43 | 7 19 | 5 4 | 10 43 | 7 15 | 5 9 | 10 43 | 7 1 | 5 23 | 10 42 |
| 23 | Tu | 7 23 | 5 2 | 11 40 | 7 18 | 5 6 | 11 39 | 7 14 | 5 10 | 11 38 | 7 0 | 5 24 | 11 35 |
| 24 | W | 7 22 | 5 3 | A.M. | 7 18 | 5 7 | A.M. | 7 13 | 5 11 | A.M. | 7 0 | 5 24 | A.M. |
| 25 | Th | 7 21 | 5 4 | 12 36 | 7 17 | 5 8 | 12 35 | 7 13 | 5 12 | 12 33 | 7 0 | 5 25 | 12 28 |
| 26 | Fr | 7 20 | 5 5 | 1 34 | 7 16 | 5 9 | 1 31 | 7 13 | 5 14 | 1 29 | 6 59 | 5 26 | 1 21 |
| 27 | Sa | 7 19 | 5 7 | 2 31 | 7 16 | 5 10 | 2 28 | 7 12 | 5 15 | 2 25 | 6 58 | 5 27 | 2 15 |
| 28 | S | 7 19 | 5 8 | 3 28 | 7 15 | 5 12 | 3 25 | 7 11 | 5 16 | 3 22 | 6 58 | 5 28 | 3 10 |
| 29 | M | 7 18 | 5 9 | 4 25 | 7 14 | 5 13 | 4 21 | 7 10 | 5 17 | 4 17 | 6 57 | 5 29 | 4 4 |
| 30 | Tu | 7 17 | 5 10 | 5 18 | 7 13 | 5 14 | 5 15 | 7 9 | 5 18 | 5 11 | 6 57 | 5 30 | 4 58 |
| 31 | W | 7 16 | 5 12 | 6 8 | 7 12 | 5 15 | 6 5 | 7 8 | 5 19 | 6 2 | 6 56 | 5 31 | 5 50 |

## SUN ON MERIDIAN OF WASHINGTON.

| Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 3 | 27 | 8 | 12 | 6 | 37 | 14 | 12 | 9 | 1 | 20 | 12 | 11 | 2 | 26 | 12 | 12 | 36 |
| 2 | 12 | 3 | 55 | 9 | 12 | 7 | 2 | 15 | 12 | 9 | 23 | 21 | 12 | 11 | 19 | 27 | 12 | 12 | 49 |
| 3 | 12 | 4 | 23 | 10 | 12 | 7 | 27 | 16 | 12 | 9 | 44 | 22 | 12 | 11 | 36 | 28 | 12 | 13 | 1 |
| 4 | 12 | 4 | 50 | 11 | 12 | 7 | 51 | 17 | 12 | 10 | 4 | 23 | 12 | 11 | 52 | 29 | 12 | 13 | 12 |
| 5 | 12 | 5 | 18 | 12 | 12 | 8 | 15 | 18 | 12 | 10 | 24 | 24 | 12 | 12 | 8 | 30 | 12 | 13 | 22 |
| 6 | 12 | 5 | 44 | 13 | 12 | 8 | 38 | 19 | 12 | 10 | 43 | 25 | 12 | 12 | 22 | 31 | 12 | 13 | 32 |
| 7 | 12 | 6 | 11 | | | | | | | | | | | | | | | | |

## TWILIGHT.

| Places. | Jan. | Begins, A.M. | Ends, P.M. | Jan. | Begins, A.M. | Ends, P.M. | Jan. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston... | 1 | 5 48 | 6 19 | 11 | 5 48 | 6 28 | 21 | 5 45 | 6 38 |
| New York | 1 | 5 46 | 6 22 | 11 | 5 46 | 6 30 | 21 | 5 44 | 6 40 |
| Wash'ton.. | 1 | 5 43 | 6 24 | 11 | 5 44 | 6 32 | 21 | 5 42 | 6 42 |
| Charleston | 1 | 5 35 | 6 33 | 11 | 5 36 | 6 40 | 21 | 5 35 | 6 48 |

## MOON'S PHASES.

| | D. | H. | M. | | D. | H. | M. |
|---|---|---|---|---|---|---|---|
| Full Moon | 2 | 9 | 33 P. M. | New Moon | 16 | 9 | 41 P. M. |
| Last Quarter | 9 | 7 | 54 P. M. | First Quarter | 24 | 10 | 59 P. M. |

Morning Stars—Venus, Jupiter, Saturn. Evening Stars—Mercury, Mars.

Note—The calendars are in Local Mean Time, see page 49. The Moon's Phases are in Eastern Standard Time.

2nd Month. **FEBRUARY.** 28 Days.

| Day of the Month. | Day of the Week. | Calendar for Boston, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for New York City, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for Washington, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for Charleston, Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | Th | 7 15 | 5 13 | rises. | 7 11 | 5 16 | rises. | 7 7 | 5 20 | rises. | 6 56 | 5 32 | rises. |
| 2 | Fr | 7 14 | 5 14 | 6 46 | 7 10 | 5 18 | 6 48 | 7 6 | 5 22 | 6 51 | 6 55 | 5 33 | 6 58 |
| 3 | Sa | 7 13 | 5 16 | 7 57 | 7 9 | 5 19 | 7 59 | 7 5 | 5 23 | 8 1 | 6 54 | 5 34 | 8 5 |
| 4 | S | 7 12 | 5 17 | 9 9 | 7 8 | 5 20 | 9 10 | 7 5 | 5 24 | 9 10 | 6 54 | 5 35 | 9 11 |
| 5 | M | 7 10 | 5 18 | 10 20 | 7 7 | 5 22 | 10 20 | 7 4 | 5 25 | 10 20 | 6 53 | 5 36 | 10 17 |
| 6 | Tu | 7 9 | 5 20 | 11 30 | 7 6 | 5 23 | 11 29 | 7 3 | 5 26 | 11 28 | 6 52 | 5 36 | 11 22 |
| 7 | W | 7 8 | 5 21 | A.M. | 7 5 | 5 24 | A.M. | 7 2 | 5 27 | A.M. | 6 51 | 5 37 | A.M. |
| 8 | Th | 7 7 | 5 22 | 12 39 | 7 4 | 5 25 | 12 37 | 7 1 | 5 29 | 12 34 | 6 50 | 5 38 | 12 26 |
| 9 | Fr | 7 6 | 5 24 | 1 45 | 7 3 | 5 26 | 1 42 | 6 59 | 5 30 | 1 39 | 6 50 | 5 39 | 1 28 |
| 10 | Sa | 7 4 | 5 25 | 2 48 | 7 2 | 5 28 | 2 44 | 6 58 | 5 31 | 2 40 | 6 49 | 5 40 | 2 28 |
| 11 | S | 7 3 | 5 26 | 3 45 | 7 0 | 5 29 | 3 42 | 6 57 | 5 32 | 3 38 | 6 48 | 5 41 | 3 25 |
| 12 | M | 7 2 | 5 27 | 4 38 | 6 59 | 5 30 | 4 34 | 6 56 | 5 33 | 4 30 | 6 47 | 5 42 | 4 17 |
| 13 | Tu | 7 1 | 5 29 | 5 24 | 6 58 | 5 32 | 5 21 | 6 55 | 5 34 | 5 17 | 6 46 | 5 43 | 5 5 |
| 14 | W | 6 59 | 5 30 | 6 5 | 6 57 | 5 33 | 6 2 | 6 54 | 5 35 | 5 59 | 6 45 | 5 44 | 5 49 |
| 15 | Th | 6 58 | 5 31 | sets. | 6 55 | 5 34 | sets. | 6 53 | 5 37 | sets. | 6 44 | 5 45 | sets. |
| 16 | Fr | 6 57 | 5 33 | 6 37 | 6 54 | 5 35 | 6 39 | 6 51 | 5 38 | 6 41 | 6 43 | 5 46 | 6 47 |
| 17 | Sa | 6 55 | 5 34 | 7 35 | 6 53 | 5 36 | 7 37 | 6 50 | 5 39 | 7 38 | 6 42 | 5 46 | 7 41 |
| 18 | S | 6 54 | 5 35 | 8 32 | 6 51 | 5 38 | 8 33 | 6 49 | 5 40 | 8 33 | 6 41 | 5 47 | 8 34 |
| 19 | M | 6 52 | 5 36 | 9 29 | 6 50 | 5 39 | 9 29 | 6 48 | 5 41 | 9 28 | 6 40 | 5 48 | 9 26 |
| 20 | Tu | 6 51 | 5 38 | 10 26 | 6 49 | 5 40 | 10 25 | 6 46 | 5 42 | 10 24 | 6 39 | 5 49 | 10 19 |
| 21 | W | 6 49 | 5 39 | 11 22 | 6 47 | 5 41 | 11 20 | 6 45 | 5 43 | 11 18 | 6 38 | 5 50 | 11 11 |
| 22 | Th | 6 48 | 5 40 | A.M. | 6 46 | 5 42 | A.M. | 6 44 | 5 44 | A.M. | 6 37 | 5 51 | A.M. |
| 23 | Fr | 6 46 | 5 41 | 12 19 | 6 44 | 5 43 | 12 16 | 6 42 | 5 45 | 12 14 | 6 36 | 5 51 | 12 4 |
| 24 | Sa | 6 45 | 5 43 | 1 15 | 6 43 | 5 44 | 1 12 | 6 41 | 5 47 | 1 9 | 6 35 | 5 52 | 12 58 |
| 25 | S | 6 43 | 5 44 | 2 10 | 6 42 | 5 46 | 2 7 | 6 40 | 5 48 | 2 3 | 6 34 | 5 53 | 1 51 |
| 26 | M | 6 42 | 5 45 | 3 4 | 6 40 | 5 47 | 3 1 | 6 38 | 5 49 | 2 57 | 6 32 | 5 54 | 2 44 |
| 27 | Tu | 6 40 | 5 46 | 3 55 | 6 39 | 5 48 | 3 52 | 6 37 | 5 50 | 3 48 | 6 31 | 5 55 | 3 36 |
| 28 | W | 6 39 | 5 48 | 4 43 | 6 37 | 5 49 | 4 40 | 6 35 | 5 51 | 4 36 | 6 30 | 5 56 | 4 25 |
| .. | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| .. | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| .. | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

## SUN ON MERIDIAN OF WASHINGTON.

| Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 13 | 41 | 7 | 12 | 14 | 16 | 13 | 12 | 14 | 23 | 19 | 12 | 14 | 4 | 25 | 12 | 13 | 19 |
| 2 | 12 | 13 | 49 | 8 | 12 | 14 | 19 | 14 | 12 | 14 | 22 | 20 | 12 | 13 | 58 | 26 | 12 | 13 | 9 |
| 3 | 12 | 13 | 56 | 9 | 12 | 14 | 21 | 15 | 12 | 14 | 20 | 21 | 12 | 13 | 51 | 27 | 12 | 12 | 59 |
| 4 | 12 | 14 | 2 | 10 | 12 | 14 | 23 | 16 | 12 | 14 | 17 | 22 | 12 | 13 | 44 | 28 | 12 | 12 | 48 |
| 5 | 12 | 14 | 7 | 11 | 12 | 14 | 24 | 17 | 12 | 14 | 13 | 23 | 12 | 13 | 36 | | | | |
| 6 | 12 | 14 | 12 | 12 | 12 | 14 | 24 | 18 | 12 | 14 | 9 | 24 | 12 | 13 | 28 | | | | |

## TWILIGHT.

| Places. | Feb. | Begins, A.M. | Ends, P.M. | Feb. | Begins, A.M. | Ends, P.M. | Feb. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 5 38 | 6 51 | 11 | 5 28 | 7 1 | 21 | 5 15 | 7 13 |
| New York | 1 | 5 37 | 6 51 | 11 | 5 27 | 7 2 | 21 | 5 15 | 7 13 |
| Wash'ton.. | 1 | 5 36 | 6 52 | 11 | 5 27 | 7 3 | 21 | 5 15 | 7 13 |
| Charleston | 1 | 5 31 | 6 57 | 11 | 5 24 | 7 5 | 21 | 5 15 | 7 13 |

## MOON'S PHASES.

| | D. | H. | M. | | D. | H. | M. | |
|---|---|---|---|---|---|---|---|---|
| Full Moon | 1 | 10 | 53 | A. M. | New Moon | 15 | 2 | 7 P. M. |
| Last Quarter | 8 | 4 | 16 | A. M. | First Quarter | 23 | 7 | 6 P. M. |

Morning Stars—Mercury, Venus, Jupiter, Saturn. Evening Star—Mars.

3rd Month. **MARCH.** 31 Days.

| Day of the Month | Day of the Week | Calendar for BOSTON, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for NEW YORK CITY, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for WASHINGTON, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for CHARLESTON, Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUN RISES. | SUN SETS. | MOON R. & S. | SUN RISES. | SUN SETS. | MOON R. & S. | SUN RISES. | SUN SETS. | MOON R. & S. | SUN RISES. | SUN SETS. | MOON R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | Th | 6 37 | 5 49 | 5 27 | 6 36 | 5 50 | 5 25 | 6 34 | 5 52 | 5 22 | 6 29 | 5 56 | 5 13 |
| 2 | Fr | 6 35 | 5 50 | rises. | 6 34 | 5 51 | rises. | 6 32 | 5 53 | rises. | 6 28 | 5 57 | rises. |
| 3 | Sa | 6 34 | 5 51 | 6 47 | 6 32 | 5 53 | 6 48 | 6 31 | 5 54 | 6 49 | 6 27 | 5 58 | 6 52 |
| 4 | S | 6 32 | 5 53 | 8 1 | 6 31 | 5 54 | 8 1 | 6 30 | 5 55 | 8 1 | 6 25 | 5 59 | 8 0 |
| 5 | M | 6 30 | 5 54 | 9 14 | 6 29 | 5 55 | 9 13 | 6 28 | 5 56 | 9 12 | 6 24 | 6 0 | 9 8 |
| 6 | Tu | 6 29 | 5 55 | 10 26 | 6 28 | 5 56 | 10 24 | 6 27 | 5 57 | 10 22 | 6 23 | 6 0 | 10 15 |
| 7 | W | 6 27 | 5 56 | 11 36 | 6 26 | 5 57 | 11 33 | 6 26 | 5 58 | 11 30 | 6 22 | 6 1 | 11 20 |
| 8 | Th | 6 26 | 5 57 | A.M. | 6 25 | 5 58 | A.M. | 6 24 | 5 59 | A.M. | 6 21 | 6 2 | A.M. |
| 9 | Fr | 6 24 | 5 58 | 12 41 | 6 23 | 5 59 | 12 37 | 6 22 | 6 0 | 12 34 | 6 19 | 6 3 | 12 22 |
| 10 | Sa | 6 22 | 6 0 | 1 41 | 6 21 | 6 0 | 1 37 | 6 21 | 6 1 | 1 33 | 6 18 | 6 4 | 1 21 |
| 11 | S | 6 21 | 6 1 | 2 35 | 6 20 | 6 2 | 2 31 | 6 19 | 6 2 | 2 27 | 6 17 | 6 4 | 2 14 |
| 12 | M | 6 19 | 6 2 | 3 22 | 6 18 | 6 3 | 3 19 | 6 18 | 6 3 | 3 15 | 6 16 | 6 5 | 3 3 |
| 13 | Tu | 6 17 | 6 3 | 4 5 | 6 16 | 6 4 | 4 2 | 6 16 | 6 4 | 3 59 | 6 14 | 6 6 | 3 48 |
| 14 | W | 6 16 | 6 4 | 4 42 | 6 15 | 6 5 | 4 40 | 6 14 | 6 5 | 4 37 | 6 13 | 6 6 | 4 28 |
| 15 | Th | 6 14 | 6 6 | 5 15 | 6 13 | 6 6 | 5 14 | 6 13 | 6 6 | 5 12 | 6 12 | 6 7 | 5 5 |
| 16 | Fr | 6 12 | 6 7 | 5 46 | 6 12 | 6 7 | 5 45 | 6 11 | 6 7 | 5 44 | 6 10 | 6 8 | 5 40 |
| 17 | Sa | 6 10 | 6 8 | sets. | 6 10 | 6 8 | sets. | 6 10 | 6 8 | sets. | 6 9 | 6 9 | sets. |
| 18 | S | 6 8 | 6 9 | 7 22 | 6 8 | 6 9 | 7 21 | 6 8 | 6 9 | 7 21 | 6 8 | 6 9 | 7 20 |
| 19 | M | 6 7 | 6 10 | 8 18 | 6 7 | 6 10 | 8 18 | 6 7 | 6 10 | 8 16 | 6 6 | 6 10 | 8 13 |
| 20 | Tu | 6 5 | 6 11 | 9 15 | 6 5 | 6 11 | 9 13 | 6 5 | 6 11 | 9 11 | 6 5 | 6 11 | 9 5 |
| 21 | W | 6 3 | 6 12 | 10 11 | 6 3 | 6 12 | 10 8 | 6 4 | 6 12 | 10 6 | 6 4 | 6 12 | 9 58 |
| 22 | Th | 6 2 | 6 14 | 11 7 | 6 2 | 6 13 | 11 4 | 6 2 | 6 13 | 11 1 | 6 2 | 6 12 | 10 50 |
| 23 | Fr | 6 0 | 6 15 | A.M. | 6 0 | 6 14 | 11 58 | 6 0 | 6 14 | 11 54 | 6 1 | 6 13 | 11 43 |
| 24 | Sa | 5 58 | 6 16 | 12 1 | 5 58 | 6 16 | A.M. | 5 59 | 6 15 | A.M. | 6 0 | 6 14 | A.M. |
| 25 | S | 5 56 | 6 17 | 12 55 | 5 57 | 6 17 | 12 51 | 5 57 | 6 16 | 12 47 | 5 59 | 6 14 | 12 35 |
| 26 | M | 5 55 | 6 18 | 1 45 | 5 55 | 6 18 | 1 42 | 5 56 | 6 17 | 1 38 | 5 57 | 6 15 | 1 26 |
| 27 | Tu | 5 53 | 6 19 | 2 33 | 5 54 | 6 19 | 2 30 | 5 54 | 6 18 | 2 26 | 5 56 | 6 16 | 2 15 |
| 28 | W | 5 51 | 6 20 | 3 17 | 5 52 | 6 20 | 3 14 | 5 52 | 6 19 | 3 12 | 5 55 | 6 16 | 3 2 |
| 29 | Th | 5 50 | 6 21 | 3 59 | 5 50 | 6 21 | 3 57 | 5 51 | 6 20 | 3 54 | 5 53 | 6 17 | 3 47 |
| 30 | Fr | 5 48 | 6 23 | 4 38 | 5 48 | 6 22 | 4 37 | 5 49 | 6 21 | 4 35 | 5 52 | 6 18 | 4 31 |
| 31 | Sa | 5 46 | 6 24 | 5 15 | 5 47 | 6 23 | 5 15 | 5 48 | 6 22 | 5 15 | 5 51 | 6 18 | 5 14 |

## SUN ON MERIDIAN OF WASHINGTON.

| DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 12 | 37 | 8 | 12 | 11 | 4 | 14 | 12 | 9 | 30 | 20 | 12 | 7 | 47 | 26 | 12 | 5 | 58 |
| 2 | 12 | 12 | 25 | 9 | 12 | 10 | 50 | 15 | 12 | 9 | 14 | 21 | 12 | 7 | 29 | 27 | 12 | 5 | 40 |
| 3 | 12 | 12 | 13 | 10 | 12 | 10 | 34 | 16 | 12 | 8 | 57 | 22 | 12 | 7 | 11 | 28 | 12 | 5 | 22 |
| 4 | 12 | 12 | 0 | 11 | 12 | 10 | 19 | 17 | 12 | 8 | 40 | 23 | 12 | 6 | 53 | 29 | 12 | 5 | 3 |
| 5 | 12 | 11 | 47 | 12 | 12 | 10 | 3 | 18 | 12 | 8 | 22 | 24 | 12 | 6 | 35 | 30 | 12 | 4 | 45 |
| 6 | 12 | 11 | 33 | 13 | 12 | 9 | 47 | 19 | 12 | 8 | 5 | 25 | 12 | 6 | 17 | 31 | 12 | 4 | 27 |
| 7 | 12 | 11 | 19 | | | | | | | | | | | | | | | | |

## TWILIGHT.

| PLACES. | Mar. | Begins, A.M. | Ends, P.M. | Mar. | Begins, A.M. | Ends, P.M. | Mar. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 5 3 | 7 23 | 11 | 4 46 | 7 35 | 21 | 4 28 | 7 47 |
| New York | 1 | 5 4 | 7 22 | 11 | 4 48 | 7 33 | 21 | 4 31 | 7 45 |
| Wash'ton.. | 1 | 5 5 | 7 21 | 11 | 4 50 | 7 31 | 21 | 4 34 | 7 42 |
| Charleston | 1 | 5 7 | 7 19 | 11 | 4 54 | 7 27 | 21 | 4 41 | 7 34 |

## MOON'S PHASES.

| | D. | H. | M. | | | D. | H. | M. | |
|---|---|---|---|---|---|---|---|---|---|
| Full Moon | 2 | 10 | 24 | P. M. | New Moon | 17 | 7 | 51 | A. M. |
| Last Quarter | 9 | 1 | 31 | P. M. | First Quarter | 25 | 11 | 42 | A. M. |

Morning Stars—Mercury, Venus, Jupiter, Saturn. Evening Star—Mars.

4th Month. **APRIL.** 30 Days.

| Day of the Month. | Day of the Week. | Calendar for Boston, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for New York City, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for Washington, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for Charleston, Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | S | 5 44 | 6 25 | rises. | 5 45 | 6 24 | rises. | 5 46 | 6 23 | rises. | 5 50 | 6 19 | rises. |
| 2 | M | 5 43 | 6 26 | 8 4 | 5 44 | 6 25 | 8 2 | 5 45 | 6 24 | 8 1 | 5 48 | 6 20 | 7 55 |
| 3 | Tu | 5 41 | 6 27 | 9 17 | 5 42 | 6 26 | 9 14 | 5 43 | 6 25 | 9 12 | 5 47 | 6 21 | 9 3 |
| 4 | W | 5 39 | 6 28 | 10 26 | 5 40 | 6 27 | 10 24 | 5 42 | 6 26 | 10 20 | 5 46 | 6 21 | 10 9 |
| 5 | Th | 5 37 | 6 29 | 11 31 | 5 39 | 6 28 | 11 28 | 5 40 | 6 27 | 11 24 | 5 44 | 6 22 | 11 11 |
| 6 | Fr | 5 36 | 6 30 | A.M. | 5 37 | 6 29 | A.M. | 5 38 | 6 28 | A.M. | 5 43 | 6 23 | A.M. |
| 7 | Sa | 5 34 | 6 32 | 12 29 | 5 35 | 6 30 | 12 26 | 5 37 | 6 28 | 12 22 | 5 42 | 6 24 | 12 9 |
| 8 | S | 5 33 | 6 33 | 1 20 | 5 34 | 6 31 | 1 17 | 5 35 | 6 29 | 1 13 | 5 40 | 6 24 | 1 1 |
| 9 | M | 5 31 | 6 34 | 2 5 | 5 32 | 6 32 | 2 2 | 5 34 | 6 30 | 1 58 | 5 39 | 6 25 | 1 47 |
| 10 | Tu | 5 29 | 6 35 | 2 44 | 5 31 | 6 33 | 2 41 | 5 32 | 6 31 | 2 38 | 5 38 | 6 26 | 2 29 |
| 11 | W | 5 27 | 6 36 | 3 18 | 5 29 | 6 34 | 3 16 | 5 31 | 6 32 | 3 14 | 5 36 | 6 26 | 3 7 |
| 12 | Th | 5 26 | 6 37 | 3 49 | 5 27 | 6 35 | 3 48 | 5 29 | 6 33 | 3 47 | 5 35 | 6 27 | 3 42 |
| 13 | Fr | 5 24 | 6 38 | 4 19 | 5 26 | 6 36 | 4 18 | 5 28 | 6 34 | 4 18 | 5 34 | 6 28 | 4 15 |
| 14 | Sa | 5 22 | 6 39 | 4 47 | 5 24 | 6 38 | 4 47 | 5 26 | 6 35 | 4 48 | 5 33 | 6 28 | 4 48 |
| 15 | S | 5 21 | 6 40 | 5 15 | 5 23 | 6 39 | 5 16 | 5 25 | 6 36 | 5 17 | 5 32 | 6 29 | 5 19 |
| 16 | M | 5 19 | 6 42 | sets. | 5 21 | 6 40 | sets. | 5 23 | 6 37 | sets. | 5 30 | 6 30 | sets. |
| 17 | Tu | 5 17 | 6 43 | 8 5 | 5 20 | 6 41 | 8 3 | 5 22 | 6 38 | 8 1 | 5 29 | 6 30 | 7 53 |
| 18 | W | 5 16 | 6 44 | 9 1 | 5 18 | 6 42 | 8 59 | 5 21 | 6 39 | 8 56 | 5 28 | 6 31 | 8 46 |
| 19 | Th | 5 14 | 6 45 | 9 57 | 5 16 | 6 43 | 9 54 | 5 19 | 6 40 | 9 50 | 5 27 | 6 32 | 9 38 |
| 20 | Fr | 5 13 | 6 46 | 10 50 | 5 15 | 6 44 | 10 47 | 5 18 | 6 41 | 10 43 | 5 26 | 6 33 | 10 30 |
| 21 | Sa | 5 11 | 6 47 | 11 41 | 5 14 | 6 45 | 11 37 | 5 16 | 6 42 | 11 33 | 5 25 | 6 33 | 11 21 |
| 22 | S | 5 10 | 6 48 | A.M. | 5 12 | 6 46 | A.M. | 5 15 | 6 43 | A.M. | 5 24 | 6 34 | A.M. |
| 23 | M | 5 8 | 6 50 | 12 28 | 5 11 | 6 47 | 12 25 | 5 14 | 6 44 | 12 22 | 5 22 | 6 35 | 12 10 |
| 24 | Tu | 5 7 | 6 51 | 1 13 | 5 9 | 6 48 | 1 10 | 5 12 | 6 45 | 1 7 | 5 21 | 6 36 | 12 56 |
| 25 | W | 5 5 | 6 52 | 1 54 | 5 8 | 6 49 | 1 52 | 5 11 | 6 46 | 1 49 | 5 20 | 6 37 | 1 40 |
| 26 | Th | 5 4 | 6 56 | 2 32 | 5 6 | 6 50 | 2 31 | 5 10 | 6 47 | 2 29 | 5 19 | 6 37 | 2 23 |
| 27 | Fr | 5 2 | 6 54 | 3 9 | 5 5 | 6 51 | 3 8 | 5 8 | 6 48 | 3 8 | 5 18 | 6 38 | 3 5 |
| 28 | Sa | 5 1 | 6 55 | 3 45 | 5 4 | 6 52 | 3 46 | 5 7 | 6 49 | 3 46 | 5 17 | 6 38 | 3 46 |
| 29 | S | 4 59 | 6 56 | 4 22 | 5 2 | 6 53 | 4 23 | 5 6 | 6 50 | 4 25 | 5 16 | 6 39 | 4 29 |
| 30 | M | 4 58 | 6 57 | rises. | 5 1 | 6 54 | rises. | 5 4 | 6 51 | rises. | 5 15 | 6 40 | rises. |

## SUN ON MERIDIAN OF WASHINGTON.

| Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 4 | 8 | 7 | 12 | 2 | 22 | 13 | 12 | 0 | 43 | 19 | 11 | 59 | 16 | 25 | 11 | 58 | 3 |
| 2 | 12 | 3 | 50 | 8 | 12 | 2 | 5 | 14 | 12 | 0 | 28 | 20 | 11 | 59 | 3 | 26 | 11 | 57 | 53 |
| 3 | 12 | 3 | 32 | 9 | 12 | 1 | 48 | 15 | 12 | 0 | 13 | 21 | 11 | 58 | 50 | 27 | 11 | 57 | 43 |
| 4 | 12 | 3 | 14 | 10 | 12 | 1 | 31 | 16 | 11 | 59 | 58 | 22 | 11 | 58 | 38 | 28 | 11 | 57 | 33 |
| 5 | 12 | 2 | 57 | 11 | 12 | 1 | 15 | 17 | 11 | 59 | 44 | 23 | 11 | 58 | 26 | 29 | 11 | 57 | 24 |
| 6 | 12 | 2 | 39 | 12 | 12 | 0 | 59 | 18 | 11 | 59 | 30 | 24 | 11 | 58 | 14 | 30 | 11 | 57 | 15 |

## TWILIGHT.

| Places. | Apr. | Begins, A.M. | Ends, P.M. | Apr. | Begins, A.M. | Ends, P.M. | Apr. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 4 7 | 8 2 | 11 | 3 47 | 8 16 | 21 | 3 27 | 8 32 |
| New York | 1 | 4 10 | 7 58 | 11 | 3 51 | 8 12 | 21 | 3 32 | 8 26 |
| Wash'ton.. | 1 | 4 14 | 7 54 | 11 | 3 57 | 8 7 | 21 | 3 39 | 8 20 |
| Charleston | 1 | 4 25 | 7 43 | 11 | 4 11 | 7 53 | 21 | 3 57 | 8 2 |

## MOON'S PHASES.

| | D. | H. | M. | | D. | H. | M. |
|---|---|---|---|---|---|---|---|
| Full Moon | 1 | 8 | 10 A. M. | First Quarter | 24 | 12 | 20 A. M. |
| Last Quarter | 8 | 12 | 22 A. M. | Full Moon | 30 | 4 | 30 P. M. |
| New Moon | 16 | 1 | 28 A. M. | | | | |

Morning Stars—Venus, Jupiter.

Evening Stars—Mercury, Mars, Saturn.

5th Month. **MAY.** 31 Days.

| Day of the Month. | Day of the Week. | Calendar for Boston, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for New York City, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for Washington, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for Charleston, Georgia, Alabama, Louisiana, Arkansas Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | Tu | 4 56 | 6 58 | 8 3 | 5 0 | 6 55 | 8 0 | 5 3 | 6 52 | 7 58 | 5 14 | 6 41 | 7 48 |
| 2 | W | 4 55 | 7 0 | 9 13 | 4 58 | 6 56 | 9 10 | 5 2 | 6 53 | 9 6 | 5 13 | 6 41 | 8 54 |
| 3 | Th | 4 54 | 7 1 | 10 17 | 4 57 | 6 57 | 10 13 | 5 1 | 6 54 | 10 9 | 5 12 | 6 42 | 9 56 |
| 4 | Fr | 4 52 | 7 2 | 11 13 | 4 56 | 6 58 | 11 9 | 5 0 | 6 54 | 11 5 | 5 11 | 6 43 | 10 52 |
| 5 | Sa | 4 51 | 7 3 | A.M. | 4 54 | 6 59 | 11 58 | 4 59 | 6 55 | 11 55 | 5 10 | 6 43 | 11 43 |
| 6 | S | 4 50 | 7 4 | 12 1 | 4 53 | 7 0 | A.M. | 4 57 | 6 56 | A.M. | 5 9 | 6 44 | A.M. |
| 7 | M | 4 48 | 7 5 | 12 44 | 4 52 | 7 1 | 12 41 | 4 56 | 6 57 | 12 38 | 5 8 | 6 45 | 12 27 |
| 8 | Tu | 4 47 | 7 6 | 1 20 | 4 51 | 7 2 | 1 18 | 4 55 | 6 58 | 1 16 | 5 8 | 6 46 | 1 8 |
| 9 | W | 4 46 | 7 7 | 1 53 | 4 50 | 7 3 | 1 51 | 4 54 | 6 59 | 1 50 | 5 7 | 6 46 | 1 44 |
| 10 | Th | 4 45 | 7 8 | 2 23 | 4 49 | 7 4 | 2 22 | 4 53 | 7 0 | 2 21 | 5 6 | 6 47 | 2 18 |
| 11 | Fr | 4 44 | 7 10 | 2 51 | 4 48 | 7 5 | 2 51 | 4 52 | 7 1 | 2 51 | 5 5 | 6 48 | 2 50 |
| 12 | Sa | 4 43 | 7 11 | 3 19 | 4 47 | 7 6 | 3 20 | 4 51 | 7 2 | 3 20 | 5 4 | 6 49 | 3 22 |
| 13 | S | 4 42 | 7 12 | 3 47 | 4 46 | 7 7 | 3 49 | 4 50 | 7 3 | 3 50 | 5 3 | 6 49 | 3 55 |
| 14 | M | 4 40 | 7 13 | 4 17 | 4 45 | 7 8 | 4 19 | 4 49 | 7 4 | 4 22 | 5 3 | 6 50 | 4 28 |
| 15 | Tu | 4 39 | 7 14 | sets. | 4 44 | 7 9 | sets. | 4 48 | 7 5 | sets. | 5 2 | 6 51 | sets. |
| 16 | W | 4 38 | 7 15 | 7 52 | 4 43 | 7 10 | 7 49 | 4 47 | 7 6 | 7 46 | 5 1 | 6 52 | 7 35 |
| 17 | Th | 4 37 | 7 16 | 8 47 | 4 42 | 7 11 | 8 44 | 4 46 | 7 7 | 8 40 | 5 0 | 6 52 | 8 27 |
| 18 | Fr | 4 36 | 7 17 | 9 39 | 4 41 | 7 12 | 9 36 | 4 46 | 7 7 | 9 32 | 5 0 | 6 53 | 9 19 |
| 19 | Sa | 4 35 | 7 18 | 10 28 | 4 40 | 7 13 | 10 24 | 4 45 | 7 8 | 10 21 | 4 59 | 6 54 | 10 8 |
| 20 | S | 4 34 | 7 19 | 11 13 | 4 39 | 7 14 | 11 10 | 4 44 | 7 9 | 11 6 | 4 58 | 6 54 | 10 55 |
| 21 | M | 4 34 | 7 20 | 11 54 | 4 38 | 7 15 | 11 52 | 4 43 | 7 10 | 11 49 | 4 58 | 6 55 | 11 39 |
| 22 | Tu | 4 33 | 7 21 | A.M. | 4 37 | 7 16 | A.M. | 4 42 | 7 11 | A.M. | 4 57 | 6 56 | A.M. |
| 23 | W | 4 32 | 7 22 | 12 32 | 4 37 | 7 17 | 12 30 | 4 42 | 7 12 | 12 28 | 4 57 | 6 56 | 12 21 |
| 24 | Th | 4 31 | 7 23 | 1 8 | 4 36 | 7 18 | 1 7 | 4 41 | 7 13 | 1 6 | 4 56 | 6 57 | 1 2 |
| 25 | Fr | 4 30 | 7 24 | 1 43 | 4 35 | 7 19 | 1 43 | 4 40 | 7 13 | 1 43 | 4 56 | 6 57 | 1 42 |
| 26 | Sa | 4 30 | 7 24 | 2 18 | 4 35 | 7 19 | 2 19 | 4 40 | 7 14 | 2 20 | 4 55 | 6 58 | 2 22 |
| 27 | S | 4 29 | 7 25 | 2 54 | 4 34 | 7 20 | 2 56 | 4 39 | 7 15 | 2 58 | 4 55 | 6 58 | 3 4 |
| 28 | M | 4 28 | 7 26 | 3 34 | 4 33 | 7 21 | 3 36 | 4 39 | 7 16 | 3 40 | 4 54 | 6 59 | 3 48 |
| 29 | Tu | 4 28 | 7 27 | 4 17 | 4 33 | 7 22 | 4 21 | 4 38 | 7 17 | 4 25 | 4 54 | 7 0 | 4 36 |
| 30 | W | 4 27 | 7 28 | rises. | 4 32 | 7 23 | rises. | 4 38 | 7 17 | rises. | 4 54 | 7 1 | rises. |
| 31 | Th | 4 26 | 7 29 | 8 59 | 4 32 | 7 23 | 8 55 | 4 37 | 7 18 | 8 51 | 4 53 | 7 2 | 8 38 |

## SUN ON MERIDIAN OF WASHINGTON.

| Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | 57 | 7 | 8 | 11 | 56 | 26 | 14 | 11 | 56 | 13 | 20 | 11 | 56 | 21 | 26 | 11 | 56 | 48 |
| 2 | 11 | 56 | 59 | 9 | 11 | 56 | 22 | 15 | 11 | 56 | 13 | 21 | 11 | 56 | 24 | 27 | 11 | 56 | 54 |
| 3 | 11 | 56 | 52 | 10 | 11 | 56 | 19 | 16 | 11 | 56 | 14 | 22 | 11 | 56 | 28 | 28 | 11 | 57 | 1 |
| 4 | 11 | 56 | 46 | 11 | 11 | 56 | 17 | 17 | 11 | 56 | 15 | 23 | 11 | 56 | 32 | 29 | 11 | 57 | 8 |
| 5 | 11 | 56 | 40 | 12 | 11 | 56 | 15 | 18 | 11 | 56 | 16 | 24 | 11 | 56 | 37 | 30 | 11 | 57 | 16 |
| 6 | 11 | 56 | 35 | 13 | 11 | 56 | 14 | 19 | 11 | 56 | 18 | 25 | 11 | 56 | 42 | 31 | 11 | 57 | 24 |
| 7 | 11 | 56 | 30 | | | | | | | | | | | | | | | | |

## TWILIGHT.

| Places. | May. | Begins, A.M. | Ends, P.M. | May. | Begins, A.M. | Ends, P.M. | May. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 3 7 | 8 48 | 11 | 2 48 | 9 5 | 21 | 2 32 | 9 22 |
| New York | 1 | 3 14 | 8 41 | 11 | 2 57 | 8 56 | 21 | 2 42 | 9 11 |
| Wash'ton.. | 1 | 3 22 | 8 33 | 11 | 3 6 | 8 47 | 21 | 2 53 | 9 1 |
| Charleston | 1 | 3 43 | 8 12 | 11 | 3 31 | 8 22 | 21 | 3 21 | 8 32 |

## MOON'S PHASES.

| | D. | H. | M. | | | D. | H. | M. | |
|---|---|---|---|---|---|---|---|---|---|
| Last Quarter | 7 | 1 | 18 | P. M. | First Quarter | 23 | 9 | 25 | A. M. |
| New Moon | 15 | 5 | 38 | P. M. | Full Moon | 30 | 12 | 7 | A. M. |

Morning Star—Venus. Evening Stars—Mercury, Mars, Jupiter, Saturn.

6th Month. **JUNE.** 30 Days.

| Day of the Month. | Day of the Week. | Calendar for BOSTON, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for NEW YORK CITY, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for WASHINGTON, Virginia Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for CHARLESTON, Georgia, Alabama, Louisiana Arkansas, Texas, New Mexico, Arizona and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUN RISES. | SUN SETS. | MOON R. & S. | SUN RISES. | SUN SETS. | MOON R. & S. | SUN RISES. | SUN SETS. | MOON R. & S. | SUN RISES. | SUN SETS. | MOON R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | Fr | 4 26 | 7 30 | 9 53 | 4 31 | 7 24 | 9 49 | 4 37 | 7 19 | 9 45 | 4 53 | 7 2 | 9 33 |
| 2 | Sa | 4 25 | 7 30 | 10 39 | 4 31 | 7 25 | 10 36 | 4 36 | 7 19 | 10 33 | 4 53 | 7 3 | 10 22 |
| 3 | S | 4 25 | 7 31 | 11 19 | 4 30 | 7 26 | 11 16 | 4 36 | 7 20 | 11 14 | 4 53 | 7 3 | 11 4 |
| 4 | M | 4 24 | 7 32 | 11 54 | 4 30 | 7 26 | 11 52 | 4 36 | 7 21 | 11 50 | 4 52 | 7 4 | 11 43 |
| 5 | Tu | 4 24 | 7 32 | A.M. | 4 30 | 7 27 | A.M. | 4 35 | 7 21 | A.M. | 4 52 | 7 4 | A.M. |
| 6 | W | 4 24 | 7 33 | 12 25 | 4 29 | 7 28 | 12 24 | 4 35 | 7 22 | 12 23 | 4 52 | 7 5 | 12 19 |
| 7 | Th | 4 24 | 7 34 | 12 54 | 4 29 | 7 28 | 12 54 | 4 35 | 7 23 | 12 54 | 4 52 | 7 5 | 12 52 |
| 8 | Fr | 4 23 | 7 34 | 1 22 | 4 29 | 7 29 | 1 23 | 4 34 | 7 23 | 1 23 | 6 52 | 7 6 | 1 24 |
| 9 | Sa | 4 23 | 7 35 | 1 50 | 4 28 | 7 30 | 1 52 | 4 34 | 7 24 | 1 53 | 4 52 | 7 6 | 1 56 |
| 10 | S | 4 22 | 7 36 | 2 19 | 4 28 | 7 30 | 2 21 | 4 34 | 7 24 | 2 23 | 4 52 | 7 7 | 2 29 |
| 11 | M | 4 23 | 7 36 | 2 50 | 4 28 | 7 31 | 2 53 | 4 34 | 7 25 | 2 56 | 4 51 | 7 7 | 3 4 |
| 12 | Tu | 4 22 | 7 37 | 3 24 | 4 28 | 7 31 | 3 28 | 4 34 | 7 25 | 3 32 | 4 51 | 7 8 | 3 42 |
| 13 | W | 4 22 | 7 37 | 4 2 | 4 28 | 7 32 | 4 6 | 4 34 | 7 26 | 4 11 | 4 51 | 7 8 | 4 23 |
| 14 | Th | 4 22 | 7 38 | sets. | 4 28 | 7 32 | sets. | 4 34 | 7 26 | sets. | 4 51 | 7 9 | sets. |
| 15 | Fr | 4 22 | 7 38 | 8 26 | 4 28 | 7 32 | 8 22 | 4 34 | 7 27 | 8 18 | 4 51 | 7 9 | 8 6 |
| 16 | Sa | 4 22 | 7 38 | 9 12 | 4 28 | 7 33 | 9 9 | 4 34 | 7 27 | 9 6 | 4 52 | 7 9 | 8 54 |
| 17 | S | 4 22 | 7 39 | 9 56 | 4 28 | 7 33 | 9 53 | 4 34 | 7 27 | 9 50 | 4 52 | 7 10 | 9 40 |
| 18 | M | 4 22 | 7 39 | 10 35 | 4 28 | 7 34 | 10 33 | 4 34 | 7 28 | 10 31 | 4 52 | 7 10 | 10 23 |
| 19 | Tu | 4 22 | 7 40 | 11 11 | 4 28 | 7 34 | 11 10 | 4 34 | 7 28 | 11 9 | 4 52 | 7 10 | 11 3 |
| 20 | W | 4 22 | 7 40 | 11 46 | 4 28 | 7 34 | 11 45 | 4 34 | 7 28 | 11 45 | 4 52 | 7 10 | 11 42 |
| 21 | Th | 4 23 | 7 40 | A.M. | 4 28 | 7 34 | A.M. | 4 34 | 7 28 | A.M. | 4 52 | 7 11 | A.M. |
| 22 | Fr | 4 23 | 7 40 | 12 19 | 4 28 | 7 35 | 12 20 | 4 35 | 7 29 | 12 20 | 4 52 | 7 11 | 12 21 |
| 23 | Sa | 4 23 | 7 40 | 12 54 | 4 29 | 7 35 | 12 55 | 4 35 | 7 29 | 12 57 | 4 52 | 7 11 | 1 1 |
| 24 | S | 4 23 | 7 41 | 1 30 | 4 29 | 7 35 | 1 33 | 4 35 | 7 29 | 1 35 | 4 53 | 7 11 | 1 42 |
| 25 | M | 4 24 | 7 41 | 2 10 | 4 29 | 7 35 | 2 14 | 4 35 | 7 29 | 2 17 | 4 53 | 7 11 | 2 27 |
| 26 | Tu | 4 24 | 7 41 | 2 55 | 4 30 | 7 35 | 2 59 | 4 36 | 7 29 | 3 3 | 4 53 | 7 12 | 3 15 |
| 27 | W | 4 24 | 7 41 | 3 46 | 4 30 | 7 35 | 3 50 | 4 36 | 7 29 | 3 55 | 4 54 | 7 12 | 4 8 |
| 28 | Th | 4 25 | 7 41 | rises. | 4 30 | 7 35 | rises. | 4 36 | 7 29 | rises. | 4 54 | 7 12 | rises. |
| 29 | Fr | 4 25 | 7 41 | 8 30 | 4 31 | 7 35 | 8 27 | 4 37 | 7 29 | 8 23 | 4 54 | 7 12 | 8 11 |
| 30 | Sa | 4 26 | 7 41 | 9 14 | 4 31 | 7 35 | 9 11 | 4 37 | 7 29 | 9 8 | 4 55 | 7 12 | 8 58 |

## SUN ON MERIDIAN OF WASHINGTON.

| DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | 57 | 32 | 8 | 11 | 58 | 43 | 14 | 11 | 59 | 55 | 20 | 12 | 1 | 12 | 26 | 12 | 2 | 29 |
| 2 | 11 | 57 | 41 | 9 | 11 | 58 | 54 | 15 | 12 | 0 | 7 | 21 | 12 | 1 | 25 | 27 | 12 | 2 | 42 |
| 3 | 11 | 57 | 51 | 10 | 11 | 59 | 6 | 16 | 12 | 0 | 20 | 22 | 12 | 1 | 38 | 28 | 12 | 2 | 54 |
| 4 | 11 | 58 | 0 | 11 | 11 | 59 | 18 | 17 | 12 | 0 | 33 | 23 | 12 | 1 | 51 | 29 | 12 | 3 | 6 |
| 5 | 11 | 58 | 10 | 12 | 11 | 59 | 30 | 18 | 12 | 0 | 46 | 24 | 12 | 2 | 4 | 30 | 12 | 3 | 18 |
| 6 | 11 | 58 | 21 | 13 | 11 | 59 | 42 | 19 | 12 | 0 | 59 | 25 | 12 | 2 | 17 | | | | |
| 7 | 11 | 58 | 31 | | | | | | | | | | | | | | | | |

## TWILIGHT.

| PLACES. | June. | Begins, A.M. | Ends, P.M. | June. | Begins, A.M. | Ends, P.M. | June. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 2 18 | 9 38 | 11 | 2 10 | 9 50 | 21 | 2 8 | 9 55 |
| New York | 1 | 2 29 | 9 26 | 11 | 2 23 | 9 36 | 21 | 2 22 | 9 41 |
| Wash'ton.. | 1 | 2 42 | 9 14 | 11 | 2 36 | 9 23 | 21 | 2 35 | 9 28 |
| Charleston | 1 | 3 14 | 8 42 | 11 | 3 10 | 8 49 | 21 | 3 10 | 8 53 |

## MOON'S PHASES.

| | D. | H. | M. | | | D. | H. | M. | |
|---|---|---|---|---|---|---|---|---|---|
| Last Quarter | 6 | 4 | 19 | A. M. | First Quarter | 21 | 3 | 46 | P. M. |
| New Moon | 14 | 7 | 42 | A. M. | Full Moon | 28 | 8 | 4 | A. M. |

Morning Stars—Mercury, Venus. Evening Stars—Mars, Jupiter, Saturn.

7th Month. **JULY.** 31 Days.

| Day of the Month. | Day of the Week. | Calendar for Boston, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for New York City, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for Washington, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for Charleston Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | S | 4 26 | 7 41 | 9 52 | 4 32 | 7 35 | 9 50 | 4 38 | 7 29 | 9 48 | 4 55 | 7 12 | 9 39 |
| 2 | M | 4 27 | 7 40 | 10 26 | 4 32 | 7 35 | 10 24 | 4 38 | 7 29 | 10 23 | 4 56 | 7 12 | 10 17 |
| 3 | Tu | 4 27 | 7 40 | 10 56 | 4 33 | 7 35 | 10 56 | 4 39 | 7 29 | 10 55 | 4 56 | 7 12 | 10 52 |
| 4 | W | 4 28 | 7 40 | 11 25 | 4 33 | 7 35 | 11 25 | 4 39 | 7 29 | 11 25 | 4 56 | 7 12 | 11 24 |
| 5 | Th | 4 28 | 7 40 | 11 52 | 4 34 | 7 34 | 11 53 | 4 40 | 7 29 | 11 54 | 4 57 | 7 12 | 11 57 |
| 6 | Fr | 4 29 | 7 40 | A.M. | 4 34 | 7 34 | A.M. | 4 40 | 7 28 | A.M. | 4 57 | 7 11 | A.M. |
| 7 | Sa | 4 30 | 7 39 | 12 21 | 4 35 | 7 34 | 12 23 | 4 41 | 7 28 | 12 25 | 4 58 | 7 11 | 12 30 |
| 8 | S | 4 30 | 7 39 | 12 51 | 4 36 | 7 34 | 12 54 | 4 41 | 7 28 | 12 56 | 4 58 | 7 11 | 1 4 |
| 9 | M | 4 31 | 7 39 | 1 24 | 4 36 | 7 33 | 1 27 | 4 42 | 7 28 | 1 30 | 4 59 | 7 11 | 1 40 |
| 10 | Tu | 4 32 | 7 38 | 2 0 | 4 37 | 7 33 | 2 4 | 4 43 | 7 27 | 2 8 | 4 59 | 7 11 | 2 19 |
| 11 | W | 4 32 | 7 38 | 2 41 | 4 38 | 7 32 | 2 45 | 4 43 | 7 27 | 2 50 | 5 0 | 7 10 | 3 3 |
| 12 | Th | 4 33 | 7 37 | 3 27 | 4 38 | 7 32 | 3 32 | 4 44 | 7 27 | 3 37 | 5 0 | 7 10 | 3 51 |
| 13 | Fr | 4 34 | 7 37 | sets. | 4 39 | 7 32 | sets. | 4 44 | 7 26 | sets. | 5 1 | 7 10 | sets. |
| 14 | Sa | 4 35 | 7 37 | 7 54 | 4 40 | 7 31 | 7 51 | 4 45 | 7 26 | 7 48 | 5 2 | 7 9 | 7 37 |
| 15 | S | 4 35 | 7 36 | 8 36 | 4 40 | 7 30 | 8 33 | 4 46 | 7 25 | 8 30 | 5 2 | 7 9 | 8 22 |
| 16 | M | 4 36 | 7 35 | 9 14 | 4 41 | 7 30 | 9 12 | 4 47 | 7 25 | 9 10 | 5 3 | 7 9 | 9 4 |
| 17 | Tu | 4 37 | 7 34 | 9 49 | 4 42 | 7 29 | 9 48 | 4 47 | 7 24 | 9 48 | 5 3 | 7 8 | 9 44 |
| 18 | W | 4 38 | 7 33 | 10 23 | 4 43 | 7 29 | 10 23 | 4 48 | 7 23 | 10 24 | 5 4 | 7 8 | 10 24 |
| 19 | Th | 4 39 | 7 33 | 10 57 | 4 44 | 7 28 | 10 58 | 4 49 | 7 23 | 10 59 | 5 4 | 7 7 | 11 2 |
| 20 | Fr | 4 40 | 7 32 | 11 32 | 4 44 | 7 28 | 11 34 | 4 50 | 7 22 | 11 37 | 5 5 | 7 7 | 11 42 |
| 21 | Sa | 4 40 | 7 31 | A.M. | 4 45 | 7 27 | A.M. | 4 51 | 7 21 | A.M. | 5 6 | 7 6 | A.M. |
| 22 | S | 4 41 | 7 30 | 12 10 | 4 46 | 7 26 | 12 13 | 4 51 | 7 21 | 12 16 | 5 6 | 7 6 | 12 25 |
| 23 | M | 4 42 | 7 30 | 12 51 | 4 47 | 7 26 | 12 55 | 4 52 | 7 20 | 12 59 | 5 7 | 7 5 | 1 10 |
| 24 | Tu | 4 43 | 7 29 | 1 38 | 4 48 | 7 25 | 1 42 | 4 53 | 7 19 | 1 47 | 5 8 | 7 5 | 2 0 |
| 25 | W | 4 44 | 7 28 | 2 30 | 4 49 | 7 24 | 2 35 | 4 54 | 7 18 | 2 40 | 5 8 | 7 4 | 2 54 |
| 26 | Th | 4 45 | 7 27 | 3 27 | 4 50 | 7 23 | 3 32 | 4 55 | 7 18 | 3 37 | 5 9 | 7 3 | 3 51 |
| 27 | Fr | 4 46 | 7 26 | rises. | 4 51 | 7 22 | rises. | 4 55 | 7 17 | rises. | 5 10 | 7 3 | rises. |
| 28 | Sa | 4 47 | 7 25 | 7 48 | 4 52 | 7 21 | 7 46 | 4 56 | 7 16 | 7 43 | 5 10 | 7 2 | 7 34 |
| 29 | S | 4 48 | 7 24 | 8 24 | 4 52 | 7 20 | 8 22 | 4 57 | 7 15 | 8 20 | 5 11 | 7 1 | 8 13 |
| 30 | M | 4 49 | 7 23 | 8 56 | 4 53 | 7 19 | 8 55 | 4 58 | 7 14 | 8 54 | 5 12 | 7 0 | 8 50 |
| 31 | Tu | 4 50 | 7 22 | 9 26 | 4 54 | 7 18 | 9 26 | 4 59 | 7 13 | 9 25 | 5 12 | 7 0 | 9 24 |

## SUN ON MERIDIAN OF WASHINGTON.

| Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 3 | 30 | 8 | 12 | 4 | 45 | 14 | 12 | 5 | 35 | 20 | 12 | 6 | 8 | 26 | 12 | 6 | 20 |
| 2 | 12 | 3 | 41 | 9 | 12 | 4 | 54 | 15 | 12 | 5 | 42 | 21 | 12 | 6 | 11 | 27 | 12 | 6 | 20 |
| 3 | 12 | 3 | 53 | 10 | 12 | 5 | 3 | 16 | 12 | 5 | 48 | 22 | 12 | 6 | 14 | 28 | 12 | 6 | 20 |
| 4 | 12 | 4 | 4 | 11 | 12 | 5 | 12 | 17 | 12 | 5 | 54 | 23 | 12 | 6 | 17 | 29 | 12 | 6 | 19 |
| 5 | 12 | 4 | 15 | 12 | 12 | 5 | 20 | 18 | 12 | 5 | 59 | 24 | 12 | 6 | 19 | 30 | 12 | 6 | 17 |
| 6 | 12 | 4 | 25 | 13 | 12 | 5 | 28 | 19 | 12 | 6 | 4 | 25 | 12 | 6 | 20 | 31 | 12 | 6 | 14 |
| 7 | 12 | 4 | 35 | | | | | | | | | | | | | | | | |

## TWILIGHT.

| Places. | July. | Begins, A.M. | Ends, P.M. | July. | Begins, A.M. | Ends, P.M. | July. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 2 13 | 9 54 | 11 | 2 24 | 9 46 | 21 | 2 38 | 9 34 |
| New York | 1 | 2 26 | 9 40 | 11 | 2 36 | 9 34 | 21 | 2 49 | 9 23 |
| Wash'ton.. | 1 | 2 40 | 9 27 | 11 | 2 48 | 9 22 | 21 | 3 0 | 9 12 |
| Charleston | 1 | 3 14 | 8 53 | 11 | 3 20 | 8 50 | 21 | 3 29 | 8 43 |

## MOON'S PHASES.

| | D. | H. | M. | | D. | H. | M. |
|---|---|---|---|---|---|---|---|
| Last Quarter | 5 | 8 | 56 P. M. | First Quarter | 20 | 8 | 32 P. M. |
| New Moon | 13 | 7 | 45 P. M. | Full Moon | 27 | 5 | 33 P. M. |

Morning Stars—Mercury, Venus. Evening Stars—Mars, Jupiter, Saturn.

8th Month. **AUGUST.** 31 Days.

| Day of the Month. | Day of the Week. | Calendar for BOSTON, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for NEW YORK CITY, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for WASHINGTON, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for CHARLESTON, Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUN RISES. | SUN SETS. | MOON R. & S. | SUN RISES. | SUN SETS. | MOON R. & S. | SUN RISES. | SUN SETS. | MOON R. & S. | SUN RISES. | SUN SETS. | MOON R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M | H. M. | H. M. | H. M. | H. M. | H. M. | H. M.t |
| 1 | W | 4 51 | 7 21 | 9 54 | 4 55 | 7 16 | 9 55 | 5 0 | 7 12 | 9 56 | 5 13 | 6 59 | 9 56 |
| 2 | Th | 4 52 | 7 19 | 10 22 | 4 56 | 7 15 | 10 24 | 5 1 | 7 11 | 10 23 | 5 14 | 6 58 | 10 29 |
| 3 | Fr | 4 53 | 7 18 | 10 52 | 4 57 | 7 14 | 10 54 | 5 2 | 7 10 | 10 56 | 5 14 | 6 57 | 11 2 |
| 4 | Sa | 4 54 | 7 17 | 11 23 | 4 58 | 7 13 | 11 26 | 5 2 | 7 9 | 11 29 | 5 15 | 6 56 | 11 38 |
| 5 | S | 4 55 | 7 16 | 11 57 | 4 59 | 7 12 | A.M. | 5 3 | 7 8 | A.M. | 5 16 | 6 56 | A.M. |
| 6 | M | 4 56 | 7 15 | A.M. | 5 0 | 7 11 | 12 1 | 5 4 | 7 7 | 12 5 | 5 16 | 6 55 | 12 15 |
| 7 | Tu | 4 57 | 7 13 | 12 36 | 5 1 | 7 10 | 12 40 | 5 5 | 7 6 | 12 44 | 5 17 | 6 54 | 12 57 |
| 8 | W | 4 58 | 7 12 | 1 19 | 5 2 | 7 8 | 1 24 | 5 6 | 7 4 | 1 28 | 5 18 | 6 53 | 1 42 |
| 9 | Th | 4 59 | 7 11 | 2 8 | 5 3 | 7 7 | 2 13 | 5 7 | 7 3 | 2 18 | 5 18 | 6 52 | 2 32 |
| 10 | Fr | 5 0 | 7 9 | 3 4 | 5 4 | 7 6 | 3 8 | 5 8 | 7 2 | 3 13 | 5 19 | 6 51 | 3 26 |
| 11 | Sa | 5 2 | 7 8 | 4 5 | 5 5 | 7 5 | 4 9 | 5 9 | 7 1 | 4 13 | 5 20 | 6 50 | 4 25 |
| 12 | S | 5 3 | 7 7 | sets. | 5 6 | 7 3 | sets. | 5 10 | 7 0 | sets. | 5 21 | 6 49 | sets. |
| 13 | M | 5 4 | 7 5 | 7 49 | 5 7 | 7 2 | 7 48 | 5 11 | 6 58 | 7 47 | 5 21 | 6 48 | 7 42 |
| 14 | Tu | 5 5 | 7 4 | 8 24 | 5 8 | 7 1 | 8 24 | 5 12 | 6 57 | 8 24 | 5 22 | 6 47 | 8 22 |
| 15 | W | 5 6 | 7 2 | 8 59 | 5 9 | 6 59 | 9 0 | 5 12 | 6 56 | 9 1 | 5 23 | 6 46 | 9 3 |
| 16 | Th | 5 7 | 7 1 | 9 34 | 5 10 | 6 58 | 9 36 | 5 13 | 6 55 | 9 38 | 5 23 | 6 45 | 9 43 |
| 17 | Fr | 5 8 | 6 59 | 10 12 | 5 11 | 6 56 | 10 14 | 5 14 | 6 53 | 10 17 | 5 24 | 6 44 | 10 25 |
| 18 | Sa | 5 9 | 6 58 | 10 52 | 5 12 | 6 55 | 10 55 | 5 15 | 6 52 | 10 59 | 5 25 | 6 43 | 11 10 |
| 19 | S | 5 10 | 6 56 | 11 36 | 5 13 | 6 54 | 11 40 | 5 16 | 6 51 | 11 45 | 5 25 | 6 42 | 11 57 |
| 20 | M | 5 11 | 6 55 | A.M. | 5 14 | 6 52 | A.M. | 5 17 | 6 49 | A.M. | 5 26 | 6 40 | A.M. |
| 21 | Tu | 5 12 | 6 53 | 12 26 | 5 15 | 6 51 | 12 30 | 5 18 | 6 48 | 12 35 | 5 27 | 6 39 | 12 49 |
| 22 | W | 5 13 | 6 52 | 1 20 | 5 16 | 6 49 | 1 24 | 5 19 | 6 46 | 1 29 | 5 27 | 6 38 | 1 43 |
| 23 | Th | 5 14 | 6 50 | 2 18 | 5 17 | 6 48 | 2 22 | 5 20 | 6 45 | 2 27 | 5 28 | 6 37 | 2 41 |
| 24 | Fr | 5 15 | 6 49 | 3 19 | 5 18 | 6 46 | 3 23 | 5 21 | 6 44 | 3 27 | 5 29 | 6 36 | 3 39 |
| 25 | Sa | 5 16 | 8 47 | 4 21 | 5 19 | 6 45 | 4 24 | 5 22 | 6 42 | 4 28 | 5 29 | 6 35 | 4 38 |
| 26 | S | 5 18 | 6 46 | rises. | 5 20 | 6 43 | rises. | 5 22 | 6 41 | rises. | 5 30 | 6 33 | rises. |
| 27 | M | 5 19 | 6 44 | 7 26 | 5 21 | 6 42 | 7 26 | 5 23 | 6 39 | 7 25 | 5 31 | 6 32 | 7 22 |
| 28 | Tu | 5 20 | 6 42 | 7 55 | 5 22 | 6 40 | 7 55 | 5 24 | 6 38 | 7 56 | 5 31 | 6 31 | 7 56 |
| 29 | W | 5 21 | 6 41 | 8 24 | 5 23 | 6 39 | 8 25 | 5 25 | 6 36 | 8 26 | 5 32 | 6 30 | 8 28 |
| 30 | Th | 5 22 | 6 39 | 8 52 | 5 24 | 6 37 | 8 54 | 5 26 | 6 35 | 8 56 | 5 33 | 6 28 | 9 1 |
| 31 | Fr | 5 23 | 6 37 | 9 23 | 5 25 | 6 35 | 9 26 | 5 27 | 6 33 | 9 28 | 5 33 | 6 27 | 9 36 |

## SUN ON MERIDIAN OF WASHINGTON.

| DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. | DAY OF MONTH | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 6 | 12 | 8 | 12 | 5 | 34 | 14 | 12 | 4 | 40 | 20 | 12 | 3 | 26 | 26 | 12 | 1 | 54 |
| 2 | 12 | 6 | 8 | 9 | 12 | 5 | 27 | 15 | 12 | 4 | 29 | 21 | 12 | 3 | 12 | 27 | 12 | 1 | 37 |
| 3 | 12 | 6 | 4 | 10 | 12 | 5 | 18 | 16 | 12 | 4 | 17 | 22 | 12 | 2 | 57 | 28 | 12 | 1 | 20 |
| 4 | 12 | 5 | 59 | 11 | 12 | 5 | 10 | 17 | 12 | 4 | 5 | 23 | 12 | 2 | 42 | 29 | 12 | 1 | 2 |
| 5 | 12 | 5 | 54 | 12 | 12 | 5 | 0 | 18 | 12 | 3 | 53 | 24 | 12 | 2 | 26 | 30 | 12 | 0 | 44 |
| 6 | 12 | 5 | 48 | 13 | 12 | 4 | 51 | 19 | 12 | 3 | 40 | 25 | 12 | 2 | 10 | 31 | 12 | 0 | 26 |
| 7 | 12 | 5 | 41 | | | | | | | | | | | | | | | | |

## TWILIGHT.

| PLACES. | Aug. | Begins, A.M. | Ends, P.M. | Aug. | Begins, A.M. | Ends, P.M. | Aug. | Begins, P.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 2 56 | 9 16 | 11 | 3 12 | 8 57 | 21 | 3 28 | 8 37 |
| New York | 1 | 3 5 | 9 7 | 11 | 3 21 | 8 49 | 21 | 3 34 | 8 31 |
| Wash'ton.. | 1 | 3 14 | 8 57 | 11 | 3 28 | 8 42 | 21 | 3 41 | 8 24 |
| Charleston | 1 | 3 40 | 8 32 | 11 | 3 50 | 8 20 | 21 | 3 59 | 8 7 |

## MOON'S PHASES.

| | D. | H. | M. | | | D. | H. | M. | |
|---|---|---|---|---|---|---|---|---|---|
| Last Quarter | 4 | 2 | 22 | P. M. | First Quarter | 19 | 1 | 7 | A. M. |
| New Moon | 12 | 6 | 17 | A. M. | Full Moon | 26 | 5 | 29 | A. M. |
| Morning Stars—Venus. Mars. | | | | | Evening Stars—Mercury, Jupiter, Saturn. | | | | |

9th Month. **SEPTEMBER.** 30 Days.

| Day of the Month. | Day of the Week. | Calendar for Boston, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for New York City, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for Washington, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for Charleston, Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | Sa | 5 24 | 6 36 | 9 56 | 5 26 | 6 34 | 9 59 | 5 28 | 6 32 | 10 3 | 5 34 | 6 26 | 10 12 |
| 2 | S | 5 25 | 6 34 | 10 32 | 5 27 | 6 32 | 10 36 | 5 29 | 6 30 | 10 40 | 5 35 | 6 25 | 10 52 |
| 3 | M | 5 26 | 6 32 | 11 12 | 5 28 | 6 31 | 11 17 | 5 30 | 6 29 | 11 21 | 5 35 | 6 24 | 11 34 |
| 4 | Tu | 5 27 | 6 30 | 11 58 | 5 29 | 6 29 | A.M. | 5 31 | 6 27 | A.M. | 5 36 | 6 22 | A.M. |
| 5 | W | 5 23 | 6 29 | A.M. | 5 30 | 6 27 | 12 3 | 5 31 | 6 26 | 12 8 | 5 36 | 6 21 | 12 22 |
| 6 | Th | 5 29 | 6 27 | 12 50 | 5 31 | 6 26 | 12 55 | 5 32 | 6 24 | 1 0 | 5 37 | 6 20 | 1 12 |
| 7 | Fr | 5 30 | 6 25 | 1 43 | 5 32 | 6 24 | 1 52 | 5 33 | 6 22 | 1 56 | 5 38 | 6 18 | 2 9 |
| 8 | Sa | 5 31 | 6 24 | 2 50 | 5 33 | 6 22 | 2 54 | 5 34 | 6 21 | 2 58 | 5 38 | 6 17 | 3 9 |
| 9 | S | 5 32 | 6 22 | 3 57 | 5 34 | 6 21 | 4 0 | 5 35 | 6 19 | 4 3 | 5 39 | 6 16 | 4 12 |
| 10 | M | 5 33 | 6 20 | sets. | 5 35 | 6 19 | sets. | 5 36 | 6 18 | sets. | 5 40 | 6 14 | sets. |
| 11 | Tu | 5 34 | 6 18 | 6 56 | 5 36 | 6 17 | 6 57 | 5 37 | 6 16 | 6 57 | 5 40 | 6 13 | 6 58 |
| 12 | W | 5 36 | 6 17 | 7 33 | 5 37 | 6 16 | 7 34 | 5 38 | 6 15 | 7 36 | 5 41 | 6 12 | 7 39 |
| 13 | Th | 5 37 | 6 15 | 8 10 | 5 38 | 6 14 | 8 13 | 5 39 | 6 13 | 8 15 | 5 42 | 6 10 | 8 22 |
| 14 | Fr | 5 38 | 6 13 | 8 51 | 5 39 | 6 12 | 8 54 | 5 39 | 6 11 | 8 57 | 5 42 | 6 9 | 9 7 |
| 15 | Sa | 5 39 | 6 11 | 9 34 | 5 40 | 6 11 | 9 38 | 5 40 | 6 10 | 9 43 | 5 43 | 6 8 | 9 54 |
| 16 | S | 5 40 | 6 10 | 10 23 | 5 41 | 6 9 | 10 27 | 5 41 | 6 8 | 10 32 | 5 44 | 6 6 | 10 45 |
| 17 | M | 5 41 | 6 8 | 11 16 | 5 42 | 6 7 | 11 20 | 5 42 | 6 7 | 11 25 | 5 44 | 6 5 | 11 39 |
| 18 | Tu | 5 42 | 6 6 | A.M. | 5 42 | 6 6 | A.M. | 5 43 | 6 5 | A.M. | 5 45 | 6 4 | A.M. |
| 19 | W | 5 43 | 6 4 | 12 12 | 5 43 | 6 4 | 12 17 | 5 44 | 6 3 | 12 22 | 5 46 | 6 2 | 12 35 |
| 20 | Th | 5 44 | 6 2 | 1 12 | 5 44 | 6 2 | 1 16 | 5 45 | 6 2 | 1 20 | 5 46 | 6 1 | 1 33 |
| 21 | Fr | 5 45 | 6 1 | 2 12 | 5 45 | 6 0 | 2 16 | 5 46 | 6 0 | 2 20 | 5 47 | 5 59 | 2 31 |
| 22 | Sa | 5 46 | 5 59 | 3 14 | 5 46 | 5 59 | 3 16 | 5 47 | 5 59 | 3 20 | 5 48 | 5 58 | 3 28 |
| 23 | S | 5 47 | 5 57 | 4 14 | 5 47 | 5 57 | 4 16 | 5 48 | 5 57 | 4 18 | 5 48 | 5 57 | 4 24 |
| 24 | M | 5 48 | 5 55 | rises. | 5 48 | 5 55 | rises. | 5 48 | 5 55 | rises. | 5 49 | 5 55 | rises. |
| 25 | Tu | 5 49 | 5 54 | 6 25 | 5 49 | 5 54 | 6 26 | 5 49 | 5 54 | 6 27 | 5 49 | 5 54 | 6 28 |
| 26 | W | 5 50 | 5 52 | 6 54 | 5 50 | 5 52 | 6 56 | 5 50 | 5 52 | 6 57 | 5 50 | 5 53 | 7 1 |
| 27 | Th | 5 52 | 5 50 | 7 24 | 5 51 | 5 50 | 7 26 | 5 51 | 5 51 | 7 28 | 5 51 | 5 51 | 7 35 |
| 28 | Fr | 5 53 | 5 48 | 7 55 | 5 52 | 5 49 | 7 58 | 5 52 | 5 49 | 8 2 | 5 51 | 5 50 | 8 11 |
| 29 | Sa | 5 54 | 5 47 | 8 30 | 5 53 | 5 47 | 8 33 | 5 53 | 5 48 | 8 37 | 5 52 | 5 49 | 8 48 |
| 30 | S | 5 55 | 5 45 | 9 8 | 5 54 | 5 45 | 9 12 | 5 54 | 5 46 | 9 17 | 5 53 | 5 47 | 9 29 |

## SUN ON MERIDIAN OF WASHINGTON.

| Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 0 | 8 | 7 | 11 | 58 | 11 | 13 | 11 | 56 | 7 | 19 | 11 | 54 | 0 | 25 | 11 | 51 | 53 |
| 2 | 11 | 59 | 49 | 8 | 11 | 57 | 50 | 14 | 11 | 55 | 46 | 20 | 11 | 53 | 39 | 26 | 11 | 51 | 33 |
| 3 | 11 | 59 | 30 | 9 | 11 | 57 | 30 | 15 | 11 | 55 | 25 | 21 | 11 | 53 | 17 | 27 | 11 | 51 | 12 |
| 4 | 11 | 59 | 10 | 10 | 11 | 57 | 9 | 16 | 11 | 55 | 4 | 22 | 11 | 52 | 56 | 28 | 11 | 50 | 52 |
| 5 | 11 | 58 | 51 | 11 | 11 | 56 | 49 | 17 | 11 | 54 | 42 | 23 | 11 | 52 | 35 | 29 | 11 | 50 | 32 |
| 6 | 11 | 58 | 31 | 12 | 11 | 56 | 28 | 18 | 11 | 54 | 21 | 24 | 11 | 52 | 14 | 30 | 11 | 50 | 12 |

## TWILIGHT.

| Places. | Sept. | Begins, A.M. | Ends, P.M. | Sept. | Begins, A.M. | Ends, P.M. | Sept. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 3 44 | 8 15 | 11 | 3 58 | 7 54 | 21 | 4 11 | 7 34 |
| New York | 1 | 3 49 | 8 10 | 11 | 4 2 | 7 50 | 21 | 4 14 | 7 32 |
| Wash'ton.. | 1 | 3 54 | 8 5 | 11 | 4 6 | 7 47 | 21 | 4 17 | 7 29 |
| Charleston | 1 | 4 9 | 7 51 | 11 | 4 17 | 7 36 | 21 | 4 25 | 7 21 |

## MOON'S PHASES.

| | D. | H. | M. | | D. | H. | M. | |
|---|---|---|---|---|---|---|---|---|
| Last Quarter | 3 | 7 | 47 | A. M. | First Quarter | 17 | 7 | 4 A. M. |
| New Moon | 10 | 3 | 53 | P. M. | Full Moon | 24 | 8 | 16 P. M. |

Morning Star—Mars. Evening Stars—Mercury, Venus, Jupiter, Saturn.

10th Month. **OCTOBER.** 31 Days.

| Day of the Month. | Day of the Week. | Calendar for Boston, New England, N. Y. State, Michigan, Wisconsin, N and S. Dakota, Washington, and Oregon. | | | Calendar for New York City, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for Washington, Virginia, Kentucky, Missouri, Kansas Colorado, Utah, Nevada, and Central California. | | | Calendar for Charleston, Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | M | 5 56 | 5 43 | 9 51 | 5 55 | 5 44 | 9 56 | 5 55 | 5 44 | 10 0 | 5 53 | 5 46 | 10 14 |
| 2 | Tu | 5 57 | 5 41 | 10 39 | 5 56 | 5 42 | 10 44 | 5 56 | 5 43 | 10 49 | 5 54 | 5 45 | 11 3 |
| 3 | W | 5 58 | 5 40 | 11 33 | 5 57 | 5 40 | 11 37 | 5 57 | 5 41 | 11 42 | 5 55 | 5 44 | 11 55 |
| 4 | Th | 5 59 | 5 38 | A.M. | 5 58 | 5 39 | A.M. | 5 58 | 5 39 | A.M. | 5 55 | 5 42 | A.M. |
| 5 | Fr | 6 0 | 5 36 | 12 32 | 6 0 | 5 37 | 12 36 | 6 59 | 5 38 | 12 40 | 5 56 | 5 41 | 12 52 |
| 6 | Sa | 6 1 | 5 34 | 1 35 | 6 1 | 5 35 | 1 39 | 6 0 | 5 36 | 1 42 | 5 57 | 5 40 | 1 52 |
| 7 | S | 6 2 | 5 33 | 2 43 | 6 2 | 5 34 | 2 45 | 6 1 | 5 35 | 2 48 | 5 58 | 5 38 | 2 55 |
| 8 | M | 6 4 | 5 31 | 3 53 | 6 3 | 5 32 | 3 55 | 6 2 | 5 33 | 3 56 | 5 58 | 5 37 | 4 1 |
| 9 | Tu | 6 5 | 5 29 | 5 6 | 6 4 | 5 31 | 5 6 | 6 3 | 5 32 | 5 7 | 5 59 | 5 36 | 5 8 |
| 10 | W | 6 6 | 5 28 | sets. | 6 5 | 5 29 | sets. | 6 4 | 5 30 | sets. | 6 0 | 5 34 | sets. |
| 11 | Th | 6 7 | 5 26 | 6 43 | 6 6 | 5 27 | 6 46 | 6 4 | 5 29 | 6 49 | 6 0 | 5 33 | 6 57 |
| 12 | Fr | 6 8 | 5 24 | 7 27 | 6 7 | 5 26 | 7 31 | 6 5 | 5 27 | 7 35 | 6 1 | 5 32 | 7 46 |
| 13 | Sa | 6 9 | 5 23 | 8 16 | 6 8 | 5 24 | 8 20 | 6 6 | 5 26 | 8 25 | 6 2 | 5 31 | 8 38 |
| 14 | S | 6 11 | 5 21 | 9 9 | 6 9 | 5 23 | 9 13 | 6 7 | 5 24 | 9 18 | 6 3 | 5 30 | 9 32 |
| 15 | M | 6 12 | 5 20 | 10 6 | 6 10 | 5 21 | 10 10 | 6 8 | 5 23 | 10 15 | 6 3 | 5 28 | 10 29 |
| 16 | Tu | 6 13 | 5 18 | 11 5 | 6 11 | 5 20 | 11 10 | 6 9 | 5 21 | 11 14 | 6 4 | 5 27 | 11 27 |
| 17 | W | 6 14 | 5 16 | A.M. | 6 12 | 5 18 | A.M. | 6 10 | 5 20 | A.M. | 6 5 | 5 26 | A.M. |
| 18 | Th | 6 15 | 5 15 | 12 6 | 6 14 | 5 17 | 12 10 | 6 12 | 5 19 | 12 14 | 6 6 | 5 25 | 12 26 |
| 19 | Fr | 6 16 | 5 13 | 1 7 | 6 15 | 5 15 | 1 10 | 6 13 | 5 17 | 1 13 | 6 6 | 5 24 | 1 23 |
| 20 | Sa | 6 18 | 5 12 | 2 7 | 6 16 | 5 14 | 2 9 | 6 14 | 5 16 | 2 12 | 6 7 | 5 22 | 2 19 |
| 21 | S | 6 19 | 5 10 | 3 7 | 6 17 | 5 12 | 3 8 | 6 15 | 5 14 | 3 10 | 6 8 | 5 21 | 3 15 |
| 22 | M | 6 20 | 5 8 | 4 5 | 6 18 | 5 11 | 4 6 | 6 16 | 5 13 | 4 7 | 6 9 | 5 20 | 4 9 |
| 23 | Tu | 6 21 | 5 7 | 5 3 | 6 19 | 5 9 | 5 3 | 6 17 | 5 12 | 5 3 | 6 10 | 5 19 | 5 2 |
| 24 | W | 6 22 | 5 6 | rises. | 6 20 | 5 8 | rises. | 6 18 | 5 10 | rises. | 6 10 | 5 18 | rises. |
| 25 | Th | 6 24 | 5 4 | 5 56 | 6 21 | 5 7 | 5 59 | 6 19 | 5 9 | 6 2 | 6 11 | 5 17 | 6 10 |
| 26 | Fr | 6 25 | 5 3 | 6 30 | 6 22 | 5 5 | 6 33 | 6 20 | 5 8 | 6 37 | 6 12 | 5 16 | 6 47 |
| 27 | Sa | 6 26 | 5 1 | 7 6 | 6 24 | 5 4 | 7 10 | 6 21 | 5 7 | 7 15 | 6 13 | 5 15 | 7 27 |
| 28 | S | 6 27 | 5 0 | 7 48 | 6 25 | 5 3 | 7 52 | 6 22 | 5 5 | 7 57 | 6 14 | 5 14 | 8 10 |
| 29 | M | 6 28 | 4 59 | 8 33 | 6 26 | 5 1 | 8 38 | 6 23 | 5 4 | 8 43 | 6 14 | 5 13 | 8 57 |
| 30 | Tu | 6 30 | 4 57 | 9 24 | 6 27 | 5 0 | 9 29 | 6 24 | 5 3 | 9 34 | 6 15 | 5 12 | 9 47 |
| 31 | W | 6 31 | 4 56 | 10 19 | 6 28 | 4 59 | 10 24 | 6 25 | 5 2 | 10 28 | 6 16 | 5 11 | 10 41 |

## SUN ON MERIDIAN OF WASHINGTON.

| Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | 49 | 52 | 8 | 11 | 47 | 45 | 14 | 11 | 46 | 12 | 20 | 11 | 44 | 58 | 26 | 11 | 44 | 6 |
| 2 | 11 | 49 | 33 | 9 | 11 | 47 | 28 | 15 | 11 | 45 | 58 | 21 | 11 | 44 | 47 | 27 | 11 | 43 | 59 |
| 3 | 11 | 49 | 14 | 10 | 11 | 47 | 12 | 16 | 11 | 45 | 45 | 22 | 11 | 44 | 37 | 28 | 11 | 43 | 54 |
| 4 | 11 | 48 | 56 | 11 | 11 | 46 | 56 | 17 | 11 | 45 | 32 | 23 | 11 | 44 | 28 | 29 | 11 | 43 | 49 |
| 5 | 11 | 48 | 37 | 12 | 11 | 46 | 41 | 18 | 11 | 45 | 20 | 24 | 11 | 44 | 20 | 30 | 11 | 43 | 45 |
| 6 | 11 | 48 | 19 | 13 | 11 | 46 | 26 | 19 | 11 | 45 | 8 | 25 | 11 | 44 | 12 | 31 | 11 | 43 | 42 |
| 7 | 11 | 48 | 2 | | | | | | | | | | | | | | | | |

## TWILIGHT.

| Places. | Oct. | Begins, A.M. | Ends, P.M. | Oct. | Begins, A.M. | Ends, P.M. | Oct. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 4 23 | 7 16 | 11 | 4 34 | 6 58 | 21 | 4 46 | 6 43 |
| New York | 1 | 4 25 | 7 14 | 11 | 4 35 | 6 57 | 21 | 4 46 | 6 43 |
| Wash'ton.. | 1 | 4 27 | 7 12 | 11 | 4 37 | 6 56 | 21 | 4 46 | 6 43 |
| Charleston | 1 | 4 32 | 7 7 | 11 | 4 39 | 6 54 | 21 | 4 46 | 6 43 |

## MOON'S PHASES.

| | D. | H. | M. | | | D. | H. | M. | |
|---|---|---|---|---|---|---|---|---|---|
| Last Quarter | 3 | 12 | 29 | A. M. | First Quarter | 16 | 3 | 54 | P. M. |
| New Moon | 10 | 1 | 6 | A. M. | Full Moon | 24 | 1 | 26 | P. M. |

Morning Stars—Mercury, Mars. Evening Stars—Venus, Jupiter.

11th Month. **NOVEMBER.** 30 Days.

| Day of the Month. | Day of the Week. | Calendar for Boston, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for New York City, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for Washington, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada and Central California. | | | Calendar for Charleston, Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | Th | 6 32 | 4 54 | 11 19 | 6 29 | 4 57 | 11 23 | 6 26 | 5 1 | 11 27 | 6 17 | 5 10 | 11 38 |
| 2 | Fr | 6 34 | 4 53 | A.M. | 6 31 | 4 56 | A.M. | 6 27 | 4 59 | A.M. | 6 18 | 5 9 | A.M. |
| 3 | Sa | 6 35 | 4 52 | 12 23 | 6 32 | 4 55 | 12 26 | 6 28 | 4 58 | 12 29 | 6 19 | 5 8 | 12 38 |
| 4 | S | 6 36 | 4 51 | 1 30 | 6 33 | 4 54 | 1 32 | 6 30 | 4 57 | 1 34 | 6 20 | 5 8 | 1 40 |
| 5 | M | 6 37 | 4 50 | 2 39 | 6 34 | 4 53 | 2 40 | 6 31 | 4 56 | 2 41 | 6 20 | 5 7 | 2 44 |
| 6 | Tu | 6 38 | 4 48 | 3 52 | 6 35 | 4 52 | 3 52 | 6 32 | 4 55 | 3 52 | 6 21 | 5 6 | 3 51 |
| 7 | W | 6 40 | 4 47 | 5 6 | 6 36 | 4 51 | 5 5 | 6 33 | 4 54 | 5 4 | 6 22 | 5 5 | 5 0 |
| 8 | Th | 6 41 | 4 46 | sets. | 6 38 | 4 50 | sets. | 6 34 | 4 53 | sets. | 6 23 | 5 4 | sets. |
| 9 | Fr | 6 42 | 4 45 | 6 2 | 6 39 | 4 48 | 6 6 | 6 35 | 4 52 | 6 11 | 6 24 | 5 4 | 6 23 |
| 10 | Sa | 6 43 | 4 44 | 6 55 | 6 40 | 4 47 | 6 59 | 6 36 | 4 51 | 7 4 | 6 25 | 5 3 | 7 18 |
| 11 | S | 6 45 | 4 43 | 7 52 | 6 41 | 4 46 | 7 57 | 6 37 | 4 50 | 8 2 | 6 26 | 5 2 | 8 16 |
| 12 | M | 6 46 | 4 42 | 8 53 | 6 42 | 4 46 | 8 58 | 6 38 | 4 49 | 9 2 | 6 26 | 5 2 | 9 16 |
| 13 | Tu | 6 47 | 4 41 | 9 56 | 6 44 | 4 45 | 10 0 | 6 40 | 4 49 | 10 4 | 6 27 | 5 1 | 10 17 |
| 14 | W | 6 48 | 4 40 | 10 58 | 6 45 | 4 44 | 11 2 | 6 41 | 4 48 | 11 6 | 6 28 | 5 0 | 11 16 |
| 15 | Th | 6 50 | 4 39 | A.M. | 6 46 | 4 43 | A.M. | 6 42 | 4 47 | A.M. | 6 29 | 5 0 | A.M. |
| 16 | Fr | 6 51 | 4 38 | 12 1 | 6 47 | 4 42 | 12 3 | 6 43 | 4 46 | 12 6 | 6 30 | 4 59 | 12 14 |
| 17 | Sa | 6 52 | 4 37 | 1 0 | 6 48 | 4 41 | 1 2 | 6 44 | 4 45 | 1 4 | 6 31 | 4 59 | 1 10 |
| 18 | S | 6 53 | 4 36 | 1 59 | 6 49 | 4 40 | 2 0 | 6 45 | 4 45 | 2 1 | 6 32 | 4 58 | 2 4 |
| 19 | M | 6 55 | 4 36 | 2 57 | 6 50 | 4 40 | 2 57 | 6 46 | 4 44 | 2 58 | 6 33 | 4 58 | 2 58 |
| 20 | Tu | 6 56 | 4 35 | 3 54 | 6 52 | 4 39 | 3 54 | 6 47 | 4 43 | 3 53 | 6 34 | 4 57 | 3 50 |
| 21 | W | 6 57 | 4 34 | 4 51 | 6 53 | 4 38 | 4 50 | 6 48 | 4 43 | 4 48 | 6 35 | 4 57 | 4 43 |
| 22 | Th | 6 58 | 4 33 | 5 48 | 6 54 | 4 38 | 5 46 | 6 50 | 4 42 | 5 44 | 6 36 | 4 56 | 5 36 |
| 23 | Fr | 7 0 | 4 33 | rises. | 6 55 | 4 37 | rises. | 6 51 | 4 42 | rises. | 6 36 | 4 56 | rises. |
| 24 | Sa | 7 1 | 4 32 | 5 46 | 6 56 | 4 36 | 5 50 | 6 52 | 4 41 | 5 55 | 6 37 | 4 56 | 6 8 |
| 25 | S | 7 2 | 4 31 | 6 30 | 6 58 | 4 36 | 6 35 | 6 53 | 4 41 | 6 40 | 6 38 | 4 55 | 6 54 |
| 26 | M | 7 3 | 4 31 | 7 19 | 6 59 | 4 35 | 7 24 | 6 54 | 4 40 | 7 29 | 6 39 | 4 55 | 7 43 |
| 27 | Tu | 7 4 | 4 30 | 8 13 | 7 0 | 4 35 | 8 17 | 6 55 | 4 40 | 8 22 | 6 40 | 4 55 | 8 35 |
| 28 | W | 7 5 | 4 30 | 9 11 | 7 1 | 4 34 | 9 15 | 6 56 | 4 40 | 9 19 | 6 41 | 4 54 | 9 30 |
| 29 | Th | 7 6 | 4 30 | 10 12 | 7 2 | 4 34 | 10 15 | 6 57 | 4 39 | 10 18 | 6 42 | 4 54 | 10 28 |
| 30 | Fr | 7 8 | 4 29 | 11 16 | 7 3 | 4 34 | 11 18 | 6 58 | 4 39 | 11 21 | 6 43 | 4 54 | 11 28 |

## SUN ON MERIDIAN OF WASHINGTON.

| Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | 43 | 40 | 7 | 11 | 43 | 43 | 13 | 11 | 44 | 17 | 19 | 11 | 45 | 20 | 25 | 11 | 46 | 53 |
| 2 | 11 | 43 | 38 | 8 | 11 | 43 | 47 | 14 | 11 | 44 | 25 | 20 | 11 | 45 | 33 | 26 | 11 | 47 | 11 |
| 3 | 11 | 43 | 38 | 9 | 11 | 43 | 51 | 15 | 11 | 44 | 34 | 21 | 11 | 45 | 48 | 27 | 11 | 47 | 30 |
| 4 | 11 | 43 | 38 | 10 | 11 | 43 | 56 | 16 | 11 | 44 | 45 | 22 | 11 | 46 | 3 | 28 | 11 | 47 | 49 |
| 5 | 11 | 43 | 39 | 11 | 11 | 44 | 2 | 17 | 11 | 44 | 56 | 23 | 11 | 46 | 19 | 29 | 11 | 48 | 10 |
| 6 | 11 | 43 | 40 | 12 | 11 | 44 | 9 | 18 | 11 | 45 | 7 | 24 | 11 | 46 | 35 | 30 | 11 | 48 | 31 |

## TWILIGHT.

| Places. | Nov. | Begins, A.M. | Ends, P.M. | Nov. | Begins, A.M. | Ends, P.M. | Nov. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 4 58 | 6 29 | 11 | 5 9 | 6 19 | 21 | 5 19 | 6 12 |
| New York | 1 | 4 57 | 6 29 | 11 | 5 8 | 6 20 | 21 | 5 18 | 6 14 |
| Wash'ton.. | 1 | 4 57 | 6 30 | 11 | 5 6 | 6 21 | 21 | 5 16 | 6 16 |
| Charleston | 1 | 4 54 | 6 33 | 11 | 5 2 | 6 26 | 21 | 5 10 | 6 22 |

## MOON'S PHASES.

| | D. | H. | M. | | D. | H. | M. |
|---|---|---|---|---|---|---|---|
| Last Quarter | 1 | 3 | 49 P. M. | First Quarter | 15 | 4 | 41 A. M. |
| New Moon | 8 | 10 | 27 A. M. | Full Moon | 23 | 7 | 58 A. M. |
| Morning Stars—Mars, Saturn. | | | | Evening Stars—Venus, Jupiter. | | | |

12th Month. **DECEMBER.** 31 Days.

| Day of the Month. | Day of the Week. | Calendar for Boston, New England, N. Y. State, Michigan, Wisconsin, N. and S. Dakota, Washington, and Oregon. | | | Calendar for New York City, Connecticut, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Wyoming, and Northern California. | | | Calendar for Washington, Virginia, Kentucky, Missouri, Kansas, Colorado, Utah, Nevada, and Central California. | | | Calendar for Charleston, Georgia, Alabama, Louisiana, Arkansas, Texas, New Mexico, Arizona, and Southern California. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. | Sun Rises. | Sun Sets. | Moon R. & S. |
| | | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | Sa | 7 9 | 4 29 | A.M. | 7 4 | 4 33 | A.M. | 6 59 | 4 39 | A.M. | 6 44 | 4 54 | A.M. |
| 2 | S | 7 10 | 4 28 | 12 22 | 7 5 | 4 33 | 12 23 | 7 0 | 4 38 | 12 25 | 6 44 | 4 54 | 12 29 |
| 3 | M | 7 11 | 4 28 | 1 30 | 7 6 | 4 33 | 1 30 | 7 1 | 4 38 | 1 31 | 6 45 | 4 54 | 1 32 |
| 4 | Tu | 7 12 | 4 28 | 2 41 | 7 7 | 4 33 | 2 40 | 7 2 | 4 38 | 2 40 | 6 46 | 4 54 | 2 37 |
| 5 | W | 7 13 | 4 28 | 3 54 | 7 8 | 4 32 | 3 52 | 7 3 | 4 38 | 3 51 | 6 47 | 4 54 | 3 45 |
| 6 | Th | 7 14 | 4 28 | 5 8 | 7 9 | 4 32 | 5 5 | 7 4 | 4 38 | 5 3 | 6 48 | 4 54 | 4 54 |
| 7 | Fr | 7 15 | 4 27 | sets. | 7 10 | 4 32 | sets. | 7 5 | 4 38 | sets. | 6 49 | 4 54 | sets. |
| 8 | Sa | 7 16 | 4 27 | 5 32 | 7 11 | 4 32 | 5 37 | 7 5 | 4 38 | 5 42 | 6 50 | 4 54 | 5 56 |
| 9 | S | 7 17 | 4 27 | 6 33 | 7 12 | 4 32 | 6 38 | 7 6 | 4 38 | 6 43 | 6 50 | 4 54 | 6 57 |
| 10 | M | 7 18 | 4 27 | 7 37 | 7 13 | 4 32 | 7 41 | 7 7 | 4 38 | 7 46 | 6 51 | 4 54 | 7 59 |
| 11 | Tu | 7 18 | 4 27 | 8 42 | 7 14 | 4 32 | 8 46 | 7 8 | 4 38 | 8 50 | 6 52 | 4 54 | 9 2 |
| 12 | W | 7 19 | 4 28 | 9 47 | 7 14 | 4 33 | 9 50 | 7 9 | 4 38 | 9 53 | 6 52 | 4 55 | 10 2 |
| 13 | Th | 7 20 | 4 28 | 10 49 | 7 15 | 4 33 | 10 51 | 7 10 | 4 38 | 10 54 | 6 53 | 4 55 | 11 0 |
| 14 | Fr | 7 21 | 4 28 | 11 50 | 7 16 | 4 33 | 11 51 | 7 10 | 4 39 | 11 53 | 6 54 | 4 55 | 11 57 |
| 15 | Sa | 7 22 | 4 28 | A.M. | 7 17 | 4 33 | A.M. | 7 11 | 4 39 | A.M. | 6 54 | 4 55 | A.M. |
| 16 | S | 7 22 | 4 28 | 12 49 | 7 17 | 4 33 | 12 49 | 7 12 | 4 39 | 12 50 | 6 55 | 4 56 | 12 51 |
| 17 | M | 7 23 | 4 29 | 1 47 | 7 18 | 4 34 | 1 46 | 7 12 | 4 39 | 1 46 | 6 56 | 4 56 | 1 44 |
| 18 | Tu | 7 24 | 4 29 | 2 44 | 7 19 | 4 34 | 2 43 | 7 13 | 4 40 | 2 42 | 6 56 | 4 56 | 2 37 |
| 19 | W | 7 25 | 4 29 | 3 40 | 7 19 | 4 34 | 3 39 | 7 14 | 4 40 | 3 37 | 6 57 | 4 57 | 3 30 |
| 20 | Th | 7 25 | 4 29 | 4 37 | 7 20 | 4 35 | 4 35 | 7 14 | 4 41 | 4 32 | 6 57 | 4 57 | 4 23 |
| 21 | Fr | 7 26 | 4 30 | 5 33 | 7 20 | 4 35 | 5 30 | 7 15 | 4 41 | 5 26 | 6 58 | 4 58 | 5 15 |
| 22 | Sa | 7 26 | 4 30 | 6 27 | 7 21 | 4 36 | 6 24 | 7 15 | 4 41 | 6 20 | 6 58 | 4 58 | 6 8 |
| 23 | S | 7 27 | 4 31 | rises. | 7 21 | 4 36 | rises. | 7 16 | 4 42 | rises. | 6 59 | 4 59 | rises. |
| 24 | M | 7 27 | 4 32 | 6 8 | 7 22 | 4 37 | 6 12 | 7 16 | 4 43 | 6 17 | 7 0 | 4 59 | 6 31 |
| 25 | Tu | 7 28 | 4 32 | 7 5 | 7 22 | 4 38 | 7 9 | 7 17 | 4 43 | 7 13 | 7 0 | 5 0 | 7 26 |
| 26 | W | 7 28 | 4 33 | 8 5 | 7 23 | 4 38 | 8 9 | 7 17 | 4 44 | 8 12 | 7 0 | 5 0 | 8 23 |
| 27 | Th | 7 28 | 4 34 | 9 8 | 7 23 | 4 39 | 9 11 | 7 17 | 4 44 | 9 14 | 7 1 | 5 1 | 9 22 |
| 28 | Fr | 7 29 | 4 34 | 10 12 | 7 23 | 4 39 | 10 14 | 7 18 | 4 45 | 10 16 | 7 1 | 5 2 | 10 21 |
| 29 | Sa | 7 29 | 4 35 | 11 18 | 7 24 | 4 40 | 11 19 | 7 18 | 4 46 | 11 20 | 7 1 | 5 2 | 11 22 |
| 30 | S | 7 29 | 4 36 | A.M. | 7 24 | 4 41 | A.M. | 7 18 | 4 46 | A.M. | 7 2 | 5 3 | A.M. |
| 31 | M | 7 29 | 4 37 | 12 26 | 7 24 | 4 42 | 12 26 | 7 19 | 4 47 | 12 26 | 7 2 | 5 4 | 12 25 |

## SUN ON MERIDIAN OF WASHINGTON.

| Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. | Day of Month | H. | M. | S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | 48 | 53 | 8 | 11 | 51 | 43 | 14 | 11 | 54 | 28 | 20 | 11 | 57 | 24 | 26 | 12 | 0 | 23 |
| 2 | 11 | 49 | 15 | 9 | 11 | 52 | 10 | 15 | 11 | 54 | 57 | 21 | 11 | 57 | 54 | 27 | 12 | 0 | 53 |
| 3 | 11 | 49 | 38 | 10 | 11 | 52 | 37 | 16 | 11 | 55 | 26 | 22 | 11 | 58 | 23 | 28 | 12 | 1 | 22 |
| 4 | 11 | 50 | 2 | 11 | 11 | 53 | 4 | 17 | 11 | 55 | 55 | 23 | 11 | 58 | 53 | 29 | 12 | 1 | 52 |
| 5 | 11 | 50 | 27 | 12 | 11 | 53 | 32 | 18 | 11 | 56 | 25 | 24 | 11 | 59 | 23 | 30 | 12 | 2 | 21 |
| 6 | 11 | 50 | 52 | 13 | 11 | 54 | 0 | 19 | 11 | 56 | 54 | 25 | 11 | 59 | 53 | 31 | 12 | 2 | 50 |
| 7 | 11 | 51 | 17 | | | | | | | | | | | | | | | | |

## TWILIGHT.

| Places. | Dec. | Begins, A.M. | Ends, P.M. | Dec. | Begins, A.M. | Ends, P.M. | Dec. | Begins, A.M. | Ends, P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | | H. M. | H. M. | | H. M. | H. M. |
| Boston.... | 1 | 5 29 | 6 9 | 11 | 5 38 | 6 9 | 21 | 5 44 | 6 12 |
| New York | 1 | 5 27 | 6 11 | 11 | 5 35 | 6 11 | 21 | 5 42 | 6 14 |
| Wash'ton.. | 1 | 5 25 | 6 13 | 11 | 5 33 | 6 14 | 21 | 5 39 | 6 17 |
| Charleston | 1 | 5 17 | 6 21 | 11 | 5 24 | 6 22 | 21 | 5 30 | 6 26 |

## MOON'S PHASES.

| | D. | H. | M. | | D. | H. | M. | |
|---|---|---|---|---|---|---|---|---|
| Last Quarter | 1 | 5 | 9 | A. M. | Full Moon | 23 | 2 | 33 | A. M. |
| New Moon | 7 | 8 | 30 | P. M. | Last Quarter | 30 | 4 | 7 | P. M. |
| First Quarter | 14 | 9 | 38 | E. M. | | | | | |

Morning Stars—Mars, Jupiter, Saturn.

Evening Stars—Mercury, Venus.

## READY-REFERENCE CALENDAR.

*For ascertaining any Day of the Week for any given Time within Two Hundred Years from the introduction of the New Style,* 1752* *to* 1952 *inclusive.*

| COMMON YEARS, 1753 TO 1951. | | | | | | | | | | | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1761 1801 | 1767 1807 | 1778 1818 | 1789 1829 | 1795 1835 | 1846 | 1857 1903 | 1863 1914 | 1874 1925 | 1885 1931 | 1891 1942 | 4 | 7 | 7 | 3 | 5 | 1 | 3 | 6 | 2 | 4 | 7 | 2 |
| 1762 1802 | 1773 1813 | 1779 1819 | 1790 1830 | 1841 | 1847 | 1858 1909 | 1869 1915 | 1875 1926 | 1886 1937 | 1897 1943 | 5 | 1 | 1 | 4 | 6 | 2 | 4 | 7 | 3 | 5 | 1 | 3 |
| 1757 1803 | 1763 1814 | 1774 1825 | 1785 1831 | 1791 1842 | 1853 | 1859 1910 | 1870 1921 | 1881 1927 | 1887 1938 | 1898 1949 | 6 | 2 | 2 | 5 | 7 | 3 | 5 | 1 | 4 | 6 | 2 | 4 |
| 1754 1805 | 1765 1811 | 1771 1822 | 1782 1833 | 1793 1839 | 1799 1850 1901 | 1861 1907 | 1867 1918 | 1878 1929 | 1889 1935 | 1895 1946 | 2 | 5 | 5 | 1 | 3 | 6 | 1 | 4 | 7 | 2 | 5 | 7 |
| 1755 1806 | 1766 1817 | 1777 1823 | 1783 1834 | 1794 1845 | 1800 1851 1902 | 1862 1913 | 1873 1919 | 1879 1930 | 1890 1941 | ... 1947 | 3 | 6 | 6 | 2 | 4 | 7 | 2 | 5 | 1 | 3 | 6 | 1 |
| 1758 1809 | 1769 1815 | 1775 1826 | 1786 1837 | 1797 1843 | 1854 1905 | 1865 1911 | 1871 1922 | 1882 1933 | 1893 1939 | 1899 1950 | 7 | 3 | 3 | 6 | 1 | 4 | 6 | 2 | 5 | 7 | 3 | 5 |
| 1753 1810 | 1759 1821 | 1770 1827 | 1781 1838 | 1787 1849 | 1798 1855 | 1866 1906 | 1877 1917 | 1883 1923 | 1894 1934 | 1900 1945 1951 | 1 | 4 | 4 | 7 | 2 | 5 | 7 | 3 | 6 | 1 | 4 | 6 |
| LEAP YEARS, 1756 TO 1952. | | | | | | | | | | | .. | 29 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 1764 | 1792 | 1804 | 1832 | 1860 | 1888 | | 1928 | | | | 7 | 3 | 4 | 7 | 2 | 5 | 7 | 3 | 6 | 1 | 4 | 6 |
| 1768 | 1796 | 1808 | 1836 | 1864 | 1892 | 1904 | 1932 | | | | 5 | 1 | 2 | 5 | 7 | 3 | 5 | 1 | 4 | 6 | 2 | 4 |
| 1772 | .. | 1812 | 1840 | 1868 | 1896 | 1908 | 1936 | | | | 3 | 6 | 7 | 3 | 5 | 1 | 3 | 6 | 2 | 4 | 7 | 2 |
| 1776 | .. | 1816 | 1844 | 1872 | .. | 1912 | 1940 | | | | 1 | 4 | 5 | 1 | 3 | 6 | 1 | 4 | 7 | 2 | 5 | 7 |
| 1780 | .. | 1820 | 1848 | 1876 | .. | 1916 | 1944 | | | | 6 | 2 | 3 | 6 | 1 | 4 | 6 | 2 | 5 | 7 | 3 | 5 |
| 1756 | 1784 | 1824 | 1852 | 1880 | .. | 1920 | 1948 | | | | 4 | 7 | 1 | 4 | 6 | 2 | 4 | 7 | 3 | 5 | 1 | 3 |
| 1760 | 1788 | 1828* | 1856 | 1884 | .. | 1924 | 1952 | | | | 2 | 5 | 6 | 2 | 4 | 7 | 2 | 5 | 1 | 3 | 6 | 1 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| Monday 1 | Tuesday 1 | Wednesday 1 | Thursday 1 | Friday 1 | Saturday 1 | SUNDAY 1 |
| Tuesday 2 | Wednesday 2 | Thursday 2 | Friday 2 | Saturday 2 | SUNDAY 2 | Monday 2 |
| Wednesday 3 | Thursday 3 | Friday 3 | Saturday 3 | SUNDAY 3 | Monday 3 | Tuesday 3 |
| Thursday 4 | Friday 4 | Saturday 4 | SUNDAY 4 | Monday 4 | Tuesday 4 | Wednesday 4 |
| Friday 5 | Saturday 5 | SUNDAY 5 | Monday 5 | Tuesday 5 | Wednesday 5 | Thursday 5 |
| Saturday 6 | SUNDAY 6 | Monday 6 | Tuesday 6 | Wednesday 6 | Thursday 6 | Friday 6 |
| SUNDAY 7 | Monday 7 | Tuesday 7 | Wednesday 7 | Thursday 7 | Friday 7 | Saturday 7 |
| Monday 8 | Tuesday 8 | Wednesday 8 | Thursday 8 | Friday 8 | Saturday 8 | SUNDAY 8 |
| Tuesday 9 | Wednesday 9 | Thursday 9 | Friday 9 | Saturday 9 | SUNDAY 9 | Monday 9 |
| Wednesd. 10 | Thursday 10 | Friday 10 | Saturday 10 | SUNDAY 10 | Monday 10 | Tuesday 10 |
| Thursday 11 | Friday 11 | Saturday 11 | SUNDAY 11 | Monday 11 | Tuesday 11 | Wednesd. 11 |
| Friday 12 | Saturday 12 | SUNDAY 12 | Monday 12 | Tuesday 12 | Wednesd. 12 | Thursday 12 |
| Saturday 13 | SUNDAY 13 | Monday 13 | Tuesday 13 | Wednesd. 13 | Thursday 13 | Friday 13 |
| SUNDAY 14 | Monday 14 | Tuesday 14 | Wednesd. 14 | Thursday 14 | Friday 14 | Saturday 14 |
| Monday 15 | Tuesday 15 | Wednesd. 15 | Thursday 15 | Friday 15 | Saturday 15 | SUNDAY 15 |
| Tuesday 16 | Wednesd. 16 | Thursday 16 | Friday 16 | Saturday 16 | SUNDAY 16 | Monday 16 |
| Wednesd. 17 | Thursday 17 | Friday 17 | Saturday 17 | SUNDAY 17 | Monday 17 | Tuesday 17 |
| Thursday 18 | Friday 18 | Saturday 18 | SUNDAY 18 | Monday 18 | Tuesday 18 | Wednesd. 18 |
| Friday 19 | Saturday 19 | SUNDAY 19 | Monday 19 | Tuesday 19 | Wednesd. 19 | Thursday 19 |
| Saturday 20 | SUNDAY 20 | Monday 20 | Tuesday 20 | Wednesd. 20 | Thursday 20 | Friday 20 |
| SUNDAY 21 | Monday 21 | Tuesday 21 | Wednesd. 21 | Thursday 21 | Friday 21 | Saturday 21 |
| Monday 22 | Tuesday 22 | Wednesd. 22 | Thursday 22 | Friday 22 | Saturday 22 | SUNDAY 22 |
| Tuesday 23 | Wednesd. 23 | Thursday 23 | Friday 23 | Saturday 23 | SUNDAY 23 | Monday 23 |
| Wednesd. 24 | Thursday 24 | Friday 24 | Saturday 24 | SUNDAY 24 | Monday 24 | Tuesday 24 |
| Thursday 25 | Friday 25 | Saturday 25 | SUNDAY 25 | Monday 25 | Tuesday 25 | Wednesd. 25 |
| Friday 26 | Saturday 26 | SUNDAY 26 | Monday 26 | Tuesday 26 | Wednesd. 26 | Thursday 26 |
| Saturday 27 | SUNDAY 27 | Monday 27 | Tuesday 27 | Wednesd. 27 | Thursday 27 | Friday 27 |
| SUNDAY 28 | Monday 28 | Tuesday 28 | Wednesd. 28 | Thursday 28 | Friday 28 | Saturday 28 |
| Monday 29 | Tuesday 29 | Wednesd. 29 | Thursday 29 | Friday 29 | Saturday 29 | SUNDAY 29 |
| Tuesday 30 | Wednesd. 30 | Thursday 30 | Friday 30 | Saturday 30 | SUNDAY 30 | Monday 30 |
| Wednesd. 31 | Thursday 31 | Friday 31 | Saturday 31 | SUNDAY 31 | Monday 31 | Tuesday 31 |

NOTE.—To ascertain any day of the week, first look in the table for the year required, and under the months are figures which refer to the corresponding figures at the head of the columns of days below. *For Example:*—To know on what day of the week July 4, 1918, fell, look in the table of years for 1918, and in a parallel line under July is figure 1, which directs to column 1 in which it will be seen that July 4 fell on Thursday.

* 1752 same as 1772 from January 1 to September 2. From September 14 to December 31 same as 1780 (September 3–13 were omitted). (Whitaker's Almanack).

## Morning Stars in 1923.

MERCURY—January 28 to April 8; May 28 to July 22; September 28 to November 15.
VENUS—January 1 to September 10.
MARS—August 8 to end of year.
JUPITER—January 1 to May 5; November 22 to end of year.
SATURN—January 1 to April 7; October 17 to end of year.

## Evening Stars in 1923.

MERCURY—January 1 to 28; April 8 to May 28; July 22 to September 28; November 15 to end of year.
VENUS—September 10 to end of year.
MARS—January 1 to August 8.
JUPITER—May 5 to November 22.
SATURN—April 7 to October 17.

## Chronological Cycles.

| | | | |
|---|---|---|---|
| Dominical Letter | G | Lunar Cycle | 5 |
| Epact | 13 | Solar Cycle | 28 |
| Roman Indiction | 6 | | |
| Julian Period | 6636 | | |

## Chronological Eras.

THE year 1923 corresponds to the year 7431-32 of the Byzantine era; 5683-84 of the Jewish era, the year 5684 commencing at sunset September 10; 2676 since the foundation of Rome, according to Varro; 2699 of the Olympiads, or the third year of the 675th Olympiad, commencing July 1; 2583 of the Japanese era, and to the twelfth year of the period entitled Taisho; 1341-42 of the Mohammedan era, the year 1342 beginning at sunset August 13. The 148th year of the Independence of the United States of America begins on July 4, 1923.

## Date of Beginning of Epochs, Eras, and Periods.

| *Name.* | *Began.* | | | *Name.* | *Began.* | | |
|---|---|---|---|---|---|---|---|
| Grecian Mundane Era | B. C. | 5598, | Sept. 1 | Grecian or Syro-Macedonian Era | B. C. | 312, | Sept. 1 |
| Civil Era of Constantinople | " | 5508, | Sept. 1 | Era of Maccabees | " | 166, | Nov. 24 |
| Alexandrian Era | " | 5502, | Aug. 29 | Tyrian Era | " | 125, | Oct. 19 |
| Julian Period | " | 4713, | Jan. 1 | Sidonian Era | " | 110, | Oct. 1 |
| Mundane Era | " | 4008, | Oct. 1 | Julian Era | " | 45, | Jan. 1 |
| Jewish Mundane Era | " | 3761, | Oct. 1 | Spanish Era | " | 38, | Jan. 1 |
| Era of Abraham | " | 2015, | Oct. 1 | Augustan Era | " | 27, | Feb. 14 |
| Era of the Olympiads | " | 776, | July 1 | Christian Era | A. D. | 1, | Jan. 1 |
| Roman Era (A. U. C.) | " | 753, | April 24 | Destruction of Jerusalem | " | 69, | Sept. 1 |
| Era of Metonic Cycle | " | 432, | July 15 | Mohammedan Era | " | 622, | July 16 |

### THE ANCIENT AND MODERN YEAR.

THE Athenians began the year in June, the Macedonians in September, the Romans first in March and afterward in January, the Persians on August 11, the ancient Mexicans on February 23, the Mohammedans in July. The Chinese year, which begins late in January or early in February, is similar to the Mohammedan in having 12 months of 29 and 30 days alternately; but in every nineteen years there are seven years which have 13 months. This is not quite correct, and the Chinese have therefore formed a cycle of 60 years, in which period 22 intercalary months occur.

### THE FRENCH REVOLUTIONARY ERA.

IN September, 1793, the convention decreed that the common era should be abolished in all civil affairs, and that the new French era should begin on September 22, 1792, the day of the true Autumnal Equinox, and that each succeeding year should begin at the midnight of the day on which the true Autumnal Equinox falls. The year was divided into twelve months of thirty days each. In ordinary years there were five extra days, from the 17th to the 21st of our September, and at the end of every fourth year was a sixth complementary day. This reckoning was first used on November 22, 1793, and was continued until December 31, 1805, when it was discontinued, and the Gregorian Calendar was resumed.

### CHURCH FASTS.

THE Roman Catholic days of obligation are: Jan. 1 (Circumcision of Christ); Ascension Day (forty days after Easter Sunday); Aug. 15 (Assumption of the Blessed Virgin Mary); Nov. 1 (All Saints' Day); Dec. 8 (Immaculate Conception); Dec. 25 (Christmas), and all the Sundays of the year.

THE Roman Catholic Days of fasting are the forty days of Lent, the Ember Days, the Fridays of the four weeks in Advent, and certain vigils or evenings prior to the greater feasts, while all Fridays of the year are days of abstinence from flesh meat. In the American Episcopal Church the days of fasting or abstinence to be observed, according to the Book of Common Prayer, are the forty days of Lent, the Ember Days, the three Rogation Days, and all the Fridays of the year except Christmas Day. In the Greek Church the four principal fasts are those in Lent, the week succeeding Whitsuntide, the fortnight before the Assumption, and forty days before Christmas.

### EMBER AND ROGATION DAYS.

EMBER and Rogation Days are certain periods of the year devoted to prayer and fasting. Ember Days (twelve annually), about the beginning of the four seasons, are the Wednesday, Friday, and Saturday after the first Sunday in Lent, in Spring; after the feast of Pentecost (Whit Sunday), Summer; after the festival of the Holy Cross, Autumn, and after the festival of St. Lucia, Winter. Ember Weeks are the weeks in which the Ember Days appear.

Rogation Days occur on the Feast of St. Mark, April 25, and on the three days immediately preceding Ascension Day.

## Greek Church Calendar, 1923.

A. D. 1923. A. M. 8032.

| New Style. | Holy Days. | Old Style. | New Style. | Holy Days. | Old Style. |
|---|---|---|---|---|---|
| Jan. 14 | Circumcision | Jan. 1 | July 12 | Peter and Paul (Chief Apostles) | June 29 |
| Jan. 19 | Theophany (Epiphany) | Jan. 6 | Aug. 19 | Transfiguration | Aug. 6 |
| Feb. 15 | Hypapante (Purification) | Feb. 2 | Aug. 28 | Repose of Theotokos | Aug. 15 |
| Feb. 19 | Great Lent begins | Feb. 6 | Sept. 12 | *St. Alexander Nevsky | Aug. 30 |
| Apr. 1 | Palm Sunday | Mar. 19 | Sept. 21 | Nativity of Theotokos | Sept. 8 |
| Apr. 6 | Great Friday | Mar. 24 | Sept. 27 | Exaltation of Cross | Sept. 14 |
| Apr. 7 | Annunciation | Mar. 25 | Oct. 14 | Patronage of Theotokos | Oct. 1 |
| Apr. 8 | Holy Pasch (Easter) | Mar. 26 | Nov. 28 | First Day Fast of Theotokos | Nov. 15 |
| May 6 | St. George | April 23 | Dec. 4 | Entrance of Tneotokos | Nov. 21 |
| May 17 | Ascension | May 4 | Dec. 22 | Conception of Theotokos | Dec. 9 |
| May 27 | Pentecost | May 14 | 1924 | | |
| May 28 | Holy Ghost | May 15 | Jan. 7 | Nativity (Christmas) | Dec. 25 |

* Peculiar to Russia.

## Mohammedan Calendar, 1923.

| Year. | Name of Month. | Month Begins. | Year. | Name of Month. | Month Begins. |
|---|---|---|---|---|---|
| 1341.. | Jomadi I | Dec. 20, 1922 | 1341.. | Dulkaada | June 15, 1923 |
| 1341.. | Jomadi II | Jan. 19, 1923 | 1341.. | Dulheggia | July 15, 1923 |
| 1341.. | Rajab | Feb. 17, 1923 | 1342.. | Muharram (New Year) | Aug. 14, 1923 |
| 1341.. | Shaaban | Mar. 19, 1923 | 1342.. | Saphar | Sept. 13, 1923 |
| 1341.. | Ramadan (Month of Abstinence) | April 17, 1923 | 1342.. | Rabia I | Oct. 12, 1923 |
| 1341.. | Shawall | May 17, 1923 | 1342.. | Rabia II | Nov. 11, 1923 |
| | | | 1342.. | Jomadi I | Dec. 10, 1923 |

## JEWISH HOLIDAYS, FESTIVALS AND FASTS.

| Festivals and Fasts. | Hebrew | Date. | 1919-20. | 1920-21. | 1921-22. | 1922-23. | 1923-24. |
|---|---|---|---|---|---|---|---|
| New Year | Tishri | 1 | Sept. 25, Th. | Sept. 13, M. | Oct. 3, M. | Sept. 23, St. | Sept. 11, T. |
| Fast of Gedaliah* | Tishri | 3 | Sept. 27, St. | Sept. 15, W. | Oct. 5, W. | Sept. 25, M. | Sept. 13, Th. |
| Day of Atonement | Tishri | 10 | Oct. 4, St. | Sept. 22, W. | Oct. 12, W. | Oct. 2, M. | Sept. 20, Th. |
| Tabernacles, 1st Day | Tishri | 15 | Oct. 9, Th. | Sept. 27, M. | Oct. 17, M. | Oct. 7, St. | Sept. 25, T. |
| Tabernacles, 8th Day | Tishri | 22 | Oct. 16, Th. | Oct. 4, M. | Oct. 24, M. | Oct. 14, St. | Oct. 2, T. |
| Rejoicing of the Law | Tishri | 23 | Oct. 17, F. | Oct. 5, T. | Oct. 25, T. | Oct. 15, S. | Oct. 3, W. |
| Hannukah | Kislev | 25 | Dec. 17, W. | Dec. 6, M. | Dec. 25, M. | Dec. 15, F. | Dec. 3, M. |
| Fast of Tebet | Tebet | 10 | Jan. 1, Th. | Dec. 21, T. | Jan. 10, T. | Dec. 29, F. | Dec. 18, T. |
| Purim | Adar | 14 | Mar. 4, Th. | . . . . . | Mar. 14, T. | Mar. 2, F. | . . . . . |
| Purim (Leap Year) | Adar Sheni | 14 | . . . . . | Mar. 24, Th. | . . . . . | . . . . . | Mar. 20, Th. |
| Passover, 1st Day | Nisan | 15 | Apr. 3, St. | Apr. 23, St. | Apr. 13, Th. | Apr. 1, S. | Apr. 19, St. |
| Passover, 7th Day | Nisan | 21 | Apr. 9, F. | Apr. 29, F. | Apr. 19, W. | Apr. 7, St. | Apr. 25, F. |
| Passover, Last Day | Nisan | 22 | Apr. 10, St. | Apr. 30, St. | Apr. 20, Th. | Apr. 8, S. | Apr. 26, St. |
| Feast of Weeks | Sivan | 6 | May 23, St. | June 12, S. | June 2, F. | May 21, M. | June 8, S. |
| Fast of Tammuz* | Tammuz | 17 | July 3, St. | July 23, St. | July 13, Th. | July 1, S. | July 19, St. |
| Fast of Ab* | Ab | 9 | July 24, St. | Aug. 13, St. | Aug. 3, Th. | July 22, S. | Aug. 9, St. |

* If Saturday, substitute Sunday immediately following.

## Church Memoranda for 1923.

*January.*
1 Monday.
6 Epiphany.
7 i. Sun. aft. Epiphany.
14 ii. " " "
21 iii. " " "
28 Septuagesima Sunday.

*February.*
1 Thursday.
2 Purification.
4 Sexagesima Sunday.
11 Quinquagesima Sun.
14 Ash Wednesday.
18 i. Sunday in Lent.
25 ii. " " "

*March.*
1 Thursday.
4 iii. Sunday in Lent.
8 Thurs. (Mi-Careme.)
11 iv. Sunday in Lent.
18 v. " " "
25 Palm Sunday.
(Annunciation.)
30 Good Friday.

*April.*
1 Easter Sunday.
8 i. Sunday aft. Easter.
15 ii. " " "
22 iii. " " "
23 St. George.
29 iv. Sunday aft. Easter.

*May.*
1 Tuesday.
6 Rogation Sunday.
10 Ascension Day.
13 i. Sun. aft. Ascension.
20 Pentecost (Whit. Sun.)
27 Trinity Sunday.
31 Corpus Christi.

*June.*
1 Friday.
3 i. Sun. after Trinity.
10 ii. " " "
17 iii. " " "
24 iv. " " "
(St. John the Baptist.)
29 SS. Peter and Paul.

*July.*
1 v. Sun. after Trinity.
8 vi. " " "
15 vii. " " "
22 viii. " " "
29 ix. " " "

*August.*
1 Wednesday.
5 x. Sun. after Trinity.
6 Transfiguration.
12 xi. Sun. after Trinity.
15 Assumption.
19 xii. Sun. after Trinity.
26 xiii. " " "

*September.*
1 Saturday.
2 xiv. Sun. aft. Trinity.
9 xv. " " "
16 xvi. " " "
23 xvii. " " "
29 Michaelmas.
30 xviii. Sun. aft. Trinity.

*October.*
1 Monday.
7 xix. Sun. aft. Trinity.
14 xx. " " "
18 St. Luke (Evangelist.)
21 xxi. Sun. aft. Trinity.
28 xxii. " " "

*November.*
1 Thursday—All Saints.
4 xxiii. Sun. aft. Trinity.
11 xxiv. " " "
18 xxv. " " "
25 xxvi. " " "
30 St. Andrew.

*December.*
1 Saturday.
2 i. Sunday in Advent.
9 ii. " " "
16 iii. " " "
23 iv. " " "
25 Christmas Day.
27 St. John (Evangelist.)
30 i. Sun. aft. Christmas.

## PROT. EPIS. RITUALISTIC CALENDAR, WITH ALTAR COLORS.

*White*—From the First Service (First Vespers) of Christmas Day to the Octave of Epiphany, inclusive (except on the Feasts of Martyrs); on Maundy Thursday (for the celebration); from the First Service of Easter Day to the Vigil of Pentecost (except on Feasts of Martyrs and Rogation Days); on Trinity Sunday, Conversion of St. Paul, Purification, Annunciation, St. John Baptist, St. Michael, St. Luke, All Saints, Saints who are not Martyrs, and Patron Saints (Transfiguration and Dedication of Church).

*Red*—From First Vespers of Pentecost to the First Vespers of Trinity Sunday (which includes Ember Days); Holy Innocents (if on a Sunday), and Feasts of all Martyrs.

*Violet*—From Septuagesima to Maundy Thursday (Easter Eve); Advent Sunday to Christmas Eve; Vigils, Ember Days (except in Whitsun Week), and Rogation Days; Holy Innocents (unless on Sunday).

*Black*—Good Friday and at funerals. *Green*—All other days.

| Days, Etc. | 1917. | 1918. | 1919. | 1920. | 1921. | 1922. | 1923. | 1924. | 1925. | 1926. |
|---|---|---|---|---|---|---|---|---|---|---|
| Golden Number | 18 | 19 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Sunday Letter | G | F | E | DC | B | A | G | FE | D | C |
| Sundays after Epiphany | 4 | 2 | 5 | 3 | 2 | 5 | 3 | 5 | 4 | 3 |
| Septuagesima | Feb. 4 | Jan. 27 | Feb. 16 | Feb. 1 | Jan. 23 | Feb. 12 | Jan. 28 | Feb. 17 | Feb. 8 | Jan. 31 |
| Ash Wednesday | Feb. 21 | Feb. 13 | Mar. 5 | Feb. 18 | Feb. 9 | Mar. 1 | Feb. 14 | Mar. 5 | Feb. 25 | Feb. 17 |
| First Sunday in Lent | Feb. 25 | Feb. 17 | Mar. 9 | Feb. 22 | Feb. 13 | Mar. 5 | Feb. 18 | Mar. 9 | Mar. 1 | Feb. 21 |
| Passion Sunday | Mar. 25 | Mar. 17 | April. 6 | Mar. 21 | Mar. 13 | April. 2 | Mar. 18 | April. 6 | Mar. 29 | Mar. 21 |
| Palm Sunday | April. 1 | Mar. 24 | April. 13 | Mar. 28 | Mar. 20 | April. 9 | Mar. 25 | April. 13 | April. 5 | Mar. 28 |
| Good Friday | April. 6 | Mar. 29 | April. 18 | April. 2 | Mar. 25 | April. 14 | Mar. 30 | April. 18 | April. 10 | April. 2 |
| Easter Day | April. 8 | Mar. 31 | April. 20 | April. 4 | Mar. 27 | April. 16 | April. 1 | April. 20 | April. 12 | April. 4 |
| Rogation Sunday | May. 13 | May. 5 | May. 25 | May. 9 | May. 1 | May. 21 | May. 6 | May. 25 | May. 17 | May. 9 |
| Ascension Day | May. 17 | May. 9 | May. 29 | May. 13 | May. 5 | May. 25 | May. 10 | May. 29 | May. 21 | May. 13 |
| Whitsunday | June. 27 | May. 19 | June. 8 | May. 23 | May. 15 | May. 4 | May. 20 | June. 8 | May. 31 | May. 23 |
| Trinity Sunday | June. 3 | May. 26 | June. 15 | May. 30 | May. 22 | June. 11 | May. 27 | June. 15 | June. 7 | May. 30 |
| Sundays after Trinity | 25 | 26 | 23 | 25 | 26 | 24 | 26 | 23 | 24 | 25 |
| First Sunday in Advent | Dec. 2 | Dec. 1 | Nov. 30 | Nov. 28 | Nov. 27 | Dec. 3 | Dec. 2 | Nov. 30 | Nov. 29 | Nov. 28 |

## ASH WEDNESDAY AND EASTER SUNDAY.

(A table showing the dates on which they fall, 1801-2000.)

| YEAR. | Ash Wed. | Easter Sunday. | YEAR. | Ash Wed. | Easter Sunday. | YEAR. | Ash Wed. | Easter Sunday. | YEAR. | Ash Wed. | Easter Sunday. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1801... | Feb. 18 | April 5 | 1851... | Mar. 5 | April 20 | 1901... | Feb. 20 | April 7 | 1951... | Feb. 7 | Mar. 25 |
| 1802... | Mar. 3 | April 18 | 1852... | Feb. 25 | April 11 | 1902... | Feb. 12 | Mar. 30 | 1952... | Feb. 27 | April 13 |
| 1803... | Feb. 23 | April 10 | 1853... | Feb. 9 | Mar. 27 | 1903... | Feb. 25 | April 12 | 1953... | Feb. 18 | April 5 |
| 1804... | Feb. 15 | April 1 | 1854... | Mar. 1 | April 16 | 1904... | Feb. 17 | April 3 | 1954... | Mar. 3 | April 18 |
| 1805... | Feb. 27 | April 14 | 1855... | Feb. 21 | April 8 | 1905... | Mar. 8 | April 23 | 1955... | Feb. 23 | April 10 |
| 1806... | Feb. 19 | April 6 | 1856... | Feb. 6 | Mar. 23 | 1906... | Feb. 28 | April 15 | 1956... | Feb. 15 | April 1 |
| 1807... | Feb. 11 | Mar. 29 | 1857... | Feb. 25 | April 12 | 1907... | Feb. 13 | Mar. 31 | 1957... | Mar. 6 | April 21 |
| 1808... | Mar. 2 | April 17 | 1858... | Feb. 17 | April 4 | 1908... | Mar. 4 | April 19 | 1958... | Feb. 19 | April 6 |
| 1809... | Feb. 15 | April 2 | 1859... | Mar. 9 | April 24 | 1909... | Feb. 24 | April 11 | 1959... | Feb. 11 | Mar. 29 |
| 1810... | Mar. 7 | April 22 | 1860... | Feb. 22 | April 8 | 1910... | Feb. 9 | Mar. 27 | 1960... | Mar. 2 | April 17 |
| 1811... | Feb. 27 | April 14 | 1861... | Feb. 13 | Mar. 31 | 1911... | Mar. 1 | April 16 | 1961... | Feb. 15 | April 2 |
| 1812... | Feb. 12 | Mar. 29 | 1862... | Mar. 5 | April 20 | 1912... | Feb. 21 | April 7 | 1962... | Mar. 7 | April 22 |
| 1813... | Mar. 3 | April 18 | 1863... | Feb. 18 | April 5 | 1913... | Feb. 5 | Mar. 23 | 1963... | Feb. 27 | April 14 |
| 1814... | Feb. 23 | April 10 | 1864... | Feb. 10 | Mar. 27 | 1914... | Feb. 25 | April 12 | 1964... | Feb. 12 | Mar. 29 |
| 1815... | Feb. 8 | Mar 26 | 1865... | Mar. 1 | April 16 | 1915... | Feb. 17 | April 4 | 1965... | Mar. 3 | April 18 |
| 1816... | Feb. 28 | April 14 | 1866... | Feb. 14 | April 1 | 1916... | Mar. 8 | April 23 | 1966... | Feb. 23 | April 10 |
| 1817... | Feb. 19 | April 6 | 1867... | Mar. 6 | April 21 | 1917... | Feb. 21 | April 8 | 1967... | Feb. 8 | Mar. 26 |
| 1818... | Feb. 4 | Mar. 22 | 1868... | Feb. 26 | April 12 | 1918... | Feb. 13 | Mar. 31 | 1968... | Feb. 28 | April 14 |
| 1819... | Feb. 24 | April 11 | 1869... | Feb. 10 | Mar. 28 | 1919... | Mar. 5 | April 20 | 1969... | Feb. 19 | April 6 |
| 1820... | Feb. 16 | April 2 | 1870... | Mar. 2 | April 17 | 1920... | Feb. 18 | April 4 | 1970... | Feb. 11 | Mar. 29 |
| 1821... | Mar. 7 | April 22 | 1871... | Feb. 22 | April 9 | 1921... | Feb. 9 | Mar. 27 | 1971... | Feb. 24 | April 11 |
| 1822... | Feb. 20 | April 7 | 1872... | Feb. 14 | Mar. 31 | 1922... | Mar. 1 | April 16 | 1972... | Feb. 16 | April 2 |
| 1823... | Feb. 12 | Mar. 30 | 1873... | Feb. 26 | April 13 | 1923... | Feb. 14 | April 1 | 1973... | Mar. 7 | April 22 |
| 1824... | Mar. 3 | April 18 | 1874... | Feb. 18 | April 5 | 1924... | Mar. 5 | April 20 | 1974... | Feb. 27 | April 14 |
| 1825... | Feb. 16 | April 3 | 1875... | Feb. 10 | Mar. 28 | 1925... | Feb. 25 | April 12 | 1975... | Feb. 12 | Mar. 30 |
| 1826... | Feb. 8 | Mar. 26 | 1876... | Mar. 1 | April 16 | 1926... | Feb. 17 | April 4 | 1976... | Mar. 3 | April 18 |
| 1827... | Feb. 28 | April 15 | 1877... | Feb. 14 | April 1 | 1927... | Mar. 2 | April 17 | 1977... | Feb. 23 | April 10 |
| 1828... | Feb. 20 | April 6 | 1878... | Mar. 6 | April 21 | 1928... | Feb. 22 | April 8 | 1978... | Feb. 8 | Mar. 26 |
| 1829... | Mar. 4 | April 19 | 1879... | Feb. 26 | April 13 | 1929... | Feb. 13 | Mar. 31 | 1979... | Feb. 28 | April 15 |
| 1830... | Feb. 24 | April 11 | 1880... | Feb. 11 | Mar. 28 | 1930... | Mar. 5 | April 20 | 1980... | Feb. 20 | April 6 |
| 1831... | Feb. 16 | April 3 | 1881... | Mar. 2 | April 17 | 1931... | Feb. 18 | April 5 | 1981... | Mar. 4 | April 19 |
| 1832... | Mar. 7 | April 22 | 1882... | Feb. 22 | April 9 | 1932... | Feb. 10 | Mar. 27 | 1982... | Feb. 24 | April 11 |
| 1833... | Feb. 20 | April 7 | 1883... | Feb. 7 | Mar. 25 | 1933... | Mar. 1 | April 16 | 1983... | Feb. 16 | April 3 |
| 1834... | Feb. 12 | Mar. 30 | 1884... | Feb. 27 | April 13 | 1934... | Feb. 14 | April 1 | 1984... | Mar. 7 | April 22 |
| 1835... | Mar. 4 | April 19 | 1885... | Feb. 18 | April 5 | 1935... | Mar. 6 | April 21 | 1985... | Feb. 20 | April 7 |
| 1836... | Feb. 17 | April 3 | 1886... | Mar. 10 | April 25 | 1936... | Feb. 26 | April 12 | 1986... | Feb. 12 | Mar. 30 |
| 1837... | Feb. 8 | Mar. 26 | 1887... | Feb. 23 | April 10 | 1937... | Feb. 10 | Mar. 28 | 1987... | Mar. 4 | April 19 |
| 1838... | Feb. 28 | April 15 | 1888... | Feb. 15 | April 1 | 1938... | Mar. 2 | April 17 | 1988... | Feb. 17 | April 3 |
| 1839... | Feb. 13 | Mar. 31 | 1889... | Mar. 6 | April 21 | 1939... | Feb. 22 | April 9 | 1989... | Feb. 8 | Mar. 26 |
| 1840... | Mar. 4 | April 19 | 1890... | Feb. 19 | April 6 | 1940... | Feb. 7 | Mar. 24 | 1990... | Feb. 28 | April 15 |
| 1841... | Feb. 24 | April 11 | 1891... | Feb. 11 | Mar. 29 | 1941... | Feb. 26 | April 13 | 1991... | Feb. 13 | Mar. 31 |
| 1842... | Feb. 9 | Mar. 27 | 1892... | Mar. 2 | April 17 | 1942... | Feb. 18 | April 5 | 1992... | Mar. 4 | April 19 |
| 1843... | Mar. 1 | April 16 | 1893... | Feb. 15 | April 2 | 1943... | Mar. 10 | April 25 | 1993... | Feb. 24 | April 11 |
| 1844... | Feb. 21 | April 7 | 1894... | Feb. 7 | Mar. 25 | 1944... | Feb. 23 | April 9 | 1994... | Feb. 16 | April 3 |
| 1845... | Feb. 5 | Mar. 23 | 1895... | Feb. 27 | April 14 | 1945... | Feb. 14 | April 1 | 1995... | Mar. 1 | April 16 |
| 1846... | Feb. 25 | April 12 | 1896... | Feb. 19 | April 5 | 1946... | Mar. 6 | April 21 | 1996... | Feb. 21 | April 7 |
| 1847... | Feb. 17 | April 4 | 1897... | Mar. 3 | April 18 | 1947... | Feb. 19 | April 6 | 1997... | Feb. 12 | Mar. 30 |
| 1848... | Mar. 8 | April 23 | 1898... | Feb. 23 | April 10 | 1948... | Feb. 11 | Mar. 28 | 1998... | Feb. 25 | April 12 |
| 1849... | Feb. 21 | April 8 | 1899... | Feb. 15 | April 2 | 1949... | Mar. 2 | April 17 | 1999... | Feb. 17 | April 4 |
| 1850... | Feb. 13 | Mar. 31 | 1900... | Feb. 28 | April 15 | 1950... | Feb. 22 | April 9 | 2000... | Mar. 8 | April 23 |

Easter Sunday (Easter Day) is the first Sunday after the Paschal Full Moon; that is the first Sunday after the full moon on or next after March 21, and therefore cannot be earlier than March 22, or later than April 25. If the full moon falls on a Sunday, then Easter Day is the next Sunday.

Lent begins on Ash Wednesday, which comes 40 days previous to Easter Sunday, not counting Sundays.

## DIVISIONS OF TIME.

THE interval between two consecutive meridian transits of a fixed star having no proper motion, or the interval during which the earth makes one absolute revolution on its axis, is invariable. Very slightly differing from this is a Sidereal Day, which is the interval between two consecutive transits of the Vernal Equinox over any meridian. Vernal Equinox is employed in two senses: it may mean either the date when Spring commences, or else, as here, the point in the heavens occupied by the sun's centre when Spring commences. The interval between two consecutive transits of the Sun over any meridian is called an *Apparent* Solar Day, and its length varies from day to day by reason of the variable motion of the earth in its orbit and the inclination of this orbit to the Equator on which time is measured.

A *Mean* Solar Day is the average or mean of all the apparent solar days in a year; it is equal to 1 day 3 minutes and 56.555 seconds, when measured in units of the Sidereal Day. *Mean Solar Time* is that shown by a well-regulated clock or watch, while *Apparent Solar Time* is that shown by a well-constructed sun-dial; the difference between the two at any time is the *Equation of Time*, and may amount to 16 minutes and 22 seconds. The Astronomical Day begins at noon and the Civil Day at the preceding midnight.

The interval during which the earth makes one absolute revolution round the Sun is called a *Sidereal Year*, and consists of 365 days 6 hours 9 minutes and 9.6 seconds, which is invariable.

The Tropical Year is the interval between two consecutive returns of the sun to the Vernal Equinox. If this were a fixed point, the Sidereal and Tropical Years would be identical; but in consequence of the action of the Sun and Moon upon the equatorial protuberance of the Earth's mass and, in a much less degree, the disturbing influence of the planets upon the Earth's orbit, the Equinox has a slow, retrograde mean motion of 50".26 annually, so that the Sun returns to the Equinox sooner every year than he otherwise would by 20 minutes 23.6 seconds; the Tropical Year, therefore, consists of 365 days 5 hours 48 minutes and 46 seconds. The Tropical Year is not of uniform length; it is now slowly decreasing at the rate of .530 second per century, but this variation will not always continue.

Julius Cæsar, in B. C. 45, reformed the Roman calendar so that thereafter every fourth year should contain 366 days, and all the other years 365 days. The intercalary day was introduced by counting the *sixth* day before the Kalends of March *twice*, hence the name bissextile, from bis, twice, and sex, six. He also changed the beginning of the year from the first of March to the first of January, and also changed the name of the fifth month (Quintilis) to July, after himself. The average length of the Julian year is therefore 365¼ days, which, however, is too long by 11 minutes and 14 seconds, and this would accumulate in 400 years to about three days. The Julian Calendar continued in use until A. D. 1582, when the Gregorian Calendar was introduced by Pope Gregory XIII., with the view of keeping the Equinox to the same day of the year. Of the centurial years only those which are exactly divisible by 400 thenceforward

contained 365 days. The length of the mean Gregorian Year may therefore be set down at 365 days 5 hours 49 minutes 12 seconds, and the error will amount to one day in 3,000 years. The Gregorian Calendar was introduced into England and her colonies in 1752, at which time the Equinox had retrograded 11 days since the Council of Nice in A. D. 325, when the rule for Easter Day was established and the Equinox occurred on March 21; hence September 3, 1752, was called September 14, and at the same time the commencement of the legal year was changed from March 25 to January 1, so that the year 1751 lost the months of January and February and the first 24 days of March. The difference between the Julian and Gregorian Calendars is now 13 days.

The Gregorian Calendar was adopted by Japan in 1873, by the Chinese Republic in 1912, by the Turkish Parliament in 1917, by the Bolshevist Government of Russia in 1918, and by Roumania in 1919. Bulgaria, Serbia, Greece and the Greek Church still use the Julian Calendar.

## STANDARD TIME.

THE United States adopted standard time in 1883, on the initiative of the American Railway Association, and at noon of November 18, 1883, the telegraphic time signals sent out daily from the Naval Observatory at Washington were changed to the new system, according to which the meridians of 75°, 90°, 105° and 120° west from Greenwich became the time meridians of Eastern, Central, Mountain, and Pacific standard time respectively.

By Act of Congress, approved March 19, 1918, standard time is made the legal time throughout the United States; in addition to the four time meridians already mentioned, the meridian 150° west from Greenwich is established the time meridian of standard Alaska time; authority to readjust the boundary line between the time zones is lodged with the Interstate Commerce Commission. The Commission has made the readjustment so as to bring the new limits of the zones about half way between the standard meridians.

United States standard Eastern time is used from the Atlantic Ocean to a line through Toledo, Monroeville, Mansfield and Newark, O.; thence through Huntington, W. Va.; Norton, Va.; Johnson City, Tenn.; Asheville, N. C.; Atlanta and Macon, Ga., and Apalachicola, Fla. U. S. standard Central time is used from this first line to a line through Mandan, N. D.; Pierre, S. D.; McCook, Neb.; Dodge City, Kan., and along west line of Okla. and Tex.; standard Mountain time is used from the second line to a line that forms the western boundary of Mont., and thence passes through Pocatello, Idaho; Ogden and Salt Lake City, Utah; Parker and Yuma, Ariz. U. S. standard Pacific time is used from the third line to the Pacific Ocean.

Almost all countries throughout the world use standard time based on the meridians 15° apart from Greenwich, while some use standard time based on the longitude of their national observatories.

## TIME DIFFERENCE.

12 O'CLOCK NOON U. S. STANDARD EASTERN TIME COMPARED WITH CLOCKS IN FOREIGN CITIES:

| | | | | | |
|---|---|---|---|---|---|
| Aden | 8.00 P.M. | Dublin | 4.35 P.M. | Melbourne | 3.00 A.M.* |
| Alexandria | 7.00 P.M. | Hamburg | 6.00 P.M. | Mexico City | 10.24 A.M. |
| Amsterdam | 5.20 P.M. | Havana | 11.31 A.M. | Natal | 7.00 P.M. |
| Athens | 7.00 P.M. | Havre | 5.00 P.M. | Paris | 5.00 P.M. |
| Berlin | 6.00 P.M. | Hongkong | 1.00 A.M.* | Petrograd | 7.01 P.M. |
| Berne | 6.00 P.M. | Honolulu | 6.30 A.M. | Rio de Janeiro | 2.00 P.M. |
| Bogota | 12.03 P.M. | Lima | 12.00 NOON | Rome | 6.00 P.M. |
| Bombay | 10.30 P.M. | Lisbon | 4.24 P.M. | Santiago (Chile) | 12.00 NOON |
| Bremen | 6.00 P.M. | Liverpool | 5.00 P.M. | Sitka, Alaska | 7.00 A.M. |
| Brussels | 5.00 P.M. | London | 5.00 P.M. | Stockholm | 6.00 P.M. |
| Constantinople | 7.00 P.M. | Madrid | 5.00 P.M. | Vienna | 6.00 P.M. |
| Copenhagen | 6.00 P.M. | Manila | 1.00 A.M.* | Yokohama | 2.00 A.M.* |

* At places marked * the time noted is in the morning of the FOLLOWING day.

TWELVE O'CLOCK NOON UNITED STATES STANDARD EASTERN TIME AS COMPARED WITH THE CLOCKS IN THE FOLLOWING CITIES OF THE UNITED STATES:

| | | | | | |
|---|---|---|---|---|---|
| Atlanta, Ga | 11.00 A.M. | Detroit, Mich | 12.00 NOON | Norfolk, Va | 12.00 NOON |
| Atlantic City, N. J | 12.00 NOON | El Paso, Tex | 10.00 A.M. | Omaha, Neb | 11.00 A.M. |
| Baltimore, Md | 12.00 NOON | Galveston, Tex | 11.00 A.M. | Philadelphia, Pa | 12.00 NOON |
| Birmingham, Ala | 11.00 A.M. | Indianapolis, Ind | 11.00 A.M. | Pittsburgh, Pa | 12.00 NOON |
| Boston, Mass | 12.00 NOON | Kansas City, Mo | 11.00 A.M. | Richmond, Va | 12.00 NOON |
| Buffalo, N. Y | 12.00 NOON | Los Angeles, Cal | 9.00 A.M. | Salt Lake City, Utah | 10.00 A.M. |
| Charleston, S. C | 12.00 NOON | Louisville, Ky | 11.00 A.M. | San Francisco, Cal | 9.00 A.M. |
| Chicago, Ill | 11.00 A.M. | Memphis, Tenn | 11.00 A.M. | Savannah, Ga | 12.00 NOON |
| Cincinnati, Ohio | 11.00 A.M. | Milwaukee, Wis | 11.00 A.M. | Seattle, Wash | 9.00 A.M. |
| Cleveland, Ohio | 12.00 NOON | Minneapolis, Minn | 11.00 A.M. | St. Louis, Mo | 11.00 A.M. |
| Dallas, Tex | 11.00 A.M. | Nashville, Tenn | 11.00 A.M. | Toledo, Ohio | 12.00 NOON |
| Denver, Col | 10.00 A.M. | New Orleans, La | 11.00 A.M. | Washington, D. C | 12.00 NOON |

United States standard Eastern time is time of the meridian 75° west from Greenwich. If Summer time be desired one hour must be added to the time given in the two tables above. Summer time, or daylight saving time, is still in use throughout Europe; also in some American cities and Commonwealths.

## LONGITUDE DIFFERENCE.

THE DIFFERENCE IN LONGITUDE BETWEEN NEW YORK CITY AND THE FOLLOWING FOREIGN CITIES; MEASURED FROM NEW YORK EAST OR WEST AS INDICATED:

| | H. | M. | | H. | M. | | H. | M. |
|---|---|---|---|---|---|---|---|---|
| Aden | 7 | 56 E. | Dublin | 4 | 31 E. | Melbourne | 14 | 36 E. |
| Alexandria | 6 | 55 E. | Hamburg | 5 | 36 E. | Mexico City | 1 | 40 W. |
| Amsterdam | 5 | 16 E. | Havana | | 33 W. | Natal | 7 | 0 E. |
| Athens | 6 | 31 E. | Havre | 4 | 56 E. | Paris | 5 | 5 E. |
| Berlin | 5 | 49 E. | Hongkong | 12 | 33 E. | Petrograd | 6 | 57 E. |
| Berne | 5 | 26 E. | Honolulu | 5 | 36 W. | Rio de Janeiro | 2 | 3 E. |
| Bogota | | 1 W. | Lima | | 13 W. | Rome | 5 | 46 E. |
| Bombay | 9 | 47 E. | Lisbon | 4 | 20 E. | Santiago (Chile) | 0 | 13 E. |
| Bremen | 5 | 31 E. | Liverpool | 4 | 44 E. | Sitka, Alaska | 4 | 5 W. |
| Brussels | 5 | 13 E. | London | 4 | 56 E. | Stockholm | 6 | 8 E. |
| Constantinople | 6 | 52 E. | Madrid | 4 | 41 E. | Vienna | 6 | 1 E. |
| Copenhagen | 5 | 46 E. | Manila | 13 | 0 E. | Yokohama | 14 | 14 E. |

THE DIFFERENCE IN LONGITUDE BETWEEN NEW YORK CITY AND THE FOLLOWING CITIES OF THE UNITED STATES; MEASURED EAST OR WEST FROM NEW YORK AS INDICATED:

| | H. | M. | | H. | M. | | H. | M. |
|---|---|---|---|---|---|---|---|---|
| Atlanta, Ga | | 42 W. | Detroit, Mich | | 36 W. | Norfolk, Va | | 9 W. |
| Atlantic City, N. J | | 2 W. | El Paso, Tex | 2 | 10 W. | Omaha, Neb | 1 | 28 W. |
| Baltimore, Md | | 10 W. | Galveston, Tex | 1 | 23 W. | Philadelphia, Pa | | 5 W. |
| Birmingham, Ala | | 52 W. | Indianapolis, Ind | | 48 W. | Pittsburgh, Pa | | 24 W. |
| Boston, Mass | | 12 E. | Kansas City, Mo | 1 | 22 W. | Richmond, Va | | 14 W. |
| Buffalo, N. Y | | 20 W. | Los Angeles, Cal | 2 | 57 W. | Salt Lake City, Utah | 2 | 32 W. |
| Charleston, S. C | | 24 W. | Louisville, Ky | | 47 W. | San Francisco, Cal | 3 | 14 W. |
| Chicago, Ill | | 55 W. | Memphis, Tenn | 1 | 4 W. | Savannah, Ga | | 28 W. |
| Cincinnati, Ohio | | 42 W. | Milwaukee, Wis | | 56 W. | Seattle, Wash | 3 | 13 W. |
| Cleveland, Ohio | | 30 W. | Minneapolis, Minn | 1 | 17 W. | St. Louis, Mo | 1 | 5 W. |
| Dallas, Tex | 1 | 31 W. | Nashville, Tenn | | 51 W. | Toledo, Ohio | 0 | 38 W. |
| Denver, Col | 2 | 4 W. | New Orleans, La | 1 | 4 W. | Washington, D. C | | 12 W. |

## THE CALENDAR IN STANDARD TIME FOR CITIES IN THE U. S.

(How to ascertain the same for 120 United States cities from Local Mean Time Calendar on the twelve monthly calendar pages, 34-45.)

| Use Calendar for Boston. | M. | Use Calendar for New York City. | M. | Use Calendar for Washington, D. C. | M. | Use Calendar for Charleston. | M. |
|---|---|---|---|---|---|---|---|
| IDAHO. | | CONNECTICUT. | | CALIFORNIA (Central). | | ALABAMA. | |
| Boise City....add | 45 Mb | Bridgeport....sub | 7 E | San Fran.....add | 10 Pe | Mobile.....sub | 8 Cf |
| Pocatello.....add | 30 M | Hartford.....sub | 9 Eb | COLORADO. | | Montgomery..sub | 15 C |
| MAINE. | | New Haven...sub | 8 E | Col. Springs.. | 0 M | ARIZONA. | |
| Portland.....sub | 19 Eb | ILLINOIS. | | Denver..... | 0 M | Phoenix.....add | 28 M |
| MASSACHUSETTS. | | Chicago.....sub | 9 Cb | Pueblo.....sub | 2 M | ARKANSAS. | |
| Boston.....sub | 16 E | Springfield....sub | 1 Ce | DELAWARE. | | Hot Springs..add | 12 Cb |
| Fall River....sub | 16 E | INDIANA. | | Wilmington...add | 2 E | Little Rock...add | 9 Cb |
| Lowell.....sub | 15 E | Evansville....sub | 10 Cg | DIST. OF COLUMBIA. | | CALIFORNIA (Southern). | |
| Springfield....sub | 10 E | Fort Wayne...sub | 20 C | Washington...add | 8 E | Los Angeles...sub | 7 Pb |
| Worcester....sub | 13 E | Gary.....sub | 11 C | KANSAS. | | Monterey....add | 8 Pc |
| MICHIGAN. | | Indianapolis...sub | 16 Ce | Topeka.....add | 23 C | San Diego....sub | 11 P |
| Battle Creek..sub | 19 C | Kokomo.....sub | 15 C | Wichita.....add | 29 Ce | Santa Barbara.sub | 1 Pb |
| Detroit.....add | 32 E | Terre Haute..sub | 10 Ce | KENTUCKY. | | FLORIDA. | |
| Grand Rapids.sub | 17 C | IOWA. | | Frankfort....sub | 20 C | Jacksonville..add | 27 Ef |
| MINNESOTA. | | Burlington....add | 5 C | Lexington....sub | 22 C | Key West....add | 27 Eh |
| Minneapolis..add | 13 Cc | Cedar Rapids.add | 7 Cb | Louisville.....sub | 17 C | Miami.....add | 21 Eh |
| MONTANA. | | Davenport.... | 0 C | MARYLAND. | | GEORGIA. | |
| Butte.....add | 30 Mc | Des Moines...add | 14 C | Baltimore....add | 6 E | Atlanta.....sub | 22 Cb |
| NEW YORK. | | Sioux City....add | 26 Cb | MISSOURI. | | Augusta.....add | 28 E |
| Albany.....sub | 5 E | NEBRASKA. | | Jefferson City.add | 9 C | Macon.....add | 34 E |
| Binghamton..add | 4 E | Lincoln.....add | 27 C | Kansas City..add | 18 C | Savannah....add | 24 E |
| Buffalo.....add | 16 E | Omaha.....add | 24 C | Springfield...add | 13 Ce | LOUISIANA. | |
| Poughkeepsie..sub | 4 E | OHIO. | | St. Louis.....add | 1 C | New Orleans.. | 0 Cf |
| Rochester....add | 10 E | Cincinnati....sub | 22 Ce | NEVADA. | | Shreveport...add | 15 C |
| Schenectady..sub | 4 E | Cleveland.....add | 28 E | Carson City...sub | 1 P | MISSISSIPPI. | |
| Syracuse.....add | 5 E | Columbus.....sub | 28 C | NEW JERSEY. | | Jackson.....add | 1 C |
| Utica.....add | 1 E | Dayton.....sub | 23 Ce | Atlantic City. sub | 2 E | Vicksburg....add | 3 C |
| NORTH DAKOTA. | | Sandusky.....add | 31 E | Trenton.....sub | 1 Eb | NEW MEXICO. | |
| Bismarck.....add | 43 Cd | Toledo.....add | 34 E | NORTH CAROLINA. | | Santa Fe.....add | 4 Mc |
| SOUTH DAKOTA. | | Youngstown..add | 23 E | Raleigh.....add | 15 Eg | SOUTH CAROLINA. | |
| Pierre.....add | 41 Cb | PENNSYLVANIA. | | OKLAHOMA. | | Charleston...add | 20 E |
| OREGON. | | Easton.....add | 1 E | Muskogee....add | 21 Cg | Columbia....add | 24 Eb |
| Portland.....add | 11 Pc | Erie.....add | 20 Eb | Okla. City....add | 30 Cg | TENNESSEE. | |
| Salem.....add | 12 Pc | Harrisburg...add | 8 E | UTAH. | | Memphis..... | 0 Cc |
| WASHINGTON. | | Philadelphia..add | 1 E | S. Lake City..add | 28 Mb | Nashville.....sub | 13 Cc |
| Olympia.....add | 12 Pd | Pittsburgh....add | 20 E | VIRGINIA. | | TEXAS. | |
| Seattle.....add | 9 Pd | Scranton.....add | 3 E | Norfolk.....add | 5 Ee | Austin.....add | 31 Cf |
| Spokane.....sub | 10 Pd | RHODE ISLAND. | | Richmond....add | 10 Ee | Dallas.....add | 27 C |
| WISCONSIN. | | Providence....sub | 14 Eb | WEST VIRGINIA. | | El Paso.....add | 6 M |
| Madison.....sub | 2 C | WYOMING. | | Charleston...add | 26 E | Galveston...add | 19 Cf |
| Milwaukee....sub | 8 C | Cheyenne.....sub | 1 M | Wheeling.....add | 22 Eb | San Antonio..add | 34 Cf |

### METHOD OF USING THE TABLE ABOVE, WITH NEW YORK CITY AS AN EXAMPLE.

Directions:—From New York City, subtract 4m from the Calendar for that city and the result is in Eastern standard time; for other cities, use the Calendar named at head of column and add or subtract the given number of minutes; this gives the required standard time, which is Eastern, Central, Mountain or Pacific, according as the letter E, C, M or P is found in the table. A small letter indicates that in case of sunrise and sunset, a correction for latitude is advisable; which correction is to be found in the table below, in the column headed by the small letter and on line with the date.

### CORRECTION TO SUNRISE.

| DATE. | b. | c. | d. | e. | f. | g. | h. |
|---|---|---|---|---|---|---|---|
| | M. | M. | M. | M. | M. | M. | M. |
| Jan. 1 | add 4 | add 8 | add 17 | sub 4 | sub 7 | sub 9 | sub 17 |
| 15 | add 4 | add 7 | add 14 | sub 3 | sub 6 | sub 8 | sub 15 |
| Feb. 1 | add 3 | add 6 | add 11 | sub 3 | sub 5 | sub 6 | sub 12 |
| 15 | add 2 | add 4 | add 8 | sub 2 | sub 4 | sub 4 | sub 9 |
| March 1 | add 1 | add 2 | add 4 | sub 1 | sub 2 | sub 2 | sub 5 |
| 15 | 0 | 0 | add 1 | 0 | sub 1 | 0 | sub 1 |
| April 1 | sub 1 | sub 2 | sub 3 | add 1 | add 1 | add 2 | add 4 |
| 15 | sub 2 | sub 4 | sub 7 | add 2 | add 3 | add 4 | add 8 |
| May 1 | sub 3 | sub 6 | sub 11 | add 3 | add 4 | add 6 | add 11 |
| 15 | sub 4 | sub 7 | sub 15 | add 4 | add 6 | add 8 | add 14 |
| June 1 | sub 4 | sub 8 | sub 18 | add 4 | add 7 | add 9 | add 17 |
| 15 | sub 4 | sub 9 | sub 19 | add 4 | add 7 | add 9 | add 18 |
| July 1 | sub 4 | sub 9 | sub 19 | add 4 | add 7 | add 9 | add 17 |
| 15 | sub 3 | sub 8 | sub 17 | add 4 | add 6 | add 8 | add 16 |
| Aug. 1 | sub 3 | sub 7 | sub 14 | add 3 | add 6 | add 7 | add 14 |
| 15 | sub 2 | sub 5 | sub 10 | add 3 | add 5 | add 5 | add 10 |
| Sept. 1 | sub 1 | sub 3 | sub 6 | add 2 | add 3 | add 3 | add 6 |
| 15 | sub 1 | sub 1 | sub 2 | add 1 | add 1 | add 1 | add 2 |
| Oct. 1 | 0 | add 1 | add 1 | 0 | sub 1 | sub 1 | sub 2 |
| 15 | add 1 | add 3 | add 5 | sub 1 | sub 3 | sub 3 | sub 6 |
| Nov. 1 | add 2 | add 5 | add 9 | sub 2 | sub 4 | sub 5 | sub 10 |
| 15 | add 3 | add 8 | add 13 | sub 3 | sub 5 | sub 7 | sub 13 |
| Dec. 1 | add 4 | add 8 | add 16 | sub 4 | sub 6 | sub 8 | sub 16 |
| 15 | add 4 | add 8 | add 17 | sub 4 | sub 7 | sub 9 | sub 16 |

NOTE—The same correction is applied to sunset as to sunrise, but in the opposite way; subtracted instead of added and *vice versa*.

## TABLE OF DAYS BETWEEN TWO DATES.

The tabulation that appears below will enable any reader of THE ALMANAC to make interest and other calculations with certainty.

A TABLE OF THE NUMBER OF DAYS BETWEEN ANY TWO DATES WITHIN TWO YEARS.

| Day Mo. | Jan. | Feb. | March. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1 | 32 | 60 | 91 | 121 | 152 | 182 | 213 | 244 | 274 | 305 | 335 |
| 2. | 2 | 33 | 61 | 92 | 122 | 153 | 183 | 214 | 245 | 275 | 306 | 336 |
| 3. | 3 | 34 | 62 | 93 | 123 | 154 | 184 | 215 | 246 | 276 | 307 | 337 |
| 4. | 4 | 35 | 63 | 94 | 124 | 155 | 185 | 216 | 247 | 277 | 308 | 338 |
| 5. | 5 | 36 | 64 | 95 | 125 | 156 | 186 | 217 | 248 | 278 | 309 | 339 |
| 6. | 6 | 37 | 65 | 96 | 126 | 157 | 187 | 218 | 249 | 279 | 310 | 340 |
| 7. | 7 | 38 | 66 | 97 | 127 | 158 | 188 | 219 | 250 | 280 | 311 | 341 |
| 8. | 8 | 39 | 67 | 98 | 128 | 159 | 189 | 220 | 251 | 281 | 312 | 342 |
| 9. | 9 | 40 | 68 | 99 | 129 | 160 | 190 | 221 | 252 | 282 | 313 | 343 |
| 10. | 10 | 41 | 69 | 100 | 130 | 161 | 191 | 222 | 253 | 283 | 314 | 344 |
| 11. | 11 | 42 | 70 | 101 | 131 | 162 | 192 | 223 | 254 | 284 | 315 | 345 |
| 12. | 12 | 43 | 71 | 102 | 132 | 163 | 193 | 224 | 255 | 285 | 316 | 346 |
| 13. | 13 | 44 | 72 | 103 | 133 | 164 | 194 | 225 | 256 | 286 | 317 | 347 |
| 14. | 14 | 45 | 73 | 104 | 134 | 165 | 195 | 226 | 257 | 287 | 318 | 348 |
| 15. | 15 | 46 | 74 | 105 | 135 | 166 | 196 | 227 | 258 | 288 | 319 | 349 |
| 16. | 16 | 47 | 75 | 106 | 136 | 167 | 197 | 228 | 259 | 289 | 320 | 350 |
| 17. | 17 | 48 | 76 | 107 | 137 | 168 | 198 | 229 | 260 | 290 | 321 | 351 |
| 18. | 18 | 49 | 77 | 108 | 138 | 169 | 199 | 230 | 261 | 291 | 322 | 352 |
| 19. | 19 | 50 | 78 | 109 | 139 | 170 | 200 | 231 | 262 | 292 | 323 | 353 |
| 20. | 20 | 51 | 79 | 110 | 140 | 171 | 201 | 232 | 263 | 293 | 324 | 354 |
| 21. | 21 | 52 | 80 | 111 | 141 | 172 | 202 | 233 | 264 | 294 | 325 | 355 |
| 22. | 22 | 53 | 81 | 112 | 142 | 173 | 203 | 234 | 265 | 295 | 326 | 356 |
| 23. | 23 | 54 | 82 | 113 | 143 | 174 | 204 | 235 | 266 | 296 | 327 | 357 |
| 24. | 24 | 55 | 83 | 114 | 144 | 175 | 205 | 236 | 267 | 297 | 328 | 358 |
| 25. | 25 | 56 | 84 | 115 | 145 | 176 | 206 | 237 | 268 | 298 | 329 | 359 |
| 26. | 26 | 57 | 85 | 116 | 146 | 177 | 207 | 238 | 269 | 299 | 330 | 360 |
| 27. | 27 | 58 | 86 | 117 | 147 | 178 | 208 | 239 | 270 | 300 | 331 | 361 |
| 28. | 28 | 59 | 87 | 118 | 148 | 179 | 209 | 240 | 271 | 301 | 332 | 362 |
| 29. | 29 | ... | 88 | 119 | 149 | 180 | 210 | 241 | 272 | 302 | 333 | 363 |
| 30. | 30 | ... | 89 | 120 | 150 | 181 | 211 | 242 | 273 | 303 | 334 | 364 |
| 31. | 31 | ... | 90 | ... | 151 | ... | 212 | 243 | ... | 304 | ... | 365 |

| Day Mo. | Jan. | Feb. | March. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 366 | 397 | 425 | 456 | 486 | 517 | 547 | 578 | 609 | 639 | 670 | 700 |
| 2. | 367 | 398 | 426 | 457 | 487 | 518 | 548 | 579 | 610 | 640 | 671 | 701 |
| 3. | 368 | 399 | 427 | 458 | 488 | 519 | 549 | 580 | 611 | 641 | 672 | 702 |
| 4. | 369 | 400 | 428 | 459 | 489 | 520 | 550 | 581 | 612 | 642 | 673 | 703 |
| 5. | 370 | 401 | 429 | 460 | 490 | 521 | 551 | 582 | 613 | 643 | 674 | 704 |
| 6. | 371 | 402 | 430 | 461 | 491 | 522 | 552 | 583 | 614 | 644 | 675 | 705 |
| 7. | 372 | 403 | 431 | 462 | 492 | 523 | 553 | 584 | 615 | 645 | 676 | 706 |
| 8. | 373 | 404 | 432 | 463 | 493 | 524 | 554 | 585 | 616 | 646 | 677 | 707 |
| 9. | 374 | 405 | 433 | 464 | 494 | 525 | 555 | 586 | 617 | 647 | 678 | 708 |
| 10. | 375 | 406 | 434 | 465 | 495 | 526 | 556 | 587 | 618 | 648 | 679 | 709 |
| 11. | 376 | 407 | 435 | 466 | 496 | 527 | 557 | 588 | 619 | 649 | 680 | 710 |
| 12. | 377 | 408 | 436 | 467 | 497 | 528 | 558 | 589 | 620 | 650 | 681 | 711 |
| 13. | 378 | 409 | 437 | 468 | 498 | 529 | 559 | 590 | 621 | 651 | 682 | 712 |
| 14. | 379 | 410 | 438 | 469 | 499 | 530 | 560 | 591 | 622 | 652 | 683 | 713 |
| 15. | 380 | 411 | 439 | 470 | 500 | 531 | 561 | 592 | 623 | 653 | 684 | 714 |
| 16. | 381 | 412 | 440 | 471 | 501 | 532 | 562 | 593 | 624 | 654 | 685 | 715 |
| 17. | 382 | 413 | 441 | 472 | 502 | 533 | 563 | 594 | 625 | 655 | 686 | 716 |
| 18. | 383 | 414 | 442 | 473 | 503 | 534 | 564 | 595 | 626 | 656 | 687 | 717 |
| 19. | 384 | 415 | 443 | 474 | 504 | 535 | 565 | 596 | 627 | 657 | 688 | 718 |
| 20. | 385 | 416 | 444 | 475 | 505 | 536 | 566 | 597 | 628 | 658 | 689 | 719 |
| 21. | 386 | 417 | 445 | 476 | 506 | 537 | 567 | 598 | 629 | 659 | 690 | 720 |
| 22. | 387 | 418 | 446 | 477 | 507 | 538 | 568 | 599 | 630 | 660 | 691 | 721 |
| 23. | 388 | 419 | 447 | 478 | 508 | 539 | 569 | 600 | 631 | 661 | 692 | 722 |
| 24. | 389 | 420 | 448 | 479 | 509 | 540 | 570 | 601 | 632 | 662 | 693 | 723 |
| 25. | 390 | 421 | 449 | 480 | 510 | 541 | 571 | 602 | 633 | 663 | 694 | 724 |
| 26. | 391 | 422 | 450 | 481 | 511 | 542 | 572 | 603 | 634 | 664 | 695 | 725 |
| 27. | 392 | 423 | 451 | 482 | 512 | 543 | 573 | 604 | 635 | 665 | 696 | 726 |
| 28. | 393 | 424 | 452 | 483 | 513 | 544 | 574 | 605 | 636 | 666 | 697 | 727 |
| 29. | 394 | ... | 453 | 484 | 514 | 545 | 575 | 606 | 637 | 667 | 698 | 728 |
| 30. | 395 | ... | 454 | 485 | 515 | 546 | 576 | 607 | 638 | 668 | 699 | 729 |
| 31. | 396 | ... | 455 | ... | 516 | ... | 577 | 608 | ... | 669 | ... | 730 |

The above table applies to ordinary years only. For leap year, one day must be added to each number of days after February 28.

## DAYS' LENGTHS AT NEW YORK CITY.

(The table shows the length of each day through the year in the latitude of the metropolis.)

| DAYS. | Jan. | Feb. | March. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H.M. |
| 1..... | 9.18 | 10.06 | 11.15 | 12.39 | 13.56 | 14.53 | 15.03 | 14.21 | 13.07 | 11.48 | 10.28 | 9.29 |
| 2..... | 9.19 | 10.08 | 11.18 | 12.42 | 13.58 | 14.54 | 15.03 | 14.19 | 13.05 | 11.45 | 10.25 | 9.28 |
| 3..... | 9.20 | 10.10 | 11.21 | 12.45 | 14.00 | 14.56 | 15.02 | 14.16 | 13.02 | 11.42 | 10.23 | 9.27 |
| 4..... | 9.21 | 10.13 | 11.23 | 12.47 | 14.03 | 14.57 | 15.01 | 14.14 | 13.00 | 11.40 | 10.21 | 9.26 |
| 5..... | 9.22 | 10.15 | 11.26 | 12.50 | 14.05 | 14.58 | 15.00 | 14.12 | 12.57 | 11.37 | 10.18 | 9.24 |
| 6..... | 9.23 | 10.17 | 11.29 | 12.53 | 14.07 | 14.59 | 15.00 | 14.10 | 12.54 | 11.34 | 10.16 | 9.23 |
| 7..... | 9.24 | 10.20 | 11.31 | 12.55 | 14.10 | 15.00 | 14.59 | 14.08 | 12.52 | 11.32 | 10.14 | 9.22 |
| 8..... | 9.25 | 10.22 | 11.34 | 12.58 | 14.12 | 15.00 | 14.58 | 14.06 | 12.49 | 11.29 | 10.11 | 9.21 |
| 9..... | 9.26 | 10.24 | 11.37 | 13.01 | 14.14 | 15.01 | 14.57 | 14.04 | 12.46 | 11.26 | 10.09 | 9.20 |
| 10..... | 9.27 | 10.27 | 11.40 | 13.03 | 14.16 | 15.02 | 14.56 | 14.01 | 12.44 | 11.24 | 10.07 | 9.20 |
| 11..... | 9.28 | 10.29 | 11.42 | 13.06 | 14.18 | 15.03 | 14.55 | 13.59 | 12.41 | 11.21 | 10.05 | 9.19 |
| 12..... | 9.30 | 10.32 | 11.45 | 13.09 | 14.20 | 15.03 | 14.54 | 13.57 | 12.38 | 11.18 | 10.03 | 9.18 |
| 13..... | 9.31 | 10.34 | 11.48 | 13.11 | 14.22 | 15.04 | 14.52 | 13.54 | 12.36 | 11.16 | 10.00 | 9.18 |
| 14..... | 9.33 | 10.37 | 11.50 | 13.14 | 14.24 | 15.04 | 14.51 | 13.52 | 12.33 | 11.13 | 9.58 | 9.17 |
| 15..... | 9.34 | 10.39 | 11.53 | 13.16 | 14.26 | 15.05 | 14.50 | 13.50 | 12.30 | 11.11 | 9.56 | 9.17 |
| 16..... | 9.36 | 10.41 | 11.56 | 13.19 | 14.28 | 15.05 | 14.48 | 13.47 | 12.28 | 11.08 | 9.54 | 9.16 |
| 17..... | 9.37 | 10.44 | 11.59 | 13.21 | 14.30 | 15.05 | 14.47 | 13.45 | 12.25 | 11.05 | 9.52 | 9.16 |
| 18..... | 9.39 | 10.47 | 12.01 | 13.24 | 14.32 | 15.06 | 14.45 | 13.43 | 12.22 | 11.03 | 9.50 | 9.15 |
| 19..... | 9.40 | 10.49 | 12.04 | 13.27 | 14.34 | 15.06 | 14.44 | 13.40 | 12.20 | 11.00 | 9.49 | 9.15 |
| 20..... | 9.42 | 10.52 | 12.07 | 13.29 | 14.35 | 15.06 | 14.42 | 13.38 | 12.17 | 10.58 | 9.47 | 9.15 |
| 21..... | 9.44 | 10.54 | 12.09 | 13.32 | 14.37 | 15.06 | 14.41 | 13.35 | 12.14 | 10.55 | 9.45 | 9.15 |
| 22..... | 9.46 | 10.57 | 12.12 | 13.34 | 14.39 | 15.06 | 14.39 | 13.33 | 12.12 | 10 52 | 9.43 | 9.15 |
| 23..... | 9.48 | 11.00 | 12.15 | 13.37 | 14.40 | 15.06 | 14.37 | 13.30 | 12.09 | 10.50 | 9.42 | 9.15 |
| 24..... | 9.50 | 11.02 | 12.18 | 13.39 | 14.42 | 15.06 | 14.36 | 13.28 | 12.06 | 10.47 | 9.40 | 9.15 |
| 25..... | 9.52 | 11.05 | 12.20 | 13.42 | 14.44 | 15.06 | 14.34 | 13.25 | 12.04 | 10.45 | 9.38 | 9.15 |
| 26..... | 9.54 | 11.07 | 12.23 | 13.44 | 14.45 | 15.05 | 14.32 | 13.23 | 12.01 | 10.42 | 9.36 | 9.16 |
| 27..... | 9.55 | 11.10 | 12.26 | 13.46 | 14.47 | 15.05 | 14.30 | 13.20 | 11.58 | 10.40 | 9.34 | 9.16 |
| 28..... | 9.57 | 11.13 | 12.28 | 13.49 | 14.48 | 15.05 | 14.28 | 13.18 | 11.56 | 10.37 | 9.33 | 9.16 |
| 29..... | 10.00 | ..... | 12.31 | 13.51 | 14.49 | 15.04 | 14.26 | 13.15 | 11.53 | 10.35 | 9.32 | 9.17 |
| 30..... | 10.02 | ..... | 12.34 | 13.54 | 14.51 | 15.04 | 14.25 | 13.13 | 11.50 | 10.32 | 9.30 | 9.17 |
| 31..... | 10.04 | ..... | 12.37 | ..... | 14.52 | ..... | 14.23 | 13.10 | ..... | 10.30 | ..... | 9.18 |

The above table of days' lengths at New York City serves as the basis for similar computations elsewhere.

## HOLIDAYS OF THE WORLD.

(For full list of fixed, historical, commemorative, and religious holidays, see 1919 ALMANAC.)

Christmas and New Year's are observed the world over.

In Episcopal countries, such as England, the only church days which are regular legal holidays, aside from Christmas, are Good Friday Easter Monday, and Whit-Monday. This holds good for the British colonies, in some of which several Roman Catholic Church holidays are established. Whit-Sunday, or White Sunday, comes seven weeks after Easter. It commemorates the descent of the Holy Ghost upon the Apostles; the old feast of Pentecost.

In Roman Catholic countries, such as Spain, the church days other than Christmas which are almost universally legal holidays are Epiphany, Ascension, Assumption, All Saints', and Immaculate Conception. Throughout the Latin-American countries it is usual to observe, in addition, Good Friday and Corpus Christi. Good Friday is in many of these countries a 3-day holiday season, beginning on Holy Thursday and closing on Holy Saturday.

In Lutheran countries, such as Sweden and Prussia, Epiphany, Annunciation, Good Friday, Easter Monday, Ascension Day, Whit-Monday, Ash Wednesday, and Corpus Christi are holidays.

### OLD ENGLISH HOLIDAYS.

JANUARY 6. TWELFTH DAY, or Twelfth-tide, sometimes called Old Christmas Day, the same as Epiphany. The previous evening is Twelfth Night, with which many social rites have long been connected.

FEBRUARY 2. CANDLEMAS: Festival of the Purification of the Virgin. Consecration of the lighted candles to be used in the church during the year. Also known as "Groundhog Day."

FEBRUARY 14. OLD CANDLEMAS: St. Valentine'sDay.

MARCH 25. LADY DAY: Annunciation of the Virgin. April 6 is old Lady Day.

JUNE 24. MIDSUMMER DAY: Feast of the Nativity of John the Baptist. July 7 is old Midsummer Day.

JULY 15. ST. SWITHIN'S DAY. There was an old superstition that if rain fell on this day it would continue forty days.

AUGUST 1. LAMMAS DAY. Originally in England the festival of the wheat harvest. In the church the festival of St. Peter's miraculous deliverance from prison. Old Lammas Day is August 13.

SEPTEMBER 29. MICHAELMAS: Feast of St. Michael, the Archangel. Old Michaelmas is October 11.

NOVEMBER 1. ALL-HALLOWMAS: All-hallows, or All Saints' Day. The previous evening is All-hallow-e'en, observed by home gatherings and old-time festive rites.

NOVEMBER 2. ALL SOULS' DAY: Day of prayer for the souls of the dead.

NOVEMBER 11. MARTINMAS: Feast of St. Martin. Old Martinmas is November 23.

DECEMBER 28. CHILDERMAS: Holy Innocents' Day.

Lady Day, Midsummer Day, Michaelmas and Christmas are quarter (rent) days in England, and Whitsunday, Martinmas, Candlemas and Lammas Day in Scotland.

Shrove Tuesday, the day before Ash Wednesday, and Maundy Thursday, the day before Good Friday, are observed by the church. Mothering Sunday is Mid-Lent Sunday, in which the old rural custom obtains of visiting one's parents and making them presents.

## LEGAL OR PUBLIC HOLIDAYS IN THE UNITED STATES IN 1923.

**The chief legal or public holidays are:**

**Jan. 1**—New Year's Day (all the States, Territories and colonial possessions).

**Feb. 12**—Lincoln's Birthday (Alaska, Cal., Colo., Conn., Del., Ill., Ind., Ia., Kan., Ken., Mich., Minn., Mo., Mont., Neb., Nev., N J., N. Y., N. Dak., Ohio, Ore., Pa., Porto Rico, S. Dak., Utah, Wash., W. Va., Wyo.).

**Feb.22**—Washington's Birthday (all the States, Territories and possessions).

**Mar. 30**—Good Friday (Conn., Del., Fla., La., Md., Minn., N. J., Pa., Philippines, Porto Rico, Tenn.). In Conn. Good Friday is usually proclaimed by the Governor as a day of fasting and prayer.

**May 30**—Decoration or Memorial Day (all States and possessions, except Ala., Fla., Ga., La., Miss., N. Car., S. Car., Tenn. and Tex.).

**July 4**—Independence Day (all the States, Territories and possessions).

**Sept. 3**—Labor Day (every State and Territory except Wyoming and the Philippines).

**Oct. 12**—Columbus Day (every State and Territory except Alaska, Ark., Dist. of Col., Fla., Ga., Hawaii, Ia., Me., Minn., Miss., N. C., Okla., Philippines, So. C., S. Dak., Tenn., Utah, Va., Wis. and Wyo. In Kansas it is not a holiday as to courts or notes).

**Nov. 6**—General Election Day (1st Tuesday after 1st Monday in Nov.). Every State and Territory except Alaska, Dist. of Col., Hawaii, Ill., Mass., Miss., Ohio, Philippines and Vt. In Illinois it is a legal holiday in Chicago, Springfield, East St. Louis, Galesburg, Danville, Cairo and Rockford. In Ohio it is a half holiday. In Maine it is a legal holiday only as to the courts, which also close on the State Election Day (biennially, 2d Monday in Sept.).

**Nov. 29**—Thanksgiving Day (last Thursday in Nov. Every State, Territory and possession except Utah, where it is observed, though not on the statute books).

**Dec. 25**—Christmas Day (every State, Territory and possession).

### LAW AS TO NEGOTIABLE INSTRUMENTS.

*Under the Negotiable Instruments Law every negotiable instrument is payable at the time fixed therein without grace. When the day of maturity falls upon Sunday or a holiday, the instrument is payable on the next succeeding business day. In the United States legal holidays are fixed by State and Territorial legislation. No national holidays have been established by congressional action.*

### OTHER LEGAL OR PUBLIC HOLIDAYS NOT IN THE ABOVE TABLE.

**Jan. 8**—Battle of New Orleans (at New Orleans only).

**Jan. 19**—R. E. Lee's Birthday (observed in Ala., Ark., Fla., Ga., Miss., N. C., S. C., Tenn. and Va.).

**Feb. 12**—Georgia Day (in that State only. Date of Oglethorpe's landing in 1733).

**Feb. 13**—Shrove Tuesday (observed as Mardi Gras in Ala., Fla. and La.).

**Feb. 14**—Admission Day (in Arizona).

**Mar. 2**—Sam Houston Memorial Day (in Texas).

**Mar. 4**—Inauguration Day (once every 4 years in the Dist. of Col. only).

**Mar 22**—Emancipation Day (in Porto Rico).

**Mar. 25**—Maryland Day (in that State only).

**Mar. 30**—Seward Day (in Alaska).

**April 12**—Date of passage of Halifax Resolutions (in North Carolina).

**Mar. 29**—Holy Thursday (in the Philippines).

**April 13**—Birthday of Thomas Jefferson (in Ala.).

**April 19**—Observed as Patriots' Day (in Me. and Mass.).

**April (3rd Tuesday)**—State elections (in La.).

**April 21**—Anniversary Battle of San Jacinto (in Tex.).

**April 26**—Confederate Memorial Day (in Ala., Fla., Ga. and Miss.).

**April (Last Thursday)**—Fast Day (in N. H.).

**May 1**—Labor Day (in Philippines).

**May (1st Tuesday)**—Pres. Primary Day (in Cal.).

**May (2nd Sunday)**—Mothers' Day.

**May 10**—Confed. Memorial Day (observed in S. C.).

**May 20**—Anniversary signing of Mecklenburg Declaration of Independence (observed in N. C.).

**May (3rd Friday)**—Primary Day (in Ore.).

**June 3**—Birthday of Jefferson Davis (in Ala., Ark., Fla., Ga., La., Miss., S. C., and Tex.).

**June 3**—Decoration Day (in Tenn.).

**June 11**—Kamehameha Day (in Hawaii).

**June 14**—Flag Day.

**July 12**—Muno Rivera Day (in Porto Rico).

**July 25**—Occupation Day (in Porto Rico).

**Aug. 1**—Colorado Day (in that State only).

**Aug. 13**—Occupation Day (in Philippines).

**Aug. 16**—Anniv. Battle of Bennington (in Vt.).

**Aug. (Last Tues.)**—Prim. Elec. Day (Cal. and Mich.).

**Sept. (1st Tuesday)**—Prim. Elec. Day (in Nev.).

**Sept. (2nd Monday)**—State Election Day (in Me.).

**Sept. 6**—Lafayette Day (also the anniversary of the First Battle of the Marne) is not a legal holiday, but is celebrated in New York and ten other States.

**Sept. 9**—Admission Day (in Cal.).

**Sept.12**—Defenders' Day (in Md.).

**Oct. 1**—Missouri Day (in that State only).

**Oct. 18**—Alaska Day (in Alaska only).

**Oct. 31**—Admission Day (in Nev.).

**Nov. 1**—All Saints' Day (in La.).

**Dec. 30**—Rizal Day (in Philippines).

**Child Labor Day** (not a legal holiday) is observed in many of the States on the last Sunday in January.

## DATES ON WHICH ARBOR DAY IS OBSERVED.

THE Golden Anniversary of Arbor Day was celebrated throughout the United States on April 22, 1922, as a part of Forest Protection Week, by a proclamation from President Harding. The pioneer Arbor Day State is Nebraska, where the observance began in April, 1872.

The time of the observance of Arbor Day varies greatly in different States and countries, being determined somewhat by climatic conditions, sometimes a day which is already a holiday is selected, as in Alabama and Texas, where Washington's Birthday has been chosen; and in Jamaica, on the late Queen Victoria's Birthday. In many States of the Union it is combined with Bird Day. In general the date is early in the year in the South, and is set further along toward Summer in the more northern States, beginning in February and ending in May. In the following list the date in parentheses is the year when the Arbor Day Law was first observed. If there is a second date not in parentheses it is the year when an Arbor Day Law was enacted:

Alabama (1887)— February 22.
Arizona (1890)—In 5 no. counties, Fri. after 1st day April. Elsewhere Fri. after 1st day February.
Arkansas (1906)—First Sat. in March.
California (1886)—March 7.
Colorado (1885)—3d Fri. in April. The Gov. issues proclamation.
Connecticut (1887)—1886. Early May, by procl. of Gov.
Delaware (1901)—April, by procl. of Gov.
District of Columbia (1919)—April 16, by proclamation of the District Commissioners.
Florida (1886)—First Fri. in February.
Georgia (1887)—1890. First Fri. in December.
Hawaii (1906)—First Fri. in November.
Idaho (1886)—Various dates in April named by County Supts.
Illinois (1886)—Procl. of Gov.
Indiana (1884)—1913. Third Fri. in April.
Iowa (1887)—Procl. by Governor.
Kansas (1875)—Option of the Governor.
Kentucky (1886)—In the fall by procl. of Gov.
Louisiana (1888-89)—Second Fri. in January.
Maine (1887)—Option of Governor.
Maryland (1889)—Second Fri. in April. Procl. of Governor.
Massachusetts (1886)—Last Sat. in April.
Michigan (1885)—Procl. of Gov., usually last Fri. in April.
Minnesota (1876)—Procl. of Gov., usually last part April.
Missouri (1886)—1889. First Fri. after first Tues. April.
Montana (1888)—Second Tuesday May.
Nebraska (1872)—April 22 (birthday J. S. Morton).
Nevada (1887)—Procl. of Governor
New Hampshire (1886)—Procl. of Governor.
New Jersey (1884)—By law, second Fri. April.
New Mexico (1890)—Second Fri. Mar. Procl. of Gov.
New York (1889)—1889. Fri. after 1st of May.
North Carolina (1893)—1915. Fri. after Nov. 1st.
North Dakota (1882)—Option of Governor.
Ohio (1882)—Procl. of Gov. About middle of April.
Oklahoma (1898)—1901. Fri. fol. 2d Mon. in March.
Oregon (1889)—Second Fri. in April.
Pennsylvania (1885)—Procl. of Governor.
Porto Rico ....—Last Fri. in November.
Rhode Island (1887)—1896. Second Fri. in May.
South Carolina (1898)—1898. Third Fri. in Nov.
South Dakota ....—No law, gen. observ. in April.
Tennessee (1875)—1887. Appointed by County Superintendents in November.
Texas (1890)—1889. Feb. 22.
Utah ....—April 15, by statute.
Vermont (1885)—Opt. of Gov., usually 1st Fri. May.
Virginia (1892)—1902. Procl. of Gov. In spring.
West Virginia (1883)—Usually observ. 2d Fri. April.
Wisconsin (1889)—Proc. of Gov., usually 1st Fri. May.
Washington (1894)—Procl. of Gov., usually 1st Fri. May.
Wyoming ....—1888. Procl. of Gov., usually 1st Fri. in May.

## ASTRONOMICAL CONSTANTS.

MEAN solar parallax, 8″.80. Nutation constant, 9″.21.

Aberration constant, 20″.47. Annual precession, 50″.2534+0″.000222 (t—1900).

Obliquity of the ecliptic, 23° 27′ 8″.26—0″.4684 (t—1900).

Annual diminution of obliquity, 0″.4684.

Moon's equatorial horizontal parallax, 57′ 2″.63.

Moon's mean distance from the earth (centre to centre), 238,857 miles.

Sun's mean distance from the earth (astronomical unit), 92,897,400 miles.

Velocity of light, 186,324 miles per second.

Light travels unit of distance—viz. 92,897,400 miles in 498.580 seconds.

Length of the Year—Tropical (equinox to equinox, 365.2421988 days. Sidereal or absolute revolution, 365.2563704 days. Anomalistic (from perihelion to perihelion), 365.259643 days.

Length of Day—Sidereal, 23 hours 56 minutes 4.091 seconds (mean solar time). Mean solar, 24 hours 3 minutes 56.555 seconds (sidereal time).

Length of the Month—Synodical (from new moon to new moon), 29 days 12 hours 44 minutes 2.8 seconds. Tropical, 27 days 7 hours 43 minutes 4.7 seconds. Sidereal (absolute revolution), 27 days 7 hours 43 minutes 11.5 seconds. Anomalistic (from perigree to perigree), 27 days 13 hours 18 minutes 33.1 seconds.

Dimensions of the Earth—Equatorial radius, 3,963.34 miles. Polar radius, 3,949.99 miles. Eccentricity of the oblate spheroid, 0.0819981.

### ASTRONOMICAL SIGNS AND SYMBOLS.

| | | | | | |
|---|---|---|---|---|---|
| ☉ | The Sun. | ♂ | Mars. | ☌ | Conjunction. |
| ☾ | The Moon. | ♃ | Jupiter. | □ | Quadrature. |
| ☿ | Mercury. | ♄ | Saturn. | ☍ | Opposition. |
| ♀ | Venus. | ♅ | Uranus. | ☊ | Ascending Node. |
| ⊕ | The Earth. | ♆ | Neptune. | ☋ | Descending Node. |

Two heavenly bodies are in "conjunction" (☌) when they have the same *Right Ascension*, or are on the *same meridian*, *i. e.*, when one is due *north* or *south* of the other; if the bodies are near each other as seen from the earth, they will rise and set at the same time; they are in "opposition" (☍) when in opposite quarters of the heavens, or when one rises as the other is setting. "Quadrature" (□) is half way between conjunction and opposition. By "greatest elongation" is meant the greatest apparent *angular* distance from the sun; the planet is then generally most favorably situated for observation. Mercury can be seen with the naked eye only at this time. When a planet is in its "ascending" (☊) or "descending" (☋) node it is passing through the plane of the earth's orbit. The term "Perihelion" means nearest to the sun, and "Aphelion" farthest from the sun. An "occultation" of a planet or star is an eclipse of it by some other body, usually the moon.

## THE ZODIAC.

THE sun's apparent yearly path among the stars is known as the ecliptic. The zone 16° wide, 8° on each side of the ecliptic, is known as the zodiac. Beginning at the point on the ecliptic which marks the position of the sun at the vernal equinox, and thence proceeding eastward, the zodiac is divided into twelve signs of 30° each, as follows:

Spring Signs.
1. ♈ Aries. The Ram.
2. ♉ Taurus. The Bull.
3. ♊ Gemini. The Twins.

Summer Signs.
4. ♋ Cancer. The Crab.
5. ♌ Leo. The Lion.
6. ♍ Virgo. The Virgin.

Autumn Signs.
7. ♎ Libra. The Balance.
8. ♏ Scorpius. The Scorpion.
9. ♐ Sagittarius. The Archer.

Winter Signs.
10. ♑ Capricornus. The Goat.
11. ♒ Aquarius. The Water-Bearer.
12. ♓ Pisces. The Fishes.

These signs are named from the twelve constellations of the zodiac; with which the signs coincided in the time of the astronomer Hipparchus, about two thousand years ago. Owing to the precession of the equinoxes, that is to say, to the retrograde motion of the equinoxes along the ecliptic, each sign in the zodiac has, in the course of two thousand years, moved backward 30° into the constellation west of it; so that the sign Aries is now in the constellation Pisces, and so on.

## ECLIPSES IN 1923.

### TOTAL ECLIPSE OF THE SUN.

THE year 1923 is notable for a total eclipse of the sun, the first since 1918 to be visible in the United States and the last until 1925. The path of total obscuration will be 105 miles wide and the central line will pass among the islands off the southern coast of California. The northern limit of totality will lie one mile to the northeast of Santa Barbara, twenty-five miles to the southwest of Los Angeles, ten miles to the southwest of Long Beach, and seventeen miles to the northeast of San Diego. California is the only State in which the total phase will be visible.

In the year 1923 there will be four eclipses in all, two of the sun and two of the moon.

1. A small partial eclipse of the moon on the night of March 2, visible in the United States, beginning at 9h. 28m. P.-M., and ending at 11h. 36m. P. M., Eastern standard time. Visible generally in Europe, the Atlantic Ocean, and in North and South America.

Magnitude 0.376 (moon's diameter = 1.0). First contact with the shadow is 54° from the north point of the moon toward the east. Last contact is 20° from the north point toward the west.

2. An annular eclipse of the sun, March 17. Visible generally as a partial eclipse in South America south of latitude 15° S. and in Africa south of latitude 10° N. The annular phase will be visible in Patagonia, the Falkland Islands, Southern Africa and in Madagascar.

### PARTIAL ECLIPSE OF THE MOON.

3. A small partial eclipse of the moon visible in the United States the morning of August 26, beginning at 4h. 52m. A. M., and ending at 6h. 27m. A. M., Eastern standard time; the moon setting eclipsed in the Eastern States. Visible generally in North America, the Pacific Ocean and Australia.

Magnitude 0.168 (moon's diameter = 1.0). First contact with the shadow is 140° from the north point of the moon toward the east. Last contact is 171° from the north point toward the west.

4. As already noted, a total eclipse of the sun, September 10, visible as a partial eclipse over the whole of North America and the West Indies. The path of central or total eclipse begins in the Pacific Ocean near Kamchatka, passes to the south of the Aleutian Islands, skirts and overlaps the coast of California, passes through Lower California, Mexico, Yucatan, the Caribbean Sea and ends at sunset near the Lesser Antilles.

### TOTAL ECLIPSE OF THE SUN, SEPTEMBER 10, 1923.

(Where visible as a total eclipse.)

The following table shows the places at which the sun on Sept. 10, 1923, will be in total eclipse, with the data relating thereto:

| PLACE. | Standard Time. | Eclipse Begins. | Totality Begins. | Totality Ends. | Eclipse Ends. | Distance From Central Line. |
|---|---|---|---|---|---|---|
| | | H. M. | H. M. S. | H. M. S. | H. M. | *Miles.* |
| Avalon, Cal | Pacific | 11 29 A.M. | 12 54 23 P.M. | 12 57 11 P.M. | 2 18 P.M. | 33 |
| Pt. Conception, Cal | " | 11 23 A.M. | 12 48 23 P.M. | 12 51 27 P.M. | 2 12 P.M. | 28 |
| San Clemente Isl., Cal | " | 11 28 A.M. | 12 53 53 P.M. | 12 57 27 P.M. | 2 18 P.M. | 7 |
| San Diego, Cal | " | 11 32 A.M. | 12 57 37 P.M. | 1 0 20 P.M. | 2 21 P.M. | 35 |
| Santa Barbara, Cal | " | 11 25 A.M. | 12 51 0 P.M. | 12 51 50 P.M. | 2 14 P.M. | 51 |

(Where visible as a large partial eclipse.)

| PLACE. | Standard Time. | Eclipse Begins. | Eclipse at Maximum. | Eclipse Ends. | Position Angle Beg. | Position Angle End. | *Magnitude. |
|---|---|---|---|---|---|---|---|
| | | H. M. | H. M. | H. M. | ° | ° | |
| Juneau, Alaska | Alaskan | 9 4 A.M. | 10 10 A.M. | 11 16 A.M. | 268 | 136 | 0.61 |
| Nome, Alaska | " | 8 49 A.M. | 9 47 A.M. | 10 47 A.M. | 264 | 134 | 0.60 |
| Carson City, Nev | Pacific | 11 22 A.M. | 12 45 P.M. | 2 5 P.M. | 289 | 124 | 0.89 |
| Los Angeles, Cal | " | 11 29 A.M. | 12 55 P.M. | 2 17 P.M. | 296 | 119 | 0.99 |
| Mt. Hamilton, Cal | " | 11 19 A.M. | 12 44 P.M. | 2 6 P.M. | 293 | 120 | 0.96 |
| Mt. Wilson, Cal | " | 11 29 A.M. | 12 55 P.M. | 2 17 P.M. | 295 | 119 | 0.98 |
| Portland, O e | " | 11 14 A.M. | 12 33 P.M. | 1 50 P.M. | 282 | 129 | 0.78 |
| San Francisco, Cal | " | 11 17 A.M. | 12 42 P.M. | 2 4 P.M. | 293 | 121 | 0.95 |
| Seattle, Wash | " | 11 15 A.M. | 12 31 P.M. | 1 46 P.M. | 278 | 131 | 0.74 |
| Boise City, Idaho | Mountain | 12 27 P.M. | 1 45 P.M. | 3 1 P.M. | 281 | 130 | 0.75 |
| Cheyenne, Wyo | " | 12 51 P.M. | 2 7 P.M. | 3 17 P.M. | 277 | 134 | 0.68 |
| Denver, Col | " | 12 52 P.M. | 2 9 P.M. | 3 20 P.M. | 279 | 132 | 0.71 |
| Phoenix, Ariz | " | 12 42 P.M. | 2 7 P.M. | 3 26 P.M. | 292 | 122 | 0.92 |
| Helena, Mont | " | 12 34 P.M. | 1 48 P.M. | 2 59 P.M. | 274 | 136 | 0.65 |
| Salt Lake City, Utah | " | 12 37 P.M. | 1 56 P.M. | 3 11 P.M. | 282 | 130 | 0.77 |
| Santa Fe, N. Mex | " | 12 53 P.M. | 2 14 P.M. | 3 28 P.M. | 285 | 127 | 0.80 |
| Ann Arbor, Mich | Central | 2 28 P.M. | 3 29 P.M. | 4 24 P.M. | 262 | 143 | 0.49 |
| Atlanta, Ga | " | 2 36 P.M. | 3 43 P.M. | 4 43 P.M. | 272 | 133 | 0.64 |
| Austin, Tex | " | 2 17 P.M. | 3 35 P.M. | 4 45 P.M. | 286 | 125 | 0.83 |
| Bismarck, N. D | " | 1 56 P.M. | 3 3 P.M. | 4 7 P.M. | 267 | 141 | 0.55 |
| Cincinnati, Ohio | " | 2 31 P.M. | 3 34 P.M. | 4 31 P.M. | 266 | 140 | 0.54 |
| Cleveland, Ohio | " | 2 32 P.M. | 3 32 P.M. | 4 26 P.M. | 262 | 143 | 0.49 |
| Chicago, Ill | " | 2 22 P.M. | 3 26 P.M. | 4 24 P.M. | 264 | 142 | 0.52 |
| Jackson, Miss | " | 2 29 P.M. | 3 40 P.M. | 4 44 P.M. | 278 | 130 | 0.72 |
| Kansas City, Mo | " | 2 13 P.M. | 3 23 P.M. | 4 28 P.M. | 272 | 136 | 0.62 |
| Little Rock, Ark | " | 2 22 P.M. | 3 34 P.M. | 4 38 P.M. | 276 | 132 | 0.69 |
| Louisville, Ky | " | 2 30 P.M. | 3 34 P.M. | 4 33 P.M. | 268 | 138 | 0.57 |
| Minneapolis, Minn | " | 2 11 P.M. | 3 15 P.M. | 4 15 P.M. | 236 | 142 | 0.51 |
| Montgomery, Ala | " | 2 35 P.M. | 3 44 P.M. | 4 45 P.M. | 275 | 131 | 0.68 |
| Nashville, Tenn | " | 2 30 P.M. | 3 37 P.M. | 4 37 P.M. | 271 | 135 | 0.62 |
| New Orleans, La | " | 2 32 P.M. | 3 44 P.M. | 4 49 P.M. | 281 | 127 | 0.76 |
| Oklahoma City, Okla | " | 2 11 P.M. | 3 26 P.M. | 4 34 P.M. | 279 | 131 | 0.72 |
| Omaha, Neb | " | 2 9 P.M. | 3 18 P.M. | 4 22 P.M. | 270 | 138 | 0.60 |
| Philadelphia, Pa | " | 2 42 P.M. | 3 38 P.M. | 4 30 P.M. | 260 | 143 | 0.48 |
| Springfield, Ill | " | 2 22 P.M. | 3 28 P.M. | 4 28 P.M. | 268 | 139 | 0.57 |
| St. Louis, Mo | " | 2 22 P.M. | 3 29 P.M. | 4 31 P.M. | 270 | 137 | 0.60 |
| Topeka, Kan | " | 2 11 P.M. | 3 22 P.M. | 4 27 P.M. | 273 | 136 | 0.64 |
| Boston, Mass | Eastern | 3 44 P.M. | 4 36 P.M. | 5 25 P.M. | 255 | 146 | 0.42 |
| Columbia, S. C | " | 3 41 P.M. | 4 45 P.M. | 5 43 P.M. | 270 | 134 | 0.62 |
| New York, N. Y | " | 3 43 P.M. | 4 38 P.M. | 5 28 P.M. | 258 | 144 | 0.46 |
| Panama, Panama | " | 4 16 P.M. | 5 20 P.M. | 6 18 P.M. | 304 | 100 | 0.82 |
| Raleigh, N. C | " | 3 42 P.M. | 4 44 P.M. | 5 39 P.M. | 267 | 137 | 0.57 |
| Richmond, Va | " | 3 42 P.M. | 4 41 P.M. | 5 36 P.M. | 264 | 139 | 0.53 |
| Tallahassee, Fla | " | 3 40 P.M. | 4 48 P.M. | 5 50 P.M. | 276 | 129 | 0.71 |
| Washington, D. C | " | 3 41 P.M. | 4 39 P.M. | 5 32 P.M. | 262 | 141 | 0.50 |
| San Juan, P. R | Atlantic | 5 13 P.M. | 6 13 P.M. | After sunset. | 284 | ... | 0.89 |

* Sun's diameter = 1.00.

## THE SUN'S DECLINATION.

(*Washington—Apparent Noon.*)

| Date—1923. | Apparent Declination. | Date—1923. | Apparent Declination. | Date—1923. | Apparent Declination. | Date—1923. | Apparent Declination. |
|---|---|---|---|---|---|---|---|
| | ° ′ ″ | | ° ′ ″ | | ° ′ ″ | | ° ′ ″ |
| Jan. 1. | −23 2 53 | Apr. 3. | + 5 6 23 | July 3. | +23 0 46 | Oct. 2. | − 3 21 24 |
| 2. | −22 57 53 | 4. | 29 21 | 4. | +22 55 58 | 3. | 44 40 |
| 3. | 52 31 | 5. | 52 13 | 5. | 50 45 | 4. | − 4 7 52 |
| 4. | 43 39 | 6. | + 6 14 59 | 6. | 45 9 | 5. | 31 2 |
| 5. | 40 20 | 7. | 37 39 | 7. | 39 9 | 6. | 54 9 |
| 6. | 33 34 | 8. | + 7 0 11 | 8. | 32 46 | 7. | − 5 17 13 |
| 7. | 23 21 | 9. | 22 37 | 9. | 25 59 | 8. | 40 12 |
| 8. | 18 42 | 10. | 44 56 | 10. | 18 49 | 9. | − 6 3 7 |
| 9. | 10 35 | 11. | + 8 7 6 | 11. | 11 15 | 10. | 25 58 |
| 10. | 2 4 | 12. | 29 9 | 12. | 3 19 | 11. | 48 43 |
| 11. | −21 53 6 | 13. | 51 3 | 13. | +21 55 0 | 12. | − 7 11 22 |
| 12. | 43 43 | 14. | + 9 12 49 | 14. | 46 19 | 13. | 33 56 |
| 13. | 33 54 | 15. | 34 25 | 15. | 37 15 | 14. | 56 24 |
| 14. | 23 40 | 16. | 55 52 | 16. | 27 49 | 15. | − 8 18 45 |
| 15. | 13 2 | 17. | +10 17 8 | 17. | 18 2 | 16. | 40 59 |
| 16. | 1 59 | 18. | 38 15 | 18. | 7 52 | 17. | − 9 3 5 |
| 17. | −20 50 32 | 19. | 59 12 | 19. | +20 57 21 | 18. | 25 4 |
| 18. | 38 41 | 20. | +11 19 57 | 20. | 46 29 | 19. | 46 54 |
| 19. | 26 27 | 21. | 40 31 | 21. | 35 16 | 20. | −10 8 35 |
| 20. | 13 50 | 22. | +12 0 54 | 22. | 23 43 | 21. | 30 8 |
| 21. | 0 49 | 23. | 21 4 | 23. | 11 48 | 22. | 51 31 |
| 22. | −19 47 27 | 24. | 41 3 | 24. | +19 59 34 | 23. | −11 12 45 |
| 23. | 33 42 | 25. | +13 0 49 | 25. | 47 0 | 24. | 33 48 |
| 24. | 19 33 | 26. | 20 22 | 26. | 34 6 | 25. | 54 42 |
| 25. | 5 8 | 27. | 39 41 | 27. | 20 52 | 26. | −12 15 24 |
| 26. | −18 50 20 | 28. | 58 48 | 28. | 7 19 | 27. | 35 54 |
| 27. | 35 11 | 29. | +14 17 40 | 29. | +18 53 27 | 28. | 56 13 |
| 28. | 19 42 | 30. | 36 18 | 30. | 39 17 | 29. | −13 16 20 |
| 29. | 3 53 | May 1. | 54 42 | 31. | 24 48 | 30. | 36 15 |
| 30. | −17 47 44 | 2. | +15 12 51 | Aug. 1. | 10 1 | 31. | 55 57 |
| 31. | 31 17 | 3. | 30 45 | 2. | +17 54 56 | Nov. 1. | −14 15 26 |
| Feb. 1. | 14 31 | 4. | 48 24 | 3. | 39 34 | 2. | 34 40 |
| 2. | −16 57 27 | 5. | +16 5 47 | 4. | 23 54 | 3. | 53 41 |
| 3. | 40 5 | 6. | 22 54 | 5. | 7 57 | 4. | −15 12 28 |
| 4. | 22 25 | 7. | 39 45 | 6. | +16 51 44 | 5. | 30 59 |
| 5. | 4 29 | 8. | 56 20 | 7. | 35 14 | 6. | 49 16 |
| 6. | −15 43 16 | 9. | +17 12 37 | 8. | 18 28 | 7. | −16 7 16 |
| 7. | 27 46 | 10. | 28 38 | 9. | 1 27 | 8. | 25 1 |
| 8. | 9 1 | 11. | 44 21 | 10. | +15 44 10 | 9. | 42 29 |
| 9. | −14 50 0 | 12. | 59 46 | 11. | 26 37 | 10. | 59 40 |
| 10. | 30 44 | 13. | +18 14 53 | 12. | 8 50 | 11. | −17 16 33 |
| 11. | 11 14 | 14. | 29 42 | 13. | +14 50 48 | 12. | 33 9 |
| 12. | −13 51 30 | 15. | 44 12 | 14. | 32 33 | 13. | 49 26 |
| 13. | 31 32 | 16. | 58 23 | 15. | 14 3 | 14. | −18 5 25 |
| 14. | 11 20 | 17. | +19 12 16 | 16. | +13 55 20 | 15. | 21 5 |
| 15. | −12 50 56 | 18. | 25 48 | 17. | 36 23 | 16. | 36 25 |
| 16. | 30 19 | 19. | 39 1 | 18. | 17 14 | 17. | 51 26 |
| 17. | 9 30 | 20. | 51 53 | 19. | +12 57 52 | 18. | −19 6 6 |
| 18. | −11 48 30 | 21. | +20 4 26 | 20. | 38 18 | 19. | 20 26 |
| 19. | 27 19 | 22. | 16 38 | 21. | 18 32 | 20. | 34 25 |
| 20. | 5 57 | 23. | 28 28 | 22. | +11 58 34 | 21. | 48 3 |
| 21. | −10 44 24 | 24. | 39 58 | 23. | 38 25 | 22. | −20 1 18 |
| 22. | 22 42 | 25. | 51 7 | 24. | 18 5 | 23. | 14 12 |
| 23. | 0 50 | 26. | +21 1 54 | 25. | +10 57 34 | 24. | 26 44 |
| 24. | − 9 38 49 | 27. | 12 19 | 26. | 36 53 | 25. | 38 53 |
| 25. | 15 40 | 28. | 22 22 | 27. | 16 2 | 26. | 50 39 |
| 26. | − 8 54 22 | 29. | 32 3 | 28. | + 9 55 0 | 27. | −21 2 1 |
| 27. | 31 57 | 30. | 41 22 | 29. | 33 50 | 28. | 13 0 |
| 28. | 9 24 | 31. | 50 18 | 30. | 12 30 | 29. | 23 35 |
| Mar. 1. | − 7 46 43 | June 1. | 58 51 | 31. | + 8 51 1 | 30. | 33 45 |
| 2. | 23 57 | 2. | +22 7 2 | Sept. 1. | 29 24 | Dec. 1. | 43 31 |
| 3. | 1 3 | 3. | 14 49 | 2. | 7 39 | 2. | 52 52 |
| 4. | − 6 38 4 | 4. | 22 13 | 3. | + 7 45 46 | 3. | −22 1 48 |
| 5. | 15 0 | 5. | 29 14 | 4. | 23 44 | 4. | 10 18 |
| 6. | − 5 51 50 | 6. | 35 51 | 5. | 1 36 | 5. | 18 24 |
| 7. | 28 35 | 7. | 42 4 | 6. | + 6 39 21 | 6. | 26 2 |
| 8. | 5 16 | 8. | 47 54 | 7. | 16 59 | 7. | 33 15 |
| 9. | − 4 41 53 | 9. | 53 19 | 8. | + 5 54 31 | 8. | 40 1 |
| 10. | 18 26 | 10. | 58 21 | 9. | 31 57 | 9. | 46 20 |
| 11. | − 3 54 55 | 11. | +23 2 58 | 10. | 9 18 | 10. | 52 13 |
| 12. | 31 22 | 12. | 7 11 | 11. | + 4 46 43 | 11. | 57 38 |
| 13. | 7 47 | 13. | 10 59 | 12. | 23 43 | 12. | −23 2 37 |
| 14. | − 2 44 9 | 14. | 14 23 | 13. | 0 48 | 13. | 7 7 |
| 15. | 20 29 | 15. | 17 23 | 14. | + 3 37 50 | 14. | 11 10 |
| 16. | − 1 55 48 | 16. | 19 58 | 15. | 14 47 | 15. | 14 46 |
| 17. | 33 6 | 17. | 22 8 | 16. | + 2 51 41 | 16. | 17 53 |
| 18. | 9 23 | 18. | 23 53 | 17. | 28 32 | 17. | 20 33 |
| 19. | − 0 45 40 | 19. | 25 14 | 18. | 5 20 | 18. | 22 44 |
| 20. | − 0 21 57 | 20. | 26 10 | 19. | + 1 42 6 | 19. | 24 28 |
| 21. | + 0 1 45 | 21. | 26 41 | 20. | 18 49 | 20. | 25 43 |
| 22. | 25 27 | 22. | 26 47 | 21. | + 0 55 30 | 21. | 26 30 |
| 23. | 49 7 | 23. | 26 28 | 22. | 32 10 | 22. | 26 48 |
| 24. | + 1 12 45 | 24. | 25 45 | 23. | + 0 8 49 | 23. | 26 38 |
| 25. | 36 22 | 25. | 24 37 | 24. | − 0 14 34 | 24. | 26 0 |
| 26. | 59 56 | 26. | 23 4 | 25. | 37 56 | 25. | 24 54 |
| 27. | + 2 23 28 | 27. | 21 6 | 26. | − 1 1 19 | 26. | 23 19 |
| 28. | 46 56 | 28. | 18 44 | 27. | 24 42 | 27. | 21 17 |
| 29. | + 3 10 21 | 29. | 15 57 | 28. | 48 5 | 28. | 18 46 |
| 30. | 33 42 | 30. | 12 46 | 29. | − 2 11 27 | 29. | 15 46 |
| 31. | 57 0 | July 1. | 9 10 | 30. | 34 47 | 30. | 12 19 |
| Apr. 1. | + 4 20 12 | 2. | 5 10 | Oct. 1. | 58 7 | 31. | −23 8 24 |
| 2. | 43 20 | | | | | | |

## THE SUN'S SEMI-DIAMETER AND HORIZONTAL PARALLAX.

*(Washington—Apparent Noon.)*

| 1923. | Sun's Semi-Diameter. | Equatorial Horizontal Parallax. | 1923. | Sun's Semi-Diameter. | Equatorial Horizontal Parallax. | 1923. | Sun's Semi-Diameter. | Equatorial Horizontal Parallax. |
|---|---|---|---|---|---|---|---|---|
| | ′ ″ | ″ | | ′ ″ | ″ | | ′ ″ | ″ |
| Jan. 1 | 16 17.90 | 8.95 | May 11 | 15 51.76 | 8.71 | Sept. 18 | 15 57.10 | 8.76 |
| 11 | 17.67 | 8.95 | 21 | 49.79 | 8.69 | 28 | 59.81 | 8.78 |
| 21 | 16.98 | 8.94 | 31 | 48.20 | 8.68 | Oct. 8 | 16 2.52 | 8.81 |
| 31 | 15.86 | 8.93 | June 10 | 46.90 | 8.67 | 18 | 5.32 | 8.83 |
| Feb. 10 | 14.26 | 8.92 | 20 | 46.08 | 8.66 | 28 | 8.00 | 8.86 |
| 20 | 12.22 | 8.90 | 30 | 45.72 | 8.66 | Nov. 7 | 10.44 | 8.88 |
| Mar. 2 | 9.97 | 8.88 | July 10 | 45.71 | 8.66 | 17 | 12.72 | 8.90 |
| 12 | 7.39 | 8.85 | 20 | 46.22 | 8.66 | 27 | 14.65 | 8.92 |
| 22 | 4.70 | 8.83 | 30 | 47.16 | 8.67 | Dec. 7 | 16.12 | 8.93 |
| April 1 | 1.99 | 8.83 | Aug. 9 | 48.44 | 8.68 | 17 | 17.23 | 8.94 |
| 11 | 15 59.19 | 8.78 | 19 | 50.18 | 8.70 | 27 | 17.82 | 8.95 |
| 21 | 55.53 | 8.75 | 29 | 52.24 | 8.72 | 31 | 17.88 | 8.95 |
| May 1 | 54.07 | 8.73 | Sept. 8 | 54.52 | 8.74 | | | |

## THE MAGNETIC POLES.

THE geographical poles of the earth are the extremities of the imaginary line passing through its centre of gravity and about which it revolves, and are therefore symmetrically located with regard to the equator.

The magnetic poles, however, are not coincident with the geographical poles, nor are they diametrically opposite to each other. Prior to the recent attempt of Amundsen to determine the north magnetic pole, the only other was by Capt. James Ross in June, 1831, who found the dip of the magnetic needle to be 89° 59′ .5, in latitude 70° 5′ .2 N. and longitude 96° 45′ .8 W., which is in King William Land, Canada. The result of Amundsen's observations has not yet been published by the Norwegian authorities.

For the south magnetic pole, from a consideration of all the results available, according to the United States Coast and Geodetic Survey, the position latitude 72° .7 S. and longitude 156° E. has been tentatively adopted. These values are only roughly approximate, and for that reason are given only in degrees and tenths.

By reason of the annual variation of the magnetic needle, it is believed that the magnetic poles are not stationary, but have a slow motion around the geographical poles.

## THE PLANETS AND THE SOLAR SYSTEM.

| Name of Planet. | Mean Daily Motion. | Sidereal Revolution—Days. | Distance From the Sun. Astronomical Units. Mean. | Greatest. | Least. | Mean Distance in Miles. |
|---|---|---|---|---|---|---|
| | ″ | | | | | |
| Mercury | 14732.420 | 87.96925 | 0.387099 | 0.466694 | 0.307504 | 35,960,506 |
| Venus | 5767.670 | 224.70080 | 0.723331 | 0.728258 | 0.718404 | 67,195,600 |
| Earth | 3548.193 | 365.25636 | 1.000000 | 1.016743 | 0.983257 | 92,897,400 |
| Mars | 1886.519 | 686.97987 | 1.523688 | 1.665896 | 1.381486 | 141,546,600 |
| Jupiter | 299.128 | 4332.6284 | 5.202802 | 5.454464 | 4.951142 | 483,327,000 |
| Saturn | 120.455 | 10759.2225 | 9.538843 | 10.071308 | 9.006378 | 886,134,000 |
| Uranus | 42.230 | 30688.5022 | 19.190978 | 20.094885 | 18.287071 | 1,782,792,000 |
| Neptune | 21.530 | 60178.3060 | 30.070672 | 30.327656 | 29.813688 | 2,793,487,000 |

| Name of Planet. | Eccentricity of Orbit.* | Synodical Revolution—Days. | Inclination of Orbit to Ecliptic.* | Orbital Velocity Miles Per Second. |
|---|---|---|---|---|
| | | | ° ′ ″ | |
| Mercury | 0.2056183 | 115.877 | 7 0 11.7 | 29.73 |
| Venus | 0.0068111 | 583.920 | 3 23 37.8 | 21.75 |
| Earth | 0.0167427 | ..... | .. .. .... | 18.50 |
| Mars | 0.0933313 | 779.936 | 1 51 0.7 | 14.98 |
| Jupiter | 0.0483703 | 398.866 | 1 18 27.5 | 8.11 |
| Saturn | 0.0558207 | 378.090 | 2 29 29.4 | 5.99 |
| Uranus | 0.0471006 | 369.650 | 0 46 22.0 | 4.22 |
| Neptune | 0.0085460 | 367.482 | 1 46 38.4 | 3.37 |

| Name of Planet. | Mean Longitude at the Epoch.* | Mean Longitude of the Perihelion.* | Annual Sidereal Motion. | Mean Longitude of the Ascending Node. | Annual Sidereal Motion. | Light at Perihelion. | Light at Aphelion. |
|---|---|---|---|---|---|---|---|
| | ° ′ ″ | ° ′ ″ | ″ | ° ′ ″ | ″ | | |
| Mercury | 192 59 35.68 | 76 12 38.9 | + 5.7 | 47 22 58.8 | − 7.6 | 10.58 | 4.59 |
| Venus | 136 36 34.01 | 130 26 43.4 | + 0.4 | 75 57 34.7 | —17.9 | 1.94 | 1.91 |
| Earth | 99 51 1.71 | 101 33 52.9 | +11.6 | ... .. .... | .... | 1.03 | 0.97 |
| Mars | 132 5 14.97 | 334 35 10.9 | +15.9 | 48 56 26.3 | —22.2 | 0.52 | 0.36 |
| Jupiter | 125 18 37.06 | 13 2 1.6 | + 7.6 | 99 38 24.4 | —13.9 | 0.041 | 0.034 |
| Saturn | 151 16 1.45 | 91 28 49.8 | +20.2 | 112 57 28.8 | —18.9 | 0.012 | 0.010 |
| Uranus | 329 20 34.67 | 169 22 7.5 | + 7.4 | 73 35 27.1 | —32.0 | 0.003 | 0.0025 |
| Neptune | 128 59 52.84 | 43 55 49.6 | —18.9 | 130 53 55.5 | —10.7 | 0.001 | 0.001 |

* Epoch 1920, January 1st, Greenwich mean noon.

| Sun and Planets. | Semi-Diameter. At Unit Distance. | At Mean Least Distance. | In Miles (Mean). | Volume. ⊕ = 1. | Mass. ⊕ = 1. | Density. ⊕ = 1. | Axial Rotation. | Gravity at Surface. ⊕ = 1. |
|---|---|---|---|---|---|---|---|---|
| | ′ ″ | ″ | | | | | D. H. M. S. | |
| Sun | 15 59.63 | .... | 432196.01 | 1301139.0 | 333433 | 0.2563 | 25 9 7 12 | 27.98 |
| Mercury | 3.34 | 6.45 | 1594.27 | 0.054830 | 0.055672 | 1.0130 | 87 23 15 43 | .38 |
| Venus | 8.41 | 30.40 | 3787.69 | 0.875800 | 0.817237 | 0.9331 | 224 16 49 9 | .89 |
| Earth | .. .... | .... | 3958.88 | 1.000000 | 1.000000 | 1.0000 | 23 56 4.09 | 1.00 |
| Mars | 4.68 | 8.94 | 2107.78 | 0.150922 | 0.107785 | 0.7142 | 24 37 23 | .38 |
| Jupiter | 1 35.19 | 22.65 | 43341.31 | 1312.132 | 318.3582 | 0.2426 | 9 55 41 | 2.66 |
| Saturn | 1 18.95 | 9.24 | 33136.02 | 762.401 | 95.2230 | 0.1249 | 10 14 24 | 1.14 |
| Uranus | 34.28 | 1.88 | 15439.00 | 59.312 | 14.5801 | 0.2458 | 11 5 | 0.96 |
| Neptune | 36.56 | 1.26 | 16465.87 | 71.951 | 16.9255 | 0.2352 | 12 30 (?) | 0.98 |

## THE MOON.

Of all the secondary planets the earth's satellite is by far the most interesting and important. The moon completes her circuit around the earth in a period whose mean or average length is 27 days 7 hours 43.2 minutes; but in consequence of her motion in common with the earth around the sun, the mean duration of the lunar month—that is, the time from new moon to new moon—is 29 days 12 hours 44.05 minutes, which is called the moon's synodical period. If the earth were motionless in space the moon's orbit would be nearly an ellipse, having the earth in one of the foci; hence her distance from the earth varies during the course of a lunar month. Her mean distance from the earth is 238,857 miles. Her maximum distance, however, may reach 252,715 miles, and the least distance to which she can approach the earth is 221,466 miles. Her diameter is 2,160 miles, and if we deduct from her distance from the earth the sum of the two radii of the earth and moon—viz., 3,963 and 1,080 miles, respectively—we shall have for the nearest approach of the surfaces of the two bodies 216,423 miles. Her orbit is a very intricate one, because the earth in moving around the sun carries the moon along with it; hence the latter is sometimes within and sometimes without the earth's orbit. Its form is that of a serpentine curve, always *concave* toward the sun, and its plane is inclined to the plane of the earth's orbit at an angle of 5° 9′, in consequence of which our satellite appears sometimes above and sometimes below the plane of the earth's orbit, through which she passes twice in a revolution. These points of intersection with the ecliptic are called nodes, and it is only at or near them that eclipses can occur. The nodes have a retrograde motion, which causes them to make an entire revolution in 18 years 218 days 21 hours 22 minutes and 46 seconds. Both sun and moon return to a node after 18 years and 11 days, so that an eclipse is followed by another of the same general character at the end of this period, which was well known to the ancients, who called it the Saros; and which was made use of by them in roughly predicting eclipses.

The moon always presents the same face to us, as is evident from the permanency of the various markings on her surface. This circumstance proves that she revolves on an axis, and the time of rotation is exactly equal to the time of revolution around the earth—viz., 27.32166 days. The moon's axis is not perpendicular to the plane of her orbit, but deviates therefrom by an angle of about 6° 41′. In consequence of this fact the poles of the moon lean alternately to and from the earth. When the north pole leans toward the earth we see somewhat more of the region surrounding it, and somewhat less when it leans the contrary way. This displacement is known by the name of libration in latitude. By reason of irregular motion in her orbit, we see more of her eastern or western edge at one time than at another. This phenomenon is known as libration in longitude.

The moon's surface contains about 14,657,000 square miles, or nearly four times the area of Europe. Her volume is 1-49 and her mass 1-81 that of the earth, and hence her density is about 3-5 that of the earth, or about 3 2-5 that of water. At the lunar surface gravity is only 1-6 of what it is at the earth, and therefore a body which weighs 6 pounds here would weigh only 1 pound there.

The centre of gravity of the earth and moon, or the point about which they both actually revolve in their course around the sun, lies *within* the earth; it is 1,050 miles below the surface.

The tides are caused mainly by the moon; the tide-raising power of moon and sun being as 11 to 5.

Astronomers cling to the old idea that the moon is a dead world, destitute alike of air and water. But the recent observations of W. H. Pickering made at Mandeville, Jamaica, go to show that many changes occur with the alternation of lunar day and night: Great snowfields form in the mountain valleys and then melt away; fog banks are seen and, very rarely, drifting clouds. The loftiest peaks are snow-capped. The moon's surface is pitted with volcanic craters; some of these measure 100 miles across. Each crater is surrounded by a mountain ring 1,000 to 20,000 feet in height. According to Pickering, there are few, if any, such large and continuously active volcanic regions upon the surface of our earth. But the activity of the lunar volcanoes is now confined to the quiet emission of steam jets like those found in our Yellowstone National Park. Certain variable dark areas on the moon may be due to vegetation.

### THE EARTH'S ATMOSPHERE.

The earth's sensible atmosphere extends more than 100 miles in height. The condition and motions of this aerial ocean play a most important part in the determination of climate, modifying, by absorbing, the otherwise intense heat of the sun, and, when laden with clouds, hindering the earth from radiating its acquired heat into space.

### THE MOON'S PERIGEE AND APOGEE.

(*Eastern Standard Time.*)

PERIGEE, 1923.

| | D. | H. | | D. | H. | |
|---|---|---|---|---|---|---|
| January | 8 | 7 | A. M. | July | 21 | 9 P. M. |
| February | 4 | 2 | A. M. | August | 16 | 5 A. M. |
| March | 4 | 6 | A. M. | September | 12 | 5 P. M. |
| April | 1 | 4 | P. M. | October | 10 | 11 P. M. |
| April | 30 | 3 | A. M. | November | 8 | 10 A. M. |
| May | 28 | 11 | A. M. | December | 6 | 10 P. M. |
| June | 25 | 8 | A. M. | | | |

APOGEE, 1923.

| | D. | H. | | D. | H. | |
|---|---|---|---|---|---|---|
| January | 23 | 8 | A. M. | August | 4 | 1 A. M. |
| February | 20 | 3 | A. M. | August | 31 | 8 P. M. |
| March | 19 | 3 | P. M. | September | 28 | 1 P. M. |
| April | 15 | 6 | P. M. | October | 25 | 10 P. M. |
| May | 12 | 11 | P. M. | November | 21 | 10 P. M. |
| June | 9 | 2 | P. M. | December | 19 | 6 A. M. |
| July | 7 | 7 | A. M. | | | |

Each month the moon is said to be in perigee when nearest to the earth and in apogee when furthest from the earth. The average time from perigee to perigee, or from apogee to apogee is 27d. 13h. 18m. 33s.; and this period is known as the anomalistic month. The moon's distance when in perigee or apogee is not exactly the same in different months but varies considerably according to the phase and the month of the year. The distance is the very least when the full moon nearest to January 1 occurs at the time of perigee. And the distance is the very greatest when the new moon nearest to January 1 occurs at the time of apogee.

## HALLEY'S AND OTHER COMETS.

Of the great number of comets which have temporarily visited our solar system or have become permanent members of it none has surpassed Halley's in historical associations. It has a record dating back to B. C. 240; its visitations spread alarm and consternation throughout Europe during the Middle Ages; it was the first whose return was predicted by an Astronomer Royal of England, and will therefore, for these reasons, be an object of great scientific interest for all time. Its periodic time is 76.8 years, and in April, 1910, it made the perihelion passage for the twenty-ninth time.

### ENCKE'S COMET.

The second of the periodic comets to be discovered was Encke's, as Halley's was the first. Encke's Comet has the shortest period known,—namely, about forty months. The observed visitations, from January, 1819, to June, 1921, form an uninterrupted series, thirty-two in number.

Encke's is unique among comets in that its motion is constantly accelerating and its period is decreasing in proportion, being now 1,203 days as compared with 1,205 days in 1819. At first this was ascribed to a resisting medium; but it is more probably due to repeated passage of the comet through a cloud of meteors.

### COMETS OF 1843 AND 1882.

In the last 100 years only two comets have been brilliant enough to be seen by day with the unaided eye. Of these one was in February, 1843; the other in September, 1882. Together with the comet of 1668 and that of 1887, they form a comet group; each member, at perihelion, nearly brushes the sun's surface, that of 1843 having a velocity of 366 miles per second and passing halfway around the sun in two hours. These visitors are expected to return after six or seven centuries. The four comets were probably a single body until too close an encounter with the sun resulted in disruption.

### DONATI'S COMET.

This was the first comet of the nineteenth century and is known as the typical comet. In October, 1858, its tail reached halfway from the horizon to the zenith. Its period is 2,000 years.

## THE MOON'S PHASES, 1923.

*astern Standard Time.*

| | D. | H. | M. | | D. | H. | M. | | D. | H. | M. | | D. | H. | M. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Full Moon | Jan. 2 | 9 | 33 | P.M. | Apr. 1 | 8 | 10 | A.M. | June 28 | 8 | 4 | A.M. | Sept. 24 | 8 | 16 | P.M. |
| Last Quarter | 9 | 7 | 54 | P.M. | 8 | 12 | 22 | A.M. | July 5 | 8 | 56 | P.M. | Oct 3 | 12 | 29 | A.M. |
| New Moon | 16 | 9 | 41 | P.M. | 16 | 1 | 28 | A.M. | 13 | 7 | 45 | P.M. | 10 | 1 | 6 | A.M. |
| First Quarter | 24 | 10 | 59 | P.M. | 24 | 12 | 20 | A.M. | 20 | 8 | 32 | P.M. | 16 | 3 | 54 | P.M. |
| Full Moon | Feb. 1 | 10 | 53 | A.M. | 30 | 4 | 30 | P.M. | 27 | 5 | 33 | P.M. | 24 | 1 | 26 | P.M. |
| Last Quarter | 8 | 4 | 16 | A.M. | May 7 | 1 | 18 | P.M. | Aug. 4 | 2 | 22 | P.M. | Nov. 1 | 3 | 49 | P.M. |
| New Moon | 15 | 2 | 7 | P.M. | 15 | 5 | 38 | P.M. | 12 | 6 | 17 | A.M. | 8 | 10 | 27 | A.M. |
| First Quarter | 23 | 7 | 6 | P.M. | 23 | 9 | 25 | A.M. | 19 | 1 | 7 | A.M. | 15 | 4 | 41 | A.M. |
| Full Moon | Mar. 2 | 10 | 24 | P.M. | 30 | 12 | 7 | A.M. | 26 | 5 | 29 | A.M. | 23 | 7 | 58 | A.M. |
| Last Quarter | 9 | 1 | 31 | P.M. | June 6 | 4 | 19 | A.M. | Sept. 3 | 7 | 47 | A.M | Dec. 1 | 5 | 9 | A.M. |
| New Moon | 17 | 7 | 51 | A.M. | 14 | 7 | 42 | A.M. | 10 | 3 | 53 | P.M. | 7 | 8 | 30 | P.M. |
| First Quarter | 25 | 11 | 42 | A.M. | 21 | 3 | 46 | P.M. | 17 | 7 | 4 | A.M. | 14 | 9 | 38 | P.M. |
| Full Moon | .. | .. | .. | | .. | .. | .. | | .. | .. | .. | | 23 | 2 | 33 | A.M. |
| Last Quarter | .. | .. | .. | | .. | .. | .. | | .. | .. | .. | | 30 | 4 | 7 | P.M. |

Atlantic time may be found by adding 1h.; Central, Mountain, Pacific, Alaska or Hawaii time may be found by subtracting 1h., 2h., 3h., 5h., or 5.5h., respectively.

## THE MOON'S PHASES, 1923.

| 1923. | Phase. | Da. | East. Stan. T. Bos., N.Y., Etc. | Cent. Stan. T. Chi., St. L.,Etc. | M'nt'n Stan. T. Den.,S.L.C.,Etc | Pacific Stan. T. Sn F.,L'sA.,Etc. | Alaska Stan. T. Sitka, Ju'n, Etc. |
|---|---|---|---|---|---|---|---|
| | | | H. M. | H. M. | H. M. | H. M. | H. M. |
| Jan. | Full Moon | 2 | 9 33 P.M. | 8 33 P.M | 7 33 P.M. | 6 33 P.M. | 4 33 P.M. |
| | Last Quarter | 9 | 7 54 P.M. | 6 54 P.M. | 5 54 P.M. | 4 54 P.M. | 2 54 P.M. |
| | New Moon | 16 | 9 41 P.M. | 8 41 P.M. | 7 41 P.M. | 6 41 P.M. | 4 41 P.M. |
| | First Quarter | 24 | 10 59 P.M. | 9 59 P.M. | 8 59 P.M. | 7 59 P.M. | 5 59 P.M. |
| Feb. | Full Moon | 1 | 10 53 A.M. | 9 53 A.M. | 8 53 A.M. | 7 53 A.M. | 5 53 A.M. |
| | Last Quarter | 8 | 4 16 A.M. | 3 16 A.M. | 2 16 A.M. | 1 16 A.M. | 7d 11 16 P.M. |
| | New Moon | 15 | 2 7 P.M. | 1 7 P.M. | 12 7 P.M. | 11 7 A.M. | 9 7 A.M. |
| | First Quarter | 23 | 7 6 P.M. | 6 6 P.M. | 5 6 P.M. | 4 6 P.M. | 2 6 P.M. |
| Mar. | Full Moon | 2 | 10 24 P.M. | 9 24 P.M. | 8 24 P.M. | 7 24 P.M. | 5 24 P.M. |
| | Last Quarter | 9 | 1 31 P.M. | 12 31 P.M. | 11 31 A.M. | 10 31 A.M. | 8 31 A.M. |
| | New Moon | 17 | 7 51 A.M. | 6 51 A.M. | 5 51 A.M. | 4 51 A.M. | 2 51 A.M. |
| | First Quarter | 25 | 11 42 A.M. | 10 42 A.M. | 9 42 A.M. | 8 42 A.M. | 6 42 A.M. |
| April | Full Moon | 1 | 8 10 A.M. | 7 10 A.M. | 6 10 A.M. | 5 10 A.M. | 3 10 A.M. |
| | Last Quarter | 8 | 12 22 A.M. | 7d 11 22 P.M. | 7d 10 22 P.M. | 7d 9 22 P.M. | 7d 7 22 P.M. |
| | New Moon | 16 | 1 28 A.M. | 12 28 A.M. | 15d 11 28 P.M. | 15d 10 28 P.M. | 15d 8 28 P.M. |
| | First Quarter | 24 | 12 20 A.M. | 23d 11 20 P.M. | 23d 10 20 P.M. | 23d 9 20 P.M. | 23d 7 20 P.M. |
| | Full Moon | 30 | 4 30 P.M. | 3 30 P.M. | 2 30 P.M | 1 30 P.M. | 11 30 A.M. |
| May | Last Quarter | 7 | 1 18 P.M | 12 18 P.M. | 11 18 A.M. | 10 18 A.M. | 8 18 A.M. |
| | New Moon | 15 | 5 38 P.M | 4 38 P.M. | 3 38 P.M. | 2 38 P.M | 12 38 P.M. |
| | First Quarter | 23 | 9 25 A.M | 8 25 A.M. | 7 25 A.M. | 6 25 A.M. | 4 25 A.M. |
| | Full Moon | 30 | 12 7 A.M. | 29d 11 7 P.M. | 29d 10 7 P.M. | 29d 9 7 P.M. | 29d 7 7 P.M. |
| June | Last Quarter | 6 | 4 19 A.M. | 3 19 A.M. | 2 19 A.M. | 1 19 A.M. | 5d 11 19 P.M |
| | New Moon | 14 | 7 42 A.M. | 6 42 A.M. | 5 42 A.M. | 4 42 A.M. | 2 42 A.M |
| | First Quarter | 21 | 3 46 P.M. | 2 46 P.M. | 1 46 P.M. | 12 46 P.M. | 10 46 A.M. |
| | Full Moon | 28 | 8 4 A.M. | 7 4 A.M. | 6 4 A.M. | 5 4 A.M. | 3 4 A.M. |
| July | Last Quarter | 5 | 8 56 P.M. | 7 56 P.M. | 6 56 P.M. | 5 56 P.M. | 3 56 P.M. |
| | New Moon | 13 | 7 45 P.M. | 6 45 P.M. | 5 45 P.M. | 4 45 P.M. | 2 45 P.M. |
| | First Quarter | 20 | 8 32 P.M. | 7 32 P.M. | 6 32 P.M. | 5 32 P.M. | 3 32 P.M. |
| | Full Moon | 27 | 5 33 P.M. | 4 33 P.M. | 3 33 P.M. | 2 33 P.M. | 12 33 P.M. |
| Aug. | Last Quarter | 4 | 2 22 P.M. | 1 22 P.M. | 12 22 P.M. | 11 22 A.M. | 9 22 A.M. |
| | New Moon | 12 | 6 17 A.M. | 5 17 A.M. | 4 17 A.M. | 3 17 A.M. | 1 17 A.M. |
| | First Quarter | 19 | 1 7 A.M. | 12 7 A.M. | 18d 11 7 P.M. | 18d 10 7 P.M. | 18d 8 7 P.M |
| | Full Moon | 26 | 5 29 A.M. | 4 29 A.M. | 3 29 A.M. | 2 29 A.M. | 12 29 A.M. |
| Sept. | Last Quarter | 3 | 7 47 A.M. | 6 47 A.M. | 5 47 A.M. | 4 47 A.M. | 2 47 A.M. |
| | New Moon | 10 | 3 53 P.M. | 2 53 P.M. | 1 53 P.M. | 12 53 P.M. | 10 53 A.M. |
| | First Quarter | 17 | 7 4 A.M. | 6 4 A.M. | 5 4 A.M. | 4 4 A.M. | 2 4 A.M. |
| | Full Moon | 24 | 8 16 P.M. | 7 16 P.M. | 6 16 P.M. | 5 16 P.M. | 3 16 P.M. |
| Oct. | Last Quarter | 3 | 12 29 A.M. | 2d 11 29 P.M. | 2d 10 29 P.M. | 2d 9 29 P.M. | 2d 7 29 P.M. |
| | New Moon | 10 | 1 6 A.M. | 12 6 A.M. | 9d 11 6 P.M. | 9d 10 6 P.M. | 9d 8 6 P.M. |
| | First Quarter | 16 | 3 54 P.M. | 2 54 P.M. | 1 54 P.M. | 12 54 P.M. | 10 54 A.M. |
| | Full Moon | 24 | 1 26 P.M. | 12 26 P.M. | 11 26 A.M. | 10 26 A.M. | 8 26 A.M. |
| Nov. | Last Quarter | 1 | 3 49 P.M. | 2 49 P.M. | 1 49 P.M. | 12 49 P.M. | 10 49 A.M. |
| | New Moon | 8 | 10 27 A.M. | 9 27 A.M. | 8 27 A.M. | 7 27 A.M. | 5 27 A.M. |
| | First Quarter | 15 | 4 41 A.M. | 3 41 A.M. | 2 41 A.M. | 1 41 A.M. | 14d 11 41 P.M. |
| | Full Moon | 23 | 7 58 A.M. | 6 58 A.M. | 5 58 A.M. | 4 58 A.M. | 2 58 A.M. |
| Dec. | Last Quarter | 1 | 5 9 A.M. | 4 9 A.M. | 3 9 A.M. | 2 9 A.M. | 12 9 A.M. |
| | New Moon | 7 | 8 30 P.M. | 7 30 P.M. | 6 30 P.M. | 5 30 P.M. | 3 30 P.M. |
| | First Quarter | 14 | 9 38 P.M. | 8 38 P.M. | 7 38 P.M. | 6 38 P.M. | 4 38 P.M. |
| | Full Moon | 23 | 2 33 A.M. | 1 33 A.M. | 12 33 A.M. | 22d 11 33 P.M. | 22d 9 33 P.M. |
| | Last Quarter | 30 | 4 7 P.M. | 3 7 P.M. | 2 7 P.M. | 1 7 P.M. | 11 7 A.M. |

## DOES THE MOON AFFECT WEATHER ON THE EARTH?

There has been a renewal recently of the controversy as to whether the moon at its changes of phases has any influence on the weather. United States Weather Bureau officials say there is no such influence, but the old legend to the contrary persists.

## PLANETARY CONFIGURATIONS 1923.

(*Eastern Standard Time.*)

| | D. | H. | M. | | | |
|---|---|---|---|---|---|---|
| Jan. | 2 | 6 | 0 | P.M. | ☿ | in perihelion. |
| | 6 | 3 | 0 | A.M. | ☿ | in perihelion. |
| | 9 | 9 | 43 | P.M. | ☌ ♄ | ☾ |
| | 10 | 8 | 0 | P.M. | □ ♄ | ☉ |
| | 11 | 3 | 2 | P.M. | ☌ ♆ | ☾ |
| | 13 | 5 | 0 | A.M. | ☌ | gr. elong. E. 18° 56′. |
| | 13 | 7 | 49 | A.M. | ☌ ♀ | ☾ |
| | 22 | 2 | 33 | A.M. | ☌ ♂ | ☾ |
| | 28 | 2 | 0 | A.M. | ♀ | gr. hel. lat. N. |
| | 28 | 11 | 0 | P.M. | ☌ ☿ | ☉ inferior. |
| | 30 | 3 | 0 | P.M. | ♄ | stationary. |
| Feb | 4 | 3 | 0 | A.M. | ☌ | gr. elong. W. 46° 55′. |
| | 6 | 3 | 58 | A.M. | ☌ ♄ | ☾ |
| | 6 | 9 | 0 | A.M. | ☌ ♅ | ☉ |
| | 7 | 12 | 0 | M. | □ ♆ | ☉ |
| | 8 | 1 | 34 | A.M. | ☌ ♆ | ☾ |
| | 11 | 3 | 7 | P.M. | ☌ ♀ | ☾ |
| | 13 | 1 | 0 | A.M. | ♂ | in ♌. |
| | 20 | 3 | 2 | A.M. | ☌ ♂ | ☾ |
| | 23 | 1 | 0 | A.M. | ☿ | gr. elong. W. 26° 42′. |
| Mar. | 5 | 10 | 43 | A.M. | ☌ ♄ | ☾ |
| | 5 | 8 | 0 | P.M. | ♆ | stationary. |
| | 7 | 9 | 55 | A.M. | ☌ ♃ | ☾ |
| | 13 | 11 | 38 | A.M. | ☌ ♀ | ☾ |
| | 21 | 2 | 46 | A.M. | ☌ ♂ | ☾ |
| | 25 | 4 | 0 | A.M. | ♀ | in ♉. |
| April | 1 | 6 | 32 | P.M. | ☌ ♄ | ☾ |
| | 3 | 5 | 5 | P.M. | ☌ ♆ | ☾ |
| | 7 | 10 | 0 | A.M. | ☍ ♄ | ☉ |
| | 8 | 1 | 0 | P.M. | ☌ ☿ | ☉ superior. |
| | 12 | 2 | 27 | P.M. | ☌ ♀ | ☾ |
| | 12 | 6 | 6 | P.M. | ☌ ♃ | ☾ |
| | 14 | 5 | 0 | A.M. | ☌ ♀ ☍ | ♀ S. 0° 23′. |
| | 19 | 1 | 34 | A.M. | ☌ ♂ | ☾ |
| | 28 | 12 | 0 | M. | ♀ | in aphelion. |
| | 29 | 2 | 27 | A.M. | ☌ ♄ | ☾ |
| | 30 | 11 | 13 | P.M. | ☌ ♆ | ☾ |
| May | 5 | 9 | 0 | A.M. | ☍ ♆ | ☉ |
| | 5 | 12 | 0 | M. | ☿ | gr. elong. E. 21° 7′. |
| | 12 | 7 | 36 | P.M. | ☌ ♀ | ☾ |
| | 17 | 11 | 4 | P.M. | ☌ ♂ | ☾ |
| | 20 | 11 | 0 | P.M. | ♀ | gr. hel. lat. S. |
| | 26 | 9 | 26 | A.M. | ☌ ♄ | ☾ |
| | 28 | 4 | 20 | A.M. | ☌ ♆ | ☾ |
| | 28 | 10 | 0 | P.M. | ☌ ☿ | ☉ inferior. |
| June | 12 | 2 | 53 | A.M. | ☌ ♀ | ☾ |
| | 15 | 6 | 56 | P.M. | ☌ ♂ | ☾ |
| | 17 | 6 | 0 | PM. | ♄ | stationary. |
| | 22 | 3 | 36 | P.M. | ☌ ♄ | ☾ |
| | 22 | 11 | 0 | P.M. | ☿ | gr. elong. W. 22° 33′. |
| | 24 | 9 | 9 | A.M. | ☌ ♆ | ☾ |
| July | 4 | 10 | 0 | A.M. | ☌ ☿ ♀ | ☿ S. 0° 47′. |
| | 5 | 7 | 0 | P.M. | ☿ | in aphelion. |
| | 6 | 3 | 0 | P.M. | □ ♄ | ☉ |
| | 7 | 3 | 0 | P.M. | ♆ | stationary. |
| | 12 | 11 | 30 | A.M. | ☌ ♀ | ☾ |
| | 14 | 1 | 8 | P.M. | ☌ ♂ | ☾ |

| | D. | H. | M. | | | |
|---|---|---|---|---|---|---|
| July | 16 | 7 | 0 | A.M. | ♀ | in ♌. |
| | 19 | 10 | 15 | P.M. | ☌ ♄ | ☾ |
| | 21 | −3 | 9 | P.M. | ☌ ♆ | ☾ |
| | 22 | 5 | 0 | A.M. | ☌ ☿ | ☉ superior. |
| | 25 | 9 | 0 | P.M. | ☌ ☿ ♂ | ☿ N. 0° 39′. |
| | 31 | 6 | 0 | A.M. | ☌ ☿ ♆ | ☿ N. 1° 35′. |
| Aug. | 3 | 8 | 0 | A.M. | □ ♆ | ☉ |
| | 8 | 3 | 0 | P.M. | ☌ ♂ | ☉ |
| | 11 | 10 | 0 | A.M. | ☌ ♆ | ☉ |
| | 11 | 5 | 4 | P.M. | ☌ ♀ | ☾ |
| | 12 | 6 | 1 | A.M. | ☌ ♂ | ☾ |
| | 12 | 10 | 0 | A.M. | ☌ ♂ ♆ | ♂ N. 0° 59′. |
| | 16 | 7 | 8 | A.M. | ☌ ♄ | ☾ |
| | 17 | 1 | 0 | A.M. | ♂ | gr. hel. lat. N. |
| | 18 | 12 | 6 | A.M. | ☌ ♆ | ☾ |
| | 18 | 7 | 0 | P.M. | ♀ | in perihelion. |
| | 23 | 11 | 0 | A.M. | ☌ ♀ ♂ | ♀ N. 0° 6′. |
| Sept. | 2 | 5 | 0 | P.M. | ☿ | gr. elong. E. 27° 9′ |
| | 9 | 2 | 0 | A.M. | ☍ ♅ | ☉ |
| | 9 | 7 | 0 | P.M. | ♀ | gr. hel. lat. N. |
| | 9 | 10 | 6 | P.M. | ☌ ♂ | ☾ |
| | 10 | 6 | 0 | A.M. | ☌ ♀ | ☉ superior. |
| | 10 | 4 | 44 | P.M. | ☌ ♀ | ☾ |
| | 12 | 7 | 17 | P.M. | ☌ ♄ | ☾ |
| | 14 | 1 | 9 | P.M. | ☌ ♆ | ☾ |
| | 21 | 11 | 0 | P.M. | ♂ | in aphelion. |
| | 25 | 11 | 0 | P.M. | ☌ ☿ ♀ | ☿ S. 4° 57′. |
| | 28 | 11 | 0 | P.M. | ☌ ☿ | ☉ inferior. |
| Oct. | 8 | 1 | 49 | P.M. | ☌ ♂ | ☾ |
| | 9 | 1 | 0 | A.M. | ☌ ♀ | ♄ ♀ S. 1° 22′. |
| | 10 | 10 | 24 | A.M. | ☌ ♄ | ☾ |
| | 10 | 1 | 2 | P.M. | ☌ ♀ | ☾ |
| | 12 | 6 | 24 | A.M. | ☌ ♅ | ☾ |
| | 14 | 11 | 0 | A.M. | ☿ | gr. elong. W. 18° 7′. |
| | 15 | 7 | 0 | A.M. | ♄ | gr. hel. lat. N. |
| | 17 | 6 | 0 | A.M. | ☌ ♄ | ☉ |
| | 29 | 7 | 0 | P.M. | ☌ ☿ ♄ | ☿ S. 0° 42′. |
| Nov. | 4 | 3 | 0 | P.M. | ☌ ♀ ♆ | ♀ S. 0° 45′. |
| | 4 | 9 | 0 | P.M. | ♀ | in ♍. |
| | 6 | 5 | 17 | A.M. | ☌ ♂ | ☾ |
| | 7 | 2 | 47 | A.M. | ☌ ♄ | ☾ |
| | 9 | 2 | 42 | A.M. | ☌ ♅ | ☾ |
| | 9 | 10 | 45 | A.M. | ☌ ♀ | ☾ |
| | 15 | 7 | 0 | P.M. | ☌ ☿ | ☉ superior. |
| | 16 | 10 | 22 | P.M. | ☌ ☍ | ☾ |
| | 20 | 1 | 0 | A.M. | ☌ ☿ ♅ | ☿ S. 1° 25′. |
| | 22 | 5 | 0 | P.M. | ☌ ♅ | ☉ |
| Dec. | 2 | 3 | 0 | A.M. | ☌ ♂ | ♄ ♂ S. 1° 30′. |
| | 4 | 6 | 0 | P.M. | ☌ ♄ | ☾ |
| | 4 | 8 | 22 | P.M. | ☌ ♂ | ☾ |
| | 6 | 11 | 59 | P.M. | ☌ ♅ | ☾ |
| | 9 | 3 | 0 | A.M. | ♀ | in aphelion. |
| | 9 | 12 | 14 | P.M. | ☌ ♀ | ☾ |
| | 27 | 2 | 22 | A.M. | ☌ ♆ | ☾ |
| | 27 | 11 | 0 | A.M. | ☿ | gr. elong. E. 19° 46′. |
| | 31 | 5 | 0 | P.M. | ♀ | gr. hel. lat. S |

## DENSITY OF STARS.

From the photometric study of eclipsing binary stars it has been shown by Roberts and by Russell that the average densities of these stars is small, no more than one-eighth of that of the sun. On this and other grounds astronomers are of the opinion that stars are generally less dense than the sun; that is, that they occupy a larger volume when of equal mass. The sun is only 1.4 times as dense as water, or half as dense as glass, while our earth is 5.5 times as dense as water, or 4 times as dense as the sun.

We may suppose that certain meteors are efficacious for troubling the surface of the sun because they are subject to closer approaches to it. Turner was led to adopt the idea, formerly held by J. Herschel, while trying to represent the variable frequency of sun spots by a series of periodical terms. For a course of years certain constant values may be adopted for the coefficients of these terms, and then these values have to be altered. The epochs of all these perturbations, according to Turner, fall close to the time of the perihelion passage of the Leonides. It is true the distance of the Leonides from the sun, even at perihelion passage, is somewhat great and necessitates recourse to a secondary stream derived through the intervention of some planet. This theory finds a certain degree of confirmation in the Chinese annals, which record ancient increases in sun spots when the Leonides swarm must have passed close to Saturn.

## THE HEAT OF THE STARS.

The heat of three stars—Aldebaran, Capella and Betelgeuse—has been measured by R. G. Abbott and L. B. Aldrich of the Smithsonian Institution at the Carnegie Solar Observatory on Mt. Wilson, Cal.

The heat of the stars first was gathered and brought to focus by the 100-inch telescope. The heat and light then were passed through a prism and spread out into a rainbow-colored spectrum. The observers then measured the light in each color as well as the invisible heat.

As the hotter a body is the whiter and bluer is its light, the intensities of the heat in the various colors allowed an estimate of the temperature of the stars, which was fixed at approximately 10,000 degrees centigrade, or 18.000 degrees Fahrenheit.

## POLE STAR.

MEAN TIME OF TRANSIT (AT WASHINGTON) AND POLAR DISTANCE OF POLARIS.

| 1923 | January. | | February. | | March. | | April. | | May. | | June. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day of Mo. | Upper Transit. | Polar Distance. | Lower Transit. | Polar Distance. | Lower Transit. | Polar Distance. | Lower Transit. | Polar Distance. | Lower Transit. | Polar Distance. | Lower Transit. | Polar Distance. |
| | P. M. H. M. S. | ° ′ ″ | A. M. H. M. S. | ° ′ ″ | A. M. H. M. S. | ° ′ ″ | H. M. S. | ° ′ ″ | P. M. H. M. S. | ° ′ ″ | P. M. H. M. S. | ° ′ ″ |
| 1 | 6 51 34 | 1 6 10 | 4 51 5 | 1 6 9 | 3 0 32 | 1 6 14 | 12 58 22 A.M. | 1 6 22 | 10 56 33 | 1 6 31 | 8 55 0 | 1 6 39 |
| 11 | 6 12 4 | 1 6 9 | 4 11 34 | 1 6 10 | 2 21 5 | 1 6 16 | 12 19 2 A.M. | 1 6 25 | 10 17 19 | 1 6 34 | 8 15 50 | 1 6 40 |
| 21 | 5 32 34 | 1 6 9 | 3 32 6 | 1 6 12 | 1 41 40 | 1 6 19 | 11 35 48 P.M. | 1 6 28 | 9 38 6 | 1 6 37 | 7 36 41 | 1 6 41 |

| 1923 | July. | | August. | | September. | | October. | | November. | | December. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day of Mo. | Lower Transit. | Polar Distance. | Upper Transit. | Polar Distance. | Upper Transit. | Polar Distance. | Upper Transit. | Polar Distance. | Upper Transit. | Polar Distance. | Upper Transit. | Polar Distance. |
| | P. M. H. M. S. | ° ′ ″ | A. M. H. M. S. | ° ′ ″ | A. M. H. M. S. | ° ′ ″ | H. M. S. | ° ′ ″ | P. M. H. M. S. | ° ′ ″ | P. M. H. M. S. | ° ′ ″ |
| 1 | 6 57 32 | 1 6 42 | 4 58 11 | 1 6 39 | 2 56 49 | 1 6 32 | 12 59 11 A.M. | 1 6 23 | 10 53 27 | 1 6 11 | 8 55 18 | 1 6 1 |
| 11 | 6 18 25 | 1 6 41 | 4 19 3 | 1 6 37 | 2 17 37 | 1 6 29 | 12 19 55 A.M. | 1 6 19 | 10 14 5 | 1 6 7 | 8 15 51 | 1 5 58 |
| 21 | 5 39 17 | 1 6 41 | 3 39 54 | 1 6 35 | 1 38 25 | 1 6 26 | 11 36 41 P.M. | 1 6 15 | 9 34 42 | 1 6 4 | 7 36 23 | 1 5 56 |

From June 16 to August 1 both the upper and lower transits take place during daylight. The azimuth at the time of greatest Eastern or Western elongation can be easily computed from the formula:

$$\sin A = \frac{\sin p}{\cos l}$$

where $A$ denotes the azimuth, $p$ the polar distance, and $l$ the latitude of the place.

### TIME OF GREATEST ELONGATION.

In the United States, the greatest Eastern elongation of Polaris occurs 5h. 55m. before upper transit and 6h. 3m. after lower transit; while the greatest Western elongation occurs 5h. 55m. after upper transit and 6h. 3m. before lower transit.

## STAR TABLE.

FOR IDENTIFYING THE PRINCIPAL FIXED STARS.

| Name of Star. | Magnitude. | Declination. | On Meridian. | Name of Star. | Magnitude. | Declination. | On Meridian. |
|---|---|---|---|---|---|---|---|
| | | ° ′ | Upper H. M. Lower H. M. | | | ° ′ | Upper H. M. Lower H. M. |
| αAndromedæ (Alpheratz) | 2.2 | +28 40 | — 1 29 + 10 29 | αLeonis (Regulus) | 1.3 | +12 21 | + 8 29 + 20 27 |
| γPegasi (Algenib) | 2.9 | +14 45 | — 1 24 + 10 34 | αVirginis (Spica) | 1.2 | —10 45 | + 11 46 + 23 44 |
| αCassiopeiæ (Schedir) | 2.2 | +56 7 | — 0 57 + 11 1 | αBootis (Arcturus) | 0.2 | +19 35 | + 12 37 + 0 39 |
| αArietis | 2.2 | +23 6 | + 0 29 + 12 27 | βUrsæ Minoris | 2.2 | +74 28 | + 13 15 + 1 17 |
| βPersei (Algol) | 2.1 | +40 39 | + 1 30 + 13 28 | αCoronæ Borealis | 2.3 | +26 59 | + 13 56 + 1 58 |
| αTauri (Aldebaran) | 1.1 | +16 21 | + 2 58 + 14 56 | αScorpii (Antares) | 1.2 | —26 16 | + 14 49 + 2 51 |
| αAurigæ (Capella) | 0.2 | +45 55 | + 3 37 + 15 35 | αLyræ (Vega) | 0.1 | +38 43 | + 16 58 + 5 0 |
| αOrionis (Betelgeuse) | 1.0 | + 7 24 | + 4 17 + 16 15 | αAquilæ (Altair) | 0.9 | + 8 40 | + 18 10 + 6 12 |
| αCarinæ (Canopus) | —0.9 | —52 39 | + 4 48 + 16 46 | αCygni (Deneb) | 1.3 | +45 0 | + 19 2 + 7 4 |
| αCanis Majoris (Sirius) | —1.6 | —16 36 | + 5 8 + 17 6 | αCephei | 2.6 | +62 15 | + 19 40 + 7 42 |
| αGeminorum (Castor) | 2.0 | +32 4 | + 5 55 + 17 53 | αAquarii | 3.2 | — 0 42 | + 20 25 + 8 27 |
| αCanis Minoris (Procyon) | 0.5 | + 5 26 | + 6 1 + 17 59 | αPiscis Australis (Fomalhaut) | 1.3 | —30 2 | + 21 16 + 9 18 |
| βGeminorum (Pollux) | 1.2 | +28 13 | + 6 6 + 18 4 | αPegasi (Markab) | 2.6 | +14 47 | + 21 24 + 9 26 |

To find the time of the star's transit, add or subtract, according to the sign, the hours and minutes given in the "On Meridian" column, applying them to the time of the transit of the pole star given above. Thus, for α Andromedæ, February 11; lower transit of the pole star is 4h. 11m. 34s. A. M., to which add 10h. 29m., and we have 2h. 41m. P. M.; for December 1, we find 7h. 26m. P. M., etc.

### APPROXIMATE PARALLAX AND DISTANCE IN LIGHT-YEARS OF SOME OF THE PRINCIPAL FIXED STARS.

By light-years is to be understood the number of years light requires to travel from the star to us.

| Name of Star. | Magnitude. | Parallax. | Light-Years. | Name of Star. | Magnitude. | Parallax. | Light-Years. |
|---|---|---|---|---|---|---|---|
| | | ″ | | | | ″ | |
| βCassiopeiæ | 2.4 | 0.187 | 17 | βGeminorum (Pollux) | 1.2 | 0.068 | 48 |
| αCassiopeiæ (Schedir) | 2.2 | 0.071 | 46 | αLeonis (Regulus) | 1.3 | 0.093 | 35 |
| αUrsæ Minoris (Pole Star) | 2.1 | 0.073 | 45 | αBootis (Arcturus) | 0.2 | 0.127 | 26 |
| αTauri (Aldebaran) | 1.1 | 0.116 | 28 | αCentauri | 0.1 | 0.750 | 4 |
| αAurigæ (Capella) | 0.2 | 0.077 | 42 | αLyræ (Vega) | 0.1 | 0.140 | 23 |
| αOrionis (Betelgeuse) | 1.0 | 0.014 | 233 | αAquilæ (Altair) | 0.9 | 0.240 | 14 |
| αCarinæ (Canopus) | —0.9 | ..... | 500+ | 61 Cygni | 5.6 | 0.300 | 11 |
| αCanis Majoris (Sirius) | —1.6 | 0.380 | 9 | αPiscis Australis (Fomalhaut) | 1.3 | 0.370 | 9 |
| αCanis Minoris (Procyon) | 0.5 | 0.330 | 10 | 85 Pegasi | 5.8 | 0.054 | 60 |

The determination of stellar parallax is one of the most difficult and refined problems in practical or observational astronomy. It is to find the angle which the semi-diameter of the earth's orbit subtends at the star—an angle always very small, as seen from the above table, and which cannot be measured directly but by various processes too complicated to be explained here.

During the last year calculations of astronomers, based on Prof. Einstein's relativity theory, have caused some doubt as to the accuracy of earlier estimates of the distances of remote stars.

## MAGNETIC DECLINATIONS.

OR VARIATION OF COMPASS FOR JANUARY, 1923—WITH THE ANNUAL CHANGE BETWEEN 1915 AND 1922 FOR SELECTED PLACES IN THE UNITED STATES.

A plus(+) sign to the annual change denotes that the declination is increasing, and a minus (—) sign the reverse.

(Specially prepared for THE WORLD ALMANAC in the Office of the United States Coast and Geodetic Survey.)

| STATE OR TERRITORY. | Station. | Approximate Latitude. | Approximate Longitude. | Variation January, 1923 | Annual Change. | STATE OR TERRITORY. | Station. | Approximate Latitude. | Approximate Longitude. | Variation January, 1923 | Annual Change. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ° ′ | ° ′ | ° ′ | ′ | | | ° ′ | ° ′ | ° ′ | ′ |
| Ala. | Montgomery | 32 22 | 86 18 | 2 57 E | +1 | Mo. | Jefferson City | 38 35 | 92 09 | 7 16 E | 0 |
| | Mobile | 30 41 | 88 09 | 5 02 E | +1 | | St. Louis | 38 38 | 90 16 | 5 02 E | 0 |
| | Huntsville | 34 44 | 86 35 | 4 03 E | +1 | | Kansas City | 39 07 | 94 38 | 0 15 E | 0 |
| Alaska | Sitka | 57 03 | 135 20 | 30 30 E | +1 | Mont. | Helena | 46 37 | 112 02 | 19 58 E | —1 |
| | Kodiak | 57 48 | 152 24 | 23 50 E | —1 | Neb. | Lincoln | 40 49 | 96 42 | 10 00 E | —1 |
| | St. Michael | 63 29 | 162 01 | 20 49 E | —3 | | Omaha | 41 16 | 95 58 | 9 41 E | —1 |
| | Dutch Harbor | 53 53 | 166 32 | 16 20 E | —2 | Nevada | Carson City | 39 10 | 119 46 | 17 45 E | +1 |
| | Kiska | 51 59 | 182 28 | 7 00 E | —3 | | Eureka | 39 31 | 115 58 | 17 45 E | +1 |
| Ariz. | Prescott | 34 34 | 112 30 | 14 53 E | +1 | N. H. | Concord | 43 12 | 71 29 | 14 38W | +4 |
| | Yuma | 32 44 | 114 37 | 15 00 E | +1 | N. J. | Trenton | 40 13 | 74 44 | 9 31W | +4 |
| | Nogales | 31 20 | 110 56 | 13 47 E | +1 | N. Mex. | Santa Fe | 35 41 | 105 57 | 13 30 E | +1 |
| Ark. | Little Rock | 34 44 | 92 16 | 7 08 E | +1 | N. Y. | Albany | 42 40 | 73 45 | 12 34W | +4 |
| Calif. | Sacramento | 38 34 | 121 30 | 17 30 E | +1 | | New York | 40 43 | 74 00 | 10 28W | +4 |
| | San Francisco | 37 48 | 122 25 | 18 24 E | +1 | | Ithaca | 42 27 | 76 29 | 8 43W | +4 |
| | Los Angeles | 34 04 | 118 15 | 16 03 E | +1 | | Buffalo | 42 55 | 78 54 | 7 26W | +3 |
| | San Diego | 32 43 | 117 12 | 15 36 E | +1 | N. C. | Raleigh | 35 47 | 78 38 | 3 11W | +2 |
| Col. | Denver | 39 45 | 105 00 | 14 50 E | 0 | | Wilmington | 34 13 | 77 56 | 3 00W | +2 |
| Conn. | Hartford | 41 46 | 72 40 | 12 10W | +4 | N. Dak. | Bismarck | 46 48 | 100 47 | 14 48 E | —2 |
| | New Haven | 41 18 | 72 55 | 11 39W | +4 | | Pembina | 48 58 | 97 14 | 10 54 E | —3 |
| Del. | Dover | 39 09 | 75 31 | 8 05W | +3 | Ohio | Columbus | 40 00 | 83 00 | 1 44W | +2 |
| Dist. of Col. | Washington | 38 53 | 77 00 | 6 15W | +3 | | Cleveland | 41 30 | 81 42 | 4 30W | +3 |
| Florida | Tallahassee | 30 26 | 84 17 | 2 25 E | +1 | | Cincinnati | 39 08 | 84 25 | 0 49 E | —2 |
| | Jacksonville | 30 20 | 81 39 | 1 04 E | 0 | Okla. | Atoka | 34 24 | 96 09 | 8 53 E | +1 |
| | Key West | 24 33 | 81 48 | 2 35 E | +1 | | Guthrie | 35 53 | 97 25 | 10 03 E | +1 |
| Georgia | Atlanta | 33 44 | 84 22 | 1 36 E | 0 | Oregon | Portland | 45 31 | 122 41 | 23 23 E | 0 |
| | Savannah | 32 05 | 81 05 | 0 17 E | —1 | Pa. | Harrisburg | 40 16 | 76 53 | 7 49W | +3 |
| Idaho | Boise | 43 37 | 116 12 | 19 45 E | 0 | | Philadelphia | 39 58 | 75 10 | 9 01W | +4 |
| Illinois | Springfield | 39 50 | 89 39 | 4 05 E | —1 | | Allegheny | 40 29 | 80 01 | 5 00W | +3 |
| | Chicago | 41 54 | 87 37 | 2 25 E | —2 | R. I. | Providence | 41 50 | 71 24 | 13 43W | +4 |
| Indiana | Indianapolis | 39 47 | 86 08 | 0 45 E | —2 | S. C. | Columbia | 34 00 | 81 02 | 0 30W | +1 |
| | Fort Wayne | 41 06 | 85 08 | 0 30W | +2 | | Charleston | 32 47 | 79 56 | 1 19W | +1 |
| Iowa | Des Moines | 41 36 | 93 36 | 7 45 E | —2 | S. Dak. | Pierre | 44 22 | 100 22 | 12 57 E | —1 |
| | Keokuk | 40 23 | 91 23 | 5 55 E | —1 | | Yankton | 42 53 | 97 23 | 11 12 E | —1 |
| Kansas | Topeka | 39 02 | 95 43 | 9 35 E | +1 | Tenn. | Nashville | 36 09 | 86 48 | 3 31 E | 0 |
| | Ness City | 38 28 | 99 54 | 11 45 E | +1 | | Knoxville | 35 56 | 83 57 | 0 31W | +1 |
| Ky. | Lexington | 38 04 | 84 30 | 0 07 E | —1 | | Memphis | 35 08 | 90 03 | 5 33 E | +1 |
| | Paducah | 37 05 | 88 37 | 4 25 E | 0 | Texas | Austin | 30 17 | 97 44 | 9 10 E | +2 |
| | Louisville | 38 15 | 85 42 | 0 47 E | —1 | | San Antonio | 29 27 | 98 28 | 9 47 E | +2 |
| La. | Baton Rouge | 30 27 | 91 11 | 6 29 E | +2 | | Houston | 29 47 | 95 20 | 8 40 E | +2 |
| | New Orleans | 30 00 | 90 05 | 5 59 E | +2 | | Galveston | 29 18 | 94 47 | 8 19 E | +2 |
| | Shreveport | 32 30 | 93 45 | 7 42 E | +2 | | El Paso | 31 46 | 106 29 | 12 54 E | +1 |
| Maine | Bangor | 44 48 | 68 48 | 18 49W | +4 | Utah | Salt Lake | 40 46 | 111 54 | 17 24 E | 0 |
| | Portland | 43 39 | 70 17 | 16 17W | +4 | | Ogden | 41 13 | 112 00 | 18 12 E | 0 |
| | Eastport | 44 54 | 66 59 | 20 56W | +3 | Vt. | Montpelier | 44 15 | 72 32 | 15 42W | +4 |
| Md. | Annapolis | 38 59 | 76 29 | 6 54W | +3 | | Burlington | 44 28 | 73 12 | 14 12W | +4 |
| | Baltimore | 39 16 | 76 35 | 7 03W | +3 | Va. | Richmond | 37 32 | 77 26 | 5 04W | +3 |
| Mass. | Boston | 42 22 | 71 04 | 14 25W | +4 | | Norfolk | 36 52 | 76 17 | 5 40W | +3 |
| | Pittsfield | 42 27 | 73 17 | 12 47W | +4 | | Lynchburg | 37 25 | 79 09 | 3 44W | +2 |
| Mich. | Lansing | 42 44 | 84 32 | 0 58W | +2 | Wash. | Olympia | 47 02 | 122 54 | 23 30 E | 0 |
| | Detroit | 42 21 | 83 03 | 2 12W | +3 | | Walla Walla | 46 04 | 118 21 | 22 00 E | 0 |
| | Marquette | 46 33 | 87 22 | 1 28 E | —4 | W. Va. | Charleston | 38 21 | 81 38 | 2 56W | +2 |
| Minn. | St. Paul | 44 58 | 93 05 | 8 26 E | —2 | | Wheeling | 40 03 | 80 44 | 2 22W | +3 |
| | Duluth | 46 46 | 92 04 | 8 12 E | —3 | Wis. | Madison | 43 04 | 89 25 | 4 18 E | —3 |
| Miss. | Jackson | 32 19 | 90 12 | 6 34 E | +2 | | Milwaukee | 43 04 | 87 53 | 2 45 E | —3 |
| | Oxford | 34 22 | 89 33 | 5 49 E | +1 | | La Crosse | 43 50 | 91 14 | 5 05 E | —3 |
| | | | | | | Wyo. | Cheyenne | 41 08 | 104 49 | 15 13 E | 0 |

### EXTREME VALUES.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maine | N. E. Corner | | | 22 15W | —3 | Alaska | N. E. Corner | | | 40 30 E | —1 |

### DEPENDENCIES.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cuba | Havana | 23 08 | 82 22 | 3 29 E | +2 | Haw'n Islands | Honolulu | 21 18 | 157 52 | 11 07 E | +2 |
| | Santiago | 20 00 | 75 50 | 0 55 E | —2 | | Hilo | 19 44 | 155 05 | 9 25 E | +2 |
| Porto Rico | San Juan | 18 29 | 66 07 | 3 50W | +7 | Philippines | Manila | 14 35 | 120 58 E | 0 53 E | 0 |
| | Ponce | 17 59 | 66 40 | 3 32W | +7 | | | | | | |

## VISIBILITY—DISTANCES OF OBJECTS AT VARIOUS ELEVATIONS ABOVE SEA LEVEL.

| HEIGHT, IN FEET. | Distance, in Statute Miles. | HEIGHT, IN FEET. | Distance, in Statute Miles. | HEIGHT, IN FEET. | Distance, in Statute Miles. | HEIGHT, IN FEET. | Distance, in Statute Miles. | HEIGHT, IN FEET. | Distance in Statute Miles. |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 2.96 | 45 | 8.87 | 85 | 12.20 | 150 | 16.20 | 550 | 31.02 |
| 10 | 4.18 | 50 | 9.35 | 90 | 12.55 | 200 | 18.71 | 600 | 32.40 |
| 15 | 5.12 | 55 | 9.81 | 95 | 12.89 | 250 | 20.92 | 650 | 33.73 |
| 20 | 5.92 | 60 | 10.25 | 100 | 13.23 | 300 | 22.91 | 700 | 35.00 |
| 25 | 6.61 | 65 | 10.67 | 110 | 13.87 | 350 | 24.75 | 800 | 37.42 |
| 30 | 7.25 | 70 | 11.07 | 120 | 14.49 | 400 | 26.46 | 900 | 39.69 |
| 35 | 7.83 | 75 | 11.46 | 130 | 15.08 | 450 | 28.06 | 1,000 | 41.83 |
| 40 | 8.37 | 80 | 11.83 | 140 | 15.65 | 500 | 29.58 | | |

## LATITUDE AND LONGITUDE TABLE.

(LONGITUDE RECKONED FROM GREENWICH)

Specially prepared for THE WORLD ALMANAC by the United States Coast and Geodetic Survey.

| | ° ′ ″ | | H. M. S. | |
|---|---|---|---|---|
| Acapulco, Mex. | 16 50 56 | N. | 6 39 41.8 | W. |
| Adelaide, S. Australia* | 34 55 38 | S. | 9 14 20.1 | E. |
| Aden, Arabia | 12 46 40 | N. | 2 59 55.8 | E. |
| Albany, N. Y.* | 42 39 13 | N. | 4 55 07.1 | W. |
| Algiers* | 36 47 50 | N. | 0 12 08.4 | E. |
| Allegheny, Pa.* | 40 28 58 | N. | 5 20 05.4 | W. |
| Alexandria, Egypt | 31 11 43 | N. | 1 59 26.7 | E. |
| Amherst, Mass* | 42 21 56 | N. | 4 50 05.9 | W. |
| Ann Arbor, Mich* | 42 16 48 | N. | 5 34 55.2 | W. |
| Annapolis, Md.* | 38 58 54 | N. | 5 05 56.9 | W. |
| Archangel, Russia | 64 32 06 | N. | 2 42 14.0 | E. |
| Armagh, Ireland* | 54 21 13 | N. | 0 26 35.4 | W. |
| Aspinwall, S. A. Lt. | 9 22 09 | N. | 5 19 39.0 | W. |
| Astoria, Ore. | 46 11 19 | N. | 8 15 18.8 | W. |
| Athens, Greece* | 37 58 20 | N. | 1 34 54.9 | E. |
| Attu Island, Alaska | 52 56 01 | N. | 11 32 49.6 | E. |
| Bahia, Brazil | 13 00 37 | S. | 2 34 08 | W. |
| Baltimore, Md.* | 39 17 52 | N. | 5 06 29.1 | W. |
| Batavia, Java | 6 07 | S. | 7 07 13.7 | E. |
| Belle Isle, Lt. | 51 53 00 | N. | 3 41 29.5 | W. |
| Berkeley, Cal.* | 37 52 24 | N. | 8 09 02.8 | W. |
| Berlin, Prussia* | 52 30 17 | N. | 0 53 34.9 | E. |
| Bermuda, Dock Yard | 32 19 24 | N. | 4 19 18.3 | W. |
| Berne, Switzerland* | 46 57 09 | N. | 0 29 45.7 | E. |
| Bombay* | 18 53 36 | N. | 4 51 15.7 | E. |
| Bonn, Germany* | 50 43 45 | N. | 0 28 23.2 | E. |
| Bordeaux, France* | 44 50 07 | N. | 0 02 05.5 | W. |
| Boston State House | 42 21 28 | N. | 4 44 15.3 | W. |
| Brussels, Belgium* | 50 47 56 | N. | 0 17 26.0 | E. |
| Buenos Ayres | 34 36 30 | S. | 3 53 28.9 | W. |
| Cabinda, W. Africa | 5 33 22 | S. | 0 48 47.4 | E. |
| Calcutta | 22 33 25 | N. | 5 53 20.7 | E. |
| Callao, Peru, Lt. | 12 04 03 | S. | 5 09 03.0 | W. |
| Cambridge, England | 52 12 52 | N. | 0 00 22.7 | E. |
| Cambridge, Mass.* | 42 22 48 | N. | 4 44 31.0 | W. |
| Canton, China | 23 06 35 | N. | 7 33 46.3 | E. |
| Cape Cod, Mass, Lt. | 42 02 21 | N. | 4 40 14.6 | W. |
| Cape Hatteras, N. C., Lt. | 35 15 14 | N. | 5 02 05.0 | W. |
| Cape Henry, Va., Lt. | 36 55 29 | N. | 5 04 02.0 | W. |
| Cape Horn | 55 58 41 | S. | 4 29 05.0 | W. |
| Cape May, N. J., Lt. | 38 55 56 | N. | 4 59 50.7 | W. |
| Cape Good Hope* | 33 56 04 | S. | 1 13 54.8 | E. |
| Cape Good Hope, Lt. | 34 21 12 | S. | 1 13 58.0 | E. |
| Cape Prince of Wales | 65 33 30 | N. | 11 11 56.8 | W. |
| Charleston, S. C., Lt. | 32 41 44 | N. | 5 19 32.0 | W. |
| Charlottetown, P. E. I. | 46 13 55 | N. | 4 12 27.5 | W. |
| Charlottesville, Va.* | 38 02 01 | N. | 5 14 05.3 | W. |
| Cherbourg, France | 49 38 54 | N. | 0 06 32.5 | W. |
| Chicago, Ill.* | 41 50 01 | N. | 5 50 26.8 | W. |
| Christiania, Norway* | 59 54 44 | N. | 0 42 53.5 | E. |
| Cincinnati, Ohio* | 39 08 20 | N. | 5 37 41.4 | W. |
| Clinton, N. Y.* | 43 03 17 | N. | 5 01 37.4 | W. |
| Colombo, Ceylon | 6 55 40 | N. | 5 19 21.9 | E. |
| Constantinople | 41 00 30 | N. | 1 56 03.7 | E. |
| Copenhagen* | 55 41 13 | N. | 0 50 18.7 | E. |
| Demerara (Geo'town, Lt.) | 6 49 20 | N. | 3 52 46.0 | W. |
| Denver, Col.* | 39 40 36 | N. | 6 59 47.7 | W. |
| Dublin, Ireland* | 53 23 13 | N. | 0 25 21.1 | W. |
| Eagle Pass, Tex. | 28 42 39 | N. | 6 42 01.6 | W. |
| Edinburgh* | 55 57 23 | N. | 0 12 43.1 | W. |
| Fairbanks, Alasks | 64 50 53 | N. | 9 50 54.1 | W. |
| Father Point, Quebec, Lt. | 48 31 25 | N. | 4 33 49.2 | W. |
| Fayal, Azores | 38 32 9 | N. | 1 54 16.0 | W. |
| Fernadina, Fla. | 30 40 19 | N. | 5 25 51.1 | W. |
| Florence, Italy* | 43 46 4 | N. | 0 45 1.5 | E. |
| Funchal, Madeira | 32 38 4 | N. | 1 7 35.6 | W. |
| Galveston, Tex. | 29 18 17 | N. | 6 19 9.7 | W. |
| Geneva, Switzerland* | 46 11 59 | N. | 0 24 36.6 | E. |
| Glasgow, Scotland* | 55 52 43 | N. | 0 17 10.6 | W. |
| Gibraltar | 36 6 30 | N. | 0 21 23.3 | W. |
| Greenwich, England* | 51 28 38 | N. | 0 0 0.0 | — |
| Guam | 13 26 22 | N. | 9 38 35.5 | E. |
| Halifax, N. S. | 44 39 38 | N. | 4 14 21.1 | W. |
| Hamburg, Germany* | 53 32 51 | N. | 0 39 53.5 | E. |
| Hanover, N. H.* | 43 42 15 | N. | 4 49 8.0 | W. |
| Havana, Cuba | 23 9 21 | N. | 5 29 26.0 | W. |
| Hongkong, China* | 22 18 13 | N. | 7 36 41.9 | E. |
| Honolulu (Reef Lt.) | 21 17 55 | N. | 10 31 28.0 | W. |
| Ithaca, N. Y. | 42 23 47 | N. | 5 05 56.0 | W. |
| Key West, Fla., Lt. | 24 32 58 | N. | 5 27 12 3 | W. |
| Kingston, Jamaica | 17 57 41 | N. | 5 7 10.7 | W. |
| Lisbon, Portugal* | 38 42 31 | N. | 0 36 44.7 | W. |
| Liverpool* | 53 24 5 | N. | 0 12 17.3 | W. |
| Madison, Wis.* | 43 4 37 | N. | 5 57 37.9 | W. |
| Madras, India* | 13 4 8 | N. | 5 20 59.1 | E. |
| Madrid, Spain* | 40 24 30 | N. | 0 14 45.1 | W. |

| | ° ′ ″ | | H. M. S. | |
|---|---|---|---|---|
| Manila, Lt. | 14 35 25 | N. | 8 3 50.0 | E. |
| Marseilles* | 43 18 19 | N. | 0 21 34.6 | E. |
| Matuba, W. Africa | 5 16 59 | S. | 0 48 40.5 | E. |
| Melbourne, Vic.* | 37 49 53 | S. | 9 39 53.9 | E. |
| Mexico (city)* | 19 26 2 | N. | 6 36 26.7 | W. |
| Monrovia, Liberia | 6 19 5 | N. | 0 43 15.7 | W. |
| Montreal, Quebec* | 45 30 20 | N. | 4 54 18.6 | W. |
| Moscow* | 55 45 20 | N. | 2 30 17.0 | E. |
| Mount Hamilton, Cal.* | 37 20 26 | N. | 8 6 34.9 | W. |
| Munich* | 48 8 45 | N. | 0 46 26.0 | E. |
| Nain, Labrador | 56 32 51 | N. | 4 6 42.7 | W. |
| Naples* | 40 51 46 | N. | 0 57 1.7 | E. |
| Nashville, Tenn.* | 36 8 54 | N. | 5 47 12.2 | W. |
| Nassau, Bahamas | 25 5 37 | N. | 5 9 27.8 | W. |
| Natal, S. Africa* | 29 50 47 | S. | 2 4 1.2 | E. |
| New Haven, Ct.* | 41 19 22 | N. | 4 51 40.6 | W. |
| New Orleans (Mint) | 29 57 46 | N. | 6 0 13.9 | W. |
| New York (Col. Univ.)* | 40 48 35 | N. | 4 55 50.0 | W. |
| Nice, France* | 43 43 17 | N. | 0 29 12.2 | E. |
| Norfolk, Va. (Navy Yd.) | 36 49 33 | N. | 5 5 11.0 | W. |
| North Cape | 71 11 0 | N. | 1 42 40.0 | E. |
| Northfield, Minn.* | 44 27 42 | N. | 6 12 35.9 | W. |
| Northampton, Mass.* | 42 19 02 | N. | 4 50 33.1 | W. |
| Odessa, Russia* | 46 28 37 | N. | 2 03 02.2 | E. |
| Ogden, Utah* | 41 13 08 | N. | 7 27 59.6 | W. |
| Ottawa, Canada* | 45 23 39 | N. | 5 02 52.0 | W. |
| Oxford, Eng. (Univ.)* | 51 45 34 | N. | 0 5 0.4 | W. |
| Panama | 8 57 | N. | 5 18 8.8 | W. |
| Paris, France* | 48 50 11 | N. | 0 9 20.9 | E. |
| Pensacola, Fla., Lt. | 30 20 47 | N. | 5 49 14.1 | W. |
| Petrograd* | 59 56 30 | N. | 2 1 13.5 | E. |
| Port au Prince, Hayti | 18 33 54 | N. | 4 49 28.0 | W. |
| Philadelphia, Pa.* | 39 58 2 | N. | 5 1 6.8 | W. |
| Point Barrow† | 71 27 0 | N. | 10 25 0.0 | W. |
| Portland, Me. | 43 39 28 | N. | 4 41 1.2 | W. |
| Port Louis, Mauritius | 20 8 46 | S. | 3 49 57.7 | E. |
| Port Said, Egypt, Lt. | 31 15 45 | N. | 2 9 15.5 | E. |
| P. Stanley, Falkland Is. | 51 41 10 | S. | 3 51 20.0 | W. |
| Potsdam, Prussia* | 52 22 56 | N. | 0 52 15.9 | E. |
| Poughkeepsie, N. Y.* | 41 41 18 | N. | 4 55 33.6 | W. |
| Prague, Bohemia* | 50 5 16 | N. | 0 57 40.3 | E. |
| Princeton, N. J.* | 40 20 58 | N. | 4 58 37.6 | W. |
| Providence, R. I.* | 41 49 46 | N. | 4 45 37.6 | W. |
| Quebec, Que.* | 46 47 59 | N. | 4 44 52.7 | W. |
| Richmond, Va. | 37 32 16 | N. | 5 9 44.0 | W. |
| Rio de Janeiro* | 22 54 24 | S. | 2 52 44.4 | W. |
| Rochester, N. Y.* | 43 9 17 | N. | 5 10 21.8 | W. |
| Rome, Italy* | 41 53 54 | N. | 0 49 55.1 | E. |
| Saigon, Cochin-China* | 10 46 47 | N. | 7 6 48.7 | E. |
| San Diego, Cal. | 32 43 6 | N. | 7 48 38.7 | W. |
| Sandy Hook, N. J., Lt. | 40 27 40 | N. | 4 56 0.6 | W. |
| San Francisco, Cal.* | 37 47 28 | N. | 8 9 42.8 | W. |
| San Juan de Porto Rico | 18 28 56 | N. | 4 24 29.8 | W. |
| Santiago de Cuba | 20 0 16 | N. | 5 3 22.0 | W. |
| Savannah, Ga. | 32 4 52 | N. | 5 24 21.7 | W. |
| Seattle, Wash. | 47 35 54 | N. | 8 9 19.9 | W. |
| Shanghai, China | 31 14 42 | N. | 8 5 55.7 | E. |
| Singapore | 1 17 11 | N. | 6 55 25.0 | E. |
| Sitka, Alaska | 57 02 53 | N. | 9 01 21.9 | W. |
| St. Helena Island | 15 55 0 | S. | 0 22 52.0 | W. |
| St. John's, Newfoundland | 47 34 2 | N. | 3 30 43.6 | W. |
| St. Louis, Mo.* | 38 38 3 | N. | 6 0 49.3 | W. |
| Stockholm* | 59 20 33 | N. | 1 12 14.0 | E. |
| Suakim, E. Africa, Lt. | 19 7 0 | N. | 2 29 16.6 | E. |
| Sydney, N. S. W.* | 33 51 41 | S. | 10 4 49.3 | E. |
| Tanana, Alaska | 65 10 10 | N. | 10 08 21.6 | W. |
| Tokio, Japan* | 35 39 17 | N. | 9 18 58.2 | E. |
| Tunis (Goletta, Lt.) | 36 48 36 | N. | 0 41 14.5 | E. |
| Urbana, Ill.* | 40 06 20 | N. | 5 52 53.9 | W. |
| Utrecht, Netherlands* | 52 5 10 | N. | 0 20 31.0 | E. |
| Valdez, Alaska | 61 06 50 | N. | 9 45 05.0 | W. |
| Valparaiso, Chile | 33 1 53 | S. | 4 46 34.8 | W. |
| Venice, Italy* | 45 26 10 | N. | 0 49 22.1 | E. |
| Vera Cruz, Mex., Lt. | 19 12 29 | N. | 6 24 31.8 | W. |
| Victoria, B. C., Lt. | 48 25 26 | N. | 8 13 33.8 | W. |
| Vienna, Austria* | 48 13 55 | N. | 1 5 21.4 | E. |
| Warsaw, Poland* | 52 13 5 | N. | 1 24 7.2 | E. |
| Washington, D. C.* | 38 55 14 | N. | 5 8 15.8 | W. |
| Wellesley, Mass.* | 42 17 35 | N. | 4 45 12.7 | W. |
| Wellington, N. Z.* | 41 17 4 | S. | 11 39 4.3 | E. |
| West Point, N. Y.* | 41 23 22 | N. | 4 55 50.6 | W. |
| Williams Bay, Wis. | 42 34 13 | N. | 5 54 13.2 | W. |
| Williamstown, Mass.* | 42 42 30 | N. | 4 52 50 4 | W. |
| Yokohama, Japan | 35 26 24 | N. | 9 18 36.9 | E. |
| Zanzibar (E. Consulate) | 6 9 43 | S. | 2 36 44.7 | E. |

* Observatories  Lt. denotes a lighthouse.  †Highest latitude in U. S. territory.

### HIPPARCHUS FIRST DETERMINED LATITUDE AND LONGITUDE.

Latitude is said to have been first determined by Hipparchus of Nice, about 162 B. C. Hipparchus also first determined longitude.

LATITUDE AND LONGITUDE TABLE—*Continued.*

AT CERTAIN OTHER LIGHTHOUSES.

| | Lat. | Long. | Long. | | Lat. | Long. | Long. |
|---|---|---|---|---|---|---|---|
| | ° ′ ″ | H. M. S. | ° ′ ″ | | ′ ″ | H. M. S. | ° ′ ″ |
| Mount Desert, Me. | 43 58 08 | 4 32 30.9 | 68 07 44 | Pensacola, Fla. | 30 20 46 | 5 49 13.9 | 87 18 29 |
| Cape Eliz'h, Me., E. | 43 33 58 | 4 40 48 1 | 70 12 02 | Sand Island, Ala. | 30 11 15 | 5 52 12.1 | 88 03 02 |
| Cape Ann, Mass., N. | 42 38 21 | 4 42 18.1 | 70 34 31 | Ship Shoal, La. | 28 54 52 | 6 04 17.0 | 91 04 15 |
| Boston, Mass. | 42 19 41 | 4 43 33.7 | 70 53 26 | Sabine Bank, La. | 29 28 20 | 6 14 54.1 | 93 43 31 |
| Gay Head, Mass. | 41 20 55 | 4 47 20.5 | 70 50 08 | Bolivar Point, Tex. | 29 21 59 | 6 19 04.1 | 94 46 01 |
| Montauk Point, N. Y. | 41 04 16 | 4 49 25.8 | 71 51 27 | Brazos River, Tex. | 28 56 41 | 6 21 14.1 | 95 18 31 |
| Fire Island, N. Y. | 40 37 57 | 4 52 52.5 | 73 13 08 | Point Loma, Cal. | 32 39 55 | 7 48 58.1 | 117 14 32 |
| Navesink, N. J. | 40 23 43 | 4 55 56.6 | 73 59 09 | L' Angeles Harbor, C. | 33 42 31 | 7 53 00.2 | 118 15 03 |
| Barnegat, N. J. | 39 45 52 | 4 56 25.6 | 74 06 24 | Point Concep'n, Cal. | 34 26 56 | 8 01 52.9 | 120 28 13 |
| Cape May, N. J. | 38 55 59 | 4 59 50.6 | 74 57 39 | San Luis Obispo, Cal. | 35 09 38 | 8 03 02.5 | 120 45 37 |
| Cape Henlopen, Del. | 38 46 42 | 5 00 20.2 | 75 05 03 | Point Pinos, Cal. | 36 38 01 | 8 07 43.9 | 121 55 59 |
| Cape Charles, Va. | 37 07 22 | 5 03 37.6 | 75 54 24 | Point Reyes, Cal. | 37 59 45 | 8 12 05.4 | 123 01 21 |
| Cape Lookout, N. C. | 34 37 22 | 5 06 05.9 | 76 31 29 | Point Arena, Cal. | 38 57 19 | 8 14 57.6 | 123 44 24 |
| Cape Fear, N. C. | 33 50 47 | 5 11 51.9 | 77 57 58 | Cape Mendocino, Cal. | 40 26 26 | 8 17 37.4 | 124 24 21 |
| Cape Romain, S. C. | 33 01 08 | 5 17 29.7 | 79 22 26 | Trinidad Head, Cal. | 41 03 08 | 8 16 36.1 | 124 09 02 |
| Tybee, Ga. | 32 01 19 | 5 23 23.0 | 80 50 45 | Cape Blanco, Ore. | 42 50 07 | 8 18 15.0 | 124 33 45 |
| St. Simon, Ga. | 31 08 02 | 5 25 34.5 | 81 23 38 | Yaquina Head, Ore. | 44 40 38 | 8 16 18.9 | 124 04 43 |
| St. Augustine, Fla. | 29 53 07 | 5 25 09.3 | 81 17 20 | Tillamook Rock, Ore. | 45 56 16 | 8 16 04.3 | 124 01 05 |
| Cape Canaveral, Fla. | 28 27 37 | 5 22 10.5 | 80 32 37 | Grays Harbor, Wash. | 46 53 19 | 8 16 27.8 | 124 06 57 |
| Jupiter Inlet, Fla. | 26 56 54 | 5 20 19.7 | 80 04 56 | Cape Flattery, Wash. | 48 23 31 | 8 18 56.6 | 124 44 09 |
| Dry Tortugas, Fla. | 24 37 59 | 5 31 40.9 | 82 55 13 | Cape Hinchinb'k, Alas. | 60 14 05 | 9 46 36.4 | 146 39 06 |

OF MOUNTAIN PEAKS.

| | Lat. | Long. | Long. | | Lat. | Long. | Long. |
|---|---|---|---|---|---|---|---|
| | ° ′ ″ | H. M. S. | ° ′ ″ | | ° ′ ″ | H. M. S. | ° ′ ″ |
| Mt. McKinley, Alaska | 63 03 59 | 10 04 02.9 | 151 00 44 | Mount Hood, Ore. | 45 22 27 | 8 06 47.3 | 121 41 49 |
| Mt. St. Elias, Alaska | 60 17 29 | 9 23 42.9 | 140 55 43 | Mount Ouray, Col. | 38 25 22 | 7 04 53.8 | 106 13 27 |
| Mount Shasta, Cal. | 41 24 34 | 8 08 46.5 | 122 11 38 | Mt. Cheenahaw, Ala. | 33 29 08 | 5 43 14.1 | 85 48 31 |
| Pike's Peak, Col. | 38 50 26 | 7 00 10.5 | 105 02 37 | Briery Knob, W. Va. | 38 08 40 | 5 21 22.7 | 80 20 40 |
| Mount Elbert, Col. | 39 07 04 | 7 05 46.7 | 106 26 41 | Wheeler Peak, Nev. | 38 59 10 | 7 37 15.2 | 114 18 48 |
| Mount Marcy, N. Y. | 44 06 46 | 4 55 41.8 | 73 55 27 | Mount Harvard, Col. | 38 55 28 | 7 05 16.9 | 106 19 13 |
| Mt. Mitchell, N. C. | 35 45 53 | 5 29 03.7 | 82 15 55 | Mount Belknap, Utah. | 38 25 10 | 7 29 38.9 | 112 24 43 |
| Mount Rainier, Wash. | 46 51 11 | 8 07 03.1 | 121 45 47 | Silver Mt., S.Pk., Cal. | 38 32 39 | 7 59 01.1 | 119 45 17 |
| Mount Helena, Cal. | 38 40 11 | 8 10 31.9 | 122 37 58 | Mount Conness, Cal. | 37 58 03 | 7 57 16.9 | 119 19 14 |
| Mt. Tamalpais, Cal. | 37 55 28 | 8 10 23.0 | 122 35 45 | Mt. Washington, N. H. | 44 16 14 | 4 45 12.9 | 71 18 14 |

IN THE NATIONAL AND STATE CAPITALS.

(Capitol Building, except where noted.)

| | Lat. | Long. | Long. | | Lat. | Long. | Long. |
|---|---|---|---|---|---|---|---|
| | ° ′ ″ | H. M. S. | ° ′ ″ | | ° ′ ″ | H. M. S. | ° ′ ″ |
| Atlanta, Ga. | 33 44 58 | 5 37 33.2 | 84 23 18 | Helena, Mont. (Court-house) | 46 35 18 | 7 28 08.5 | 112 02 08 |
| Augusta, Me. | 44 18 26 | 4 39 07.7 | 69 46 53 | Indianapolis, Ind. | 39 46 11 | 5 44 38.4 | 86 09 36 |
| Austin, Texas | 30 16 28 | 6 30 57.7 | 97 44 26 | Jefferson City, Mo. | 38 34 47 | 6 08 41.3 | 92 10 20 |
| Baton Rouge, La. (Barracks) | 30 27 23 | 6 04 45.7 | 91 11 25 | Little Rock, Ark. (Custom House) | 34 44 56 | 6 09 05.6 | 92 16 24 |
| Bismarck, N. D. | 46 49 11 | 6 43 07.4 | 100 46 51 | Montgomery, Ala. | 32 22 40 | 5 45 12.1 | 86 18 02 |
| Capitol Head of Liberty Statue, D. C. | 38 53 23 | 5 08 02.3 | 77 00 34 | OklahomaCity, O. (Ch) | 35 28 34 | 6 30 00.4 | 97 30 06 |
| Carson City, Nev. | 39 09 51 | 7 59 03.7 | 119 45 56 | Omaha, Neb. (Pr. Ch.) | 41 15 43 | 6 23 45.0 | 95 56 15 |
| Charleston, W. Va. (Old Capitol Bldg.) | 38 21 02 | 5 26 31.8 | 81 37 57 | Olympia, Wash. | 47 02 09 | 8 11 36.6 | 122 54 09 |
| Cheyenne, Wyo. | 41 08 25 | 6 59 16.7 | 104 49 11 | Raleigh, N. C. (Triangulation) | 35 46 47 | 5 14 33.3 | 78 38 19 |
| Columbia, S. C. | 34 00 01 | 5 24 08.0 | 81 01 59 | Sacramento Cal. | 38 34 37 | 8 05 58.3 | 121 29 34 |
| Columbus, O. (Obs.) | 39 59 50 | 5 32 02.6 | 83 00 39 | Salem, Oregon | 44 56 19 | 8 12 06.9 | 123 01 44 |
| Des Moines, Ia. (Obs.) | 41 36 00 | 6 14 30.6 | 93 37 39 | Salt Lake City, Utah (Temple) | 40 46 15 | 7 27 33.9 | 111 53 28 |
| Dover, Del. (Court-house) | 39 09 21 | 5 02 05.7 | 75 31 25 | Springfield, Ill. | 39 47 57 | 5 58 37.1 | 89 39 17 |
| Harrisburg, Pa. (Old Capitol Building) | 40 15 51 | 5 07 31.6 | 76 52 54 | Topeka, Kan. | 39 02 54 | 6 22 42.8 | 95 40 42 |
| Hartford, Conn. | 41 45 51 | 4 50 43.9 | 72 40 58 | Washington Monument, D. C. | 38 53 22 | 5 08 08.5 | 77 02 08 |

IN OTHER CITIES.

| | Lat. | Long. | Long. | | Lat. | Long. | Long. |
|---|---|---|---|---|---|---|---|
| | ° ′ ″ | H. M. S. | ° ′ ″ | | ° ′ ″ | H. M. S. | ° ′ ″ |
| Buffalo, N.Y. (C.H.) | 42 53 03 | 5 15 30.7 | 78 52 41 | Los Angeles, Cal. (Baptist Ch.) | 34 02 48 | 7 53 00.3 | 118 15 04 |
| Duluth, Minn. (High School) | 46 47 21 | 6 08 24.0 | 92 06 00 | Louisville, Ky. (C.H.) | 38 15 16 | 5 43 02.5 | 85 45 38 |
| El Paso, Texas (Court-house) | 31 45 30 | 7 05 56.1 | 106 29 02 | Mobile, Ala. (Ct. Hse). | 30 41 23 | 5 52 09.7 | 88 02 25 |
| Jacksonville, Fla. (Courthouse) | 30 19 35 | 5 26 37.1 | 81 39 17 | Portland, Ore. (Court-house) | 45 31 00 | 8 10 42.6 | 122 40 39 |
| Kansas City, Mo. (Pr. Ch.) | 39 05 56 | 6 18 20.9 | 94 35 13 | Rochester, N.Y. (Anderson Hall) | 43 09 38 | 5 10 20.9 | 77 35 14 |
| Laredo, Texas (N. Wireless Tower) | 27 30 25 | 6 38 04.5 | 99 31 07 | Rockland, Me. ;C.Ch.) | 44 06 24 | 4 36 26.7 | 69 06 37 |
| | | | | Tampa, Fla. (Co'hse) | 27 56 53 | 5 29 49.9 | 82 27 28 |
| | | | | Walla Walla, Wash. (Courthouse) | 46 03 55 | 7 53 23.4 | 118 20 51 |

Latitude of a place is its angular distance from the equator and is measured by an arc of the meridian between the zenith and the equator. Longitude of a place is measured by the arc of the equator, intercepted between the prime meridian and the meridian passing through the place, or by the angle at the pole between these two meridians.

## HIGH-TIDE TABLES.

FOR GOVERNOR'S ISLAND (NEW YORK HARBOR).

(Specially prepared from the Tide Tables of the United States Coast and Geodetic Survey for THE WORLD ALMANAC.)

*Eastern Standard Time.*

| 1923. | January. | | February. | | March. | | April. | | May. | | June. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day of Month. | A. M. | P. M. | A. M. | P. M. | A. M. | P. M. | A. M. | P. M. | A. M. | P. M. | A. M. | P. M. |
| | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | 6 36 | 7 0 | 7 35 | 8 5 | 6 31 | 7 2 | 7 49 | 8 15 | 8 23 | 8 46 | 9 56 | 10 13 |
| 3 | 7 13 | 7 40 | 8 18 | 8 49 | 7 18 | 7 47 | 8 36 | 9 3 | 9 15 | 9 37 | 10 49 | 11 4 |
| 3 | 7 51 | 8 20 | 9 2 | 9 34 | 8 5 | 8 33 | 9 28 | 9 53 | 10 8 | 10 29 | 11 44 | 11 55 |
| 4 | 8 30 | 9 2 | 9 48 | 10 23 | 8 50 | 9 20 | 10 18 | 10 45 | 11 5 | 11 23 | . . . | 12 40 |
| 5 | 9 11 | 9 47 | 10 36 | 11 16 | 9 37 | 10 8 | 11 14 | 11 41 | . . . | 12 2 | 12 52 | 1 37 |
| 6 | 9 57 | 10 36 | 11 31 | . . . | 10 28 | 11 0 | . . . | 12 15 | 12 21 | 1 5 | 1 46 | 2 32 |
| 7 | 10 47 | 11 31 | 12 17 | 12 33 | 11 22 | 11 57 | 12 43 | 1 24 | 1 22 | 2 10 | 2 44 | 3 26 |
| 8 | 11 41 | . . . | 1 25 | 1 47 | . . . | 12 25 | 1 51 | 2 36 | 2 27 | 3 12 | 3 40 | 4 18 |
| 9 | 12 35 | 12 45 | 2 35 | 3 4 | 1 4 | 1 37 | 3 1 | 3 41 | 3 28 | 4 9 | 4 30 | 5 4 |
| 10 | 1 44 | 1 59 | 3 43 | 4 13 | 2 15 | 2 52 | 4 3 | 4 41 | 4 25 | 4 57 | 5 20 | 5 47 |
| 11 | 2 54 | 3 15 | 4 45 | 5 15 | 3 25 | 4 3 | 5 0 | 5 31 | 5 14 | 5 43 | 6 5 | 6 26 |
| 12 | 3 59 | 4 23 | 5 41 | 6 10 | 4 29 | 5 1 | 5 48 | 6 15 | 5 59 | 6 23 | 6 45 | 7 3 |
| 13 | 4 58 | 5 24 | 6 31 | 6 57 | 5 25 | 5 54 | 6 31 | 6 55 | 6 41 | 7 0 | 7 26 | 7 37 |
| 14 | 5 53 | 6 20 | 7 16 | 7 42 | 6 12 | 6 40 | 7 11 | 7 31 | 7 18 | 7 33 | 8 2 | 8 10 |
| 15 | 6 43 | 7 12 | 7 58 | 8 23 | 6 57 | 7 21 | 7 46 | 8 4 | 7 53 | 8 6 | 8 38 | 8 42 |
| 16 | 7 31 | 7 59 | 8 36 | 9 1 | 7 36 | 7 57 | 8 19 | 8 34 | 8 25 | 8 35 | 9 13 | 9 16 |
| 17 | 8 16 | 8 45 | 9 12 | 9 37 | 8 12 | 8 34 | 8 48 | 8 1 | 8 57 | 9 2 | 9 49 | 9 54 |
| 18 | 8 59 | 9 29 | 9 46 | 10 12 | 8 46 | 9 5 | 9 16 | 9 25 | 9 27 | 9 33 | 10 27 | 10 33 |
| 19 | 9 40 | 10 12 | 10 16 | 10 44 | 9 16 | 9 33 | 9 42 | 9 54 | 10 0 | 10 5 | 11 13 | 11 21 |
| 20 | 10 19 | 10 54 | 10 46 | 11 16 | 9 43 | 10 0 | 10 17 | 10 29 | 10 41 | 10 49 | . . . | 12 7 |
| 21 | 10 57 | 11 35 | 11 18 | 11 52 | 10 9 | 10 27 | 10 55 | 11 10 | 11 25 | 11 36 | 12 16 | 1 7 |
| 22 | 11 36 | . . . | 11 58 | . . . | 10 40 | 11 2 | 11 41 | 11 59 | . . . | 12 20 | 1 17 | 2 16 |
| 23 | 12 22 | 12 17 | 12 38 | 12 49 | 11 18 | 11 44 | . . . | 12 36 | 12 34 | 1 25 | 2 27 | 3 27 |
| 24 | 1 11 | 1 7 | 1 37 | 1 58 | . . . | 12 7 | 12 58 | 1 50 | 1 36 | 2 38 | 3 45 | 4 32 |
| 25 | 2 5 | 2 7 | 2 47 | 3 22 | 12 34 | 1 8 | 2 10 | 3 11 | 2 53 | 3 51 | 4 54 | 5 33 |
| 26 | 2 59 | 3 13 | 3 54 | 4 29 | 1 39 | 2 26 | 3 30 | 4 21 | 4 8 | 4 54 | 6 1 | 6 29 |
| 27 | 3 52 | 4 12 | 4 51 | 5 25 | 2 56 | 3 50 | 4 40 | 5 20 | 5 16 | 5 52 | 6 59 | 7 24 |
| 28 | 4 41 | 5 6 | 5 43 | 6 15 | 4 10 | 4 53 | 5 41 | 6 14 | 6 17 | 6 48 | 7 55 | 8 16 |
| 29 | 5 27 | 5 54 | . . . | . . . | 5 12 | 5 48 | 6 38 | 7 6 | 7 14 | 7 40 | 8 48 | 9 5 |
| 30 | 6 10 | 6 38 | . . . | . . . | 6 7 | 6 38 | 7 30 | 7 57 | 8 11 | 8 31 | 9 40 | 9 53 |
| 31 | 6 53 | 7 22 | . . . | . . . | 6 59 | 7 28 | . . . | . . . | 9 2 | 9 22 | . . . | . . . |

| 1923. | July. | | August. | | September. | | October. | | November. | | December. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day of Month. | A. M. | P. M. | A. M. | P. M. | A. M. | P. M. | A. M. | P. M. | A. M. | P. M. | A. M. | P. M. |
| | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. | H. M. |
| 1 | 10 29 | 10 41 | 11 28 | 11 35 | 11 59 | . . . | 11 42 | . . . | 12 33 | 12 42 | 1 7 | 1 12 |
| 2 | 11 18 | 11 27 | . . . | 12 11 | 12 8 | 12 40 | 12 12 | 12 29 | 1 40 | 1 49 | 2 13 | 2 22 |
| 3 | . . . | 12 6 | 12 14 | 12 55 | 12 54 | 1 29 | 1 9 | 1 28 | 2 49 | 2 57 | 3 19 | 3 33 |
| 4 | 12 16 | 12 56 | 12 59 | 1 41 | 1 52 | 2 25 | 2 18 | 2 33 | 3 50 | 4 4 | 4 20 | 4 36 |
| 5 | 1 3 | 1 48 | 1 49 | 2 34 | 2 59 | 3 25 | 3 24 | 3 38 | 4 44 | 5 1 | 5 18 | 5 38 |
| 6 | 1 55 | 2 38 | 2 46 | 3 26 | 4 2 | 4 21 | 4 21 | 4 37 | 5 37 | 5 57 | 6 11 | 6 38 |
| 7 | 2 47 | 3 30 | 3 45 | 4 16 | 4 56 | 5 14 | 5 14 | 5 31 | 6 30 | 6 52 | 7 3 | 7 32 |
| 8 | 3 41 | 4 19 | 4 39 | 5 5 | 5 48 | 6 4 | 6 4 | 6 24 | 7 20 | 7 46 | 7 55 | 8 27 |
| 9 | 4 34 | 5 4 | 5 33 | 5 51 | 6 34 | 6 51 | 6 53 | 7 14 | 8 12 | 8 38 | 8 48 | 9 22 |
| 10 | 5 25 | 5 48 | 6 21 | 6 36 | 7 20 | 7 37 | 7 43 | 8 4 | 9 3 | 9 35 | 9 41 | 10 20 |
| 11 | 6 11 | 6 28 | 7 6 | 7 19 | 8 6 | 8 23 | 8 30 | 8 55 | 9 57 | 10 35 | 10 35 | 11 17 |
| 12 | 6 54 | 7 7 | 7 49 | 7 59 | 8 52 | 9 11 | 9 22 | 9 49 | 10 55 | 11 38 | 11 33 | . . . |
| 13 | 7 35 | 7 44 | 8 31 | 8 43 | 9 40 | 10 1 | 10 16 | 10 46 | 11 57 | . . . | 12 18 | 12 31 |
| 14 | 8 14 | 8 21 | 9 15 | 9 27 | 10 31 | 10 55 | 11 12 | 11 50 | 12 43 | 1 2 | 1 18 | 1 32 |
| 15 | 8 53 | 8 59 | 9 59 | 10 13 | 11 27 | 11 54 | . . . | 12 15 | 1 48 | 2 4 | 2 17 | 2 31 |
| 16 | 9 33 | 9 39 | 10 48 | 11 2 | . . . | 12 28 | 12 57 | 1 21 | 2 49 | 3 7 | 3 13 | 3 27 |
| 17 | 10 16 | 10 23 | 11 40 | 11 56 | 12 59 | 1 35 | 2 6 | 2 28 | 3 44 | 4 2 | 4 3 | 4 17 |
| 18 | 11 3 | 11 10 | . . . | 12 40 | 2 12 | 2 44 | 3 10 | 3 32 | 4 35 | 4 50 | 4 50 | 5 5 |
| 19 | 11 54 | . . . | 1 0 | 1 46 | 3 20 | 3 48 | 4 8 | 4 29 | 5 21 | 5 36 | 5 32 | 5 49 |
| 20 | 12 3 | 12 52 | 2 12 | 2 55 | 4 23 | 4 48 | 5 0 | 5 19 | 6 1 | 6 18 | 6 10 | 6 29 |
| 21 | 12 59 | 1 57 | 3 26 | 4 2 | 5 20 | 5 41 | 5 46 | 6 5 | 6 39 | 6 56 | 6 46 | 7 7 |
| 22 | 2 14 | 3 6 | 4 33 | 5 3 | 6 10 | 6 29 | 6 29 | 6 47 | 7 14 | 7 32 | 7 20 | 7 43 |
| 23 | 3 30 | 4 14 | 5 34 | 5 59 | 6 55 | 7 13 | 7 8 | 7 25 | 7 46 | 8 10 | 7 51 | 8 17 |
| 24 | 4 41 | 5 16 | 6 29 | 6 50 | 7 37 | 7 54 | 7 44 | 8 2 | 8 16 | 8 41 | 8 21 | 8 52 |
| 25 | 5 46 | 6 14 | 7 18 | 7 38 | 8 15 | 8 32 | 8 17 | 8 35 | 8 43 | 9 7 | 8 50 | 9 24 |
| 26 | 6 44 | 7 8 | 8 4 | 8 21 | 8 52 | 9 8 | 8 48 | 9 9 | 9 13 | 9 41 | 9 25 | 10 3 |
| 27 | 7 38 | 7 58 | 8 47 | 9 3 | 9 25 | 9 42 | 9 16 | 9 39 | 9 47 | 10 22 | 10 6 | 10 45 |
| 28 | 8 29 | 8 44 | 9 27 | 9 41 | 9 59 | 10 14 | 9 44 | 10 10 | 10 28 | 11 10 | 10 51 | 11 36 |
| 29 | 9 16 | 9 30 | 10 7 | 10 19 | 10 30 | 10 48 | 10 18 | 10 51 | 11 15 | . . . | 11 43 | . . . |
| 30 | 10 1 | 10 13 | 10 44 | 10 55 | 11 3 | 11 25 | 10 59 | 11 37 | 12 3 | 12 11 | 12 35 | 12 41 |
| 31 | 10 45 | 10 55 | 11 21 | 11 31 | . . . | . . . | 11 47 | . . . | . . . | . . . | 1 42 | 1 53 |

NOTE—The time as above given from April to October, inclusive, must be increased by one hour in order to obtain Daylight Saving Time.

HIGH-TIDE TABLES—*Continued.*

TIME OF HIGH WATER AT POINTS ON THE ATLANTIC COAST.

The standard time of high water at the following places may be found approximately for each day by adding to or subtracting from the time of high water at Governor's Island, N. Y., the hours and minutes annexed.

| | H. | M. | | H. | M. |
|---|---|---|---|---|---|
| Albany, N. Y. | add | 9 54 | New Haven, Conn. | add | 3 0 |
| Annapolis, Md. | add | 9 13 | New London, Conn. | add | 1 14 |
| Atlantic City, N. J. | sub. | 51 | Newport, R. I. | sub. | 31 |
| Baltimore, Md. | add | 11 5 | Norfolk, Va. | add | 1 21 |
| Bar Harbor, Me. | add | 2 31 | Norwich, Conn. | add | 1 55 |
| Beaufort, S. C. | add | 33 | Old Point Comfort, Va. | add | 49 |
| Block Island, R. I. | sub. | 41 | Philadelphia, Pa. | add | 5 56 |
| Boston, Mass. | add | 3 12 | Plymouth, Mass. | add | 3 4 |
| Bridgeport, Conn. | add | 3 2 | Point Lookout, Md. | add | 5 5 |
| Bristol, R. I. | sub. | 13 | Portland, Me. | add | 2 52 |
| Cape May, N. J. | sub. | 10 | Portsmouth, N. H. | add | 3 13 |
| Charleston, S. C. | sub. | 15 | Poughkeepsie, N. Y. | add | 4 36 |
| Eastport, Me. | add | 2 37 | Providence, R. I. | sub. | 2 |
| Fernandina, Fla. | add | 26 | Richmond, Va. | add | 8 53 |
| Gloucester, Mass. | add | 2 57 | Rockaway Inlet, N. Y. | sub. | 22 |
| Hell Gate Ferry, East River, N. Y. | add | 2 6 | Rockland, Me. | add | 2 44 |
| Isle of Shoals, N. H. | add | 3 1 | Rockport, Mass. | add | 2 55 |
| Jacksonville, Fla. | add | 1 30 | Salem, Mass. | add | 3 0 |
| Key West, Fla. | add | 2 19 | Sandy Hook, N. J. | sub. | 29 |
| League Island, Pa. | add | 5 26 | Savannah, Ga. | add | 50 |
| Marblehead, Mass. | add | 3 0 | Southport (Smithville), N. C. | sub. | 18 |
| Nahant, Mass. | add | 2 59 | Vineyard Haven, Mass. | add | 3 25 |
| Nantucket, Mass. | add | 4 4 | Washington, D. C. | | 0 |
| Newark, N. J. | add | 58 | Watch Hill, R. I. | add | 36 |
| New Bedford, Mass. | sub. | 19 | West Point, N. Y. | add | 3 2 |
| Newburyport, Mass. | add | 3 23 | Wilmington, N. C. | add | 1 56 |

EXAMPLE.—To find the approximate standard time of high tide at Atlantic City, N. J., on any day, find first the time of high water at New York under the desired date, and then subtract 51 minutes, as in the above table; the result is the time of high water required.

AVERAGE RISE AND FALL OF TIDE.

| PLACES. | Feet. | Inch. | PLACES. | Feet. | Inch. | PLACES. | Feet. | Inch. |
|---|---|---|---|---|---|---|---|---|
| Baltimore, Md. | 1 | 2 | New London, Conn. | 2 | 6 | San Diego, Cal. | 3 | 11 |
| Boston, Mass. | 9 | 7 | New Orleans, La. | None | None | Sandy Hook, N. J. | 4 | 8 |
| Charleston, S. C. | 5 | 2 | Newport, R. I. | 3 | 6 | San Francisco, Cal. | 3 | 11 |
| Colon, Panama | 0 | 11 | New York, N. Y. | 4 | 5 | Savannah, Ga. | 6 | 6 |
| Eastport, Me. | 18 | 2 | Old Point Comf't, Va. | 2 | 6 | Seattle, Wash. | 11 | 4 |
| Galveston, Tex. | 1 | 0 | Balboa, Panama | 12 | 6 | Tampa, Fla. | 2 | 2 |
| Key West, Fla. | 1 | 2 | Philadelphia, Pa. | 5 | 4 | Washington, D. C. | 2 | 11 |
| Mobile, Ala. | 1 | 6 | Portland, Me. | 8 | 11 | | | |

Highest tide at Eastport, Me., 218 inches.

VARIATIONS IN RAINFALL.

Cultivation of semi-arid lands does not cause any appreciable difference in the rainfall in that region, according to records of the Weather Bureau of the Department of Agriculture. Special attention has been given by the bureau to this subject and in arriving at this conclusion the specialists delved into the weather records for the last fifty years. During that period there has been a decided increase in the area under cultivation in the Great Plain States. If increasing the area of cultivation in any district increased the precipitation, the specialists point out, a steady rise in the annual rainfall of this region could be expected. Instead of a regular increase, the records show there are well-defined but comparatively short periods of increasing and decreasing rainfall, which cannot be due to cultivation.

The records of the average rainfall over the Western Great Plains show that for twenty-five years from 1868 to 1892 inclusive, it was 19.2 inches, and from 1893 to 1917 inclusive, 18.4 inches. Over the Southern Great Plains the average rainfall for the twenty-five years, from 1868 to 1892 inclusive, was 19.8 inches, and for the next twenty-five years only 17.8 inches.

## FOG DURATION AVERAGES.

| STATION. | Ave. Hours of Fog PerYr. (1921) | Years of Record. | Per Cent. of Fog. | STATION. | Ave. Hours of Fog PerYr. (1921). | Years of Record. | Per Cent. of Fog. |
|---|---|---|---|---|---|---|---|
| Moose Peak, Me. | 1,644 | 8 | 19 | Nash Island, Me. | 1,162 | 16 | 13 |
| Petit Manan, Me. | 1,607 | 37 | 18 | San Francisco Light Vessel, Cal. | 1,148 | 23 | 13 |
| Libby Islands, Me. | 1,574 | 37 | 18 | Bonita Point, Cal. | 1,122 | 37 | 13 |
| Whitehead, Me. | 1,511 | 37 | 17 | Manana Island, Me. | 1,109 | 37 | 13 |
| Mount Desert, Me. | 1,418 | 28 | 16 | Point Cabrillo, Cal. | 1,087 | 12 | 12 |
| Egg Rock, Me. | 1,404 | 17 | 16 | Humboldt, Cal. | 1,086 | 12 | 12 |
| Great Duck Island, Me. | 1,303 | 30 | 16 | Pollock Rip Light Vessel, Mass. | 1,084 | 37 | 12 |
| Point Reyes, Cal. | 1,384 | 37 | 16 | Point Arena, Cal. | 1 059 | 37 | 12 |
| West Quoddy, Me. | 1,374 | 37 | 16 | Nantucket Shoal L'ht Ves., Mass. | 1,016 | 29 | 12 |
| Matinicus Rock, Me. | 1,361 | 37 | 16 | San Luis Obispo, Cal. | 1,010 | 30 | 12 |
| Little River, Me. | 1,300 | 16 | 15 | Gt. Round Shoal L'ht Ves., Mass. | 1,086 | 28 | 12 |
| The Cuckolds, Me. | 1,297 | 27 | 15 | Gloucester Breakwater, Mass. | 1,049 | 10 | 12 |
| Seguin, Me. | 1,278 | 37 | 15 | Calumet Harbor (station not in operation when navigation is closed) | 1,174 | 15 | 20 |
| Swiftsure B'nk Light Ves., Wash. | 1,272 | 13 | 14 | | | | |
| Pollock Rip Slue L'ht Ves., Mass. | 1,243 | 19 | 14 | | | | |
| Blunts Reef Light Vessel, Cal. | 1,166 | 16 | 13 | | | | |

WEATHER SEASONS NOT CHANGING, SAYS U. S. WEATHER BUREAU.

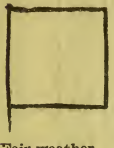
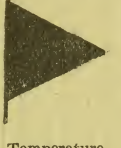
The coldest January at New Haven, Conn., since 1790 was in 1857. The coldest February occurred eight years after the warmest one. The coldest March was as late as 1870 and again in 1885. The coldest April was in 1874, and many years after the warmest one. The lowest temperature in May was in 1812, 1815, 1870, and 1882. The highest figures in June were in 1779, 1790, 1803, and 1876. In July the lowest was in 1816, with the warmest as early as 1780 and equalled in 1876. The coldest August occurred 61 years after the warmest. In September the coolest months were in the earlier years, but for October, November, and December the coldest year came after the warmest year in each case.

## WEATHER FLAGS.

OF THE WEATHER BUREAU, U. S. DEPARTMENT OF AGRICULTURE.

THE Weather Bureau furnishes, when practicable, for the benefit of all interests dependent upon weather conditions, the "Forecasts" which are prepared daily at the Central Office in Washington, D. C., and certain designated stations. These forecasts are telegraphed to stations of the Weather Bureau, railway officials, postmasters, and many others, to be communicated to the public by telegraph, telephone, "wireless" and mail or by means of flags or steam whistles. The flags adopted for this purpose are five in number, and of the forms and colors indicated below:

EXPLANATION OF WEATHER FLAGS.

| No. 1. White Flag. | No. 2. Blue Flag | No. 3. White and Blue Flag. | No. 4. Black Triangular Flag. | No. 5. White Flag with black square in Centre |
|---|---|---|---|---|
|  | | |  | |
| Fair weather. | Rain or snow. | Local rain or snow. | Temperature. | Cold wave. |

When number 4 is placed above number 1, 2 or 3, it indicates warmer; when below, colder; when not displayed, the temperature is expected to remain about stationary.

### WHISTLE SIGNALS.

A warning blast of from fifteen to twenty seconds' duration is sounded to attract attention. After this warning the longer blasts (of from four to six seconds' duration) refer to weather, and shorter blasts (of from one to three seconds' duration) refer to temperature; those for weather are sounded first.

| Blasts. | Indicate. | Blasts. | Indicate. |
|---|---|---|---|
| One long | Fair weather. | One short | Lower temperature. |
| Two long | Rain or snow. | Two short | Higher emperature. |
| Three long | Local rain or snow. | Three short | Cold wave. |

By repeating each combination a few times, with intervals of ten seconds, liability to error in reading the signals may be avoided.

The forecast messages are telegraphed at the expense of the Weather Bureau to places where they are distributed to nearby and local communities; they are furnished at the regular commercial rates and sent "collect." In no case are the forecasts sent to a second address in any place, except at the expense of the applicant.

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## SMALL CRAFT, STORM AND HURRICANE WARNINGS

OF THE WEATHER BUREAU, U. S. DEPARTMENT OF AGRICULTURE.

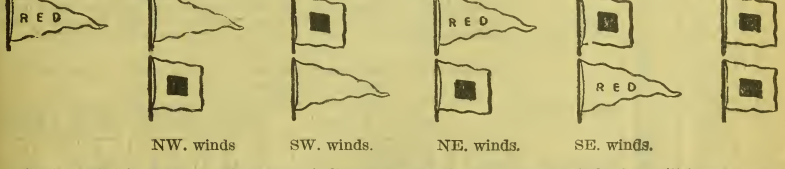
(For lantern signals, see reading matter below the cuts.)

### VERIFICATION OF FORECASTS.

The U. S. Weather Bureau in its Administrative Report, claims that its A. M. 36-hour forecasts throughout the whole country, averaged (1915-1919) 86.5 per cent. correct for weather, and 90.2 per cent. correct for temperature. For the Eastern New York locality, in the same period, it is claimed, the A. M. 36-hour forecasts were 85.7 per cent. correct as to weather, and 89.9 per cent. correct as to temperature. The highest percentage of accurate weather forecasts (92.6) was for Southern California; the lowest (81.6) in Upper Michigan. The highest accuracy in temperature forecasts (96.4) was in Florida; the lowest (84.4) in Montana.

All square flags shown here are red with black centre when displayed as warnings.

Small craft. Storm. Hurricane.




NW. winds SW. winds. NE. winds. SE. winds.

*Small Craft Warning*—A red pennant indicates that moderately strong winds that will interfere with the safe operation of small craft are expected. No night display of small craft warnings is made.

*Northeast Storm Warning*—A red pennant *above* a square red flag with black centre displayed by day, or two red lanterns, one above the other, displayed by night, indicates the approach of a storm of marked violence with winds beginning from the *northeast.*

*Southeast Storm Warning*—A red pennant *below* a square red flag with black centre displayed by day, or one red lantern displayed by night, indicates the approach of a storm of marked violence with winds beginning from the *southeast.*

*Southwest Storm Warning*—A white pennant *below* a square red flag with black centre displayed by day, or a white lantern *below* a red lantern displayed by night, indicates the approach of a storm of marked violence with winds beginning from the *southwest.*

*Northwest Storm Warning*—A white pennant *above* a square red flag with black centre displayed by day, or a white lantern *above* a red lantern displayed by night, indicates the approach of a storm of marked violence with winds beginning from the *northwest.*

*Hurricane, or Whole Gale Warning*—Two square flags, red with black centres, one above the other, displayed by day, or two red lanterns, with a white lantern between, displayed by night, indicate the approach of a tropical hurricane, or of one of the extremely severe and dangerous storms which occasionally move across the Great Lakes and Atlantic coast.

## NORMAL TEMPERATURE AND RAINFALL.

(Prepared in the office of the Chief of the Weather Bureau, U. S. Department of Agriculture.)

| States and Territories. | Stations. | Mean Temperature. Jan. | Mean Temperature. July | Record High-est. | Record Low-est. | Mean Ann'l Precip'n (Ins.) | States and Territories. | Stations. | Mean Temperature. Jan. | Mean Temperature. July | Record High-est. | Record Low-est. | Mean Ann'l Precip'n (Ins.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ala. | Mobile | 50 | 80 | 102 | — 1 | 62.0 | Neb. | Omaha | 20 | 76 | 110 | —32 | 30.7 |
| Ariz. | Phoenix | 50 | 90 | 119 | 12 | 7.9 | Nev. | Winnemucca | 29 | 72 | 104 | —28 | 8.4 |
| Ark. | Little Rock | 41 | 81 | 106 | —12 | 49.9 | N. C. | Charlotte | 40 | 79 | 102 | — 5 | 49.2 |
| Cal. | San Francisco | 50 | 57 | 101 | 29 | 22.3 | N. Dak. | Bismarck | 7 | 70 | 108 | —45 | 17.6 |
| Col. | Denver | 29 | 72 | 105 | —29 | 14.0 | N. H. | Concord | 21 | 69 | 102 | —35 | 40.1 |
| Conn. | New Haven | 27 | 72 | 100 | —14 | 47.2 | N. J. | Atlantic City | 32 | 72 | 104 | — 7 | 40.8 |
| D. of C. | Washington | 33 | 77 | 106 | —15 | 43.5 | N. Mex. | Santa Fé | 28 | 69 | 97 | —13 | 14.5 |
| Fla. | Key West | 69 | 84 | 100 | 41 | 38.7 | N. Y. | N. Y. City | 30 | 74 | 102 | —13 | 44.6 |
| Ga. | Atlanta | 42 | 78 | 100 | — 8 | 49.4 | Ohio | Cincinnati | 32 | 78 | 105 | —17 | 38.3 |
| Idaho | Boisé | 29 | 73 | 111 | —28 | 12.7 | Okla. | Oklahoma | 35 | 80 | 108 | —17 | 31.7 |
| Ill. | Chicago | 24 | 72 | 103 | —23 | 33.3 | Ore. | Portland | 39 | 66 | 102 | — 2 | 45.1 |
| Ind. | Indianapolis | 28 | 76 | 106 | —25 | 41.5 | Pa. | Philadelphia | 32 | 76 | 106 | — 6 | 41.2 |
| Iowa | Dubuque | 18 | 75 | 106 | —32 | 34.0 | R. I. | Block Island | 31 | 68 | 92 | — 6 | 44.4 |
| Kan. | Wichita | 30 | 79 | 107 | —22 | 30.6 | S. C. | Charleston | 49 | 81 | 104 | 7 | 52.1 |
| Ky. | Louisville | 34 | 79 | 107 | —20 | 44.3 | S. Dak. | Pierre | 14 | 75 | 110 | —40 | 16.6 |
| La. | New Orleans | 53 | 81 | 102 | 7 | 57.4 | Tenn. | Nashville | 38 | 79 | 104 | —13 | 48.5 |
| Maine. | Portland | 22 | 68 | 103 | —21 | 42.5 | Texas. | Galveston | 53 | 83 | 99 | 8 | 47.1 |
| Md. | Baltimore | 33 | 77 | 105 | — 7 | 43.2 | Utah. | Salt Lake C. | 29 | 76 | 102 | —20 | 16.0 |
| Mass. | Boston | 27 | 71 | 104 | —14 | 43.4 | Vt. | Burlington | 16 | 68 | 100 | —28 | 31.6 |
| Mich. | Detroit | 24 | 72 | 104 | —24 | 32.2 | Va. | Norfolk | 40 | 78 | 105 | 2 | 49.5 |
| Minn. | St. Paul | 12 | 72 | 104 | —41 | 28.7 | Wash. | Seattle | 39 | 64 | 96 | 11 | 36.6 |
| Miss. | Vicksburg | 47 | 80 | 101 | — 1 | 53.7 | W. Va. | Parkersburg | 31 | 76 | 106 | —27 | 40.2 |
| Mo. | St. Louis | 31 | 79 | 107 | —22 | 37.2 | Wis. | Milwaukee | 20 | 70 | 102 | —25 | 31.4 |
| Mont. | Helena | 20 | 67 | 103 | —42 | 12.8 | Wyo. | Cheyenne | 26 | 67 | 100 | —38 | 13.6 |

The minus (—) sign indicates temperature below zero. Fahrenheit thermometer registration.

## THERMOMETERS.

Comparative Scales.

| Reaumur, | Centigrade, | Fahrenheit, | |
|---|---|---|---|
| 80° | 100° | 212° | Water Boils at Sea-Level. |
| 76 | 95 | 203 | |
| 72 | 90 | 194 | |
| 68 | 85 | 185 | |
| 63.1 | 78.9 | 174 | |
| 60 | 75 | 167 | Alcohol Boils. |
| 56 | 70 | 158 | |
| 52 | 65 | 149 | |
| 48 | 60 | 140 | |
| 44 | 55 | 131 | |
| 42.2 | 52.8 | 127 | Tallow Melts. |
| 40 | 50 | 122 | |
| 36 | 45 | 113 | |
| 33.8 | 42.2 | 108 | |
| 32 | 40 | 104 | |
| 29.3 | 36.7 | 98 | Blood Heat. |
| 28 | 35 | 95 | |
| 25.8 | 32.2 | 90 | |
| 24 | 30 | 86 | |
| 21.3 | 26.7 | 80 | |
| 20 | 25 | 77 | |
| 16 | 20 | 68 | |
| 12.4 | 15.3 | 60 | Temperate. |
| 10.2 | 12.8 | 55 | |
| 8 | 10 | 50 | |
| 5.8 | 7.2 | 45 | |
| 4 | 5 | 41 | |
| 1.3 | 1.7 | 35 | |
| 0 | 0 | 32 | Water Freezes. |
| — 0.9 | — 1.1 | 30 | |
| — 4 | — 5 | 23 | |
| — 5.3 | — 6.7 | 20 | |
| — 8 | —10 | 14 | |
| — 9.8 | —12.2 | 10 | |
| —12 | —15 | 5 | |
| —14.2 | —17.8 | 0 | Zero Fahr. |
| —16 | —20 | — 4 | |
| —20 | —25 | —13 | |
| —24 | —30 | —22 | |
| —28 | —35 | —31 | Mercury Freezes. |
| —32 | —40 | —40 | |

## RULES FOR FORETELLING THE WEATHER.

Adapted for Use with Aneroid Barometers.

A rising barometer.

A rapid rise indicates unsettled weather.

A gradual rise indicates settled weather.

A rise with dry air and cold increasing in Summer indicates wind from the northward; and if rain has fallen, better weather may be expected.

A rise with moist air and a low temperature indicates wind and rain from the northward.

A rise with southerly winds indicates fine weather.

A steady barometer

with dry air and seasonable temperature indicates a continuance of very fine weather.

A falling barometer.

A rapid fall indicates stormy weather.

A rapid fall with westerly wind indicates stormy weather from the northward.

A fall with a northerly wind indicates storm, with rain and hail in Summer, and snow in Winter.

A fall with increased moisture in the air, and heat increasing, indicates wind and rain from the southward.

A fall with dry air and cold increasing in Winter indicates snow.

A fall after very calm and warm weather indicates rain with squally weather.

The barometer rises for northerly winds, including from northwest by north to the eastward for dry or less wet weather, for less wind, or for more than one of these changes, except on a few occasions, when rain, hail or snow comes from the northward with strong wind.

The barometer falls for southerly wind, including from southeast by south to the westward, for wet weather, for stronger wind or for more than one of these changes, except on a few occasions, when moderate wind, with rain or snow, comes from the northward.

Duration of Different Kinds of Weather in the Several Storms—Vicinity of New York.

| Critical Winds. | Clear Hours. | Cloudy Hours. | Rain Hours. | Clearing Hours. |
|---|---|---|---|---|
| South to Southwest | 9 | 8 | 8.3 | 14 |
| South to Southeast | 14 | 13.4 | 15.6 | 15.4 |
| East to Northeast | 20 | 17.6 | 31 | 20.6 |

## WEATHER WISDOM.

A gray, lowering sunset, or one where the sky is green or yellowish-green, indicates rain. A red sunrise, with clouds lowering later in the morning, also indicates rain. A halo occurring after fine weather indicates a storm. A corona growing smaller indicates rain; growing larger, fair weather. A morning rainbow is regarded as a sign of rain; an evening rainbow of fair weather. A deep-blue color of the sky, even when seen through clouds, indicates fair weather, a growing whiteness an approaching storm. Fogs indicate settled weather. A morning fog usually breaks away before noon. Unusual clearness of the atmosphere, unusual brightness or twinkling of the stars, indicate rain. The first frost and last frost are usually preceded by a temperature very much above the mean.

## ABSOLUTE ZERO—ABSOLUTE TEMPERATURE.

The zero points on the Fahrenheit, Centigrade, and Reaumur thermometer scales are simply arbitrary. Absolute zero—the point at which bodies on the earth are entirely devoid of heat—exists at 459.4 degrees below the Fahrenheit and 273.1 degrees below the Centigrade zero points. This is the beginning of what is known in dynamic meteorology as Absolute Temperature, as determined by observations of the contraction of gases when cooled, and from thermo-dynamical considerations. Thus, water freezes at 273.1 degrees of Absolute Temperature on the Centigrade scale of registration.

## MONTHLY AND ANNUAL MEAN TEMPERATURE AND PRECIPITATION.

### AT NORTH AMERICAN CITIES.

| STATIONS. | JAN. | | FEB. | | MAR. | | APRIL. | | MAY. | | JUNE. | | JULY. | | AUG. | | SEPT. | | OCT. | | NOV. | | DEC. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. |
| Albany | 22 | 2.6 | 24 | 2.5 | 32 | 2.7 | 46 | 2.4 | 59 | 3.0 | 68 | 3.8 | 72 | 3.9 | 70 | 4.0 | 62 | 3.2 | 50 | 3.0 | 38 | 2.8 | 28 | 2.6 |
| Asheville | 35 | 4.7 | 38 | 4.6 | 45 | 5.1 | 54 | 4.0 | 63 | 3.8 | 69 | 4.4 | 72 | 4.9 | 70 | 4.8 | 65 | 3.0 | 55 | 2.9 | 45 | 3.3 | 38 | 4.1 |
| Atlanta | 42 | 5.3 | 45 | 4.6 | 52 | 5.8 | 61 | 3.6 | 70 | 3.1 | 76 | 3.9 | 78 | 4.7 | 76 | 4.5 | 72 | 3.5 | 62 | 2.3 | 52 | 3.4 | 45 | 4.5 |
| Bismarck | 7 | 0.5 | 8 | 0.5 | 22 | 1.0 | 43 | 1.9 | 55 | 2.5 | 64 | 3.5 | 70 | 2.1 | 68 | 2.0 | 57 | 1.2 | 44 | 1.0 | 26 | 0.7 | 15 | 0.6 |
| Boston | 27 | 3.8 | 28 | 3.4 | 35 | 4.1 | 45 | 3.6 | 57 | 3.5 | 66 | 3.0 | 71 | 3.4 | 69 | 4.0 | 63 | 3.2 | 52 | 3.9 | 41 | 4.1 | 32 | 3.4 |
| Buffalo | 25 | 3.3 | 24 | 2.8 | 31 | 2.6 | 42 | 2.4 | 54 | 3.1 | 65 | 3.1 | 70 | 3.4 | 69 | 3.0 | 63 | 3.2 | 52 | 3.5 | 39 | 3.4 | 30 | 3.4 |
| Calgary | 12 | 0.5 | 13 | 0.7 | 34 | 0.7 | 40 | 0.7 | 49 | 1.8 | 55 | 2.4 | 60 | 2.7 | 59 | 2.1 | 50 | 1.4 | 42 | 0.5 | 25 | 0.9 | 20 | 0.6 |
| Charleston | 49 | 3.4 | 52 | 3.4 | 57 | 3.7 | 64 | 3.0 | 72 | 3.5 | 78 | 5.4 | 81 | 7.3 | 80 | 7.0 | 76 | 5.5 | 67 | 3.9 | 58 | 2.9 | 51 | 3.2 |
| Chicago | 24 | 2.0 | 25 | 2.2 | 34 | 2.6 | 46 | 2.9 | 56 | 3.4 | 66 | 3.7 | 72 | 3.6 | 71 | 2.9 | 65 | 3.0 | 53 | 2.6 | 39 | 2.5 | 29 | 2.1 |
| Cincinnati | 30 | 3.4 | 32 | 3.2 | 41 | 3.6 | 52 | 3.0 | 63 | 3.5 | 72 | 4.0 | 76 | 3.3 | 74 | 3.3 | 67 | 2.3 | 55 | 2.3 | 43 | 3.2 | 34 | 2.9 |
| Cleveland | 26 | 2.4 | 27 | 2.6 | 34 | 2.8 | 46 | 2.3 | 58 | 3.2 | 68 | 3.7 | 73 | 3.6 | 70 | 3.2 | 64 | 3.2 | 53 | 2.7 | 40 | 2.8 | 31 | 2.6 |
| Colon | 80 | 4.0 | 79 | 1.5 | 80 | 1.6 | 80 | 4.3 | 80 | 12 | 80 | 13 | 80 | 17 | 79 | 15 | 80 | 13 | 79 | 14 | 79 | 20 | 80 | 12 |
| Dallas | 45 | 2.7 | 49 | 1.3 | 57 | 3.1 | 64 | 4.4 | 72 | 5.3 | 81 | 3.4 | 84 | 1.4 | 82 | 5.2 | 77 | 2.3 | 67 | 3.9 | 56 | 3.5 | 46 | 2.2 |
| Denver | 29 | 0.4 | 31 | 0.5 | 39 | 1.0 | 48 | 2.2 | 57 | 2.5 | 66 | 1.5 | 72 | 1.6 | 70 | 1.3 | 63 | 0.9 | 51 | 1.0 | 39 | 5.0 | 32 | 0.6 |
| Detroit | 24 | 2.0 | 25 | 2.2 | 33 | 2.4 | 46 | 2.3 | 58 | 3.3 | 68 | 3.9 | 72 | 3.5 | 70 | 2.8 | 63 | 2.5 | 52 | 2.4 | 39 | 2.6 | 30 | 2.4 |
| Galveston | 53 | 3.6 | 56 | 3.1 | 62 | 2.9 | 69 | 3.1 | 75 | 3.2 | 81 | 4.8 | 83 | 4.0 | 83 | 5.0 | 79 | 5.4 | 72 | 4.2 | 63 | 4.0 | 56 | 3.7 |
| Guatemala | 61 | 0.3 | 63 | 0.2 | 66 | 6.5 | 63 | 1.3 | 68 | 5.6 | 66 | 12. | 66 | 8.0 | 66 | 8.0 | 66 | 9.2 | 65 | 6.7 | 63 | 0.9 | 61 | 0.2 |
| Halifax | 27 | 5.9 | 20 | 4.5 | 30 | 5.4 | 39 | 4.5 | 49 | 4.3 | 58 | 3.7 | 64 | 3.9 | 65 | 4.3 | 58 | 3.9 | 48 | 5.4 | 38 | 5.6 | 28 | 5.5 |
| Havana | 70 | 2.7 | 72 | 2.3 | 73 | 1.8 | 76 | 2.8 | 79 | 4.5 | 81 | 7.2 | 82 | 5.0 | 82 | 6.0 | 80 | 6.7 | 78 | 7.4 | 75 | 3.1 | 72 | 2.2 |
| Helena | 20 | 0.9 | 22 | 0.7 | 31 | 0.7 | 42 | 1.1 | 52 | 2.0 | 61 | 2.1 | 67 | 1.1 | 66 | 0.7 | 56 | 1.1 | 44 | 0.8 | 33 | 0.7 | 25 | 0.8 |
| Jacksonville | 54 | 3.1 | 57 | 3.4 | 62 | 3.5 | 68 | 2.7 | 74 | 4.2 | 79 | 5.5 | 81 | 6.2 | 80 | 6.2 | 77 | 8.0 | 70 | 5.1 | 61 | 2.2 | 55 | 3.0 |
| Juneau | 26 | 6.3 | 30 | 4.7 | 35 | 5.0 | 41 | 5.0 | 49 | 5.2 | 55 | 3.9 | 58 | 4.9 | 55 | 7.1 | 50 | 11. | 44 | 10. | 35 | 7.9 | 31 | 7.1 |
| Kansas City | 26 | 1.1 | 30 | 1.5 | 41 | 2.8 | 54 | 3.3 | 64 | 5.1 | 73 | 4.7 | 78 | 4.8 | 76 | 4.8 | 68 | 3.8 | 50 | 2.2 | 42 | 1.8 | 32 | 1.4 |
| Los Angeles | 54 | 2.8 | 55 | 2.9 | 57 | 3.0 | 59 | 1.1 | 62 | 0.5 | 67 | 0.1 | 70 | 0.0 | 72 | 0.0 | 70 | 0.1 | 65 | 0.8 | 60 | 1.5 | 56 | 2.9 |
| Memphis | 40 | 5.2 | 43 | 4.4 | 52 | 5.8 | 62 | 4.8 | 71 | 4.3 | 78 | 4.4 | 81 | 3.5 | 79 | 3.2 | 73 | 3.0 | 62 | 2.7 | 51 | 4.6 | 44 | 4.4 |
| Mexico | 54 | 0.2 | 57 | 0.2 | 60 | 0.6 | 64 | 0.6 | 65 | 1.9 | 64 | 3.9 | 62 | 4.1 | 62 | 4.7 | 62 | 4.1 | 59 | 1.8 | 56 | 0.5 | 53 | 0.2 |
| Miami | 67 | 3.4 | 69 | 2.7 | 72 | 2.7 | 74 | 2.6 | 79 | 6.4 | 80 | 7.9 | 82 | 7.2 | 82 | 7.6 | 82 | 9.6 | 78 | 11. | 72 | 2.6 | 68 | 2.2 |
| Montreal | 12 | 3.7 | 14 | 3.1 | 24 | 3.8 | 40 | 2.2 | 55 | 3.0 | 65 | 3.5 | 68 | 4.3 | 66 | 3.6 | 58 | 3.3 | 45 | 3.1 | 32 | 3.7 | 18 | 3.6 |
| New Orleans | 53 | 4.6 | 56 | 4.5 | 62 | 5.3 | 68 | 4.9 | 74 | 3.9 | 80 | 6.2 | 81 | 6.5 | 81 | 5.6 | 78 | 4.8 | 70 | 2.9 | 61 | 3.8 | 54 | 4.5 |
| New York | 30 | 3.8 | 31 | 3.7 | 38 | 4.1 | 48 | 3.3 | 59 | 3.2 | 68 | 3.3 | 74 | 4.5 | 72 | 4.5 | 66 | 3.6 | 56 | 3.7 | 44 | 3.4 | 34 | 3.4 |
| Oklahoma | 35 | 1.3 | 38 | 1.0 | 49 | 2.4 | 62 | 2.8 | 68 | 5.8 | 77 | 3.3 | 80 | 3.1 | 78 | 3.2 | 72 | 2.8 | 61 | 1.8 | 48 | 2.2 | 39 | 1.7 |
| Ottawa | 12 | 2.9 | 13 | 2.5 | 25 | 2.7 | 42 | 2.0 | 56 | 2.7 | 65 | 3.0 | 69 | 3.5 | 66 | 2.9 | 58 | 2.7 | 46 | 2.6 | 32 | 2.6 | 17 | 2.9 |
| Philadelphia | 32 | 3.4 | 33 | 3.4 | 40 | 3.4 | 51 | 2.9 | 62 | 3.2 | 71 | 3.3 | 76 | 4.3 | 74 | 4.6 | 67 | 3.4 | 56 | 3.1 | 45 | 3.1 | 36 | 3.0 |
| Phoenix | 50 | 1.2 | 54 | 0.7 | 60 | 0.5 | 67 | 0.4 | 75 | 0.0 | 84 | 0.1 | 90 | 1.1 | 89 | 1.0 | 81 | 1.0 | 70 | 0.4 | 59 | 1.0 | 52 | 0.6 |
| Pittsburgh | 31 | 2.9 | 32 | 2.7 | 40 | 3.0 | 51 | 2.9 | 63 | 3.3 | 71 | 3.9 | 75 | 4.4 | 72 | 3.2 | 66 | 2.5 | 55 | 2.4 | 43 | 2.6 | 35 | 2.7 |
| Quebec | 10 | 3.7 | 11 | 3.1 | 23 | 3.3 | 37 | 2.1 | 52 | 3.0 | 61 | 3.8 | 66 | 4.3 | 63 | 4.0 | 55 | 3.8 | 42 | 3.1 | 32 | 3.2 | 15 | 3.4 |
| Saint Louis | 31 | 2.3 | 34 | 2.8 | 44 | 3.4 | 56 | 3.5 | 67 | 4.2 | 75 | 4.5 | 79 | 3.4 | 77 | 2.7 | 70 | 2.9 | 58 | 2.4 | 45 | 2.9 | 35 | 2.2 |
| Saint Paul | 12 | 0.9 | 15 | 0.8 | 28 | 1.6 | 46 | 2.3 | 58 | 3.6 | 67 | 4.4 | 72 | 3.4 | 70 | 3.5 | 60 | 3.4 | 48 | 2.3 | 31 | 1.3 | 19 | 1.1 |
| Salt Lake City | 29 | 1.4 | 33 | 1.4 | 41 | 2.0 | 50 | 2.3 | 58 | 2.0 | 68 | 0.8 | 76 | 0.5 | 76 | 0.8 | 65 | 0.8 | 52 | 1.4 | 40 | 1.4 | 32 | 1.3 |
| San Antonio | 51 | 1.7 | 54 | 1.8 | 62 | 1.7 | 69 | 2.9 | 75 | 3.0 | 80 | 3.1 | 82 | 2.2 | 82 | 2.7 | 77 | 2.9 | 69 | 1.5 | 59 | 1.8 | 53 | 1.6 |
| San Francisco | 50 | 4.3 | 51 | 3.7 | 58 | 3.1 | 54 | 1.8 | 56 | 0.8 | 57 | 0.2 | 57 | 0.0 | 58 | 0.0 | 59 | 0.3 | 58 | 1.3 | 56 | 2.5 | 51 | 4.2 |
| Santa Fe | 28 | 0.6 | 32 | 0.8 | 39 | 0.7 | 48 | 0.9 | 57 | 1.1 | 66 | 1.0 | 69 | 2.7 | 67 | 2.4 | 61 | 1.6 | 50 | 1.1 | 38 | 0.8 | 30 | 0.8 |
| Seattle | 39 | 4.5 | 40 | 3.9 | 44 | 3.6 | 49 | 2.7 | 55 | 2.3 | 60 | 1.7 | 64 | 0.7 | 63 | 0.5 | 58 | 1.9 | 51 | 2.9 | 44 | 5.9 | 41 | 6.0 |
| Sioux City | 16 | 0.6 | 20 | 0.6 | 33 | 1.3 | 48 | 2.8 | 61 | 4.4 | 69 | 3.9 | 74 | 3.6 | 73 | 3.0 | 64 | 2.5 | 51 | 1.8 | 34 | 1.0 | 23 | 0.7 |
| Sitka | 31 | 7.2 | 34 | 6.0 | 37 | 5.1 | 42 | 5.4 | 47 | 3.9 | 51 | 3.4 | 55 | 4.2 | 56 | 7.0 | 52 | 10. | 46 | 12. | 38 | 9.0 | 35 | 8.8 |
| Spokane | 27 | 2.3 | 30 | 1.9 | 39 | 1.5 | 48 | 1.3 | 56 | 1.6 | 63 | 1.6 | 69 | 0.7 | 68 | 0.5 | 59 | 1.0 | 47 | 1.5 | 37 | 2.3 | 31 | 2.6 |
| Toronto | 22 | 2.9 | 21 | 2.6 | 29 | 2.6 | 41 | 2.4 | 53 | 3.0 | 63 | 2.8 | 68 | 3.0 | 67 | 2.8 | 59 | 3.2 | 46 | 2.5 | 36 | 3.0 | 26 | 2.8 |
| Vancouver | 35 | 8.6 | 38 | 6.2 | 42 | 4.5 | 47 | 3.1 | 53 | 3.6 | 58 | 2.8 | 63 | 1.3 | 62 | 1.7 | 56 | 4.3 | 49 | 5.7 | 42 | 11. | 39 | 7.6 |
| Vera Cruz | 71 | 0.4 | 73 | 0.6 | 75 | 0.6 | 79 | 0.1 | 81 | 4.2 | 78 | 13. | 82 | 15. | 82 | 8.9 | 80 | 11. | 76 | 9.0 | 75 | 3.2 | 71 | 2.0 |
| Washington | 33 | 3.4 | 34 | 3.4 | 42 | 3.8 | 53 | 3.2 | 64 | 3.8 | 73 | 4.2 | 77 | 4.6 | 74 | 4.4 | 68 | 3.6 | 57 | 3.1 | 45 | 2.7 | 36 | 3.2 |
| Winnipeg | −7 | 0.9 | −11 | 0.0 | 12 | 1.0 | 36 | 1.6 | 51 | 2.2 | 62 | 3.3 | 66 | 3.1 | 63 | 2.7 | 52 | 2.0 | 39 | 1.7 | 18 | 1.1 | 4 | 0.9 |

### AT FOREIGN CITIES.

| STATIONS. | JAN. | | FEB. | | MAR. | | APRIL. | | MAY. | | JUNE. | | JULY. | | AUG. | | SEPT. | | OCT. | | NOV. | | DEC. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. | T. | P. |
| Athens | 46 | 2.2 | 48 | 1.5 | 52 | 1.5 | 59 | 0.9 | 68 | 0.8 | 76 | 0.4 | 81 | 0.3 | 80 | 0.4 | 74 | 0.6 | 6 | 1.8 | 57 | 3.0 | 50 | 2.5 |
| Auckland | 67 | 2.4 | 67 | 3.1 | 66 | 2.7 | 61 | 3.1 | 57 | 4.6 | 54 | 5.0 | 52 | 5.1 | 52 | 4.3 | 54 | 3.7 | 57 | 3.5 | 60 | 3.4 | 64 | 2.8 |
| Belgrade | 29 | 1.1 | 34 | 1.3 | 43 | 1.8 | 52 | 2.2 | 62 | 2.8 | 67 | 3.1 | 72 | 2.8 | 70 | 1.8 | 63 | 1.7 | 45 | 2.4 | 43 | 1.7 | 34 | 1.6 |
| Berlin | 31 | 1.5 | 32 | 1.5 | 37 | 1.9 | 46 | 1.4 | 55 | 1.7 | 62 | 2.5 | 65 | 2.7 | 63 | 2.2 | 57 | 1.7 | 48 | 2.0 | 38 | 1.9 | 33 | 1.9 |
| Bordeaux | 41 | 2.8 | 43 | 2.3 | 47 | 2.5 | 53 | 2.6 | 58 | 2.9 | 64 | 3.2 | 68 | 2.0 | 68 | 2.2 | 64 | 2.6 | 55 | 3.7 | 47 | 3.7 | 41 | 2.9 |
| Brest | 44 | 3.3 | 44 | 3.0 | 46 | 2.2 | 51 | 2.1 | 55 | 1.9 | 60 | 2.0 | 64 | 2.1 | 64 | 2.1 | 61 | 3.1 | 54 | 3.6 | 48 | 3.8 | 45 | 3.2 |
| Brussels | 34 | 2.2 | 36 | 1.8 | 40 | 2.0 | 47 | 1.7 | 53 | 2.3 | 60 | 2.5 | 63 | 3.1 | 62 | 3.1 | 58 | 2.7 | 50 | 2.9 | 41 | 2.7 | 36 | 2.6 |
| Bucharest | 25 | 1.3 | 29 | 1.2 | 40 | 1.7 | 51 | 2.0 | 62 | 2.4 | 68 | 3.6 | 73 | 2.6 | 72 | 3.0 | 64 | 1.4 | 54 | 1.5 | 40 | 1.8 | 29 | 1.7 |
| Budapest | 28 | 1.5 | 32 | 1.1 | 40 | 1.9 | 51 | 2.0 | 60 | 2.4 | 67 | 2.7 | 70 | 2.0 | 68 | 2.1 | 61 | 2.0 | 51 | 2.2 | 39 | 2.2 | 31 | 2.1 |
| Buenos Ayres | 74 | 3.0 | 73 | 2.5 | 70 | 4.6 | 62 | 3.0 | 56 | 2.8 | 51 | 2.7 | 50 | 2.2 | 52 | 2.4 | 56 | 3.0 | 61 | 3.6 | 67 | 2.8 | 71 | 3.9 |
| Christiania | 24 | 1.2 | 24 | 0.9 | 30 | 1.1 | 40 | 1.1 | 51 | 1.7 | 60 | 2.0 | 63 | 3.3 | 61 | 2.9 | 53 | 3.0 | 42 | 2.6 | 32 | 1.9 | 26 | 1.3 |
| Constantinople | 41 | 3.4 | 41 | 2.7 | 46 | 2.4 | 53 | 1.7 | 62 | 1.2 | 70 | 1.3 | 74 | 1.1 | 74 | 1.7 | 68 | 2.0 | 62 | 2.5 | 53 | 4.0 | 46 | 4.8 |
| Copenhagen | 31 | 1.3 | 31 | 1.1 | 34 | 1.3 | 42 | 1.1 | 51 | 1.5 | 59 | 2.0 | 62 | 2.6 | 61 | 2.4 | 55 | 2.4 | 47 | 2.4 | 38 | 1.9 | 33 | 1.5 |
| Dublin | 42 | 2.1 | 42 | 1.9 | 43 | 2.0 | 47 | 2.0 | 52 | 2.1 | 58 | 2.0 | 60 | 2.6 | 59 | 3.1 | 56 | 3.1 | 49 | 2.9 | 45 | 2.6 | 42 | 2.3 |
| Edinburgh | 38 | 1.9 | 39 | 1.7 | 40 | 1.5 | 45 | 1.5 | 50 | 1.9 | 57 | 2.1 | 55 | 2.8 | 58 | 2.8 | 54 | 2.4 | 47 | 2.5 | 43 | 2.4 | 39 | 2.2 |
| Hamburg | 32 | 1.9 | 33 | 1.7 | 37 | 3.0 | 45 | 1.7 | 53 | 2.2 | 60 | 3.1 | 63 | 3.4 | 62 | 3.0 | 56 | 2.6 | 48 | 2.6 | 39 | 2.3 | 34 | 2.4 |
| Jerusalem | 45 | 6.5 | 47 | 5.0 | 51 | 4.1 | 59 | 1.6 | 67 | 0.2 | 70 | 0.0 | 73 | 0.0 | 73 | 0.0 | 70 | T. | 66 | 0.4 | 58 | 2.3 | 53 | 3.7 |
| Liege | 35 | 2.1 | 37 | 1.9 | 41 | 2.0 | 49 | 2.0 | 57 | 2.4 | 64 | 2.8 | 67 | 2.9 | 66 | 3.2 | 59 | 2.5 | 52 | 2.7 | 41 | 2.5 | 37 | 2.5 |
| Lille | 36 | 2.1 | 38 | 1.8 | 41 | 2.2 | 48 | 1.6 | 54 | 2.2 | 60 | 2.8 | 63 | 2.8 | 63 | 2.5 | 58 | 2.5 | 50 | 3.0 | 42 | 2.8 | 37 | 2.5 |
| Lima | 71 | T. | 73 | T. | 73 | T. | 70 | T. | 66 | T. | 62 | 0.2 | 61 | 0.3 | 61 | 0.5 | 61 | 0.5 | 62 | 0.1 | 66 | T. | 70 | T. |
| London | 38 | 2.0 | 40 | 1.6 | 42 | 1.7 | 48 | 1.7 | 54 | 1.9 | 60 | 2.2 | 63 | 2.4 | 62 | 2.4 | 58 | 2.4 | 50 | 2.7 | 43 | 2.3 | 39 | 2.1 |
| Lyons | 35 | 1.3 | 38 | 1.4 | 43 | 2.1 | 51 | 2.6 | 57 | 3.3 | 64 | 3.3 | 68 | 3.4 | 67 | 3.3 | 61 | 3.0 | 52 | 3.8 | 42 | 2.6 | 35 | 1.9 |
| Montevideo | 73 | 3.2 | 71 | 2.4 | 68 | 3.5 | 63 | 3.4 | 57 | 3.9 | 52 | 3.3 | 51 | 3.3 | 51 | 2.7 | 56 | 3.1 | 60 | 3.7 | 65 | 3.0 | 70 | 3.1 |
| Moscow | 12 | 1.1 | 15 | 0.9 | 23 | 1.2 | 38 | 1.5 | 54 | 1.9 | 59 | 2.0 | 66 | 2.8 | 60 | 2.9 | 51 | 2.2 | 38 | 1.4 | 28 | 1.6 | 17 | 1.5 |
| Naples | 47 | 3.4 | 49 | 2.8 | 51 | 3.0 | 57 | 2.4 | 64 | 1.9 | 71 | 1.3 | 75 | 0.7 | 76 | 1.2 | 71 | 2.8 | 63 | 4.3 | 54 | 4.8 | 49 | 4.3 |
| Ostend | 36 | 2.0 | 38 | 1.6 | 42 | 1.9 | 47 | 1.5 | 53 | 1.9 | 59 | 1.9 | 63 | 2.2 | 63 | 2.9 | 60 | 2.8 | 51 | 2.6 | 44 | 3.1 | 39 | 2.3 |
| Paris | 36 | 1.4 | 38 | 1.1 | 43 | 1.5 | 50 | 1.5 | 55 | 1.8 | 62 | 2.1 | 65 | 2.0 | 64 | 1.8 | 58 | 1.9 | 50 | 2.1 | 42 | 1.9 | 37 | 1.6 |
| Petrograd | 15 | 0.9 | 17 | 0.8 | 24 | 0.9 | 36 | 0.9 | 48 | 1.7 | 59 | 1.8 | 64 | 2.7 | 61 | 2.7 | 51 | 2.0 | 40 | 1.7 | 29 | 1.4 | 20 | 1.2 |
| Rome | 44 | 2.9 | 47 | 2.3 | 51 | 2.5 | 57 | 2.3 | 64 | 2.2 | 71 | 1.5 | 76 | 0.6 | 76 | 1.1 | 70 | 2.7 | 62 | 4.1 | 52 | 4.4 | 46 | 3.3 |
| Sofia | 27 | 1.5 | 30 | 1.4 | 39 | 1.5 | 50 | 2.0 | 59 | 3.4 | 65 | 3.2 | 69 | 2.7 | 68 | 2.1 | 61 | 1.9 | 52 | 2.4 | 40 | 1.9 | 31 | 1.4 |
| Stockholm | 27 | 0.8 | 26 | 0.7 | 29 | 0.8 | 38 | 0.9 | 47 | 1.4 | 57 | 1.4 | 62 | 2.3 | 60 | 2.4 | 53 | 1.8 | 43 | 2.0 | 35 | 1.4 | 28 | 1.1 |
| Sydney | 71 | 3.5 | 71 | 4.7 | 69 | 5.2 | 65 | 5.4 | 58 | 5.2 | 54 | 5.4 | 52 | 4.5 | 55 | 3.1 | 59 | 2.9 | 64 | 2.9 | 67 | 3.0 | 70 | 2.5 |
| Tokio | 37 | 2.0 | 38 | 2.0 | 44 | 3.3 | 54 | 5.3 | 62 | 5.9 | 69 | 5.3 | 75 | 5.6 | 78 | 4.6 | 72 | 7.5 | 61 | 7.2 | 50 | 4.3 | 41 | 2.3 |
| Trieste | 39 | 2.4 | 41 | 2.2 | 46 | 2.4 | 54 | 3.1 | 62 | 3.8 | 69 | 4.0 | 73 | 3.0 | 72 | 3.5 | 66 | 4.8 | 58 | 6.1 | 48 | 4.1 | 42 | 2.9 |
| Valencia | 45 | 1.3 | 45 | 1.2 | 46 | 1.5 | 48 | 1.5 | 52 | 1.7 | 56 | 0.8 | 58 | 0.5 | 59 | 0.4 | 56 | 3.0 | 52 | 3.3 | 48 | 2.0 | 45 | 1.9 |
| Valparaiso | 63 | | 64 | | 61 | 0.6 | 58 | 0.3 | 55 | 4.6 | 53 | 2.4 | 53 | 6.6 | 53 | 8.9 | 54 | 0.7 | 57 | 0.3 | 60 | 0.2 | 63 | 0.1 |
| Vienna | 29 | 1.3 | 32 | 1.5 | 39 | 2.0 | 49 | 2.0 | 57 | 2.8 | 64 | 2.8 | 67 | 2.6 | 66 | 2.7 | 59 | 1.7 | 50 | 2.0 | 38 | 1.9 | 31 | 1.9 |
| Vladivostok | 6 | 0.1 | 13 | 0.2 | 27 | 0.3 | 39 | 1.1 | 49 | 1.3 | 57 | 1.5 | 66 | 2.2 | 70 | 3.5 | 61 | 2.4 | 48 | 1.6 | 30 | 0.5 | 14 | 0.2 |
| Warsaw | 24 | 1.2 | 27 | 1.1 | 33 | 1.3 | 45 | 1.5 | 55 | 1.9 | 63 | 2.7 | 65 | 3.0 | 64 | 3.1 | 56 | 1.9 | 46 | 1.7 | 35 | 1.5 | 27 | 1.4 |

## VELOCITY OF WINDS IN THE UNITED STATES.

| STATIONS. | Average Hourly Velocity. | Highest Ever Reported. | STATIONS. | Average Hourly Velocity. | Highest Ever Reported. | STATIONS. | Average Hourly Velocity. | Highest Ever Reported. |
|---|---|---|---|---|---|---|---|---|
| | *Miles* | *Miles* | | *Miles* | *Miles* | | *Miles* | *Miles* |
| Abilene, Tex. | 10 | 66 | El Paso, Tex. | 10 | 78 | Philadelphia, Pa. | 10 | 75 |
| Albany, N. Y. | 8 | 70 | Fort Smith, Ark. | 8 | 74 | Pittsburgh, Pa. | 8 | 70 |
| Alpena, Mich. | 10 | 72 | Galveston, Tex. | 11 | 93 | Portland, Me. | 8 | 61 |
| Atlanta, Ga. | 10 | 66 | Havre, Mont. | 10 | 76 | Red Bluff, Cal. | 6 | 60 |
| Bismarck, N. D. | 10 | 74 | Helena, Mont. | 7 | 70 | Rochester, N. Y. | 8 | 78 |
| Boise, Idaho. | 5 | 55 | Huron, S. D. | 12 | 72 | St. Louis, Mo. | 11 | 80 |
| Boston, Mass. | 11 | 72 | Jacksonville, Fla. | 8 | 75 | St. Paul, Minn. | 9 | 102 |
| Buffalo, N. Y. | 14 | 96 | Keokuk, Iowa. | 8 | 63 | St. Vincent, Minn.* | 9 | 72 |
| Charlotte, N. C. | 7 | 72 | Knoxville, Tenn. | 6 | 84 | Salt Lake City, Utah. | 6 | 68 |
| Chattanooga, Tenn. | 6 | 66 | Leavenworth, Kan.* | 7 | 66 | San Diego, Cal. | 6 | 54 |
| Chicago, Ill. | 16 | 84 | Louisville, Ky. | 8 | 74 | San Francisco, Cal. | 10 | 64 |
| Cincinnati, Ohio. | 7 | 59 | Lynchburg, Va. | 4 | 63 | Santa Fe, N. M. | 7 | 53 |
| Cleveland, Ohio. | 14 | 73 | Memphis, Tenn. | 9 | 75 | Savannah, Ga. | 8 | 88 |
| Custer, Mont.* | 7 | 72 | Montgomery, Ala. | 6 | 54 | Spokane, Wash. | 6 | 52 |
| Denver, Col. | 8 | 75 | Nashville, Tenn. | 7 | 75 | Toledo, Ohio. | 11 | 84 |
| Detroit, Mich. | 11 | 87 | New Orleans, La. | 8 | 86 | Vicksburg, Miss. | 7 | 62 |
| Dodge City, Kan. | 11 | 75 | New York City, N. Y. | 12 | 96 | Washington, D. C. | 7 | 68 |
| Dubuque, Iowa. | 7 | 60 | North Platte, Neb. | 9 | 96 | Wilmington, N. C. | 8 | 72 |
| Duluth, Minn. | 14 | 78 | Omaha, Neb. | 9 | 66 | | | |
| Eastport, Me. | 11 | 78 | Palestine, Tex. | 7 | 60 | | | |

* Stations discontinued.

## STANDARD TABLE SHOWING VELOCITY AND FORCE OF WINDS.

| DESCRIPTION. | Miles Per Hour. | Feet Per Minute. | Feet Per Second. | Force in Lbs. Per Square Foot. | DESCRIPTION. | Miles Per Hour. | Feet Per Minute. | Feet Per Second. | Force in Lbs. Per Square Foot. |
|---|---|---|---|---|---|---|---|---|---|
| Calm | 1 | 88 | 1.47 | .004 | Strong breeze | 30 | 2,640 | 44.0 | 3.600 |
| | 2 | 176 | 2.93 | .016 | | 35 | 3,080 | 51.3 | 4.900 |
| | 3 | 264 | 4.4 | .036 | Moderate gale | 40 | 3,520 | 58.6 | 6.400 |
| Light air | 4 | 352 | 5.87 | .064 | Fresh gale | 45 | 3,960 | 66.0 | 8.100 |
| | 5 | 440 | 7.33 | .100 | Strong gale | 50 | 4,400 | 73.3 | 10.000 |
| Light breeze | 10 | 880 | 14.67 | .400 | Whole gale | 60 | 5,280 | 88.0 | 14.400 |
| Gentle breeze | 15 | 1,320 | 22.0 | .900 | Storm | 70 | 6,160 | 102.7 | 19.600 |
| | 20 | 1,760 | 29.3 | 1.600 | Hurricane | 80 | 7,040 | 117.3 | 25.600 |
| Moderate breeze | 25 | 2,200 | 36.6 | 2.500 | | 100 | 8,800 | 146.6 | 40.000 |

## MARCH THE WETTEST, SEPTEMBER THE DRYEST, MONTH.

(Number of times that each month has stood in each order of dryness, for 38 years, 1868 to 1905, inclusive. Computed from natural flow of Croton River, N. Y., at New Croton Dam.)

| DRYEST. | | SECOND. | | THIRD. | | FOURTH. | | FIFTH. | | SIXTH. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Month. | No. | Month. | No. | Month. | No. | Month. | No. | Month. | No. | Month. | No. |
| September | 11 | September | 9 | July | 8 | June | 11 | June | 11 | November | 11 |
| July | 10 | August | 9 | October | 7 | August | 8 | May | 6 | December | 7 |
| August | 7 | July | 9 | September | 5 | July | 6 | October | 5 | May | 5 |
| October | 4 | October | 4 | June | 5 | October | 6 | September | 4 | January | 4 |
| May | 2 | June | 4 | August | 4 | November | 3 | November | 3 | February | 2 |
| February | 2 | November | 2 | November | 4 | April | 1 | April | 2 | April | 2 |
| June | 2 | January | 1 | January | 2 | May | 1 | August | 2 | June | 2 |
| | | | | December | 2 | September | 1 | January | 1 | September | 2 |
| | | | | May | 1 | December | 1 | February | 1 | October | 2 |
| | | | | | | | | March | 1 | August | 1 |
| | | | | | | | | July | 1 | | |
| | | | | | | | | December | 1 | | |

| SEVENTH. | | EIGHTH. | | NINTH. | | TENTH. | | ELEVENTH. | | WETTEST. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Month. | No. | Month. | No. | Month. | No. | Month. | No. | Month. | No. | Month. | No. |
| May | 7 | May | 9 | January | 8 | January | 8 | March | 12 | March | 13 |
| November | 6 | April | 6 | April | 8 | February | 8 | February | 7 | February | 8 |
| January | 4 | January | 4 | December | 7 | December | 7 | April | 6 | April | 7 |
| July | 4 | February | 4 | March | 5 | April | 5 | November | 3 | January | 5 |
| October | 4 | December | 4 | February | 3 | March | 4 | December | 3 | November | 2 |
| December | 4 | October | 3 | May | 3 | November | 2 | May | 2 | December | 2 |
| February | 3 | March | 2 | August | 1 | May | 1 | August | 2 | May | 1 |
| June | 2 | August | 2 | September | 1 | August | 1 | January | 1 | | |
| March | 1 | September | 2 | October | 1 | September | 1 | September | 1 | | |
| April | 1 | June | 1 | November | 1 | October | 1 | October | 1 | | |
| August | 1 | November | 1 | | | | | | | | |
| September | 1 | | | | | | | | | | |

## THE MEANING OF "1 INCH OF RAIN."

An acre of ground contains 43,560 square feet. Consequently, a rainfall of 1 inch over 1 acre of ground would mean a total of $43{,}560 \times 144$, or 6,272,640 cubic inches of water. This is equivalent to 3,630 cubic feet. As a cubic foot of pure water weighs about 62.4 pounds, the exact amount varying slightly with the density, it follows that the weight of a uniform coating of 1 inch of rain over 1 acre of surface would be $3{,}630 \times 62.4 = 226{,}512$ pounds, or 113¼ short tons.

The weight of 1 United States gallon of pure water is 8.345 pounds. Consequently a rainfall of 1 inch over 1 acre of ground would mean $226{,}512 \div 8.345 = 27{,}143$ gallons of water on the acre. This is equivalent to 603 barrels of 45 gallons each, and would be sufficient to fill a tank or pool about 20 feet square and 9 feet in depth.

A rainfall of 1 inch on a roof of 3,000 square feet capacity would mean a total volume of 432,000 cubic inches, or 250 cubic feet, available for the cistern (loss from splashing, etc., not considered). This is equal to 1,870 United States gallons, or about 41.5 barrels of 45 gallons each, enough to fill a cistern 8 feet in diameter to a depth of 4.97 feet.

# Record of the Year.

## Chronology, Dec. 12, 1921—Dec. 12, 1922.

### 1921—DECEMBER.

Dec. 12—At N. Y. City pleas of guilty to violation of the Sherman anti-trust law were entered in the Fed. Court by corporations and 10 individuals, members of the Nat. Terra Cotta Assoc.
—At Phoenix, Ariz., Roy Gardner pleaded guilty in the U. S. Court to attempting to rob a mail car and got 25 years in a Federal penitentiary.
—4,000 meat employees struck at N. Y.
—Amer. 4-masted schooner, Blue Peter, was abandoned afire 100 miles off Uruguay.
Dec. 13—Delegates of the U. S., Britain, France and Japan signed, at Wash., D. C., 4-Power Pacific treaty, preserving for 10 yrs. status quo there.
—U. S. Rail Labor Board established 10-hour day for rail laborers.

### U. S.-HUNGARY PEACE PACT.

—Hungary ratified peace with the U. S.
—At Waco, Tex., "Curley" Hackney, white, accused of attack on girl, was taken from jail and hanged.
—Iowa Supreme Court ruled women may be jurors.
—100 died when the Siguranzia Palace, Bessarabia, was bombed.
Dec. 14—Japanese Gov't, at Tokio, announced acceptance of the 5–5–3 naval armament ratio proposed by U. S.
—Marshal Foch and ex-Premier Viviani left N. Y. for France.
—At Toledo, O., Charles Schultz, convicted of conspiracy in connection with the $1,000,000 Post Office robbery there Jan. 17 last, pleaded guilty to robbery and was sentenced to 40 years in the penitentiary. James Sansome pleaded guilty to the robbery charge and was sentenced to 39 years and one day. Father Anthony Gorek, of New Chicago, Ind., who confessed he received $87,000 of bonds from Wanda Urbavtis, was sentenced to one hour in the custody of the U. S. Marshal.
—250 Filipinos were drowned by tidal wave, Island of Negros.
Dec. 15—Peeler Clayton, stockman, was shot to death at Austin, Tex., by alleged Ku Klux men.
—J. A. Elston of Berkeley, Cal., Rep. in Congress from Sixth District of that State, committed suicide by drowning in Potomac River.
—Jos. Carroll, John Smith, and C. G. Sims were killed by masked men, Wilson, Okla.

### IRISH PEACE TREATY RATIFIED.

Dec. 16—British Parliament ratified Irish treaty.
Dec. 17—At Welch, W. Va., Detective C. E. Lively, "Buster" Pence and William Salters, charged with the killing of Ed Chambers, of Matewan, at Welch last August, were freed by a jury.
—U. S. House passed bill for $20,000,000 Russian famine relief; Senate passed it Dec. 20, President signed Dec. 23.
Dec. 18—Hungary and the U. S. exchanged peace ratifications at Budapest.
Dec. 19—Many were killed or wounded in revolution at Lisbon.
—$200,000 fire destoryed 4 hangars at Langley Field, Newport News, Va.
—A court of 3 Fed. Judges, at San Francisco, upheld Calif. anti-alien land law.
Dec. 20—G. H. Taylor, of Phil., told U. S. Senate committee, at Wash., he saw 12 Amer. soldiers hanged in one camp in France (Is-sur-Tille).
—At Montross, Va., R. D. Eastlake, ex-navy officer, charged with murder of his wife at Colonial Beach, Va., Sept. 30, last, was found not guilty by a jury.
Dec. 21—Rev. Caleb R. Stetson was inducted rector of old Trinity P. E. ch., N. Y.—the 12th pastor in 221 years.
—At Leipsic, Dr. Traugott von Jagow, former Berlin Police Commissioner, was sentenced to five years' imprisonment for part in Kapp revolt of March, 1920. Baron von Wangenheim and Dr. Schiele were acquitted.
—5 were killed when Orient express hit rear of local train at Sandona de Piave, Italy.
Dec. 22—The Irish Parliament adjourned to Jan. 3.
—Congress adjourned to Jan. 3.
—Colombian Congress ratified treaty with U. S., settling for $25,000,000 Colombia's Panama claims.
Dec. 23—President Harding pardoned 5 soldiers and commuted, to end on Christmas Day, the sentences of 24, including Eugene V. Debs, who were convicted under the Espionage Act. The soldiers, sentenced at Coblenz for life for the killing of an ex-British officer, are: Carl J. Bryan, J. A. O'Dell, Roy Youngblood, Geo. Van Gilder, and J. B. Richardson. Those commuted besides Debs were: Chas. Ashleigh, Orville Anderson, Giovanni Baldazzi, D. T. Blodgett, Thos. Carey, J. T. Cumbie, J. M. Coldwell, Claus Freese, W. G. Head, Gus. H. Jacobsen, Mrs. I. Kennedy, J. L. Murphy, Walter Phillips, Jose Prado, Mojick Fieron, Wilh. Schumann, A. J. Schur, M. L. Snitkin, A. J. Stopa, H. L. Trelease, Ed. Hamilton, Jack Law, A. B. Prashner; at Ellis Island, 1,100 aliens held for deportation, were freed.
—At Toledo, Geo. Rogers (Lewis), alleged postal robber, got 67-year sentence.
Dec. 24—Anti-British outbreaks continue in Egypt. Among those killed at Cairo was "Prof. Jean Orth," who claimed to be the Austrian Archduke who vanished in 1890.
—Judge Thayer, at Braintree, Mass., denied new trial to Nicolo Sacco and Bartholomeo Vanzettie for the murder of Fred'k A. Parmenter and his guard, Alessandro Berardelli, April, 1920.
—Canada opened the Chippewa-Queenston Power Canal.

### EGYPTIAN NATIONALISTS' OUTBREAK.

Dec. 25—Egyptian outbreak reaches Port Said.
Dec. 26—All-Russian Soviet Congress is in session at Moscow.
—E. V. Debs called on Atty. Gen. Daugherty and Pres. Harding at Washington.
—Troops killed 5 at Cairo, Egypt; 3 at Suez and Port Said.
—Manuel Head, slayer of W. H. Decker, was lynched at Key West, Fla.
—Gen. Francisco Reyna, rebel leader, was executed at Nogales, Mex.
—Philippe Berthelot, permanent French Under-Sec. for Foreign Affairs, resigned.
Dec. 27—Lithuania rejects League of Nations' offer to settle Polish dispute over Vilna.
Dec. 28—Ex-Pres. Wilson, on 65th birthday, received 1,000 messages from all over world.
—Mrs. Edith (Rockefeller) McCormick got divorce, at Chicago, from Harold F. McCormick, on ground of desertion. She later bought from him, for $3,000,000, their homes on Lake Shore Drive, Chicago, and at Lake Forest Ill.
—Lieuts. S. H. Davis and W. G. Sinclair died in airplane fall near Arcadia, Fla.
—The ninth All-Russia Soviet Congress, at Moscow, re-elected Nikolai Lenin as President of the Council of People's Commissars, with M. Kalinin as President of the Executive Committee.
Dec. 29—Bank robbers killed cashier J. B. Moore and clerk Siegfried Butz at Pearl River, N. Y.
—At Waukegan, Ill., Gov. Len Small was freed of every charge against him except that of conspiring with Lieut. Gov. Sterling and Vernon Curtis to defraud the State of $2,000,000 during Sterling's term as State Treas.
—N. Y. Board of Regents voted medical license to Prof. Adolf Lorenz of Vienna.
—The Bank of Discount suspended at Rome.
Dec. 30—Two were killed, 40 hurt, in rear-end collision on "L," 9th Ave. and 40th St., N. Y.
—Pres. Harding granted a pardon to J. H. Dierks, ex-banker, of Cincinnati, convicted under the Espionage Act during the war, to become effective on New Year's Day.
—Said Zaghlul Pasha, Egyptian Nationalist leader, and 5 others, were exiled to Ceylon.
—The French evacuated Aintab.
—10 died at N. Y. from Christmas wood alcohol "booze."

### SENATOR PENROSE DIES.

Dec. 31—U. S. Senator Boies Penrose, 61, died at his home, Wash., D. C.
—Fire destroyed, at N. Y., P. E. Ch. of Zion and St. Timothy, on W. 57th St.
—At N. Y. the Supreme Court dismissed the indictment against W. H. Childs, treas. of the Mitchel campaign fund in 1917, accused of failing to file a proper report with the Sec. of State. He also dismissed the indictments against former State Senator J. T. Newcomb and former Gov. Sulzer. The indictments were based on the failure of Treas. Childs to include in his report payments of $5,000 each to Sulzer and Misha Appelbaum for campaign speeches.

Dec. 31—75 shops at N. Y. locked out 1,500 photo-engravers. Lockout and strike ended Jan. 11, 1922.

## 1922—JANUARY.

Jan. 1—Deaths at N. Y. and vicinity from holiday wood alcohol drinking now total 28.
—Far Eastern (Chita) Republic's delegation at Washington charged that Japan and France have made secret pact as to Russia. The French delegation, on Jan. 2, made denial.
—Steamship Hudson (Capt. A. B. Randall) rescued off Grand Banks, 6 men from sinking schooner Reine des Mers.
Jan. 2—Failure of Miss Mary L. Baker to appear at 4th Presby. Church, Chicago, caused calling off her marriage to Allister McCormick.
—Prince of Wales was welcomed at Rangoon, India.
—Mayor J. F. Hylan was inaugurated for second term at N. Y.
—Earthquake caused flood in Gatun Lake, Panama Canal.
—Blind Miss Doris Belanger, 21, recovered sight at Salvation Army meeting, Holyoke, Mass.
—U. S. put its "peace" silver dollar in circulation.

### TURKEY-UKRAINIA PEACE PACT.

—Turkish Nationalist Gov't and Ukrainia signed treaty of friendship.
Jan. 3—5-cent bread loaf goes on sale at N. Y.
—Lieuts. Frank Sloman and E. C. Herseman, died in airplane fall, Pensacola, Fla.
—Wilhelm Voight, "Captain of Koepenick," died, it is reported, at Luxemburg.
Jan. 4—The Dail Eireann made public De Valera's substitute for the Irish-British treaty.
—Tokio central post office was destroyed by fire.
—Hangman's caps were on bodies of some Amer. soldiers sent home from France, it was testified to Senate Committee, Wash., D. C.
—Leopold Burckhardt, rich recluse, was slain at Cincinnati.
Jan. 5—Police detectives Wm. A. Miller and Francis J. Buckley were shot to death at N. Y by Negro, Luther Boddy, who was caught at Phila., Jan. 9; convicted Jan. 30 of murder; electrocuted Aug. 31.
—Prince of Wales reached Mandalay.
—Fire made 2,000 homeless at West Hartlepool, England.
—Emma Goldman and Alexander Berkman reached Stockholm from Riga, via Reval.
—Major H. L. Opie denied to Senate committee that he snot any man in his command in France. Herbert L. Cadenhead of Greenville, Miss., declared he saw ten or eleven soldiers hanged around Is-sur-Tille, France, while War Department records showed only two executions at that place.
—John Soffel, President of the Maywood, Ill., State Bank, was shot and killed and Louis Sweeney, Chief of Police and Arthur Benson, a bank messenger, were wounded when five bandits robbed them of a $12,000 payroll.
—Geo. Gares, 49, was found guilty, New Brunswick, N. J., of murdering Theresa Kucharski, 5, on Dec. 22, 1921.
—Vincent Trescoli, of N. Y., was slain at Montreal.
—Sir Ernest Shackleton, the British explorer, died on board the steamship Quest on which he was making another expedition into the Antarctic. Death was due to angina pectoris and occurred when the Quest was off the Gritzicken Station.
Jan. 6—Eamon De Valera tendered the Dail Eireann his resignation as President; then he agreed to suspend it pending vote on treaty with Britain.
—61 harbor tugs were tied up by strike at N. Y.
—Lockwood Legis. Committee, at N. Y., was told General Electric Co. has light-bulb monopoly.
—Body of Raoul Delorme, Ottawa, university student and half-brother of Father Abelard Delorme, was found in Montreal, slain.

### DE VALERA RESIGNS.

Jan. 7—The Dail Eireann, Dublin, ratified peace treaty with Britain by 64 to 57; and Pres. De Valera's resignation became effective.
—Prince J. K. Kalanianaole, Hawaiian delegate in U. S. House, died at Honolulu.
Jan. 8—Chas. and Hamilton Garland accept, it is stated, $1,000,000 legacy to each from father, Jas. A. Garland, of Boston, which they declined year ago.
—Frank H. Nobbe, one of the four convicted heads of the Tile Trust at N. Y., was released from the Essex Co. prison because of pulmonary hemorrhage.
Jan. 9—The Dail Eireann, 60 to 58, defeated Eamon De Valera's re-election as Pres. of the Irish Republic. His Cabinet went out of office.
—Senator T. H. Newberry, of Mich., denied on floor of Senate that he solicited or expended any money in his campaign (1918).
—Landslide destroyed cathedral and many homes and lives, San Fratello, Italy.
Jan. 10—Ex-Premier Marquis Okuma died at Tokio.
—Dail Eireann, by 64 votes, elected Arthur Griffith as President. The opposition walked out before the ballot.
—Berlin started "lightning wireless" service with Hamburg.
—Council of the League of Nations met at Geneva.
—6 men died at Hoboken from wood alcohol; 4 more died by Jan. 12.
—Testimony, which was denied, was before U. S. Senate committee to effect Major H. L. Opie shot American soldiers in France.
—Bombing was resumed by terrorists at Belfast.
—Fire destroyed Blackstone (Va.) College for Young Women.
Jan. 11—New York, north, the Atlantic Coast, and thence to Great Lakes, were swept by gale of snow, rain and sleet; 4 died at N. Y., 10 elsewhere; great damage to property and vessels.
—Before a Senate committee at Washington the photograph of a gallows on which, Senator Watson of Georgia was told by a former soldier, many men had been hanged, was identified by Col. C. J. Symonds as one he ordered erected. Only one man was executed on it, he said, and the hanging was secret, after the man had been duly tried for murder.
—The Montana Supreme Court declared unconstitutional the Bachelor Tax Law passed by the last Legislature and the Poll Tax Law, which has been in force for more than 21 years. The poll tax included all male persons from 21 to 60 years of age. The bachelors' tax was imposed on all males more than 21 years old who were not heads of families.
—U. S. Army transport Crook, Antwerp for N. Y., sprung a leak 450 miles east of Sandy Hook; she reached N. Y. Jan. 14.
Jan. 12—The French Premier, Aristide Briand, and his Cabinet resigned when Chamber of Deputies refused a hearing of his explanation of his negotiations with Lloyd George at Cannes.
—U. S. Senate, 46 to 41, decided T. H. Newberry of Mich., is entitled to his seat.
—King George of Britain granted amnesty to all political Irish prisoners (about 1,000), charged with offenses prior to July 11, 1921.
—Poland and Lithuania notified Council of League of Nations they will not accept League's Vilna decision including Jan. 8, 1922, plebiscite.
—Col. S. V. Horn told U. S. Senate committee only 2 hangings, after court martial sentence, occurred at Is-sur-Tille, France, March-July, 1919.
—"Wide open" oil town, Mexia, Tex., was put under martial law.
Jan. 13—Allied Supreme Council granted Germany moratorium on reparations; meantime paying 31 million marks every 10 days.
—2 were killed in riots at reception to Prince of Wales, Madras.
—William Hoey, 23, was convicted at N. Y., of murder in 2d degree for death of policeman D. J. Neville, Aug. 27, 1921, in a "Hell's Kitchen" junk yard; he got 20-year sentence.

### IRISH FREE STATE STARTS.

Jan. 14—At Dublin the Irish Free State was formally set up at 11.20 A. M., when the House of Commons of the Southern Parliament unanimously adopted resolutions establishing a Provisional Government, headed by Michael Collins. The process of taking over control from the British authorities will begin at once. Eamon De Valera and his colleagues were not present; only 65 members met in the Mansion House for the first and last meeting of the Southern Parliament. The treaty with Britain was unanimously adopted. A ban was put on the proposed railway strike.
—Fire destroyed main building of Blackstone (Va.) Military Academy.
—Andrew Braunn, ex-service man, killed self at U. S. Veterans' Bur., Wash., while waiting to have pension claim adjusted.
—At Frankfort, Germany, Dr. Paul Kappelmeier, a chemist, was sentenced to 9 mos. in jail and 50,000 marks fine for alleged attempted betrayal and sale of laboratory secrets to an American dye concern.
—Meat packers' strike at N. Y., begun Dec. 10, last, is over.
—Federal Prohibition Commissioner estimates number of drinkers reduced from 20,000,000 to 2,500,000.
—Flames swept Mexia, Tex.; loss, $250,000.
—"Ghosts" drove Alex. MacDonald and family from home at Caledonia Mills, Nova Scotia.
Jan. 15—At Washington, 5,000 marched from mass meeting of Woodrow Wilson Foundation to home of ex-President Wilson and cheered him. He said "There can be no doubt as to the vitality of the League of Nations."
—Chicago has closed, as uneconomic, its $2,700,000 municipal repair shop.

Jan. 16—The Provisional Government of the Irish Free State was formally installed at Dublin Castle.
—At N. Y., Policeman F. C. Brojer jr. was shot and killed when, in civilian attire, he descended a tenement stair on Columbus Ave., pulled the trigger of his revolver at Patrolman James J. O'Connell, and fell dying from a shot fired by O'Connell, who did not know Brojer nor identify him as a fellow policeman.
—Garment strike at N. Y., begun Nov. 14 last, ended.
—The jury trying Arthur C. Burch, at Los Angeles, for the alleged murder of J. B. Kennedy, Aug. 5, failed to agree.
—Henry Ford announced end of his fight against the "International Jew," in order to aim at elimination of gold as money basis.

CALIFORNIA ALIEN LAW VOID.

—U. S. Supreme Court (case of A. Basletta, Italian) held Calif. law against aliens inheriting property was void as conflicting with U. S.-Italy treaty.
—E. D. Dier & Co., brokers, failed, at N. Y.
Jan. 17—Sec. Hughes proposed to other powers an International Board of Reference at Peking, to maintain an open door to China.
—In a unanimous decision the N. Y. State Court of Appeals held that the Transit Commission Act, passed by the Legislature of 1921, was constitutional and that the Board of Estimate and Apportionment of New York City must hand over to the Transit Commission the sums it had asked for from the board, amounting to $360,895 and $1,083,327.
—U. S. Senate, 63 to 9, voted to increase Federal Reserve Board to 6, making room for a farmer.
—Negro, alleged slayer of white mail carrier, was lynched at Mayo, Fla.
—The Upper House of the Kentucky General Assembly passed a resolution, 21 to 14, condemning the action of U. S. Senators in voting to grant a seat to Senator Newberry of Michigan.
—War Department records, submitted to the Senate committee investigating charges that American soldiers had been hanged without trial in France, showed that in the case of two bodies dug up in the little cemetery at Bazailles the ropes and black caps in which the men had been put to death on the gallows had not been removed prior to burial.
Jan. 18—Lucien Muratore and wife (Lina Cavalieri) quit Chicago Opera Co.
—At Rome Maj. Gen. Henry T. Allen placed the U. S. Congressional Medal of Honor on the grave of Italy's unknown soldier.
—At Hamilton, Can., the Immigration Board ordered the deportation of Matthew Bullock, Negro, wanted in North Carolina in connection with race riots. An appeal was taken to the Ottawa Government, staying the execution of the deportation order.
Jan. 19—Pope Benedict is sick abed with a cold and fever.
—Frank Whalen, 31, Negro, of Bloomfield, N. J., prisoner at W. 123d St., N. Y., police station, seized pistol from patrolman Otto W. Motz's pocket, and killed Motz.
—Howard B. Bloomer, executor of estate of Horace E. Dodge, announced at Detroit that in May, 1920, Dodge paid $825,000 at N. Y. for a 5-strand pearl necklace he gave to his wife, and which is said to have belonged to Catherine II. of Russia. Mrs. Dodge gave the pearls to her daughter, Mrs. J. H. R. Cromwell.
—Lockwood legis. committee was told 10 landlords have figured in 10,000 rent cases at N. Y.,
—Geo. Messervy, treas. and gen. mgr. of the Timely Service Soc., was convicted in Gen. Sessions, N. Y., of getting money under false pretenses. 6 mos. sentence.
—British troops began evacuation of Ireland.
Jan. 20—Profiteering N. Y. landlords use dummy transfers of property to exact higher rents by showing courts false sales prices, Lockwood committee was told.
—Burglar-proof steel-container mail cars went in service on N. Y. Central Ry.
—800 workmen were injured in chocolate factory fire at Tempelhof, near Berlin.
Jan. 21—At Havana H. D. ("Curley") Brown, gen. mgr. of the Cuban-American Jockey Club, who was sentenced to three years' imprisonment for shooting and wounding Alberto Piedra, son-in-law of Juan Montalvo, former Sec. of State, in 1919, has received a pardon.
—Far-East Reds' Congress (China, Japan, Korea and Mongolia) met at Moscow.
—Miss Jacqueline Lebaudy, 16, daughter of late "Emperor of the Sahara," wed Roger Sudreau, in France.
—Emma Goldman and Alex. Berkman are at Stockholm.

POPE BENEDICT DIES.

Jan. 22—Pope Benedict XV. died of pneumonia, at 6 A. M., Rome time.
—James Viscount Bryce, ex-Ambassador to U. S., born 1838, died at Sidmouth, England.
—Dorothy Wardwell, 22, of Vermont, and Mabel Dixon, of Virginia, died at N. Y. of alleged drug poisoning.
Jan. 23—N. Y. police found in hollow bed-post, Brooklyn, all but 200 shares of the 1,300, worth $78,000, stolen Dec. 6 last from messenger of Thomson & McKinnon, brokers. Three men were arrested.
—The skull of Ambrose J. Melanson was broken in boxing bout with Jos. St. Hilaire, at Boston. He died next day. His opponent was exonerated by court.
Jan. 24—Prof. Irving Fisher of Yale announced at Berlin that no commercial process of making gold synthetically has been discovered.
—The N. Y. State Department of Farms and Markets' first radiophone market news for farmers to be sent out from N. Y. City was broadcast from the Westinghouse station in Newark.
—At Oklahoma City, Okla., five men, two of them Negroes, were sentenced to life imprisonment when they entered pleas of guilty to charges of complicity in the lynching of Jake Brooks, a Negro packing house worker, Jan. 14.
Jan. 25—Cuba asks U. S. to withdraw marines from Camaguey.
—192 cases of "flu" and 112 of pneumonia developed at N. Y.
Jan. 26—U. S. House, 230 to 119, passed Anti-Lynching Bill.
—Marshal Joffre of France is visiting Tokio.
—Canadian Govt. refused to deport from Hamilton Matthew Bullock, colored, wanted at Norlina, N. C., on charge of inciting to riot.
—The Turkish Govt. has banned the Y. M. C. A.
—Trade boycott is on between North and South Ireland.
Jan. 27—Robbers killed H. T. Moss, asst. cashier, 1st Nat. Bank, Grafton, Pa., and got $31,000, which they later abandoned.
—Casualty and surety companies make as high as 6,400 per cent. gross profit on premium rates in building trades, Lockwood committee heard at N. Y.
—Prince of Wales reached Hyderabad, India.

KNICKERBOCKER THEATRE DISASTER.

Jan. 28—The roof of the Knickerbocker (movie) Theatre, Columbia Road and 18th St., Washington, D. C., fell in under weight of snow, and 98 persons lost their lives. The snowstorm which exceeded 26 inches at Washington, covered, the Atlantic coast. Three large tobacco warehouses collapsed at Danville, Va. At New York there was a 3-inch snow fall, with a 50-mile gale; at Balto. the snow was 16½ inches deep.
—A band of robbers held up a bank messenger a few blocks from Police Headquarters in West Hoboken, N. J., frightened the messenger so that he dropped a bag containing $21,000 in currency, and escaped with the money in an automobile.
—Poland's Diet passed bill limiting alcohol in beer to 2½ per cent.
—Charred body of Drew Connor, white, was found wired between two pine trees at Bolinger, Ala.
—Packers' strike disorders put Nebraska City under martial law.
—Lockwood committee estimates shortage of 80,000 apartments in N. Y. City.
Jan. 29—"Flu" cases increased in N. Y. City.
Jan. 30—The Permanent International Court of Justice met in preliminary session at The Hague.
—Jury at N. Y. found Negro Luther Boddy, guilty of murder of police detective F. J. M. Buckley.
—New York City's loss on its docks and piers is $11,798,283 a year, according to a special report the Meyer committee submitted to the Legislature.
—Dr. Fridtjof Nansen, connected with relief in Russia, was quoted at London as saying starving people are eating dead human bodies in Russia, and in the Samara regions are beginning to kill one another.
Jan 31—812 new cases of "flu" and 186 of pneumonia were reported in one day in N. Y City.
—U. S. Senate passed, 39 to 26, bill authorizing refunding $11,000,000,000 foreign debt into securities maturing in not more than 25 years.
—Earthquake in Pacific, off Cal.-Oreg., shook West coast
—U. S., by joint Congress resolution, ended embargo on arms shipments to Mexico.

FEBRUARY.

Feb. 1—The Arms Conference at Washington, in plenary session, approved five-power (U. S, Britain, France, Italy, Japan) treaties, limiting capital fighting ships, and pledging against unrestricted submarine warfare and use of poison gas.
—Wilbur G. Voliva, overseer of Zion City, Ill., and head of Christian Apostolic Church, announces the world is a plane surrounded by ice; the sun is 40 miles in diameter and only 3,000 miles distant; the sky is a dome of solid matter from which sun, moon and stars hang like chandeliers.
—At Hartford, Conn., robbers got $77,300 from Dr. Eli Morgan.
—Negro accused of attacking white woman was lynched near Crystal Springs, Miss.
—Chas. Burrow, or Miller, Amer. ranch manager, was shot to death near Monterey, Mex.
Feb. 2—Cardinals of the Sacred College, sworn to secrecy, were bolted in at Vatican, preliminary to voting for new Pope.
—General railway strike began at Berlin and spread to Cassel and Chemnitz.
—N. J. Court of Errors and Appeals, 8 to 4, declared Van Ness State Prohibition Enforcement Act invalid.
—Princeton University notified parents autos are not needed by students.

W. D. TAYLOR SLAIN.

—William D. Taylor (William Deane Tanner?), chief director of the Famous Players-Lasky studio, Los Angeles, was killed by assassin.
—25 died in explosion at Frick coal mine, Gates, Pa.
—9 convicts died in explosion at Belle Ellen coal mine, near Birmingham, Ala.
—Edward R Shaughnessy, Second Assistant Postmaster General, died in Walter Reed Hospital, Washington, from injuries received when the roof of the Knickerbocker Theatre collapsed, Jan. 28.
Feb. 3—Four ballots at Vatican failed to elect a Pope.
—At The Hague the International Court of Justice, in private session, elected as President of the court Dr. B. T. C. Loder, a former member of the Dutch Supreme Court. He will hold office for three years.
—Jury (10 for conviction, 2 for acquittal), disagreed and was discharged at San Francisco, on 2d trial of Roscoe Arbuckle on manslaughter charge, due to death of Virginia Rappe, Sept., 1921.
—U. S. Senate passed La Follette resolution designed to prevent modification of the Federal Court decree requiring the "big five" meat packers to relinquish their unrelated lines of business.
—N. Y. Court of Appeals ruled N. Y. City may operate cars over the Williamsburg Bridge.
—Mrs. Marion Buckingham Ream Stephens and Anastase Andrevitch Vonsiatsky-Vonsiatsky were married in the Russian Cathedral of St. Nicholas at N. Y.
Feb. 4—Cardinals again balloted for Pope without conclusion, at Vatican.
—Arms Conference, at plenary session, at Washington, adopted two treaties, one continuing "open door" in China, the other providing for Chinese Tariff Commission and for abolishing "likin" or internal customs in China. Japan and China signed treaty transferring Kiaochow leased territory and the Shantung Railway to China.
—Soviet Russia takes power of execution from the "Cheka," or Veetcheka (the all-Russia Extraordinary Commission) and makes it a detective bureau.
—Mobs in India (Bengal) kill 17 police.
Feb. 5—57,000 public utility employees struck at Berlin, stopping light, water and trolley service.

CARDINAL RATTI ELECTED POPE.

Feb. 6—College of Cardinals elected, by 38 votes, as Pope, Achille Ratti, Archbishop of Milan (born May 30, 1857), and he addressed the public from the basilica balcony overlooking St. Peter's Square. No American Cardinals arrived in time to vote.
—At Washington, the Conference on the Limitation of Armament was ended after the signing of five of the treaties resulting from its work, with an address by President Harding. Secretary Hughes signed the treaties with the "Flagstaff penholder," made of woods from twenty-eight American States and decorated with the flags of twenty-eight nations, including those represented in the conference and several of the Allied Powers.
—Supreme Court at N. Y. signed order freeing Jos. Cohen of charge of murdering Barnet Baff, poulterer, Nov. 24, 1914.
Feb. 7—King George opened new session of British Parliament.
—German railway strike was called off.
—8 men were killed, 2 badly injured and 1 is missing as the result of explosion which wrecked mine of Marietta Coal Co., on Pond Creek, Pinson Fork, Ky.
—Poison gin kills 5 at Newark, N. J.
—5 were killed by fire at Lexington Hotel, Richmond, Va.
—U. S. Marines quit Camaguey, Cuba.
—Greek Govt. deposes Rev. Meletios Metaxakis, recently elected Patriarch of Constantinople.
Feb. 8—Sinn Feiners kidnap 100 men in Ulster and fight police; prominent men wounded in border counties.
—Fire burned part of roof of Treasury Building, Washington.
—The former U. S. Army transport, Northern Pacific, the fastest American troopship in the war, caught fire off Northeast End Lightship, twenty miles east of Cape May, N. J., and was destroyed. 4 of crew were lost.
—Herbert Mulloney, 24, who had shot policeman, leaped to death from City Hall, Chicago.
Feb. 9—4,000 Navy Yard workers lose jobs by President's order suspending work on battleships, as per treaty.
—Pres. Harding signed Foreign Debt Refunding Bill, authorizing a commission to adjust foreign obligations.
—Blizzard ties up Newfoundland.
—N. Y. Dist. Atty. is after bucket shops, which, he says, have got $50,000,000 from public in a year.
—Soviet Russia empowered the Minister of Justice to seize the wealth of all religious bodies and sects for famine relief.

ARMS TREATIES GO TO SENATE.

Feb. 10—Pres. Harding submitted in person to the Senate the Arms Conference treaties.
—Unauthorized rail strike ties up South of Ireland.
—At Paris, Frank J. Godsol, or Goldsoll, has been acquitted of charge (1918) of war graft.
Feb. 11—U. S. and Japan signed Yap treaty, at Washington.
—Bogus internal revenue stamps cheat Cuba of $10,000,000.
—Masked men lynched a Negro near Texarkana, Tex.
Feb. 12—Pius XI, the 261st Pope, was crowned at St. Peter's Church, Rome, which contained 60,000; later the Pontiff appeared on the balcony overlooking the square, with several Cardinals, and blessed 200,000 there gathered.
Feb. 13—U. S.-Jap. Yap treaty reached Senate.
—Thieves got $100,000 at Washington Hotel, St. Louis.
—25,000 cotton mill hands in N. Hamp., and 25,000 in R. Isl. struck against 20 per cent. wage cut.
Feb. 14—22 have been killed, 60 wounded, in street sniping at Belfast.
—Greek Church welcomes Pope's delegate at Constantinople (first time in 1,000 years).
—Gen. Antonio Pruneda was executed at Mexico City; Gen. Antonio Ruiz and Capt. L. Perez were executed at Chihuahua City.
—U. S. Court at N. Y. dissolved Sheet Metalware Exchange.
—Finnish Minister of Interior, Ritavouri, was assassinated at Helsingfors.
Feb. 15—Five inches of snow, followed by sleet, hampered N. Y. transit.
—The Permanent Court of International Justice began its first formal session in the Palace of Peace at The Hague.
—Employers in Denmark declared a general lockout, covering 150,000 hands.
—Italian Fascisti seize jail at Fiume.
Feb. 16—Pres. Harding urged Congress either to impose a sales tax to pay a soldiers' bonus, or else go slow.
—Belfast riot deaths now total 34.
—At N. Y., the jurors in the 2d trial of the contest of the will of Amos F. Eno gave a verdict breaking the will and wiping out bequests of $4,000,000 to Columbia University and $3,000,000 to other public institutions in that city.
—Jeremiah Haggerty, for 19 years a member of the N. Y. police force, was found guilty of murder in the 2d degree. He was indicted for killing Joseph Lazaro, a barber, Aug. 15, in the Bronx.
Feb. 17—At Mt. Ida, Ark., the Rev. Harding Hughes, 64, was convicted and sentenced to life imprisonment, charged with complicity in murder of Mrs. Anna McKennon.
—Theo. Marburg, jr., of Balto., accidentally blinded self at Magdalena, Mex. He died Feb. 24.
—Rev. A. L. Shelton, Amer. missionary, was killed by Chinese brigands at Batang.
Feb. 18—U. S. Dist. Judge Kenesaw M. Landis, Chicago, resigned, effective March 1, to devote time to overseeing baseball.
—Pope Pius agrees to amend Conclave constitution by extending to 15 days' time between death of next Pontiff and voting for successor. This will give the Amer. Cardinals time to reach Vatican.

Feb. 20—N. Y. Transit Commission's Bureau of Valuation formally estimated present value of transit lines in city at $465,680,154, excluding $22,000,000 non-operating property and $293,493,239 invested by the city under subway contracts 1 to 4 inclusive. The companies' own valuation of the properties, as carried on their books, is $791,450,839, irrespective of security issues.
—Robber got $22,000 from Greenwich Bank messenger, 7th Ave. and 19th St., N. Y.
—Pres. Harding received delegation of students representing 235 colleges, who presented report supporting Arms Conference treaties.
—R. Isl. State troops were sent to Pawtuxet Valley in textile strike.
—The League of Nations temporary mixed commission, which is to prepare a disarmament programme for the next Assembly meeting in Sept., began its work in Paris under the Presidency of Rene Viviani.
—Hotel Biltmore, N. Y., was run for a day by society women, for a charity.

AIRSHIP ROMA EXPLODES.

Feb. 21—34 died when the 410-foot Italian-built U. S. Army dirigible airship, Roma, holding over 1,000,000 cubic feet of hydrogen gas, exploded on hitting a high-tension electric wire when descending, in afternoon, at army base, Hampton, Va.; 3 of 11 survivors unhurt.
—Sinn Fein convention opened at Dublin.
—Strike sympathizer was shot to death and several were wounded by troops at Pawtucket, R. I.
—N. J. Assembly, 33 to 19, passed bill requiring health certificates for marriage license applicants.
—N. Y. Legislature approved development plan of N. Y. Port Authority.
—At Boston, the Sup. Ct. removed Joseph C. Pelletier from the office of Dist. Atty. of Suffolk County.
—U. S. Judge M. T. Manton, as arbitrator, gave the newspaper pressmen at N. Y. an 8-nour day instead of a 6.
Feb. 22—Rival Sinn Fein leaders agreed on 3-month truce, and convention at Dublin, and adjourned.
—U. S. Senate ratified extradition treaty with Costa Rica.
Feb. 23—7th incendiary fire in 10 days occurred at Trinity College, Hartford, Conn.
—Paul J. Gilman was slain in his drug store, Court St., Brooklyn.
—Structural weakness due to faulty design is held to account for the disaster to the dirigible R-38, which was destroyed at Hull, England, Aug. 25, 1921, with great loss of life. Findings just made public by the Aeronautical Research Committee state that on the third trial flight buckling of girders amidships revealed this weakness.
—Jerry Ruberto ("The Wolf") was slain in feud at N. Y.
—Jos. A. Voorhies, Asst. Mgr. Hotel Montague, Brooklyn, wounded Mgr. Jas. E. Grape and killed self when dismissed.
—Epileptic, falling unconscious in Wall St. district, N. Y., was robbed of $78,000.
Feb. 24—The firing upon several members of the Prince of Wales's party motoring from Delhi to Puttiala, India, is reported.
—Lawyer John T. Hettrick, convicted at N. Y. as a result of Lockwood committee's building trade inquiry, was discharged from the penitentiary on probation, then was arrested and bailed on a new indictment.
—At Arcadia, Fla., Sergt. Robert C. Washburn fell 3,000 feet to death attempting a parachute drop from an airplane.
—White Star liner Homeric reached N. Y. on maiden trip from England.
—At Waco, Tex., Miss Marcine Matthews, 17, shot and instantly killed J. S. Crosslin in the District Court.
—A quantity of dynamite, estimated at ten tons, at McCook, Ill., plant of Consumers' Ice Co., exploded, shaking Chicago, shattering glass within a radius of more than 5 miles and causing damage in excess of $1,000,000.
—Gov. Miller of N. Y. signed Port Authority Plan Act.
—Addie Comfort, kidnapped at Hawley, Pa., several years ago, was found at Syracuse, N. Y.
—At N. Y., John Grossman, a former confidential clerk of the National City Co., who stole $120,000 in bonds from that company, was sentenced to not less than three years and three months in prison.
—Cyclone on Zambesi River, at its mouth, at Chinde, on Indian Ocean, wrecked the town and shipping.

BLUEBEARD LANDRU GUILLOTINED.

Feb. 25—At Versailles, "Bluebeard" Henri Desire Landru was guillotined.
—Robbers at Brooklyn got $1,500 and shot fatally John F. Smith, Vice. Pres. Superior Meter Co.
—North coast of Europe is frozen up worse than for 25 years.
—At Trenton the Evans bill appropriating $1,000,000 for the development of the Port Authority plan in co-operation with the State of N. Y. was signed by Gov. Edwards.
—Prince of Wales reached Lahore, India.
Feb. 26—After a lapse of nearly 8 years the North German Lloyd house flag appeared in N. Y. Harbor, at the mainmast of the Seydlitz, which brought passengers and mail from Bremen after 15 days at sea. The ship was met at Quarantine by the police boat John F. Hylan with a band and 300 people on board waving American and German flags.
—Mayor Hylan returned to N. Y. from Fla. and signed bill amending the City Charter to make the tax rate for the entire city uniform by imposing on the city as a whole the county charges.
Feb. 27—The Steuben Society of America was founded at N. Y., at a mass meeting of 2,800 persons of German birth and descent, who hissed name of Wilson.
—Twice expelled from the Legislature in 1920, August Claessens, Socialist, was reseated in the N. Y. State Assembly in place of Murray Felenstein, Democrat, from the 17th Manhattan District. The vote was 131 to 5. A committee had decided after an investigation that Claessens was elected by a plurality of 453. He took his seat March 1.
—U. S. Supreme Court unanimously upheld Suffrage Amendment to the Fed. Constitution; also the authority of the Interstate Commerce Commission to fix State railroad passenger rates that discriminate against interstate commerce; the court, by majority, invalidated No. Dak. law regulating grain inspection and purchase.
—Surrogate Foley, at N. Y., set aside jury's verdict that Amos F. Eno was not competent when he made his will on June 18, 1915, leaving millions to institutions.
—At Brussels, Hugh S. Gibson, U. S. Minister to Poland, wed Miss Ynes M. Reyntiens, daughter of a former Belgian court official.
—Boston Jews asked Mass. Legis. to remove from the Public Library John S. Sargent's painting "The Synagogue."
—Lloyd George wrote to Austen Chamberlain threatening to resign owing to lack of Coalition support. Thereupon the Unionist leaders agreed to back him up.

PRINCESS MARY WEDS LASCELLES.

Feb. 28—Princess Mary, only daughter of the King and Queen of Great Britain, was married at Westminster Abbey, London, to Viscount Lascelles, 39, son of the Earl and Countess of Harewood.
—British Premier announced in House of Commons conclusion of British protectorate over Egypt and creation of Egypt as an independent sovereign state.
—Appearing in person before the Senate and House in joint session, Pres. Harding outlined the Administration's programme for the establishment of an American merchant marine along lines which would cause changes in existing laws. A bill prepared by the U. S. Shipping Board to carry the recommendations into effect was introduced in both Senate and House.
—Striking pressmen at N. Y. caused morning papers of March 1 to appear as 8-page sheets. Outlaw strike lasted a few hours.
—At N. Y., Fed. Judge Learned Hand signed the consent decree establishing new working conditions for the Bricklayers, Masons and Plasterers' International Union which had been agreed upon in Washington.
—Radio Conference at Washington ended open sessions.
—Japanese Diet, 243 to 147, rejected Universal Suffrage Bill.
—U. S. Secret Service men, at N. Y., found and confiscated $65,000 of $20 Fed. note counterfeits and arrested 5 men.
—N. Y. Assembly extended life of Lockwood Housing Committee to Feb. 1, 1923.

MARCH.

March 1—U. S. Senate, 67 to 22, ratified U. S.-Japan Yap treaty.
—The Runyon 1920 law exempting from taxes for 5 years homes erected between Oct. 1, 1920, and Oct. 1, 1922, was set aside by the N. J. Supreme Court as unconstitutional.

U. S.-COLOMBIA PACT RATIFIED.

March 1—Ratifications of the U. S.-Colombia treaty over Panama were exchanged at Bogota.
—Cyclone destroyed seaport of Chinde, Portuguese E. Africa, killing many.
—Hundreds view Gainsborough's "Blue Boy" painting at N. Y.
March 2—British House of Lords admits its first woman member, Viscountess Rhondda, daughter of the late war time Food Controller. She is known as "the Coal Queen."
—Geo. McCormick, 21, slayer of Edw. Shannon, at N. Y., was executed at Sing Sing.
—How some Supervisors of N. Y. City's open public markets, said in most cases to be Tammany district captains, collect upward of $600,000 annually from poor pushcart peddlers and divide with their lieutenants without turning one dollar into the City Treasury, and how this practice now threatens to deprive the city of upward of $100,000 collected from these merchants annually by the Department of Licenses, was uncovered by The World.
March 3—Comatose and strapped in a chair, Harvey Church, slayer of 2 auto salesmen, was hanged at Chicago penitentiary.
—16 motor bus passengers died in collision with train, Painesville, O.
—Fire destroyed City Hall, Montreal.
—N. Y. Pub. Service Comm. ordered (as of April 1) cut in phone rates, 5 per cent. in N. Y. City, 7 per cent. outside.
—Robber, at Dublin, killed Max Green, Chairman of the Irish Prisons Board, and son-in-law of late John Redmond.
—At Hamilton, Ont., Judge Snider released Matthew Bullock, Amer. Negro, who was held at the request of U. S. authorities for extradition to Norlina, N. C.
—Acute jaundice is epidemic in N. Y. State.
March 4—Prize fighting was legalized in Cuba, under a boxing commission.
—N. Y. Court of Appeals rules Housing Law is not retroactive.
—Securities valued at $190,000 are missing from the fund of the Dr. Thomas W. Evans Dental School and Museum of the Uni. of Penn.
March 5—Alex. Matherne, Amer. citizen, was slain at Los Narangos, Mex.
March 6—The N. Y. State Law of 1906, which provided that gas should be furnished to consumers in N. Y. City at a price not in excess of 80 cents per 1,000 cubic feet, was declared by the U. S. Supreme Court to be confiscatory as to gas furnished during 1918 and 1919. It held that "rate making is no function of the courts and should not be attempted either directly or indirectly." Brooklyn Union Gas case was similarly decided March 13.
—Max Engel, N. Y. lace merchant, was killed by discharged employee.
—N. Y. State Assembly, 78 to 58, killed bill to restore direct primaries for State officers.
—Pres. Harding, in proclamation, forbids shipments from U. S. to China of arms or munitions (as per Congress joint resol. of Jan. 31, 1922).
—N. J. Senate, 12 to 4, ratified Fed. Prohib. Amendment.
March 7—At Managua, Nicaragua, 26 Amer. Marines got prison sentences for killing native police on Dec. 8, 1921.
March 8—Declaring the proposed Genoa Conference of April 10 political rather than economic, Sec. of State Hughes notified Italy the U. S. could not participate.
—Pres. Harding left Washington for St. Augustine, Fla., for week's vacation.
—Irish Free State Bill passed 3d reading in Brit. Commons, 295 to 52.
—N. J. Assembly, 29 to 27, rejected Fed. Prohib. amend't, but vote was reconsidered.
—Indian Gov't urged Brit. Gov't to revise Sevres Treaty, by leaving Constantinople, by giving Sultan of Turkey suzerainty over the holy places, and by restoring Thrace to Turkey.
—108-mile gale swept England, cutting off wire communication with Continent.
March 9—E. S. Montagu, British Sec. of State for India, resigned.
—N. J. Assembly, 33 to 24, ratified Fed. Prohib. Amend't.
—French Chamber of Deputies repealed daylight saving, effective in 1923.

EVOLUTION WINS IN KENTUCKY.

—The Anti-Evolutionists lost their legislative fight in Kentucky when the House of Representatives turned down their bill by a vote of 42 to 41. This marked the close of a contest that began Jan. 23 following an address by William J. Bryan, before the Legislature, in which he attacked evolution as synonymous with atheism.
—At N. Y., Police Detective Jeremiah H. Haggerty, who shot and killed a man carrying a can of wine in the Bronx last August, after attempting to extort money from him and a companion, was sentenced to from twenty years to life in Sing Sing, by Bronx County Court.
March 10—Mohandas K. Gandhi, Indian Non-Co-operationist leader, has been arrested by the Brit. Gov't of India at Ahmedabad, on a charge of sedition. This was followed by general strikes at Bombay, Calcutta and elsewhere.
—Mrs. Mary Sanger, birth control advocate, landed at Yokohama. Her writings were confiscated by customs men, and she was pledged to address no meetings in Japan.
—80 were killed, several hundred wounded in mine strike riots in Rand diamond dist., So. Africa.
—Showman John T. Brunen was assassinated at home, Riverside, N. J.
March 11—Brit. employers locked out 300,000 members Amalg. Engineering Union.
—Free State and Republican forces evacuated Limerick, by mutual agreement.
—Bomb exploded in garden of U. S. Legation, Sofia, Bulgaria.
—Masked Ku Kluxers killed J. B. Culpepper, Wisner, La.
March 12—Gov't troops bomb syndicalist strikers and Reds in Rand dist., South Africa, and capture 1,500 revolutionaries.
—Prelates marched in first religious procession in Rome for 52 years; it was 300th anniv. of canonization of St. Philip Neri.
—Robbers killed Sam'l Hadan, Columbia Univ. student, at N. Y.
March 13—U. S. Supreme Court ruled Interstate Commerce Commission cannot authorize or compel abandonment of a strictly State railroad.
March 14—U. S. Senate, 50 to 27 and 55 to 30, rejected Walsh and Robinson amendments to 4-Power Treaty Bill.

"GHOST" IN NOVA SCOTIA.

March 15—Dr. Walter F. Prince, of N. Y., Sec. of Amer. Inst. for Psychic Research, concluded investigation of "ghosts" at farm house of Alex MacDonald, Caledonia Mills, Nova Scotia. He attributed the manifestations to supernatural agencies working through the farmer's 15-yr. old foster daughter.
—Civilian killed Policeman John H. McMail, Brooklyn, and was shot and captured.
—U. S. Senate rejected, 50 to 28, amendment to 4-Power Treaty, and adopted a resolution extending for 25 years the $50,000,000 advanced for the relief of Austria.
—$5,000,000 fire at Chicago destroyed block bounded by Van Buren, Canal and Clinton Sts. and W. Jackson Boulvd., wrecked 21-story C. B. & Q. Bldg. and burned out 260 firms and individuals, putting 20,000 out of work. 1 fireman killed.
March 16—The strike of miners, which has held S. Africa in its grip for more than 2 months, has been called off.
—An outbreak of rabies is raging in eastern section of State of Washington. A similar epidemic in 1915 cost 2,100 lives.
—N. J. Assembly passed over Governor's veto, the "dry" bills and also the $40,000,000 referendum bond issue for good roads; Senate overrode veto on full-crew repeal bill.
—Pauline V. Clark, "perfect" model, killed self, at Boston.
March 17—Gen. Felix Diaz was assassinated near Ortiz, Mex.
March 18—At Ahmedabad, India, Mohandas K. Gandhi, the Indian Non-Co-operationist leader, arrested recently on charges of sedition, was sentenced to 6 years imprisonment without hard labor. Gandhi's colleague, Shankerlal, banker, Bombay merchant and Nationalist leader, was sentenced to ordinary imprisonment for 1 year and fined 1,000 rupees.
—1,100 U. S. soldiers left Coblenz for U. S.
—Capt. Bajramgiani, leader of Albanian revolt, has been hanged, and cities of Durazzo and Shiak fined 100,000 and 60,000 francs.
—Pres. Harding and wife left St. Augustine, Fla., for Washington, D. C.
—Otto H. Larsen, student, killed self at Boston; he left letters saying he had given, at her request, poison to Miss Pauline V. Clark, with which she killed self March 16.
March 19—Report of Meyer Committee to Legislature, says N. Y. City is over its debt limit, has run in debt $100,000 a day since Jan. 1, 1898, and the sinking fund is no security for debt held by public.
—At Los Angeles, the jury in the case of Mrs. Madalynne Obenchain, charged with the murder of J. B. Kennedy, was unable to agree, and was discharged.

March 19—Vilhjalmur Stefansson, explorer, announces that in Sept., 1921, he set up British flag on Wrangell Island.
March 20—The Emergency Housing and Anti-Profiteering Laws enacted by the State of N. Y. in 1920 were upheld by the U. S. Supreme Court.
—$175,000 of Liberty bonds, stolen from U. S. Treasury, were found in an employee's cellar at Wash., D. C.
—In U. S. Senate, Borah declared Paul D. Cravath said (at dinner of Council on Foreign Relations, N. Y., Feb. 17) that secret understanding exists between U. S. and Britain as to the Pacific. Cravath, at N. Y., denies he made the statement.
—Wire Goods Exchange was dissolved by U. S. Court at N. Y., by consent decree.
—The right of the U. S. to priority of payment, out of German reparations, of the actual cost of the Amer. army of occupation on the Rhine, on an equal footing with the Allied Powers, is asserted in a note Sec. Hughes sent to the 5 principal Allied Powers.
March 21—Pres. Harding, Sec. Hughes, Senators Lodge and Underwood denied any sort of secret understanding between U. S. and Britain.
—Mayor Hylan of N. Y. approved the bill passed by the Legislature increasing his salary and that of Comptroller Craig from $15,000 to $25,000 a year each, and that of Pres. Murray Hulbert of the Board of Aldermen from $7,500 to $15,000.

COAL STRIKE ORDER IS ISSUED.

—Formal orders for a suspension of both anthracite and bituminous coal mining in the unionized fields of the country on April 1 issued from the headquarters of the United Mine Workers in Indianapolis.
—Henry Graves, 3d., and Henry Wilson jr. died in auto accident near Elmsford, N. Y.
—50 Congressmen asked Pres. Harding to free all Espionage Act prisoners who talked but did not act seditiously.
March 22—Britain abolishes "mutsai" (adopted-child slavery) system at Hongkong.
—Flying boat, "Miss Miami," sank in Gulf of Mex., drowning Aug. Bulte and wife, Lawrence E. Smith and wife, and Mrs. J. S. Dickson.
March 23—U. S. House, 333 to 70, passed Soldiers' Bonus Bill.
—Gov. Parker issued an appeal to the law officers of Louisiana to suppress "with an iron hand the evil of Ku Kluxism wherever it raises its head."
—British submarine, with 23 aboard, was rammed by destroyer and sunk off Gibraltar.
—Lawrence Kubal, 29, a machine gunner in the Polish troops during the war with Germany, was put to death in the Sing Sing death house for the murder of Mrs. Minnie Bartlett in her home at West Hempstead, L. I., last summer.
—Prince of Wales arrived at Ceylon.
—The Ministers of Finance and Education resigned from the Bulgarian Cabinet in protest against the Government's decision to eliminate three letters from the Bulgarian alphabet.
March 24—U. S. Senate, 67 to 27, ratified 4-power Pacific treaty, with Brandegee reservation.
—At Bombay, India, of the 8 Indians on trial in the high court for the murder of William Francis Doherty, 38, an American, during the disorders last year, two were sentenced to death, four to imprisonment for life and one to imprisonment at hard labor for 2 years. The other was discharged.
—Kissing games at church social, Coram, N. Y. give whole village "flu."
—Secret organization, "The Shifters,' spreads from N. Y. to New England.
—18 died in mine explosion near Trinidad, Colo.
—Radio broadcasting of news, sermons, music, etc., has become a regular daily feature in N. Y. City.
March 25—The U. S. Prohibition "Navy" is in operation.

RAIL SHOPMEN STRIKE.

—Maintenance of way workers and shopmen throughout the Western Maryland Railway system walked out in protest against the contract system recently put into effect by the road.
—Ida Kramer, 7, was kidnapped for ransom, at Woodbury, N. J., and drowned.
March 26—Forbidden convention of Irish Republican Army was held at Mansion House, Dublin; 3 died in Belfast riots.
March 27—U. S. Senate put through the supplemental treaty to the 4-power pact, taking the Japanese homeland out of it, with no vote recorded against it.
—U. S. House, 158 to 54, ignored the orders of Pres. Harding, the estimate submitted by Budget Director Dawes and the pleadings of Floor Leader Mondell and added an additional $15,000,000 to the more than $27,000,000 included in the Army bill for rivers and harbors.
—N. Y. police, under alleged Aldermanic ordinance of March 21, order that women shall not smoke in public places. Order was rescinded next day, as ordinance never was passed.
—Marshal Joffre, of France, reached Vancouver from Far East.
—Brit. House of Lords ratified Irish Free State Bill.
—Stephen Weinberg, who introduced Princess Fatima at White House, was convicted in the Fed. Court, Brooklyn, of impersonating an officer by wearing such a uniform in Brooklyn, where he had it changed to another of higher rank. He was sentenced to 2 years in prison.
—Textile strike is on at Lawrence, Mass.
—At Albany, Gov. Miller denied the application of "Big Jim" Larkin, the Irish agitator, for a pardon.
—Jersey forest fire sweeps 3,000 acres near Hammonton.
March 28—At Shanghai, Mrs. W. J. Snyder, of Brazil, Ind., was killed and 4 other persons were wounded when 2 Coreans made an abortive attempt to assassinate Gen. Gilchi Tenaka, former Japanese Minister of War, upon their arrival from Manila.
—N. Y. Bd. Aldermen voted to extend tax exemption on new house construction to April 1, 1923.
—At N. Y., Judge Mack in the Fed. Court sentenced Mark von Eschen, 30, to 5 years in prison and fine of $2,000, on his conviction of participating in the theft of $1,477,000 in cancelled Liberty bonds from the Gen. Post Office, July 18, 1921.
—Contracts for the vehicular tunnels under the Hudson were awarded by separate and concurrent votes of the N. Y. and the N. J. Bridge and Tunnel Commissions to the firm of Booth & Flinn, for $19,331,723.
—At Berlin, attempt was made to assassinate Prof. Paul N. Miliukoff, former Minister of Foreign Affairs in the Russian Provisional Govt., while he was addressing a gathering of Russians. The attempt was frustrated by Vladimir Naboukoff, who was killed by a bullet.
—Mt. Etna, Italy, is in violent eruption.
—Elk St. Market district, Buffalo, N. Y., suffered $500,000 by fire.
March 29—Jury at N. Y., in trial of Geo. L. (Tex) Rickard, against whom a girl made charge of intimacy, brought verdict of not guilty.
—U. S. Senate, 74 to 1 (France, of Md.), ratified Naval Limitation Treaty; 71 to 0, Submarine and Noxious Gas Treaty.
—1,000 U. S. soldiers from Rhine, and 1,065 bodies of soldiers (the last bodies) reached N. Y. on transport Cambrai.
—Fire destroyed R. C. shrine Church of Ste. Anne de Beaupre, Quebec.
March 30—At Dublin, armed men held up the staff of the Freeman's Journal, smashed the presses, threw gasoline on the floors and stairs and set fire to the building.

ULSTER-FREE STATE PACT.

—Later, at London, a peace compact between Ulster and the Free State was signed, with the British Govt. as a party thereto.
—At Washington, the Senate completed the ratification of treaties and agreements resulting from the Conference for the Limitation of Armament.
—The King of Spain restores constitutional guarantees suspended 3 years ago.
—Josefa and Rosa Blazek, "Siamese Twins," 42 years old, died at a Chicago hospital. Josefa died first, Rosa (Mrs. Dvorak) a few seconds later. The latter leaves a son, 11 years old, whose father, a Capt. in the German army, was killed in action in 1917. The twins were natives of Czecho-Slovakia.

GREAT COAL STRIKE BEGINS.

March 31—National strike of coal miners began at midnight, affecting 500,000 men in hard and soft coal fields; Kentucky not affected; men out in Kan., despite State law and Industrial Court.
—Pres. Harding dismissed, by executive order, the Director and 25 heads of the work in the Bureau of Engraving and Printing, where labor-saving machinery recently was installed, against protest of the unions.
—Fire destroyed Colonial Hotel, Nassau, Bahamas.
—King George signed the act ratifying the Irish Treaty and creating the Irish Free State.
—Work was begun (at west end of Canal St.) on Vehicular Tunnel from N. Y. to Jersey City.
—At N. Y., Alfred E. Lindsay, So. Nyack, N. Y., broker, alleged to have fleeced prominent women out of about $1,000,000, pleaded guilty to a charge of grand larceny in Gen. Sessions.

## APRIL.

April 1—Ex-Emperor Charles I. of Austria-Hungary died from pneumonia, in exile at Funchal, Madeira.
—15 inches of snow fell at Barre, Vt.
—Premier Smuts, of the Union of S. Africa, gave the House of Assembly the official figures of the losses on both sides during the recent insurrection in the Rand. The Govt. forces, he stated, lost 50 killed and 237 wounded, while on the other side there were 138 fatalities and 287 wounded. In addition, 98 Indians and natives were killed or wounded.
—Earthquakes in Siberia destroyed $6,000,000 of property.
—Fire destroyed $250,000 business block, Union, S. C.
April 2—Percy A. Straus, Chairman Committee of Fourteen, reports N. Y. cleanest city, morally, in U. S.
—At N. Y., the home of Albert R. Shattuck, Washington Sq. North, was looted of $90,000 of jewelry by 5 armed and masked men, after tying 8 servants of the Shattucks and also binding the elderly couple.
—Taps were sounded and 10,000 heads bowed in prayer at the final memorial services for the soldier dead, held in the Army Base, 58th St. and 1st Ave., Brooklyn.
—Body of Mrs. Ruth Mercer, with neck broken, was found on beach, Norfolk, Va.
April 3—Fire destroyed R. C. Ch. of Sacred Heart, Montreal.
—Tillie, circus elephant, celebrated at Columbus, O., 106th birthday.
—Henry Ford, having bought and donated as a memorial the John Burroughs farm, near Poughkeepsie, N. Y., the place of the late naturalist was dedicated by the John Burroughs Memorial Assoc.
—Aviators Major John W. Simons jr. and Lieut. Gerald H. Fitzpatrick died in plane collision near Houston, Tex.
—The U. S. Govt. is unable to sign the white slave convention drawn up by the last Assembly of the League of Nations, as it conflicts with the police regulations of certain States in the Union, Sec. of State Hughes has notified the League. The Amer. Govt., however, is in full sympathy with the object of the convention, and Congress has passed laws to the same end, Mr. Hughes points out.
—Philip Sommers, Treas. of the Royal Building and Loan Assoc., of So. Chicago, and Ernest H. Cafrey, a policeman, were shot and killed by bandits who escaped with $10,000.
April 4—At Oklahoma City, Lieut. Col. Paul W. Beck, of the Army Air Service, was shot to death by Jean P. Day, oil operator, former State Supreme Court Justice. The killing took place at 2.30 A. M. in Day's home. Day says he found Mrs. Day struggling with the army officer and struck Beck over the head with a pistol. The discharge blew Beck's head off.

NURSE CAVELL'S BETRAYER SENTENCED.

—At Mons, Belgium, Armand Jeannes, who betrayed the nurse, Edith Cavell, to the Germans, was sentenced to death and fined the costs of his trial, 11,500 francs. Sentence commuted, July, 13th, to life imprisonment.
—Marshal Joffre arrived at Portland, Ore.
April 5—Pres. Millerand, of France, reached Morocco by battle cruiser.
—Intermittent earth shocks, which began on Mar. 23, are continuing in the northern section of Serbia, but with decreasing intensity.
April 6—Jury at Brooklyn found Miss Olivia M. P. Stone not guilty of charge of murdering Ellis G. Kinkead.
—Gen. Gregorie Semenoff, Tartar Cossack leader in Siberia, arrived at N. Y., and was arrested on a civil judgment obtained in Siberia by an N. Y. trading corp.
—At N. Y., Rev. Edwin C. Holman, Treas. of the Golden Rule Alliance, was fined $500, with the alternative of 90 days in jail, by Magistrate Oberwager in Washington Heights Court, for soliciting funds without a permit. The fine was paid.
—A consent decree calling for the dissolution of the Mosaic Employers Association of N. Y. was entered in the Supreme Court.
—In the presence of Pres. and Mrs Harding, high Govt. officials and scientists and explorers, a memorial to Rear Admiral Robert E. Peary was unveiled at his grave in Arlington National Cemetery, the 13th anniversary of the naval explorer's discovery of the North Pole.
April 7—7 persons were killed when airplanes on the Paris-London express route collided in a fog over the village of Thieulloy, 70 miles north of Paris, and crashed to earth in flames. Victims included C. B. Yule and wife, of N. Y.
—Asst. Corp. Counsel Harry Crone was killed by stray shot at N. Y., in fight on 43d St., between police and tire robbers.
—Danish lockout ended after 2 months.
April 8—Coroner's jury at Oklahoma City exonerated Jean P. Day of charge of murdering Lieut. Col. Paul W. Beck.
April 9—Japanese Army began evacuation of Shantung peninsula, China; 500 troops left Tsingtau on ship.
—Evangeline C. Booth, commander of the Salvation Army in the U. S., called for retirement of Jas. Speyer, N. Y. banker and "wet" advocate, as head of committee appealing for $1,000,000 fund for the Salvation Army. He resigned.
April 10—General Economic Conference opened at Genoa, Italy.
—At N. Y., Police Reserves (volunteer citizenry, numbering 5,000) were called out to aid in curbing crime.
—U. S. Courts enjoin union organizers in non-union W. Va. coal strike regions.
—King Albert of Belgium is ill at Versailles, with inflammation of nerves.
—Contracts of sale made by manufacturers requiring retail dealers exclusively to handle their products, which may have the effect to lessen substantially competition, were held to be invalid by the U. S. Supreme Court.
April 11—Ist. of Col. Supreme Court gave Swift & Co. and Armour & Co. until March 3, 1923, to dispose of their stock yards and railway terminals.
—The Finance Committee submitted Fordney-McCumber Tariff Bill to U. S. Senate.

"FATTY" ARBUCKLE ACQUITTED.

April 12—At San Francisco, verdict of acquittal was returned by a jury in the third trial of Roscoe C. (Fatty) Arbuckle on a manslaughter charge growing out of the death of Miss Virginia Rappe, motion picture actress. The jury was out 6 minutes.
—Prince of Wales reached Tokio, from India.
—An alleged message from Woodrow Wilson (which he later repudiated) was delivered through Joseph P. Tumulty, at Jefferson Day dinner at N. Y., where Jas. M. Cox was chief speaker.
—Denver greeted Marshal Joffre.
April 13—Sir Ross M. Smith, who flew to Australia in 1919, was killed, also his mechanician, Sergt J. M. Bennett, when their plane fell, near London.
—A number of American drivers of relief wagons in Russia have been killed in the streets by the famished populace, who seized the horses for food, according to reports received by American relief organizations in Paris from the Ufa, Bashkir and Chelyabinsk famine districts.
—3 died when 20,000 lb. U. S. Govt. powder exploded, No. Charleston, S. C.; 1½ tons of exploding TNT partly wrecked Helper, Utah.
—Fire destroyed 100 dwellings at Berkley, Va.
—Mass. Supreme Court ruled women can hold any office.
April 14—Irish Republican Army seizes and barricades Four Courts and other Dublin buildings.
—"Clover," 52, oldest horse in world, owned by Rev. V. Myers, Catawissa, Pa., is to be supported by fund raised by The World.
—The bill extending use of the Govt.'s naval radio facilities for commercial and press purposes until June 30, 1925, was signed by Pres. Harding. The compromise for extension until 1925 does not apply to messages to China. The service to Chinese stations will be terminated Jan. 1, 1924, owing to international wireless agreements.
April 15—Third operation was made, at N. Y., on throat of singer, John McCormack.
—Ohio, Ill. and Miss. Rivers' floods covered 100,000 acres of crop lands.
April 16—Chicago greeted Marshal Joffre.
—Aviators Capt. G. S. Little and Sergt. Jas L. Johnson died in army plane fall, San Antonio, Tex.

RUSSO-GERMAN TRADE PACT.

—Germany and Russia made trade and economic treaty at Rapallo, Italy.
—Sec. of Treasury Mellon denies rumor that Bureau of Engraving and Printing sent out counterfeit money and duplicated Govt. bonds.
—Michael Collins, Irish Free State leader, was fired at in Dublin; he caught assassin.
April 17—Over 30 died in tornadoes in Kan., Ind. and Ill.
—E. D. Dier, bankrupt broker, denied to referee, at N. Y., that his firm had paid fees or money to State Senators C. R. Lusk and C. C. Lockwood.
—Fire destroyed $600,000 of property at Pocomoke City, Md.
—Lieut. E. M. Randall, 2d Lieut. D. W. Lewis and Private J. J. Dooghe died in Marine Corps plane collision, Quantico, Va.

April 17—At Berlin, Jemal Azmyk Bey, former Gov. of Trebizond, and Baha Eddin Chakir, a leading member of Turkish Committee of Union and Progress, were shot and killed.
—By substituting dummy package of paper, $500,000 of Liberty bonds was stolen from Chase Nat. Bank, N. Y.
April 18—At Genoa, the convening powers and the Little Entente adopted resolution censuring Germany for her separate compact with Russia.
—At Chicago, Miss Muriel McCormick, granddaughter of John D. Rockefeller, made her professional stage debut as the boy hero of "Le Passant," a one-act play in French verse, by Francois Coppee.
—London greeted Jack Dempsey.
—Famous Argentine race horse, Botafogo, winner of $335,000, died near Buenos Ayres.
April 19—Gen. Semenoff was freed at N. Y. on $25,000 cash bail in civil suit; East side Jews mobbed him. Bomb squad protected him
—U. S. House, 279 to 78, passed Naval Appropriation Bill, fixing naval personnel at 86,000.
—Marshal Joffre, wife and daughter reached Wash., D. C., and called on Pres. Harding.
April 20—Germans agreed not to take part in Russian negotiations at Genoa.
April 21—Irish labor 24-hour strike against military rioting, called for April 24-25, gets popular approval.
—Sir Arthur Conan Doyle, in lecture at N. Y., showed alleged spirit picture of his dead son.
—Troops of Gen. Chang Tsao Lin, Gov. of Manchuria, took over Peking and Tientsin.
—MacMonnies's statue of Civic Virtue was set up in City Hall Park, N. Y.
—In telling Samuel Untermyer and the Lockwood committee, at N. Y., why he is opposed to outside supervision and regulation of labor unions, Samuel Gompers, Pres. of the Amer. Fed. of Labor, made attack on American courts, declaring them incapable of being trusted to mete out justice to rich and poor alike.
April 22—A. B. Houghton, U. S. Ambassador to Germany, presented his credentials at Berlin.
—Geraldine Farrar sang her farewell (in "Zaza") at Metropolitan Opera House, N. Y., after 16 years with the company.

"COLD LIGHT" INVENTED.

—Prof. E. N. Harvey exhibits at Princeton Univ. his "luciferin," or cold light, obtained from small Japanese crustaceans.
April 23—A large meteor was observed all along the coast of N. Y., N. J. and Conn. It appeared about the size of a full moon and seemed to start from about 45 degrees above the horizon.
—The body of Ida Kramer, 7, kidnapped from home of her father, Isadore Kramer, Woodbury, N. J., March 25, was found in the mud in Little Newton Creek between Woodlynne and West Collingswood, N. J.
—Mary Garden quit as Director of Chicago Opera Co.
—Chas. Van Der Vere, ex-army aviator, and H. L. Schaeffer of Philadelphia died in plane accident, Hatboro, Pa.
April 24—Marshal Joffre received the freedom of N. Y. City.
—Labels or brands under which articles are sold, when open to the construction in the mind of the purchasing public that they describe the component ingredients or materials used in the manufacture of the articles, must clearly and definitely describe them, the U. S. Supreme Court held.
—"John Doe" was thrown out of the U. S. Supreme Court, and as he disappeared Chief Justice Taft suggested that he might be considered dead.
—Surgeon took from Premier Lenin, at Moscow, bullet shot into his side 3 years ago.
April 25—Several hundred striking miners went to trial on treason charges, at Charles Town, W. Va.
—Flood, due to dynamited levees, killed over 10 and did $1,000,000 damage at Fort Worth, Tex.
April 26—August Probst, Swiss waiter, who charged he was "kidnapped" because of his romantic interest in the daughter of a member of the Rolling Rock Country Club, near Pittsburgh, Pa., is ordered deported from the U. S. by Asst. Sec. Henning of the U. S. Labor Dept.
—Earthquake damaged Tokio and Yokohama and killed many.
—2 square miles of pine forest, at Allenwood, N. J., were destroyed by a fire which threatened the sanitarium for tuberculosis patients near the Lakewood road.
—Fighting between rival forces of Chinese for possession of Peking and Tientsin began April 25 and is increasing in scope under Gen. Wu and Gen. Chang.
April 27—Pres. Harding spoke at U. S. Grant centenary at Point Pleasant, Ohio; 30 were injured when deck collapsed on Island Queen, on Ohio River, off New Richmond, O.; Grant Memorial Statue group was dedicated at Washington, D. C.
April 28—Paul Deschanel, ex-Pres. of France, died at Paris of pneumonia.
—City Council, Sacramento, Cal., passed ordinance prohibiting residents from shaving off whiskers before May 28, when celebration of "the days of '49" begins there.
—Chas. Schloss, chum of Elmer C. Drewes, who was slain at Philadelphia, in 1921, died at N. Y., of carbolic poisoning.

RUSSIAN ENVOY RESIGNS.

—Boris Bakhmeteff, Russian Ambassador, wrote to Sec. of State Hughes, suggesting that he present resignation as of June 30. The offer was accepted; the letters were made public June 4.
April 29—Richard Croker, ex-Tammany leader of N. Y., died at Glencairn Castle, near Dublin.
—Belief the Ku Klux Klan had pledged themselves to kidnap him and take him back to Norlina, N. C., to face charges of murder and inciting riot, has caused Matthew Bullock, Amer. Negro, to leave Hamilton, Ont., and seek refuge on another continent.
—5 months of daylight-saving time went into effect at N. Y., at 2 A. M.
—Marshal Joffre and family left N. Y. for France.
April 30—Pope Pius issues peace appeal to all Governments.
—At Chicago, hundreds of high-rent victims vacate flats, and tent in the suburban woodlands.

MAY.

May 1—Irish Rep. Army irregulars have looted $500,000 from branches of the Bank of Ireland in the south.
—The Packer and Stockyard Regulation Act of 1921 was held constitutional by the U. S. Supreme Court.
—Calif. Supreme Court declared unconstitutional that portion of the California Alien Land law forbidding aliens ineligible to citizenship to act as guardians of the agricultural lands of their American-born children.
—May day passed off quietly in U. S., and in most of Europe; in Mexico there were fatal anti-Catholic riots; in Italy, there were fatal Socialist riots.
—Coal strike sympathizers blew up railroad bridge near non-union mine, Listonburg, Pa.
—Pres. Harding has refused to deal with "Children's Crusade" band led by Kate R. O'Hare which marched to Washington to plead for release of Americans in prison under Espionage Act.
—Bank of H. Upmann & Co., Havana, failed to open.
May 2—2,000 have been killed or wounded in Chinese civil war, near Peking.
—N. Y. City Transit Commission orders 246 more trains run on Interborough after May 31; company told to buy 350 new cars.
—At Phila. occurred the rededication of the building in Independence Square occupied by the United Supreme Court as first constituted and the observation of the 200th anniversary of the founding of the Supreme Court of Pennsylvania.
—At Genoa, France and Belgium refused to sign Allies' conditions to Russia.
—Ex-Senator A. J. Beveridge won over Senator H. S. New in Rep. Senatorial primary contest in Indiana.
May 4—Field Marshal Earl French reached N. Y. from England.
—Tornado killed ten or more and damaged property in and near Austin, Tex.
—Mob in a Durango (Mex.) village attacked and injured Miss Eliz. Streeter, of Meridian, Miss., a missionary, and seized and burned Bibles she was distributing.
May 5—The forces of Gen. Chang Tso Lin, Manchurian leader, have been driven from the region of Peking and Gen. Wu Pei Fu is now in control.
—Lieut. H. F. Selden and Ensign Miller died in naval sea planes collision, at Wash., D. C.
—At London, ex-army aviator Ronald True was sentenced to death for killing of Gertrude Yates.
—Ex-deputy Sheriff "Bud" Ballew, noted gun man, was killed at Wichita Falls by Chief of Police J. W. McCormick.
—N. Y. officially welcomed Mayor W. H. Thompson of Chicago.
—Danville, Va., birthplace of Lady Astor, welcomed her by reception.
—Earth waves, due to subterranean body of water, partly destroyed city of Corato in Southern Italy.
May 6—H. P. Davison, of J. P. Morgan & Co. died from brain-tumor operation, Locust Valley, N. Y.

May 6—Virginius St. J. Mayo, Conn., mnf'r, was convicted at N. Y., of bigamous marriage in 1904 with Wilhelmina Meyer; sentence,1 to 3 yrs. Sing Sing.
—Picture of King of Italy was sent by wireless (Prof. Arthur Korn's plan) from Rome to Bar Harbor, Me.
—3 Negroes, alleged slayers of white girl, Kirvin, Tex., were burned to death by mob; fourth was hanged.
—Sec. Hughes sent to Vice-Pres. Coolidge for the Senate, a denial from Boris Bakhmeteff, the Russian Ambassador, of the charges of Senator Borah, which included allegations that Mr. Bakhmeteff had invested in private real estate transactions and otherwise misapplied money loaned to the Russian Provisional Government by the U. S. Treas.
May 7—N. Y. City put 2 A. M. curfew ban on cabaret dancing.

TRINITY CHURCH 225 YEARS OLD.

—By placing its ancient charter on view for the first time, and by holding two services, Trinity P. E. Church, Broadway, at Wall St., N. Y., celebrated the 225th anniversary of the granting by His Majesty, William III, of England, of a charter.
May 8—11 convicts were shot by guards and wounded in mutiny of over 300 at State Penitentiary, Columbia, S. Car.
—Negro janitor, at N. Y., shot and wounded L. Lavelle, lawyer, and fatally shot Policeman Henry Pohndorf.
—King and Queen of England visited Belgian King at Brussels.
—Florida Supreme Court upheld lower court in ruling that Richard Croker was mentally capable.
—National Congress of Ku Klux Klan began at Atlanta, Ga.
—Russia sentenced to death, at Moscow, several priests for opposing requisition of church treasures.
May 9—Germans and poles accepted, at Genoa Conference, Silesian frontier line drawn by League of Nations.
—Prince of Wales left Japan for Manila.
—Passion Play opened at Oberammergau, first time since 1910.
—Fire wrecked Casino de Paris, Paris.
—Egypt forbids opium (and derivative) imports or exports except by special port license.
—The Government's suit, under the Sherman law, against the American Sugar Refining Co. and other sugar corporations, begun nearly twelve years ago, ended when Circuit Court filed a dissolution and injunction decree at N. Y.
—Charles Smith of Virginia, sentenced to penal servitude for life in July, 1907, for the shooting of Edward Guerin, was released from Dartmoor Prison, England. Smith's liberation was due to Lady Astor.
May 10—$440,000 of $500,000 Liberty bonds, stolen from Chase Nat. Bank, N. Y., April 17, were recovered at St. Augustine, Fla.; 3 persons were arrested at Savannah, Ga.
—At Chicago, 2 policemen were killed by labor thugs, several buildings were bombed, and 300 labor officials were arrested, many at rooms of Building Trades Council, which has opposed the Judge Landis wage award. Bomb fuses were found at labor headquarters.
—By request of Nat. Goldstein, Pres. Harding withdrew from Senate Goldstein's nominaton to be St. Louis Internal Revenue collector.
—State Comptroller James A. Wendell died at Albany, N. Y.
—The new White Star steamship Majestic, 56,000 tons, left Southampton for N. Y., on first voyage.
—Swindlers have got, mostly from Russians, $1,000-000 for fake gold mine at Yonkers, N. Y.
—Clover, 51-year old horse, is on exhibition at Masonic Fair, N. Y.
May 11—At London, Georges Carpentier, with a short right jab to the jaw, knocked out Ted (Kid) Lewis for the count after two and a half minutes of the first round of their scheduled twenty-round match for the world's light heavyweight championship.
—N. Y. Transit Commission announced plans for 84 miles of new subways, to cost $218,000,000.

EXCLUSION ACT EXTENDED.

—Pres. Harding signed the bill extending for two years from June 30 the 3 per cent. immigration restriction act.
—Treasury Auditing Committee reported discrepancy, at Bur. of Engraving and Printing, of 50 sheets of bank note or Gov't bond paper.
—Half-inch of snow at Houlton, Me.; 2 feet of snow at Deadwood, S. Dak.; man died of heat at St. Paul.
—Syracuse, N. Y., University forbids students to dance for rest of college year.
—Policeman John P. Soden, who killed John McGuinness at N. Y. on Jan. 20, pleaded guilty to first degree manslaughter. He got 4 to 10 years.
May 12—Tribunal of Arbitration opened at N. Y.
—The Court of International Justice, at Geneva, was thrown open to the entire world when the Council of the League of Nations decided that Russia, Germany, Turkey, Hungary and Mexico could bring cases before the court, provided they previously had agreed to accept its decisions and not declare war over the disputes in question.
—U. S. Court at N. Y. restored, to New Haven Railroad, power to name, in proportion to its stock ownership, Boston & Maine directors (five).
—20-ton meteor fell near Blackstone, Va. The meteor crashed into a grove of oak trees with an explosive roar, making a hole with an area of 500 square feet and burying several trees with it. Flames immediately shot up which were visible for many miles and trees caught fire.
May 13—France asks U. S. to join an international commission to inquire into Russian situation.
—Otto L. Wiedfeldt, first German Ambassador to U. S. since war, reached N. Y. from Bremen.
—4 were killed, 22 injured, when Black Diamond Express was derailed by an automobile at No. Leroy, N. Y.
May 14—Premier Poincare and the Nationalists carried, in France, the elections to the General Councils, which choose the Senators.
—Turkish Nationalist Gov't deports U. S. Near East Relief officials from Harpoot.

CHILD LABOR LAW UPSET.

May 15—U. S. Supreme Court declared unconstitutional the Federal Child Labor Law.
—Chili and Peru began Tacna-Arica conferences, Wash., D. C.
—U. S., by Sec. Hughes, declined invitation of the powers at the Genoa Conference to take part in a proposed meeting of experts on Russia at The Hague.
—Lightning caused $1,000,000 fire at Tidewater oil plant, Bayonne, N. J.
—U. S. Supreme Court decided N. Y. City's 80-Cent Gas Law was confiscatory and invalid as to 1919 and 1920.
—Body of Clarence Peters, 19, of Haverhill, Mass., was found near Kensico, N. Y.
—U. S. Supreme Court (6 to 3) ruled that alcoholic liquors may no longer be transported through this country in bond. Neither may they be transferred from one foreign ship to another in an American port.
—Prince of Wales left Manila for England.
—Unofficial daylight saving began at Wash., D. C.
May 16—In Penna. State primaries, Gifford Pinchot, anti-organization Rep., won by 14,000 Gov. nomination over Alter; G. W. Pepper won over Burke for Senate nomination.
—Bomb in labor war did $259,000 damage to new apartment house, Sheridan Road, Chicago.
—56,000-ton Majestic reached N. Y. from England on maiden trip in 5 days 14 hours 45 minutes.
—A score were drowned in flood-collapse of Marlin-Belton bridge over Brazos River, Tex.
—Newfoundland has general railway wage strike.
May 17—At Genoa Conference the powers agreed to 8-month non-aggression truce.
—P. E. Diocese of Long Island adopted resolution objecting to school books that state Henry VIII. founded the Church of England.
—Miss. River floods, and backwater cover 55,000 sq. miles in La. and Miss.
—Asparagus was sent from Swedesboro, N. J., to Boston by airplane.
—Fire did $1,000,000 damage at white lead plant Perth Amboy, N. J.
May 18—Pres. Harding entertained Gary, Schwab and other big steel men at White House dinner and suggested to them to abolish 12-hour shift in their mills.
—Served, in the Bronx, with a Police Court summons for dumping fish heads in the gutter, fish peddler Michael Fradiano, who speaks no English, shot and killed Policeman Douglas W. Hay, wounded Policeman Edw. Slater, and was caught. He was convicted May 25 of murder.
—Charles Atkins, Negro, 15, one of alleged slayers of Mrs. Eliz. Kitchens, 20, was burned at stake, Davidsboro, Ga.
—20 died when fire destroyed Santo Spirito Hospital Rome.
May 19—Economic Conference ended at Genoa.
—Hayti-Santo Domingo Independence Society announces, at Wash., D. C., that Hayti declares "passive war" against Amer. occupation, and a general boycott of Amer. goods.

May 19—7 ex-N. Y. City postal clerks were arrested charged with part in stealing $1,477,800 in Liberty bonds from registry division July 18, 1921; $3,490 of Liberty bonds a month ago, and 50,000 francs 10 months ago.
—Hullen Owens, Negro, who fatally wounded R. C. Choate, was strangled and burned to death in Miller County, Tex.
—In Oregon Gubernatorial primary, Gov. B. W. Olcott won by 591 over Chas. Hall, who was backed by Ku Klux Klan, which nominated most of the legislative candidates in western part of State.
May 20—U. S. transport Henderson with Sec. and Mrs. Denby and Naval Acad. Class of 1881 left Portsmouth, Va., for class reunion at Tokio.
—The Shantung agreement negotiated with China at the Washington Conference was ratified by Japan.
—Negro lad, 19, was burned to death at Conroe, Tex. for attacking white girl.
—Field Marshal Earl French unveiled bust of Washington at Hall of Fame, N. Y.
—98 were lost when freighter Seine rammed and sank P. & O. liner Egypt, off Finisterre, France. Among them were Mrs. M. L. Sibley and Miss V. M. Boyer, Amer. missionaries on way back to India.
May 21—Bomb partly destroyed home of Mayor J. H. Dimon, Columbus, Ga., where new City Manager form of govt. has enemies.
—Fire did $1,000,000 damage at Albert Lea, Minn.
—Three members of the Everest expedition, Mallory, Somerville and Norton, reached an altitude of, 26,800 feet, the highest ever reached by man and just 2,200 feet below the summit.

"QUICK" NICARAGUA REVOLUTION.

—One of the quickest flash-in-the-pan revolutions on record in Central America took place in Nicaragua when rebels seized a Government fort, but gave it up to Amer. marines, who returned it to the Government forces, all inside of eight hours. Gen. Arcenio Cruz was in command of the rebels and the position they took but failed to hold, is known as La Loma, a fortress commanding the capital.
May 22—Walter S. Ward, Vice Pres. of Ward Baking Co. of N. Y. surrendered at White Plains, and was released in ball on homicide charge, saying that it was he that shot and killed ex-U. S. marine Clarence Peters, May 15, near Chappaqua after latter had demanded $75,000 blackmail, having already collected $30,000.
—U. S. Circuit Court of Appeals, at N. Y., affirmed Judge Mayer's sentence of 60 days in prison on contempt charge against City Comptroller Craig.
—At Belfast, W. J. Twaddell, a member of the Northern Parliament, was shot dead.
—Jury at Los Angeles disagreed at 2d trial of Arthur C. Burch on charge of killing J. B. Kennedy.
—Pres. Harding commuted sentence of A. H. Wehde, art critic, of Chicago, convicted in 1917 of trying to cause revolution in India.
—Virginia Historical Pageant opened at Richmond.
May 23—10 sailors died in collision, near Sassnitz, of German battleship Hannover and torpedo boat T-18.
May 24—Commission of international bankers, including J. P. Morgan, met at Paris under auspices of the Reparation Commission.
—The Interstate Commerce Commission ordered a general horizontal reduction of 10 per cent. in freight rates below the rates which became effective on August 26, 1920. Passenger rates were not changed and the surcharge on Pullman fares also was retained. The new rates become applicable July 1.
—Russia and Italy signed a commercial treaty at Genoa.
—The Pope made peace plea at Eucharistic Congress at Rome.
—Dynamiters put 12 coal mines out of commission Elbenton, W. Va.
—Tribunal of Arbitration at N. Y. tried first case.
—Shortage of $85,000 is found in Bridgeport, Conn. tax funds.
May 25—3 soldiers were killed, 4 injured, by target practice explosion Camp Bragg, N. C.
—At Seattle, Wash. 3 of the jurors who convicted seven I. W. W.'s of second degree murder for killing ex-service men in the course of the 1919 Armistice Day parade at Centralia, Wash., have signed affidavits reversing their verdict.
May 26—At N. Y., John T. Hettrick, lawyer and originator of a "code of practice" among contractors; Charles G. Witherspoon, head of Baker, Smith & Co., steamfitting contractors, and Martin McCue and John Imhoff, delegates of the Steamfitters' Union, were found guilty of a conspiracy to maintain a monopoly in steamfitting appliances. They were fined $500 each.
—Negro who attacked white married woman was killed by her father at Waco, Tex.; mob then burned the corpse; State Rangers were summoned.
—6-year fight over will and estate of Amos F. Eno, now valued at $13,000,000, ended at N. Y. by mutual agreement out of court. The will is to be admitted to probate.
—Pres. Harding signed the bill creating Fed. Narcotic Board.
May 27—At Charles Town, W. Va., William Blizzard, boyish mine union official, was freed of the charge of treason by a jury in the Circuit Court of Jefferson County. He was indicted with fifty-two other men, mainly union officials and members or sympathizers of the miners' union, on the charge of treason against W. Virginia as a result of last summer's disturbance in Southern W. Virginia, "the armed march."
May 28—U. S. Rail Labor Board ordered 13.2 per cent. reduction, effective July 1, in wages of 400,000 maintenance of way employees, equalling $48,000,000 a year.
—League of Nations receives the Pope's objection to British mandate over Palestine.
—Seven firemen asleep in the forecastle of the Furness-Prince Line's cargo steamer Welsh Prince were killed and three injured when that vessel was rammed by the freighter Iowan in the Columbia River off Altoona, Wash. The Welsh Prince sank within 30 minutes.

BOTTOMLEY CONVICTED.

May 29—At London, Horatio Bottomley, M. P., former editor of John Bull and England's leading anti-American propagandist, was sentenced to seven years' penal servitude, having been found guilty of fraudulently using £150,000 of the money subscribed to his various war bond clubs. The total amount subscribed was almost £900,000.
—Parliament of Southern Ireland was dissolved by Viceroy's proclamation.
—At Buffalo, N. Y., Mayor Frank X. Schwab entered plea of nolo contendere to indictments charging violation of the Prohibition laws and was fined $500. The violation occurred before Schwab was elected Mayor and while he was manager of the Buffalo Brewing Company.
—The child crusaders for general amnesty for political prisoners began picketing White House, in absence of Harding at Annapolis.
—U. S. Supreme Court ordered So. Pacific R. R. to abandon ownership of Central Pacific Ry.
May 30—100,000 attended dedication of Lincoln Memorial Temple, at Wash., D. C.: Chief Justice Taft made address presenting the building to the U. S. Govt.: Pres. Harding accepted: Edwin Markham read a poem. Memorial Day services, statue presentations and veterans' parades were general throughout nation.
—The Earl of Balfour took his seat in Brit. House of Lords.
May 31—At Chicago, Mrs. Edith Rockefeller McCormick asked Probate Court to enjoin her former husband, Harold F. McCormick, as guardian, from permitting their daughter, Miss Mathilde McCormick, 17, to wed Max Oser, a Zurich, Switzerland, horseman.
—Steve Donohue, on Captain Cuttle, at 10 to 1, won English Derby at Epsom Downs. Calcutta Sweepstake paid £122,000, one-half going to Miss G. Thomas, Liverpool.
—Sec. of Commerce Hoover fixes, by agreement, Southern spot (soft) coal prices at $3.50 a ton at the mines.

JUNE.

June 1—Congress, by joint resolution, approved N. Y. Port Development plan.
—12,000-ton Brit. steamer Wiltshire broke in two on New Zealand coast.
—Pres. Hsu Shih Chang of China resigned, and is succeeded by Gen. Li Yuan Hung.
—U. S. Court gave Chicago a 7-cent trolley fare.
—Syrian papers of Aleppo insist, despite French denial, that Chas. R. Crane was sentenced by French military court, early in May, to 20 years servitude on charge of inciting political disturbances. Crane denies he was in France when alleged trial took place.
—$2,000,000 forest fires in Western Washington and Oregon kill several.

INDEPENDENT STEEL MERGER.

—Plans for merger were announced of Midvale Steel and Ordnance Co., Republic Iron and Steel Co. and Inland Steel Co.
—Premier Lenin of Russia has stroke of apoplexy, it is said.
June 2—Testifying to Lockwood Committee, at N. Y., ex-Judge E. H. Gary, Chairman U. S. Steel Corp., denied the concern is run by J. P. Morgan & Co.

June 2—Army aviators, Lieut. Ben Jenkins jr. and Sergt. Arthur Juengling died in plane fire, Ft. Bliss, Tex.
—Harvard Univ. officials deny anti-Jewish movement there or intention to limit number of students.
June 3—U. S. agreed to join Allies in looking into Turkish atrocities in Anatolia.
—Dr. Gordon Ley of London, Paul Carroll of Paris, and Roger Morin, pilot, died in airplane fall in English Channel.
—Greece amended Constitution to give civic rights to women.
—Frank W. Anderson, war aviator, was killed by Peggy Beal, nurse, who wounded self, at Kansas City, Mo.
—3,000 were initiated into Ku Klux Klan at Plainfield, Ill.
June 4—Infantry, cavalry, artillery and whippet tanks took part in the first offensive action of the British troops on the Ulster borderland, when Pettigoe, which straddles the line, though a large part of the town is in Free State territory, was stormed and retaken from troops of the Irish Republican Army who entered on May 3.
—Magistrate J. W. Flannigan was assassinated at Newry on leaving R. C. Church.
—The first and only medal ever given by the U. S. Govt. to any community in the world was presented by Ambassador Myron T. Herrick, "in the name of the Congress and the people of the United States," to the municipality of Verdun "as a mark of America's appreciation of the valor of its defenders."
—Pres. Harding spoke at Confederate Memorial Day services, National Cemetery, Arlington, Va.
—80 died when excursion steamer Villafranca sank off Hohenau, Paraguay.
June 5—The same people who tried to get this country into the League of Nations, who, he said, included the representatives of foreign Governments and foreign propagandists, are at work in a campaign to defeat the Fordney-McCumber Tariff Bill, was the charge made in the Senate by Senator Watson of Indiana, one of the majority leaders and one of the President's spokesmen on the floor of that body. Geddes, Brit. Ambassador, denied, for himself, to Sec. Hughes, June 6.

LABOR UNIONS LIABLE FOR DAMAGES.

—Holding that under the Sherman Anti-Trust Law labor unions are suable, the U. S. Supreme Court unanimously decided that actions could be brought against unions for damages caused by their strikes and that the funds they had collected for strike purposes could be assessable as damages. The decision was rendered in the Coronado coal case.
—A youth tried to kill Socialist leader Philip Scheidemann, near Wilhelmshohe, Germany, by squirting prussic acid at him.
June 6—U. S. Rail Labor Board cut 400,000 shopmen's wages 7 to 9 cents an hour, effective July 1, totalling $60,000,000 a year.
—August Probst, the young Swiss waiter who charged that he had been kidnapped from the Rolling Rock Country Club, near Pittsburgh, because he had fallen in love with the daughter of a member, was deported at N. Y., on the Mauretania.
—Paris court grants to Alex. S. Cochran, of N. Y., interlocutory divorce from Ganna Walska, Polish singer.
—Premier Lenin of Russia has had another apoplectic stroke, it is said.
June 7—Taking notice of objections made in the Senate by Senator Watson (Rep., Ind.) to discussion by him of tariff and other legislation, Senator Ricci, Italian Ambassador, in a formal statement declared tariff duties were an international problem, and as such were a proper subject for discussion by a foreign diplomatic agent.
—At N. Y., a Supreme Court jury found the American Cotton Exchange guilty of allowing "bucketing" by members. $5,000 fine imposed.
—Dr. F. P. Graves, N. Y. State Commissioner of Education, refused request of N. Y. City School Board to abolish secret Advisory Committee on Teachers' Qualifications, created under Lusk act (loyalty oath) to examine teachers as to their loyalty. N. Y. City Board thereupon advised teachers they need not appear before committee.
—Chained to four cross ties and with a bullet hole in the forehead, the body of J. F. Hatfield, cousin of the late Sid Hatfield, was found in the Ohio River at Woodlawn, W. Va.
June 8—17-year locusts ravage Fox River Valley, and their humming causes teachers to close schools at Aurora, Ill.
—King Alexander of Serbia wed Princess Marie of Roumania, at Belgrade.
—Julius Rosenwasser, Albert Libero and Luigi Ebanisto, young hold-up men, were put to death by electricity in Sing Sing Prison.
—Dail Eireann met, at Dublin. British troops drove Irish troops from town to Belleek.
—Soldier Bonus Bill, figured at $3,845,659,481, was reported to Senate by Finance Committee.
—Pres. Harding, in a message to the Senate, assumed responsibility for the leasing to private interests of the naval oil reserve in Cal. and in Wyo. He said the policy and action of Sec. Fall and Sec. Denby in the disposal of the naval oil reserves had always had his entire approval.
—Prince of Wales at Cairo, Egypt.
June 9—Pres. Harding dedicated Princeton Battle Monument, Princeton, N. J., and the Univ. gave him LL. D. degree.
—Lockwood Committee, at N. Y., put O. K. on steel merger.
—At Laredo, Tex., the bodies of Gen. Incio Blanco, Col. Aurelio Martinez and Major Garcia, killed by Mexican customs guards and soldiers as they headed an alleged invading party into Mexico, were recovered from the Rio Grande.
—Gen. Semenoff quit N. Y. to return to Manchuria.
—At Chicago, William F. Quesse, President of the Flat Janitors' Union, and nine associates, officers of his union, were found guilty of conspiracy to extort money, conspiracy to bomb and conspiracy to commit malicious mischief by a jury.
June 10—Bankers' International Committee, Paris, adjourned subject to call of Reparations Commission, without arranging for loan to Germany, due to French attitude.
—The Mark Twain memorial cabin at Jackass Hill, near Sonora, Cal, was dedicated with Gov. William D. Stephens delivering the dedicatory address. Twain slept and ate in the cabin, which has been restored, during the time he prospected for gold in California. He gave up prospecting and left this district in 1865.

STORM KILLS 18 AT NEW YORK.

June 11—18 died in and near N. Y. in hurricane; 7 were killed in collapse of Ferris wheel at Clason Point; many were drowned in boat-upsets at City Island. The storm did $2,000,000 damage in Mohawk Valley, N. Y.
—Negro mob killed white motorman, Richmond, Va.
—Meyer Committee, in report to N. Y. Legislature, says N. Y. City Police Dept. has been demoralized by "pull," graft and politics.
June 12—At Tokio, imprisonment for an indefinite period was the sentence imposed on Ryichi Nakaoka, the Korean lad of 19 who assassinated Premier Takashi Hara in a railway station, Nov. 4, 1921. Hashimoto, who was charged with instigating the murder, was acquitted.
—Army aviator Cadet Sergt. Leslie Wright died in war game tactics, Galveston, Texas.
—Fire destroyed Holy Rosary R. C. Church and school and 3 buildings, Passaic, N. J.
—Over 300 drowned in river floods, Salvador.
—Armed men invaded home of Darrell Figgis, Dublin, and cut off half his beard and mustache.
June. 13—Members of Congress protested against slur in Naval Acad. Grad. Class book against Cadet Leonard Kaplan, a Jew, of W. Va.
—Majority of Amer. R. C. Bishops have asked the Pope to reconsider decree suspending operations of Nat. Catholic Welfare Council.
June 14—Pres. Harding dedicated Francis Scott Key memorial at Ft. McHenry, Baltimore.
—Brewer A. A. Busch of St. Louis protested against sale of liquor on U. S. Shipping Board vessels outside 3-mile limit. Chairman Lasker said it is legal, and that "dry" Amer. passenger ships cannot compete with "wet" foreign liners.
—Negroes from every State silently marched at Wash., D. C., in favor of Anti-Lynching Bill.
—U. S. Sen. La Follette and Sam'l Gompers attacked U. S. Supreme Court at A. F. of Labor convention, Cinn.; Chief Justice Taft's name was hissed.
June 15—More than 400 bungalows, summer residences and hotels, valued at $2,000.000, were burned to the ground at Arverne, L. I., rendering 10,000 temporarily homeless. The fire, which started at 5 P. M., fanned by a high wind, devastated an area of half a square mile bounded on the east by 58th Street, Edgemere, on the west by Alexander Avenue, Arverne, and on the south and north by the Atlantic Ocean and Jamaica Bay.
—Conference on Russia opened at Peace Palace, The Hague. Newspaper correspondents were excluded.
—The Permanent Court of International Justice opened its first business session in the Carnegie Peace Palace. Despite the fact that the calendar of the court had been open about nine months only two cases were on the docket, and those not of great importance.

June 15—Upper deck vehicular roadway was opened on Manhattan Bridge, N. Y.
—As Acting Sec. of the Navy, Theodore Roosevelt Jr. officially reprimanded Ensign J. L. Olmstead, editor of The Lucky Bag, the yearbook of this year's graduating class at Annapolis, for "cruel and unwarranted" treatment of Leonard Kaplan, a classmate.
—Wm. Bell, Negro, was executed at Sing Sing Prison.
—Street car men, bakers, phone operators and factory workers strike at Mexico City.
—The Amer. Relief Administration closed its work in Poland.

## NORTHCLIFFE BREAKS DOWN.

June 16—Lord Northcliffe (Alfred Harmsworth), Brit. newspaper owner, is in sanitarium at Geneva with nervous breakdown.
—Bankers signed, at N. Y., agreement with Mex. Fin. Minister A. de la Huerta as to Mex. external and railway debts.
—A. F. Chase and J. W. Vardeman pleaded guilty at N. Y. and got 4 to 8 years for theft of $500,000 in Liberty bonds, April 17, from Chase Nat. Bank. Mrs. Vardeman got 1½ to 3 years for complicity.
—Over 25 died in cyclone in Northwestern Wisconsin.
—Railroad Labor Board, at Chicago, ordered $26,-500,000-a-year cut in wages, effective July 1, of 325,000 in clerical and station forces, signalmen, and stationary engine men.
—The forces of Gen. Chen Chiung Ming have captured Canton, the capital of the South China Govt.
—The Irish people voted for members of the new Irish Parliament, De Valera's party lost many seats to Free Staters in Parliament.
—More than 20 died when new steamship Avare upset at dock, Hamburg, Germany.
June 17—Masonic officials in Connecticut warned members against Ku Klux Klan.
—Army aviators Lieut. R. O. Hanley and Sergt. A. Opperman died in plane fall at Louisville, Ky.
—Giant fish (a barracuda) killed, in Tampa Bay, Fla., Dorothy McClatchie, 18.
June 18—N. Y. School Board Committee finds school text book authors not guilty of distorting and propaganda charges.
—Heavy rain did $500,000 damage at Port Jervis. N. Y. and thereabouts.
June 19—Chief Justice Taft spoke as chief guest at Pilgrims' Society dinner, London.
—Mob of "wets" stormed and partly demolished jail at Ocean City, Md., and released 2 men committed for intoxication.
June 20—Assassins tried to kill Sir James Craig, the Ulster Premier, at Stormont Castle, Ulster.
—Will of Amos F. Eno was admitted to probate at N. Y.
—Chief Justice Taft called on King George, at London.
June 21—Over 20 were killed in battle at Herrin, Ill., between strikers, sympathizers and coal mine strikebreakers. The dead, wounded and missing total over 70.
—Prince of Wales arrived at London from India.
—"The war between the States was deliberately and personally conceived and its inauguration made by Abraham Lincoln, and he was personally responsible for forcing the war upon the South" declared a report submitted by the Historical Committee and unanimously adopted by the United Confederate Veterans at Richmond, Va.
June 22—Field Marshal Sir Henry H. Wilson was assassinated at his London home by Jas. Connelly, alias Reginald Dunn, and Jas. O'Brien, alias Jos. O'Sullivan.
—Japanese Privy Council and the Prince Regent approved Yap treaty with U. S.
June 23—2 coal mine strikebreakers were killed by mob at Clarksburg, W. Va.
June 24—Gov. Len Small was acquitted, at Waukegan, Ill., on charge of conspiracy to defraud the State when he was State Treasurer.
—William Rockefeller, 81, Standard Oil financier, died of pneumonia at his home, North Tarrytown, N. Y.
—Walter Rathenau German Foreign Minister, was assassinated at Berlin.
—A. Bruce Bielaski, ex-Chief of the Bureau of Investigation of the U. S. Dept. of Justice, was kidnapped near Cuernavaca and held for $10,000 ransom; he escaped June 27.
June 25—Coroner's jury at Herrin, Ill. rendered verdict that coal strike massacre was "due to acts, direct and indirect, of officials of the Illinois Coal Co."
—Exploding powder barges killed 3 and destroyed 15 cottages at Verona Beach, N. Y.
—Brazil ends British-owned cable monopoly.
—Bandits seized property of Cortez Oil Co. (American-owned) and held for 15,000 pesos ransom 40 American employees.
June 26—Congress passed the bill creating the Port of New York District.
—Capt. G. D. Hamilton and Sergt. G. B. Martin died in army airplane fall at Gettysburg, Pa.
—Indefinite continuance of military occupation of Haiti, but with a reduction of the Marine Corps force, was recommended in a unanimous report presented by the special Senate committee which has been investigating American administration in Haiti and Santo Domingo.
June 27—400,000 railway shopmen have voted to strike on July 1 if Rail Labor Board's order reducing wages is enforced.
—Pres. Harding freed from Leavenworth Prison Clyde Hough, a conscientious objector, and Vincent St. John of the I. W. W.

## FIGHTING IN DUBLIN.

June 28—Irish Free State troops shelled irregulars who were intrenched in Four Courts building, Dublin; over 10 died in the battle.
—3 aviation cadets, W. R. Farrell, W. C. McCoy, and G. C. Thompson, died in army plane fall at San Antonio, Tex.
—Miss Alicia du Pont, step-daughter of A. I. du Pont, was married to H. S. Glendenning, Rhodes Scholar, at London. Both are Americans.
—Mexican bandits seized 85 employees (including 6 Americans) of La Corona Oil Co., at Pecero.
—Gov. Frazier defeated U. S. Sen. McCumber in Rep. Sen. primaries, North Dakota.
June 29—Irish irregulars still hold Four Courts, Dublin; 22 were captured.
—The will of Wm. Rockefeller, filed for probate at N. Y., leaves the estate equally to the four children—Wm. G., Percy A., Mrs. D. H. McAlpin, and Mrs. M. H. Dodge.
—Michael Rossi, 66, slayer of A. Orlando was executed at Sing Sing prison.
—Police Commissioner Enright of N. Y. is at Rome, Italy, observing police methods.
—Mexican bandits near Tampico killed Mrs. Thos. Cheney, Mexican wife of American oil man.
June 30—With the Four Courts, Dublin, in flames from shot and shell, Rory O'Connor and his Irish irregulars surrendered to Free State troops. Sniping continues. Rail line south is cut.
—U. S. rail shop craft union heads called strike for July 1 against wage reductions, and refused to obey subpoenas of Rail Labor Board, Chicago.
—U. S. House adjourned to Aug. 15.
—Berlin police uncover plot to kill all leading Jews in Germany.
—At N. Y., William A. Hogan of Mount Vernon, N. Y., Secretary of the International Brotherhood of Electrical Workers, Local No. 3, was convicted in the Supreme Court of grand larceny in the first degree for the theft of $26,000 of his union's funds; sentenced July 17, to 1½ to 3 years at Sing Sing.
—Mayor L. L. Oles, Youngstown, O., resigned his "thankless job."

## JULY.

July 1—About 90 per cent. of the 400,000 railway shopmen in U. S. went on strike at 10 A. M. against wage reduction; some sabotage on Wabash system; train operation delayed but not cut.
—Pres. Harding signed N. Y. Port Development Act.
—Two Negroes convicted of criminal assault were lynched near Jesup, Ga.
July 2—Free State troops got 400 irregulars as prisoners, Dublin; 11 killed in frays.
—Louis James, aviator, died in plane accident near Chicago.
—Lightning burned 500,000 bushels of grain and 60 cars of tobacco at B. & O. Locust Point terminal, Baltimore.
—Sec. of Navy Denby and Naval Acad. Class of 1881 reached Yokohama, on U. S. S. Henderson.
July 3—Seven were killed, 72 wounded, when Phil.-Atlantic City express was derailed at Flying Switch, Winslow Junction, N. J.
—Attempt was made to assassinate Maximilian Harden, editor, Berlin, Germany.
—At N. Y. more than $100,000 of the $2,000,000 obtained by robbers of a postal truck filled with registered mail packages in Leonard Street, Oct. 24, 1921, was recovered in a Gramercy Park apartment; $400,000 was found, July 4, under a tree on L. I. Several arrests were made.
July 4—Railway maintenance-of-way men's strike order was cancelled pending further negotiations with employers.
—Pres. Harding, in speech at Marion, O., said Eighteenth Amendment must be enforced.
—German Parliament ratified Rapallo treaty with Russia.
—U. S. Naval Acad. class of 1881 held reunion dinner at Tokio.

July 4—At Gettysburg, Pa., 50,000 visited Camp Harding for Independence Day celebration of the 4th Brigade of U. S. Marines, which included a version of Pickett's charge of Civil War days as it would be fought under present conditions.
—Brazilian revolt reported; Government says it is under control after warships bombarded Ft. Copacabana, at Rio.
July 5—With the buildings in which they have made their last stand in flames, the Irish Republican irregulars in the O'Connell Street area, the stronghold of the insurgents in the Dublin fighting, surrendered to the National Army forces.
—Chas. Burgess, Minister for Defense in the old De Valera Cabinet, was wounded; he died July 7.
—There is civil war in Germany, at Voelpke, Singen, Zwickau and Zittau, on account of workmen's demonstrations against monarchists.

"BLUEBEARD" KILLS SELF.

—Germany's "Bluebeard," Karl Grossmann, accused of slaying 20 women, killed himself at Berlin to avoid trial.
July 6—65 have died in Irish revolt; R. C. cathedral and 21 buildings at Dublin are in ruins; Free State calls for volunteer troops.
—All but horse-drawn vehicles are excluded from Brooklyn Bridge.
—Many were gassed or hurt in fire panic in Lexington Ave. subway, at 61st St., N. Y.
—Capt. G. C. Tinsley, army aviator, died in plane fall, Mt. Clemens, Mich.
July 7—Russian delegates at Hague Conference refused to agree to restore confiscated property.
July 8—Richard Croker's will, filed at West Palm Beach, Fla., leaves estate to widow.
—Illinois troops were called out on rail shop strike duty. Fed. courts at various points enjoined picketing. Kentucky troops were called out on coal mine strike duty.
—Chili and Peru, at Wash., D. C., Conference, agreed to arbitrate Tacna-Arica boundary.
July 9—Erie and other N. Y. railroads reduced suburban service on account of strike. State troops are mobilizing in Cal., Ind., Mo., Miss. and Kan., in coal strike districts.
July 10—Pres. Harding called on coal operators and miners to open up mines and return to work, pending wage arbitration.
—Railroad shops throughout country reopened under guard, without violence resulting from, strike.
—Brit. Commons passed Washington Arms Confer. treaties.
—Deputy F. T. Llorea was assassinated at Mexico City by a daughter of J. Z. Moreno, editor of the Mexican Herald, whom Llorea slew last May.
July 11—Pres. Harding issued proclamation forbidding interference with railway transportation. He upholds wage decisions of Railway Labor Board.
—Buffalo is tied up by trolley strike.
—W. S. Ward, indicted on charge of murdering C. E. Peters, was released at White Plains, N. Y., on $50,000 bail.
July 12—8 children were killed at Watertown, N. Y., by explosion of souvenir war shell.
—Hard coal mine owners accepted Pres. Harding's arbitration plan.
—Murder and other indictments against Mingo County, W. Va., "treason march" miners were quashed.
—The conviction in 1920 on charges of criminal anarchy of Benjamin Gitlow, former Socialist member of the N. Y. Assembly, and John Larkin, an Irish agitator, was affirmed by the Court of Appeals.
—N. Y. State Court of Appeals unanimously upheld the N. Y. Central Railroad's ownership of right of way through Riverside district of Manhattan, 72d St. to Spuyten Duyvil.
July 13—26,000 U. S. troops were ordered in readiness for rail strike duty in Texas.
—U. S. and Japan exchanged, at Washington, Yap Treaty ratifications.
—Wood pulp valued at $1,000,000 (30,000 tons) was burned at Port Alfred, Canada.
July 14—"Not guilty" was the verdict at Morristown, N. J., in the case of Francis Kluxen 3d, 15-year-old boy on trial for the stabbing to death of Janet Lawrence, 11.
—Fred Mader, President of the Chicago Building Trades Council, recently convicted of extorting money to settle a strike, was sentenced to serve one year in the county jail and fined $1,000.
—Gustave Bouvet, a young anarchist, fired a shot at Pres. Millerand at Paris.
—Near Whitesville, W. Va., one miner was killed and 10 others injured when a mine train carrying them to work ran into a dynamite trap and was destroyed.
July 15—Coal miners refused Pres. Harding's arbitration proposal. The U. S. Rail Labor Board broke off rail strike negotiations.
—At Boston State Attorney General J. Weston Allen noll prossed an indictment charging Supreme Court Justice Edward P. Pierce with conspiring to obstruct justice.
July 17—Pres. Harding directed coal operators to reopen mines, near Cliftonville, W. Va. Six or more died in battle between officers and coal strike sympathizers.
—The Council of the League of Nations opened sessions at London.
—Bursting of 2 dams on Willimansett Brook, near Holyoke, Mass., did $600,000 damage.
—Fire at Gouverneur, N. Y., did $100,000 damage.
—Lord Portchester, heir of Earl of Carnarvon, married, at London, Miss Kath. T. Wendell of N. Y.

RATHENAU SLAYERS KILL SELVES.

—Hermann Fischer and Edw. Kern, assassins of German Foreign Minister Rathenau, killed selves besieged in Saaleck Castle, Bad Koesen, Saxony.
July 18—Pres. Harding telegraphed the Governors of 28 coal-producing States, asking them to encourage the owners to resume work in their mines, and urging them to extend to these mines every safeguard, and to every man willing to work every protection, adding that the full support of the Federal Government will be behind this pledge. Strike disorders spread.
—Storm at N. Y. flooded west side subway at Houston St., and suspended traffic several hours.
—Maryland Court of Appeals discarded $9,000-000 Soldier Bonus Act.
—At Xenia, O., Rev. W. W. Culp, eloper, pleaded guilty to deserting family; he got 1 year in workhouse and $500 fine.
—2 firemen died, 150 persons were hurt, at $1,-000,000 explosion and fire, W. 12th St., N. Y.
—Negro slayer of 2 white men was lynched in Orange County, Fla.
—At London the Prince of Wales was best man at the marriage of Edwina Ashley, heiress of the late Sir Ernest Cassel's millions and goddaughter of the late King Edward, to Lord Louis Mountbatten, second cousin of King George, and son of the late Prince Louis of Battenberg.
July 19—Gov. Morrison of N. Car. is the only State executive refusing to co-operate with Pres. Harding in using State troops to protect reopened coal mines. He says Government interference in labor disputes is unwise.
—Chinese Government airplane in which U. S. Sec. of Navy Denby was a guest, volplaned down 4,000 feet, disabled, and was demolished in landing near the Great Wall, Peking, but no one was hurt.
—Three New Yorkers, M. B. Bernstein, Mrs. D. W. Millhauser, and Mrs. S. Gutman, were killed, and L. B. Gutman and wife, Mrs. M. B. Bornstein and chauffeur, J. Flack, were hurt in auto accident 15 miles south of Montreal, Canada.
July 20—The conference on Russia, at The Hague ended.
—Ohio, N. H. and Pa. called out Nat. Guard for rail or coal strike duty.
—Irish Free State guns bombarded Waterford; 22 are dead in Limerick fight.
—First Lieut. J. P. Roullot, army aviator, was shot accidentally and killed by Lieut. Robt. Purcell, at Reserve Officers' Training Camp, Mineola, N. Y.
July 21—Allan A. Ryan went into voluntary bankruptcy, at N. Y., with stated liabilities of $18,-000,000.
—Chili and Peru signed agreement to let Pres. Harding arbitrate Tacna-Arica boundary dispute.
—U. S. Atty. Gen. told Senate combination of Bethlehem and Lackawanna Steel Co's., and of Midvale, Republic and Inland Co's. is legal.
July 22—Ku Klux indorsed candidates won in Texas primaries; U. S. Sen. Culberson was defeated for renomination.
—Georgia Ku Klux officials issue general order against masks except in lodge rooms.
—John Walsh (Liverpool Jack), burglar, was killed by patrolman A. V. Loewe, whom Walsh fatally shot, 8th St., Brooklyn.
—At Emporia, Kan., a warrant charging William Allen White, author and editor, with violation of the Industrial Court Law in displaying a placard sympathizing with the striking shopmen, was issued in District Court, and the defendant gave bond for appearance at trial in October.
July 23—U. S. asks Britain for the privilege of searching outside the 3-mile limit British ships suspected of rum-running; the request was refused.

July 24—U. S. Atty. Gen. ruled the Government may, in strike crisis, control coal distribution and prices, to which the producing coal operators agreed.
—Rail shopmen's strike causes further curtailment of train service.
—A Negro accused of attacking white girl was lynched at Reedy Creek, Ga.
July 25—Gov. Miller of N. Y. paid $8,000 out of his own pocket for State expenses rather than permit a deficiency appropriation bill to be placed before the Legislature, it developed. The Governor also paid some bills that had been incurred by his former secretary.
—40,000 suit workers at N. Y. struck against "social" or "sweat" shops.
—Martial law was declared at Denison, Tex., in rail strike.
—Penn. R. R. shopmen stick to jobs.
July 26—Pres. Harding urged striking rail employees to accept Rail Labor Board's wage decision and return to work pending a resubmission of case to the board.
—Mass. Supreme Court allowed N. Y. Central R. R. to control Boston and Maine R. R.

IRISH REBELS BREAK JAIL OPEN.

July 27—Irish rebels blew hole in Dundalk Jail and released 105 prisoners.
—U.,S. has recognized Republics of Esthonia, Latvia, Lithuania; also Albania.
—Steamer Calista sank in collision with steamer Hawaii Maru off Seattle, Wash.
—The old U. S. frigate Granite State, accidentally afire, sank off Mass. coast, on way to Eastport, Me.
—Army dirigible C-2 flew from Aberdeen, Md., over N. Y. City, and returned.
July 28—The north cable, one of the four massive wire supports of the Brooklyn Bridge, has slipped on its saddle in the tower on the Manhattan side 1¼ inches toward the centre of the river. The second of the cables at the same tower has slipped half an inch in the same direction.
—Premier Lloyd George stated, at London, it was he who, in the Council of Ten at Paris, first proposed the League of Nations be made an integral part of the Peace Treaty.
—A Negro who quarrelled with white man over cup of water was lynched near Guernsey, Tex.
—At Sagua la Grande, Cuba, Eugene Jova, Acting Amer. Consular Agent, captured by bandits and held for $20,000 ransom, escaped but was badly wounded in his break for liberty.
July 29—Japanese troops began to withdraw from Maritime Province of Siberia.
July 30—America's share in the Argonne fighting was recalled when a memorial to 150,000 killed in the forests was inaugurated at Haute Chevauche, near the ruins of Vauquois. Premier Poincare delivered the unveiling address.
—U. S. Army Aviation Reserve Corps Lieut. T. E. Lyons and A. Altemeier died in plane fall near Port Jervis, N. Y.
July 31—Over 100 were poisoned, 6 fatally, by poisoned pies eaten in a restaurant on Broadway, N. Y.
—Harry Boland, ex-Irish Republican envoy in the U. S. and De Valera's political secretary, was fatally wounded by National soldiers at Skerries, a seaside resort north of Dublin. He was shot in the stomach.
—N. Y. State Coal Commission, headed by E. H. Outerbridge, organized to distribute shipments.
—100 were hurt by explosion of 4,000,000 cubic feet gas tank at Chicago.

AUGUST.

Aug. 1—Rail officials rejected Pres. Harding's proposal to restore seniority rights to striking shopmen; but they agree to abide by Rail Labor Board's decisions.
—18,000 trolley men struck at Chicago against wage reduction; no cars ran. Strike settled Aug. 4 on basis of 70 cents an hour.
—A Negro slayer was lynched at Hot Springs, Ark., and another at Macon, Ga.
—British House of Commons expelled Horatio Bottomley, convicted of larceny.
—At Los Angeles the jury trying Mrs. Madalynne Obenchain for the alleged murder of her sweetheart J. Belton Kennedy, failed to agree and was discharged.

CHINESE PARLIAMENT MEETS.

—At Peking the old Republican Parliament of China, dissolved by the militarists in 1917, reassembled with a quorum and began the transaction of business.
—General strike began at Rome, Italy, ended Aug. 3.
—Lieut. S. M. Lunt, army aviator, died in plane fall, San Antonio, Tex.
—Over 40 Lourdes pilgrims died in train collision near Agen, France.
—In Missouri U. S. Senatorial primaries Sen. J. A. Reed won.
Aug. 2—Rail shop strike leaders voted, at Chicago, to accept Pres. Harding's plan for settlement.
—Indiana took over several coal mines for State operation, under guard of State troops.
—Over 100,000 died in windstorm at Swatow, China.
Aug. 3—4,000 Nat. Guard troops are on rail or coal strike duty in Ala., Kan., Pa., Ky., Ohio, Ill., Ind., N. C., Wyo., N. H., Ga. and Tex. Rail strikebreaker was beaten to death at Burnside, Ill.
—Walter Castor, suspected of murdering Mrs. Anna Wilkens, killed 3 pursuers and self, San Francisco.
Aug. 4—The Fascisti occupied City Hall, Milan, Italy; 10 died in fighting. At Ancona the Fascisti set fire to the Anarchist Club, to the Chamber of Labor, the Railway Men's Club, the Soviet Club and other headquarters. Four dead and many wounded have been reported. At Ancona the Fascisti were aided in fighting by sailors from battleships. The disorders in Italy have killed scores and wounded thousands.
Aug. 5—Following Berlin's rejection of France's "ultimatum," Premier Poincare suspends liquidation of individual German claims against France.
—Crown Prince Regent of Japan sanctioned Arms Conference Treaties with U. S.
—38 were killed, 137 injured, in rear-end train collision at Sulphur Springs, Mo.
Aug. 6—Martial law takes effect in Italian provinces of Genoa, Milan, Parma, Ancona and Leghorn. Fascisti have captured San Giorgio Palace, Genoa; 5 killed, many wounded.
—Colorado troops ejected from that State W. Z. Foster, steel employees' union leader.
—Irish rebels seized cable stations at Waterville and Valentia and prevented use of cables to U. S.
Aug. 7—Ko Low, Chinese merchant, National Pres. of the Hip Sing Tong, was assassinated at N. Y.
—Allies' Conference on War Debts and Reparations opened at London.
—Paris and N. Y. were connected by wireless by opening of new station on French coast.
Aug. 8—Conservatism triumphed over progressivism and Prohibition won over light wines and beers in the Ohio primary.
—In Indiana, where State troops guard mines, only 2 cars of coal have been mined in a week.
Aug. 9—Brit. armed cruiser Raleigh went ashore in Straits of Belle Isle, N. F.; 11 of crew drowned.
Aug. 10—Irish Free State troops captured Cork; rebels dynamited public buildings before leaving.
—Operators and soft coal miners in Ohio, Ind., Ill., and Pa. agreed, at Cleveland, on resumption of mining, at old rates, pending arbitration.
—Explosion wrecked 5-story warehouse, Washington St., N. Y.

SANTA FE TRAINMEN QUIT.

—Trainmen on Santa Fe system quit at Needles, Cal., objecting to troops.
—At Chicago, "Big Tim" Murphy, charged with murder in connection with the death of a policeman supposedly killed by labor bombers, was freed when the State nol-prossed the case.
—At London, Joseph O'Sullivan and Reginald Dunn were hanged for the assassination of Field Marshal Sir Henry Wilson on June 22.
—U. S. and Germany agree, at Berlin, on commission to settle U. S. claims against Germany.
—Permanent World Court at The Hague adjourned to June 15, 1923.
Aug. 11—Abandonment of Santa Fe trains by trainmen, in outlaw strike, maroons 2,500 passengers at desert points. Men were ordered back on duty by Brotherhood chiefs. Strikers took them out of desert on Aug. 13.
—Explosion at sea, off American coast, in reserve coal hatch of steamship Adriatic killed 5 of crew and hurt 4.
—Harold F. McCormick of Chicago married, at Paris, Mme. Ganna Walska, Polish opera singer.
—$200,000 fire burned Hotel Pogatticut, Shelter Island, N. Y.
Aug. 12—Trainmen struck at Birmingham, Ala., because of armed guards.
—At Cuernavaca, Mex., Judge Quiros cleared A. B. Bielaski of complicity in his kidnapping.
—Fire did $500,000 damage at N. Y. Central railroad pier, foot W. 65th St., N. Y.
—Arthur Griffith, founder of the Sinn Fein and President of the Dail Eireann, died of heart trouble, Dublin.
—France began expulsion of 1,500 Germans from Alsace.

Aug. 13—10 died, 20 were hurt in collision, Annandale, Mich., between motor truck and 2 Soo trains; 12 died in train wreck at Portal, Canada.
—The World exposed U. S. Senate conspiracy to boost sugar tariff against Cuba and for beet sugar men.
Aug. 14—Allied Reparation Council, London, adjourned without settling question of German reparations.
—Lord Northcliffe, 57, (Alfred Harmsworth), newspaper owner, died at London of heart trouble.
—Rail strikers were arrested in Nevada and California and Santa Fe trains were moved; 1,200 trainmen struck on L. & N. in Kentucky.
—Army aviator Lieut. L. P. Moriarty and W. Stonebreaker died in fall, Dayton, O.
Aug. 15—Brotherhood chiefs offer strike mediation to rail executives, who accept.
—Soft coal strike, begun April 1, ends in peace agreement in 10 States.
—U. S. House reconvened, at Wash., after 6-weeks vacation.
—At N. Y., Chas. Loerber, alias Lambert, pleaded guilty to complicity in theft of $2,400,000 on Oct. 24, 1921, from mail truck.
Aug. 16—Strike sympathizers dynamited bridge at El Reno, Okla., and tied up Rock Island rail lines.
—50,000 tons of British coal reached N. Y. City.
—Airplane Sampaio Correia left N. Y., on way to Brazil, via Charleston, S. C.

"CUPID'S COURT" OPENS.

—"Cupid's Court" opened at Hammonton, N. J.; it is run by the Lovers' Co-operative Union.
—French Debt Mission to the U. S. has been recalled.
Aug. 17—4 convicts kidnapped Warden of So. Dak. Penitentiary, Sioux Falls, and escaped.
Aug. 18—Pres. Harding, in address to Congress on coal and rail strikes, denounced men and employers for lawlessness.
—U. S. Senate, 35 to 33, voted for import duty of $1.84 per 100 lbs. on Cuban sugar, and $2.30 per 100 lbs. on sugar from other foreign countries.
—The Vatican has withdrawn ban on (U. S.) Nat. Catholic Welfare Council.
—Transit and ferry service at N. Y. are cut owing to coal strike.
—Strike sympathizers dynamited 3-car train on International Railway, north of Buffalo, N. Y.; over 30 hurt; they wrecked N. Y. C. fast freight near Lyons, N. Y.
—2 died, 1 was hurt, in plane fall at opening of new flying field, Brattleboro, Vt.
Aug. 19—U. S. Senate, 48 to 25, passed Fordney-McCumber Tariff Bill.
—At Chicago, Thomas Walsh, Frank Hayes, Patrick Kane and Roy Shields, labor union leaders, were found guilty of conspiracy to extort, by a jury, and the penalty for each was fixed at one year's imprisonment in the County Jail.
—Johnstown, Pa., is "wet," by alleged action of local officials.
Aug. 20—The wrecking of the Mich. Central train No. 39, from N. Y. to Chicago, near Gary, Ind., at 2.10 A. M., resulted from the deliberate removal of spikes from the rails, railroad officials announced. Reward of $1,000 was offered for the arrest of those responsible. The engineer and fireman were killed and two express messengers injured. Russian and Italian strikers admitted the crime.
—Fire destroyed Edson Bradley's $250,000 60-room home, Thousand Islands, Canada.
—Nicaragua, Honduras and Salvador Presidents signed, on American warship, renewal of 1907 treaty of peace with U. S.
—Report of an Army Investigating Board exonerated Lieut.-Col. Paul W. Beck of charges that an alleged attack by him on Mrs. Jean P. Day led to his being killed by her husband.
Aug. 21—Snow fell in Adirondack Mountains, N. Y.
—Soft coal mining began again in Iowa and Mich.; in Ill. and Ind. on Aug. 22.
Aug. 22—Gen. Michael Collins, 40, Irish Free State Premier, was killed by rebels, near Bandon, County Cork.
—Seaplane Sampaio Correia, bound from N. Y. for Brazil, fell into sea and was wrecked off east end of Cuba; no casualties; crew rescued by U. S. cruiser Denver.
—Michigan troops broke up Nat. Communist Convention, near Bridgeman; plans for a revolution were found buried.
Aug. 23—Rail officials in conference at N. Y. refused to restore strikers' seniority rights.
—U. S. House, 219 to 55, passed Pres. Harding's Coal Inquiry Commission Bill.
—Crew of American steamer Philadelphia, at Naples, mutinied, looted hold, and fired ship; 76 were arrested.
—At N. Y., Gerald Chapman and George Anderson were found guilty by a Fed. jury on indictment charging them with the $2,400,000 mail robbery of Oct. 24; sentenced to 25 years each. Chas. Loerber, who confessed and testified against the others, got a year-and-a-day sentence.
—Soft coal strike was settled in Southwest; present wage scale extended 1 year, to March 31, 1923.
Aug. 24—Amer. Mission to Brazil Centennial, headed by Sec. of State Hughes, left N. Y.
—Several were killed in dock strike riots, Havre, France.

IRISH GIVE UP CABLE STATION.

—Irish rebels have relinquished Amer. cable stations at Waterville.
Aug. 25—Drug explosion followed by fire did $2,500,000 damage at Tampico, Mex.
—John Bergen, movie actor, was killed at home of G. F. Cline, movie director, Edgewater, N. J.
Aug. 26—N. Y. City skyscrapers begin to install oil burning equipment for light, heat and power, owing to coal shortage.
—French battleship France, 23,000 tons, hit rock and sank off Quiberon Bay; 3 lost.
—Ex-Gov. Ferguson was defeated in Tex. Dem. Gov. primaries by E. B. Mayfield who was indorsed by Ku Klux.
Aug. 27—Fire trapped 47 in Argonaut gold mine, Cal.
—Sweden voted on constitutional amendment to establish national prohibition, wets won by 942,129 to 897,584.
Aug. 28—N. Y. Legislature met in special session, heard message from Gov. Miller urging creation of a State Fuel Administrator, and, on Aug. 29, unanimously so voted, also granting the Governor $10,000,000 for purchase and sale of coal.
Aug. 29—Strike sympathizers have sabotaged 5,000 cars loaded with coal for Western places.
—In California Rep. Senatorial primary, Sen. Hiram Johnson won.
—Ku Klux kidnapped, at Mer Rouge, La., Watt Daniel and T. F. Richards.
Aug. 30—Soft coal strike ended in Pittsburgh district; new scale of wages signed.
—Negro assailant of white woman was lynched near Shreveport, La.
—Sniping and bombing continue in South of Ireland.
Aug. 31—U. S. Senate, 47 to 22, passed Soldiers' Bonus Bill; House, 214 to 61, passed Fed. Coal Distribution and Price-Fixing Bill.
—British Government revoked exequaturs of U. S. Consuls at Newcastle, and U. S. Government closed Consulate and transferred Consuls, who were charged with discriminating against British ships.
—Allied Reparation Commission denied Germany a moratorium but relieved her of cash payments in 1922.
—Luther Boddy, of N. Y., slayer of Policemen Buckley and Miller, was executed at Sing Sing.
—Public Service Board cut N. Y. City gas rates, effective Oct. 1.
—Men who abandoned trains in California and Arizona desert were expelled by Brotherhood of Ry. Trainmen.
—Strike sympathizers bombed or burned railway bridges at Wilmington, Del., and on Cotton Belt road, Ark.
—Turks defeat Greek Army in Asia Minor.

SEPTEMBER.

Sept. 1—Fed. Judge Wilkerson, at Chicago, enjoined the six rail shopcrafts from carrying on or supporting the strike, by collecting dues for strike benefits or in any other way.
Sept. 2—Anthracite operators met at Philadelphia and agreed to extend present (old) wage scale from Mar. 31, 1922, to Aug. 31, 1923; ratified at mine workers' convention, Scranton, Sept. 9.
—U. S. Senate passed Corrupt Practices Bill, relating only to elections.
—Sec. of Navy Denby reached San Francisco from Orient.
—Civil war continues in Ireland.
Sept. 3—7 rail shop strikebreakers died in incendiary barracks fire, P ttsburgh.
—Mrs. D. H. Miller of Cleveland died when auto rolled off cliff at Niagara Falls and fell 200 feet into river gorge.
—Negro who attacked white girl was lynched at Winder, Ga.
Sept. 4—Third Assembly of League of Nations opened at Geneva.
—U. S. Supreme Court Justice J. H. Clarke resigned and was succeeded, Sept. 5, by U. S. ex-Sen. Geo. Sutherland of Utah.

POISON WHISKEY KILLS 12.

—Wood alcohol whiskey kills 12 in Red Hook Brooklyn.

Sept. 5—Sec. Hughes and party reached Rio de Janeiro, Brazil.
—U. S. Sen. La Follette, in Wis., won over Ganfield in Rep. Sen. primary; in Miss. ex-Sen. Vardaman was defeated by H. D. Stephens in Dem. Sen. primary.
Sept. 6—Turkish Army in Asia Minor has captured 10,000 Greek troops and is marching toward Smyrna, which foreigners are evacuating.
Sept. 7—Brazil began her centennial celebration at Rio Janeiro.
—U. S. Senate, 40 to 7, passed Cummins bill to prevent coal profiteering.
—Lieut. Belvin W. Maynard, known as "the Flying Parson," pilot; Lieut. L. R. Wood, passenger; Mechanic Charles Mionette and Henry A. (Daredevil) Smith of Boston, aeronaut, died in airplane and parachute fall at Rutland, Vt.
—At Washington, representatives of the striking railway shopmen petitioned the Dist. of Col. Supreme Court for an injunction restraining the local authorities from carrying out the provisions of the Chicago temporary restraining order obtained by Atty. Gen. Daugherty; refused Sept. 9.
—Greece handed Smyrna over to care of Allied Consuls.
Sept. 8—Wife of Pres. Harding is critically ill at White House.
—U. S. Senate passed Borah bill for Coal Inquiry Commission; also bill increasing pensions of Mex. and Civil War Veterans.
Sept. 9—Turkish cavalry occupied Smyrna.
—Irish Provisional Parliament elected Wm. T. Cosgrave, President.
Sept. 10—Irish Free State postal workers went on strike.
Sept. 11—U. S. Judge Wilkerson, Chicago, extended for 10 days Atty. Gen. Daugherty's rail strike injunction. Daugherty laid 21 murders and 54 assaults to the strike. Big Eastern roads embargoed freight from West.
—In U. S. House, Rep. O. E. Keller, Minn., made impeachment charges against Atty. Gen. Daugherty; referred to Judiciary Committee.
—Republicans carried State election in Maine.
—Allies handed over city of Brusa to the Turks.
Sept. 12—U. S. Sen. H. C. Lodge won over Jos. Walker in Rep. Sen. primary, Mass.; Sen. Townsend, Rep., won renomination by reduced vote in Mich.
—P. E. House of Bishops, 36 to 27, voted in favor of taking word "obey" from marriage ceremony.
—Pres. Harding's wife is pronounced out of danger.
Sept. 13—U. S. House, 177 to 130, rejected dye embargo and potash duty in conference report on Tariff Bill.

## SMYRNA SET ON FIRE.

—Fire started in the Armenian quarter of Smyrna and spread rapidly through the rest of the city, burning most of the European section and destroying the American Consulate and the theatre where American refugees were congregated; 1,000 killed by fire and sword, score of Americans missing.
Sept. 14—U. S. House adopted conference report on Soldier Bonus Bill.
Sept. 15—Penn. R. R. signed agreement with men to end rail shop strike; Chi. & No. W., St. Paul, and B. & O. men returned to work.
—U. S. House, 210 to 90, passed amended conference Tariff Bill; Senate, 36 to 17, passed conference report on Bonus Bill. House adopted conference report on Soldier Bonus Bill, which went to Pres.
Sept. 16—British troops landed on Dardanelles to hold straits against Turks.
—P. E. House of Deputies, at Portland, Ore., condemns Ku Klux.
—Rev. Edward Wheeler Hall, rector for ten years of the P. E. Ch. of St. John the Evangelist, New Brunswick, N. J., and Mrs. James Mills, choir leader and wife of the sexton, were found shot to death on an abandoned farm 2 miles west of New Brunswick.
—Ford auto plants, Detroit, Mich., closed because of high price of coal, making 73,000 idle.
—At Charles Town, W. Va., guilty of treason was the verdict by the jury in the case of Walter Allen, indicted in connection with the march of armed miners from Kanawha to Logan County, in the southern W. Va. coal fields last summer.
Sept. 17—Turkey demands Allies quit Dardanelles in 15 days.
—Movie with words was put on at Berlin, Germany.
—Bombing and firing and shooting continue in Ireland.
Sept. 18—Rescue party found dead bodies of the 47 men trapped in Argonaut mine by fire.
—Hungary was elected a member of the League of Nations.
—Navy aviator Lieut. F. C. Fechteler died in plane fall, Mt. Clemens, Mich.
Sept. 19—U. S. Senate, 43 to 28, passed Fordney-McCumber Tariff Bill.
—Pres. Harding vetoed Soldier Bonus Bill.
—Congress passed $50,000,000 Rivers and Harbors Bill.
—N. Y. Central R. R. settled shopmen's strike.
—20 died in train wreck near Queretaro, Mex.
Sept. 20—U. S. House, 258 to 54, repassed Soldier Bonus Bill over Harding's veto; but Senate, by vote of 44 to 28, lacked the two-thirds vote, and this killed the bill.
Sept. 21—Pres. Harding signed Tariff Bill.
—British refuse to evacuate Chanak and Dardanelles; Turks seize town of Ezine.
—Robert Fay, ex-German spy, was deported from U. S., at N. Y.
—Walter Socolow, wanted at Baltimore on murder indictment, was kidnapped from Supreme Court chambers, N. Y., and carried to Maryland by Baltimore detectives.
Sept. 22—1 child was killed, 40 hurt, in collapse of lobby floor, Strand movie theatre, Pittsburgh.
—Congress adjourned sine die.
—P. E. Ch. Gen. Convention altered canon law so that communicants are forbidden to marry divorced persons other than plaintiffs in infidelity divorces.

## RAIL STRIKE INJUNCTION.

Sept. 23—U. S. Judge Wilkerson, Chicago, gave the Government a nation-wide temporary injunction against striking rail shopmen.
—New Yorkers are limited to 2 weeks' coal supply at a time.
—At Huntington, Pa., Dr. Herbert Bryson was found guilty by jury of slaying Mrs. H. I. Haines.
—Sec. Hughes and wife arrived at N. Y., from Brazil, on battleship Maryland.
—6 died, including First Lieut. R. E. Davis, when bombing army plane fell, at Mineola, N. Y.
—Soviet and anti-Soviet troops fight each other at Spask, Eastern Siberia.
Sept. 24—Daylight saving ended 2 A. M. at N. Y. It began Apr. 30.
—Lieuts. Patton and Hansen, U. S. Marine Corps, died in plane fall, near Baltimore.
—At Berlin, 6 years of political warfare came to an end when both groups of the German Social Democracy met in common session at Nuremberg and unanimously ratified the fusion resolution adopted by the Majority Socialists at Augsberg and by the Independent Socialists at Gera.
Sept. 25—Turkish cavalry have occupied Erenkeui, 10 miles south of Chanak.
—Ensign A. Harrington, naval aviator, died in plane fall, Pensacola Bay, Fla.
—Mrs. H. G. Carpenter killed Mrs. B. Goward and self, Suncook, N. H.
Sept. 26—Martial law was proclaimed at Athens, Greece; 8,000 troops at Salonica revolted.
—Sec. of State Hughes, at Wash., announced U. S. favors freedom of Dardanelles, Sea of Marmora and the Bosporus.
—Pres. and Cabinet resolved rum runners must not be seized outside 3-mile limit unless ship uses own boats and crew to violate Volstead act.
—U. S. Sen. J. S. Frelinghuysen won renomination over G. L. Record in N. J. primaries.
—Chas. and Jas. Westervelt of Little Falls, N. J., twins, hung selves at Gorham, Me.
Sept. 27—King Constantine of Greece abdicated throne in favor of his son George.
—The dreadnought Arkansas was theoretically sunk at sea outside the Virginia Capes when three squadrons of torpedo planes fired seventeen torpedoes at that battleship and scored seven hits.
—Raisuli, Morocco rebel, surrendered to Spanish forces.
Sept. 28—Lightning exploded fort at Spezia, Italy, and killed 174.
—Rep. N. Y. State Convention, at Albany, renominated Gov. N. L. Miller.
—Negro accused of attacking white girl was lynched near Wrightsville, Ga.
Sept. 29—N. Y. Dem. State Convention, at Syracuse nominated for Governor, ex-Gov. A. E. Smith, and for U. S. Senator, Health Commissioner Dr. R. S. Copeland, of N. Y.
—Referee in divorce suit of Jas. A Stillman, of N. Y., reported to Supreme Court that Mrs. Stillman was not guilty of relations with Fred. Beauvais, Indian guide, and that her son, Guy Stillman, is son of plaintiff; he finds Stillman had relations with Florence H. Leeds, and he recommends the plaintiff be denied divorce. Justice Morschauser confirmed the report, Oct. 6.
—Seventy-four railroads have signed the Baltimore agreement which the federated railway shop crafts ratified in Chicago on Sept. 13 to end the shopmen's strike.
—Bandits got $75,000 of city money at Vancouver, B. C., and escaped.

Sept. 30—Turkish troops evacuated Eren-Koui, leaving British in control of Straits.
—Court at South Bend, Ind., decided Harry Poulin is not father of third child of wife of Prof. J. P. Tiernan.
—Ex-King Constantine and family left Greece for Sicily.
—7 died in incendiary tenement fire on W. 109th St., near Broadway, N. Y.
—Third assembly of League of Nations ended, at Geneva.

OCTOBER.

Oct. 1—Mustapha Kemal Pasha ordered truce in Chanak region of Asia Minor.
Oct. 2—Inquiry by The World shows that America "invested" $960,000,000 since the war in German paper money now almost worthless. America paid 10 cents, 5 cents, 1 cent a mark. America bought 80,000,000,000 paper marks at an average of 1 1-5 cents a mark, $12 a thousand. To-day paper marks sell below 70 cents a thousand. America has left what may be worth $56,000,000. Not more.
—American Bankers' Assoc., opened convention at N. Y.
—After four years, use of pneumatic tubes in carrying mail from one Post Office to another in New York was resumed when the west side lines were put into operation.
Oct. 3—Gov. Hardwick, of Ga., appointed Mrs. W. H. Felton, 87, of Cartersville, to succeed the late T. E. Watson in U. S. Senate.
—"Guilty of murder in the first degree as charged," was the jury's verdict in the case of William M. Creasy, Kentucky railroad shopman, who had been on trial three weeks before Judge Smith in the Nassau County Court, Mineola, L. I., charged with the slaying of his sweetheart, Miss Edith Lavoy, a Freeport school teacher, June 23 last.
—Negro fireman was lynched at Montgomery, Ala.
—Turks, Greeks and Allies began peace parley at Mudania.
Oct. 4—Ex-Premier Venizelos, of Greece, asked U. S. to aid Allies in protecting Christian minorities in Thrace.
—Britain, France and Italy signed, at Geneva, agreement with Austria to loan her money and respect her independence.
—The widow of Jacques Lebaudy, "Emperor of Sahara," wed Henri Sudreau, detective, and her daughter wed Sudreau's son, at Paris.
Oct. 5—Forest fires in Ontario and Quebec provinces, Can., kill over 30 and destroy 6 mining towns.
—E. P. Weston, 83, walker, who left Buffalo Sept. 4, reached N. Y.
Oct. 6—Attorney General Daugherty ruled that selling of liquor on American ships, Government owned or privately owned, anywhere in the world, is contrary to law. He also holds that no foreign ship may bring liquors within the three-mile limit, sealed or unsealed, whether the liquors are or are not intended for consumption in this country.
—The President has already instructed Chairman Lasker of the Shipping Board to discontinue the transport and sale of alcoholic beverages on Shipping Board vessels and has directed Secretary Mellon to deliver equivalent instructions to privately owned American ships.
—N. Y. City Prohibition raiders seized $500,000 of liquors secreted in cellar on E. 44th St.
Oct. 7—Britain and France agreed to give Greeks a month to evacuate eastern Thrace.
Oct. 8—"Safety Week" began at N. Y.
Oct. 9—Fire destroyed at Tokio, $1,750,000 flour mill and $1,000,000 laboratory of Imperial University.
—Eugene Field memorial statue was unveiled, Lincoln Park, Chicago.

MUDANIA ARMISTICE SIGNED.

Oct. 10—At Mudania, Britain, France and Turkey signed armistice; evacution of Thrace in 45 days is promised Turks. Greek delegate did not sign, but accepted armistice. Later Greece agreed to evacuate Thrace.
—Elephant escaped from circus train and did damage to property at Wilmington, N. C.
Oct. 11—Cunard and Anchor steamship lines got from U. S. Court at N. Y., order on U. S. Atty. Gen. Daugherty to show cause why the Government be not enjoined from prohibiting liquor on foreign ships in U. S. waters.
Oct. 12—Steamship City of Honolulu, afire, was abandoned in Pacific; 217 passengers and crew were saved.
—Clifford Hayes, arrested as suspect in murder of Rev. E. W. Hall, and Mrs. Mills, was set free, at New Brunswick, N. J.
—The Harlem River Speedway, N. Y., was opened to motor vehicles.
Oct. 13—Arbitration tribunal at The Hague has awarded $12,000,000 to Norway for ships requisitioned by U. S. in World War. U. S. objected to award as irregular.
Oct. 14—Safety Week at N. Y. had a total of 22 deaths by accidents as against 70 in the corresponding week in 1921.
—"Pennsylvania," New York's first telephone machine switching central office, was placed in operation.
—Crowds gathered at the Leipzig court building to hear the verdict sentencing nine young men to from two months' to fifteen years' penal servitude for participating in the murder of Foreign Minister Rathenau. Four suspects were acquitted.
Oct. 15—60,000 soft coal miners demanding union contract recognition are still on strike in central and western Penn., after over 7 months' idleness.
—At Albajulia the King and Queen of Rouman a were crowned.
—At Berlin 2 police and 2 Communists died in riots.
Oct. 16—Britain notified U. S. that the former will not consent to the search of vessels flying the British flag outside the three-mile limit of the American coast by customs officers seeking liquor smugglers.
—Fire destroyed property at Tampico, Mex., valued at 1,000,000 pesos.
—Hazing has broken out again at U. S. Naval Acad., Annapolis.
Oct. 17—U. S. Army dirigible airship C-2 was destroyed by explosion, San Antonio, Tex.; 7 were hurt.
—The American Cotton Exchange went into receivership at N. Y.
—29 died when Dutch steamer Cornelis sank in Gulf of Bothnia.
Oct. 18—Mrs. Ivy Giberson was convicted at Toms River, N. J., of murdering her husband, W. F. Giberson, at Lakehurst, last August, and was sentenced to life imprisonment.

LLOYD GEORGE RESIGNS.

Oct. 19—British Premier Lloyd George and his Cabinet resigned when Unionist wing of Coalition voted, 186 to 87, to withdraw. Bonar Law became Premier Oct 25.
Oct. 20—Portland, Ore., began to ride I. W. W. out of city.
—Fire did $300,000 damage to newsprint paper mill, Lambertville, N. J.
—Capt. R. E. Brumbaugh, naval student pilot, died in plane fall, Pensacola, Fla.
Oct. 21—At Towson, Md., Walter Socolow, who was kidnapped recently from a N. Y. City Court room, was found guilty of murdering W. B. Norris, May 18, in a hold-up, and sentenced to life imprisonment.
Oct. 22—16 were killed, 20 hurt, in tenement fire, Lexington ave. and 110th st., N. Y.
Oct. 23—U. S. Judge Hand, at N. Y., ruled that no ship afloat, no matter of what flag, shall enter the three-mile limit with liquor aboard, except for crew rations. Pending a final decision by the U. S. Supreme Court, to which foreign and American steamship companies will appeal at once, Judge Hand issued an injuction against interference with such liquors as the laws of certain foreign countries require their vessels to carry as a part of the crew's rations. Of each steamship company affected by this injunction he required a bond of $25,000, "conditional against the use of such stocks for any other purpose."
—Mrs. Marie ("Peggy") Beal was acquitted at Kansas City, Mo., of charge of murdering F. P. Anderson.
Oct. 24—Britain bars clearance papers to U. S. bone-dry ships. British law requires gallon of brandy aboard for each 100 persons. Steamer President Adams was first to come under the law. She arrived at N. Y. with 5 "compulsory" gallons.
Oct. 25—Secretary of the Treasury Mellon ordered the Daugherty ship liquor opinion set aside for the time being in so far as it applies to the transportation of intoxicants by foreign vessels within the three-mile limit. Sea stores and cargo liquor may be carried through American waters when sealed. Sea stores may be opened within the jurisdiction of this country, provided they are required for the use of officers or the crew.
—On the first ballot, at Hackensack, N. J., the jury of six men and six women trying George Cline, Charles Scullion and Alice Thornton for the murder, at Edgewater, of "Handsome Jack" Bergen, daredevil of the films, found them not guilty.
—The Dail Eireann passed the new Irish Constitution.
Oct. 26—Actual work of boring vehicular tunnel under the Hudson River between Manhattan and Jersey City was begun; 30 inches was bored.
—Navy aviators Lieuts. E. L. Ericsson and R. F. Armstrong died in plane fall at Hampton Roads, Va.
—Japanese evacuated Vladivostok.
—King George dissolved British Parliament.

FACTA YIELDS TO FASCISTI.

Oct. 26—Italian Premier Facta and Cabinet resigned at demand of the Fascisti.
Oct. 27—The Fascisti adherents have seized several Italian cities, including Florence, Pisa, and Cremona.
—Irish irregulars have set up a Parliament to rival Free State Government.
—Navy Day and Theo. Roosevelt's birthday were celebrated jointly throughout the U. S.
—C. S. Warfield, Negro, who killed Jas. Goodwin at N. Y., was acquitted of murder.
—Trustees of the Roosevelt Memorial Association, Inc., voted $150,000 to the Woman's Roosevelt Memorial Association, to complete restoration of Theodore Roosevelt birthplace, No. 28 East 20th street, N. Y., and his uncle's home, next door, No. 26, where he played as a boy. They will be known as Roosevelt House.
—At Havre, Mont., Mrs. Margaret Carleton killed the Rev. Leonard J. Christler, "Bishop of All Outdoors" and director of St. Mark's Church, and shot herself through the heart.
—U. S. Judge Hand ruled, at N. Y., that ships are territory no matter upon what seas they sail or what country's shores they touch, and for them the high seas must be the "dry seas" and the law of the land the law also of the water.
—As a protest against a writ of attachment upon Mexican Government funds held in the offices of the consulate and financial institutions in New York, as security in an action brought by a trading company of N. Y. against the Mexican Government, the offices of the Mexican Consulate General at No. 7 Dey Street were closed on telegraphic order from Manuel Teilez, Mexican Charge d'Affaires at Washington.
—Coal mine strike ended in Mingo, W. Va., district.
—Bomb damaged home, at Chicago, of B. F. Sunny, Chairman Ill. Telephone Co., Kimbard ave., due to labor troubles.
—John A. Walter and Major J. J. Astor bought London Times from Northcliffe estate.
Oct. 28—U. S. agrees to send unofficial delegate to Turkish peace conference, at Lausanne.
—People's Revolutionary Party rules Vladivostok.
—A bandit army that looted and partly burned the town of Shangtsaihsien, Chinese Province of Honan, carried off H. E. Ledgard of the China Inland Mission and other missionary workers, according to advices received from Hankow. Mrs. Ledgard and her child eluded the marauders and escaped.
Oct. 29—Attacking the theory of "the living wage" as a basis for determining wages of railroad workers, the public and railroad groups of the Railroad Labor Board, in an opinion made public, declared such a course, "if carried to its legitimate conclusion, would wreck every railroad in the U. S., and if extended to other industries would carry them into communistic ruin."
—Fire destroyed Taylor Opera House and other buildings at Danbury, Conn., loss $200,000.
—King of Italy called on Benito Mussolini, leader of the Fascisti, to form Cabinet.
—W. W. Sterrett, accountant, died at Bryn Mawr, Pa., after eating poisoned cake sent by mail. His wife is recovering.
Oct. 30—Sec. of State Hughes, in address at Boston, reasserted purpose of Harding Administration to take no direct part in European post-war conferences. He said U. S. hopes to participate in World Court of Justice.

ALLIED TROOPS LEAVE SIBERIA.

—Following the withdrawal of all Allied troops from Siberia, the U. S. Govt. has followed the action of Great Britain, France, Italy and Japan in relinquishing control of the Chinese Eastern Railway.
—U. S. Army aviators Lieut. T. V. Hynes and Sergt. R. L. Owens died in plane collision, Honolulu.
—At Grand Forks, the State of North Dakota went into the elevator and flour milling business when its $2,500,000 mill and elevator was formally opened.
—The murder by bandits near Aleppo, Syria, of James Lester Wright of Waukesha, Wis., a Near East Relief worker, was reported in a cable message.
Oct. 31—Mexico suspended all commercial relations with New York; Supreme Court, at Nyack, N Y., quashed writ of attachment got by Oliver American Trading Co., against funds at Mexican Consulate, N. Y. City.
—At Buffalo, John F. Malone, former State Senator and former City Commissioner, was found guilty of larceny in connection with misappropriation of Park Department funds. Three members of the former Commissioner's staff and four business men previously had entered pleas of guilty. The total thefts were estimated at $150,000. Sentences were deferred.
—N. Y. Mayor Hylan's Coal Inquiry Committee is holding hearings in the Pennsylvania anthracite regions.
—The Turkish Nationalist Government, at Angora, has passed sentences of death upon the Turkish signatories of the Treaty of Sevres and the members of the Cabinet of ex-Premier Damad Ferid Pasha, whom it accuses of being Anglophile.

NOVEMBER.

Nov. 1—Gen. F. Murguia, Mexican rebel leader, was executed at Tepehuantes.
—Mrs. Ruth Schermerhorm, of Des Moines, Iowa, who offered to marry a man who would provide $5,000 so she could obtain skilled medical treatment for injury suffered when her first husband shot her, considered many offers before accepting that of George Rogers, Chicago banker and steel man. She interviewed men who answered her advertisement. Rogers bid $500 down and payments.
—At Statesboro, Ga., Elliott Padrick, youthful former Methodist preacher, was found guilty of first degree murder for killing his mother-in-law, Mrs. Mamie Lou Dixon, last June. The verdict, with a recommendation for mercy, automatically carries a sentence of life imprisonment.
—The King James version of the Bible cannot be used in the public schools of California, it being properly the book of a certain religious sect, according to a ruling made public by the District Court of Appeals at San Francisco.
—Mexican Consulate at New York reopened, the court injunction against its funds having been lifted.
Nov. 2—Massachusetts Supreme Court decided that mental anguish is a ground for divorce.
—Finance conference opens at Berlin, Germany.
—Major J. J. Astor announced at Dover, England, intention of disposing of the American property (estimated at $40,000,000, including vast New York realty holdings), he inherited from his father Viscount Astor, and transferring his wealth to England.
—At Cleveland, Ohio, Mrs. Mabel Champion was convicted of murder of Thos. A. O'Conneli, and was sentenced to 20 years.
Nov. 3—At Philadelphia, cheers and sobbing greeted the acquittal of Mrs. Catherine Rosier, who shot and killed her husband and his stenographer in his office, on Walnut St., Jan. 21 last.
—Near Wittenberg, Mo., Jack Kennedy, veteran Missouri train robber, known as the "Quail Hunter," and Harvey Logan, a former railroad employee, were shot and killed by Post Office inspectors after they had robbed a mail car on a southbound passenger train of the St. Louis and San Francisco. The stolen mail, about 100 registered letters, was recovered.
—5 women died, 5 were hurt, in loft fire on E. 13th St., N. Y.
—The Angora National Assembly has dethroned Sultan and declared end to Ottoman Empire.
Nov. 4—Gen. Ernest O'Mailey, Assistant Chief of Staff of Irish Republican forces, was slain by Free State forces, at Dublin.
Nov. 5—Ex-Kaiser William married, at Doorn, Holland, Princess Herminie of Reuss.
—Turkish Nationalist Government takes control of Constantinople.
—135 Russian refugees were drowned when two steamers sank on way from Vladivostock to Japan.
—Irish irregulars burned the Central Post Office at Dublin.
—Sunday morning services at St. Thomas P. E. Church, N. Y., were dispersed by radio all over the U. S.
—The Stars and Stripes filled 5th Ave., N. Y., for blocks from curb to curb, in a parade that inaugurated a ceremony new to this country, though old to Europe, the massing of the colors. Nearly 250 banners, with the national flag predominating, were carried by 800 men and women representing the Army and Navy and practically every local veterans' organization and patriotic society from 64th St. to the Church of the Heavenly Rest, 5th Ave. and 45th St., where services were held.
—Third Internationale opened its fourth annual congress at Petrograd.
Nov. 6—77 coal diggers died in explosion in Reilly mine, near Spangler, Pa.
—160,000 barrels of crude coal oil took fire near Eldorado, Kan.
—Dist. of Columbia Court of Appeals declared unconstitutional the Minimum Wage Law for Women.

Nov. 7—Ex-Gov. A. E. Smith was elected over Gov. N. L. Miller in N. Y., and N. Y. City Health Commissioner R. S. Copeland defeated U. S. Senator Wm. Calder. The Democrats won generally throughout the country in the elections for Governors, U. S. Senators and U. S. Representatives.

Nov. 8—Several ocean passenger steamships under U. S. flag are changing to Panama and other foreign flags, to avoid Prohibition laws.

Nov. 9—At London, Sir William Horwood, Chief of Scotland Yard, was poisoned by candy sent him through the mails and is in a critical condition.

—The roundup of Mexican rebels who have menaced the power of President Obregon has snuffed out the life of Gen. Juan Carrasco, leader along the west coast and in the State of Sinaloa.

Nov. 10—Erskine Childers, Eamon De Valera's right hand man, was captured by National troops at the County Wicklow home of his cousin, Robert Barton, also a Republican leader.

—F. C. Edwards, defeated candidate for the Republican nomination for U. S. Senator, was fined $1,000 and disfranchised for 3 years by the Common Pleas Court at Huntington, W. Va., on a charge of spending more money in his campaign than the law allowed. Sentence was suspended pending an appeal. Edwards's counsel told the court his client spent $96,000.

—Secretary of War Weeks cancelled an invitation to Hon. John Fortescue, President Royal Historical Soc., of England, to address West Point cadets on Armistice Day. The reason given was that Fortescue, in a book published in 1911, made disparaging comments on the people of the U. S.

## EARTHQUAKE IN CHILE.

Nov. 11—Over 900 died and many were hurt when earthquake along Pacific Coast partly destroyed Copiapo, Chile, and did much damage at Ovalle, Coquimbo, Vallenar, Chanaral, and San Fernando. The shocks were accompanied by tidal waves at Coplapo, Vallenar, Coquimbo, and Chanaral. At Coquimbo 500 houses were knocked down. Vallenar was almost obliterated.

—Belgium entombed her unknown soldier. England and France joined in uncovering tablet in Compiegne Forest, where armistice was signed.

—Ex-President Wilson made first public address in 3 years when 7,000 admirers made a cheering Armistice Day call on him at his home, Washington. He spoke briefly for the League of Nations. President Harding put a wreath on the tomb of America's unknown soldier.

Nov. 12—Lieut. J. E. Blaney, army aviator, died in plane fall at air meet, Hartford, Conn.

—Fire did $509,000 damage at army aviation post (Selfridge Field), near Mount Clemens, Mich.

—More than 1,000,000 barrels of coal oil burned at Humble, Tex.

Nov. 13—U. S. Supreme Court ruled that Japanese are not eligible for U. S. citizenship because they are not of the "white race." Section 2169 of the revised statutes restricts naturalization to "free white persons" and those of African descent. The Supreme Court held that these restrictions still apply. The subject has been in controversy for several years on the Pacific Coast.

—Discovery that 353 of the 488 tons of coal shipped in the last 3 months to Highland Falls, N. Y., had been delivered to the property of J. Pierpont Morgan resulted in the seizure of the coal by W. R. Perkins, Fuel Administrator for Orange County, who also distributed coal that had been delivered to other wealthy folk.

Nov. 14—Wassermann Bros., brokers, failed at N. Y., following suicide of Jesse A. Wassermann, member of firm.

—Lieut. E. G. Shrader, army aviator, died in plane fall near Baltimore.

—At Le Bourget, France, Edmond Poiret, noted French aviator, and his two mechanicians were killed when his machine crashed during the competition for the Grand Prix for commercial airplanes.

—The German Cabinet, headed by Chancellor Wirth, resigned after United Socialists voted to quit coalition unless latter abandoned German Peoples' Party.

Nov. 15—Earthquake shocks continue along west coast of South America.

—First day of parliamentary general election in England, Scotland and Wales resulted in gains by Labor and Liberal Parties.

—Leucocytes, the white corpuscles of the blood, have been found by Dr. Alexis Carrel, surgeon, of the Research Staff of the Rockefeller Institute, to be the agency which prevents the spread of infection in animal tissues and brings to those tissues substances which they need for rebuilding themselves.

—At Washington, the cases against Mrs. Muriel MacSwiney and eight other women, members of the Amer. Assoc. for the Recognition of the Irish Republic, who were arrested for picketing the British Embassy were dismissed after a hearing by U. S. Commissioner MacDonald.

—The Banque Francaise de Mexique suspended, at Mexico City. This caused run on other banks.

Nov. 16—Second day of parliamentary elections in Great Britain confirmed victory of Conservatives. In the new Parliament Premier Bonar Law will command a majority of about 80 over all parties. Lloyd George's Coalition Liberals have 44 seats as against 129 in the present Commons.

—The body of a two-year-old white baby, kidnapped from its home near Camaguey, Cuba, was found in a clump of bushes by policemen. They state that the baby was killed by Negro voodoo worshippers. The body had been dissected by the murderers, the heart being missing.

—At Los Angeles, Cal., Mrs. Clara Phillips was convicted of second degree murder for death of Mrs. Alberta Meadows; sentenced, Nov. 27, to 10 years to life in prison.

## SULTAN FLEES CONSTANTINOPLE.

Nov. 17—Mohammed VI., Turkish Sultan, has fled from Constantinople on British warship bound for Malta.

—George Olaf Holm, an American member of the Lutheran Mission, has been kidnapped by bandits in Honan Province, China.

—Kentucky Baptist Association declared Darwinian theory of evolution contrary to Scriptures.

—The opening of a valve in apparatus in the chemical laboratory at Columbia University caused an explosion, killing student W. E. Spandow, and injuring another. The blast wrecked part of the laboratory.

—Fire destroyed Herald newspaper plant, Manchester, Conn. ($150,000.)

—Mrs. Anna Couche, pneumonia patient, burned to death in oxygen room of Rockefeller Institute, N. Y.

—Four Irish irregulars were executed at Dublin by Irish Free State for unlawfully possessing pistols.

Nov. 18—Ex-Premier Georges Clemenceau was welcomed by City of N. Y. on his arrival from France. He spoke at the City Hall, denying France is militaristic.

—50 Federal "dry" agents who have not "produced" were dismissed in N. Y. State.

—105 doctors of N. Y. sued, in U. S. Court, to annul the provisions of the Prohibition law in so far as it restricts physicians to a limited amount of whiskey or other alcoholic beverages in the treatment of patients.

Nov. 19—U. S. Senator T. H. Newberry of Michigan, in letter to the Governor, resigned his seat.

—Clemenceau visited grave of Theodore Roosevelt, Oyster Bay.

—Twenty-two former Ministers were apparently found guilty by about 75 per cent. of the voters at the Bulgarian national referendum to determine whether they were responsible for embrolling Bulgaria in war without sufficient diplomatic preparation. The Ministers of the Radoslavof Cabinet were not included in the judgment. Trial of the latter for involving Bulgaria in the World War has been in progress more than a year.

Nov. 20—Turkish Peace Conference opened at Lausanne, Switzerland, with delegates from Britain, France, Italy, and Turkey.

—Gov. Parker conferred with President Harding at White House over Ku Klux crimes in Louisiana.

—Congress convened in extraordinary session at Washington.

—At Pensacola, Fla., Sidney J. Catts, former Governor, was found not guilty by a jury in Federal Court on a charge of peonage.

—Mayor Kohler, of Cleveland, asked that men keep their hats on while in elevators.

Nov. 21—President Harding, at joint session of Congress, demanded passage of a ship subsidy bill.

—Clemenceau, in address at New York, declared France is misunderstood. He pleaded for U. S. alliance and called Britain unfriendly.

—Mrs. Rebecca Latimer Felton was sworn in at Washington to serve for one day as U. S. Senator from Georgia.

—Kansas began suit in State Supreme Court to oust Ku Klux Klan from that State.

—Ricardo F. Magon, of Mexico, under 21-year sentence for alleged treasonable article in his newspaper, died in U. S. prison, Leavenworth, Kan.

Nov. 22—Clemenceau was greeted by 200,000 Brooklyn school children. He spoke before N. Y. Chamber of Commerce, and later before 106th Regiment.

—Blast killed 84 miners in dolomite iron mine, near Birmingham, Ala.

Nov. 22—Ignace Paderewski, ex-Premier of Poland, returned to piano, and gave concert at N. Y.
—W. B. Lloyd, rich Communist, entered Illinois State Penitentiary at Joliet to serve sentence of 1 to 2 years for violating State anti-syndicalist law.
Nov. 23—Hitchcock, Borah and other U. S. Senators attack Clemenceau's mission in this country as militaristic. Clemenceau spoke at Boston.
—Ismet Pasha, at Lausanne Peace Conference, demanded, for Turkey, Thracian frontier of 1913, plebiscite in Western Thrace, and a Bulgarian corridor to the Aegean Sea.

TO CURB THE K. K. K.

—Mayor Hylan of N. Y. ordered Police Commissioner Enright to drive Ku Klux Klan out of city.
—Ku Klux Klan agents were charged by U. S. with attempting to interfere with mails in Louisiana and Texas.
—Sydney, Nova Scotia, was crippled by storm, and by $250,000 fire.
—At Gallatin, Mo., 6 men, after blowing open and robbing the vaults of the First National Bank—the bank that Frank and Jesse James robbed in 1869—shot their way out of town and escaped with $4,000 in gold and $20,000 in securities.
—The Irish National troops took Sean Russell, Republican Director of Munitions and Chemicals. At Upton, in West Cork, Tom Hales, a local brigadier, declared responsible for the ambush in which Michael Collins was killed, was captured with documents in his possession.
—At N. Y., Redondo Sutton, ex-army officer, convicted of making a false statement in stock promotion, was sentenced to 6 months to 3 years, depending on restitution to clients.
—Key P. Smith, half-breed Indian and alleged healer was convicted at Brooklyn of murdering, May 4, the second of his three wives.
Nov. 24—Clemenceau, at Tremont Temple, Boston, asked that the U. S. intervene at the Lausanne Conference. He offered proof that Germany makes cannon. The armistice, he declared, was entirely American in conception.
—At Dublin, Erskine Childers, Eamon De Valera's right hand man, was executed in conformity with the sentence of the military court that tried him at Portobello barracks Nov. 17 for illegal possession of an automatic pistol Nov. 10 in County Wicklow.
—At Constantinople, the investiture of Abdul Mejid as Caliph of Islam took place in the Hirka Ihadet, or Chamber of the Sacred Mantle at the old Serai. A delegation from the Grand National Assembly handed him the Nazbata, announcing his nomination to the Caliphate. He then kissed the sacred relics, the Prophet's mantle, beard, sword, ring and keys, stepped out into the courtyard and sat on the low wide throne covered with gold tissue.
—Henry P. Gage was sentenced, in General Sessions, N. Y., to not less than five nor more than ten years' imprisonment in State prison. Gage pleaded guilty of grand larceny in the first degree in taking $45,000 in money and $75,000 in securities from his employers, Jerome J. Danzig & Co., Stock Exchange brokers.
—"Handsome Joe" Lanus, rich auto dealer, was shot to death at Chicago.
Nov. 25—At Lausanne, Ambassador Richard Washburn Child sprang a surprise on the Near Eastern peace conference when he reiterated America's demand for the open door in Turkey and her protest against secret agreements conveying economic privileges.
—The Italian Chamber of Deputies voted, 275 to 90, to give full power to Mussolini Cabinet until Dec. 31, 1923, to make fiscal and bureaucratic reforms.
—Clemenceau attended football game at New Haven and saw Harvard beat Yale, 10 to 3.
—Under the Turkish Prohibition Law, just proclaimed, all alcoholic liquors will be confiscated or shipped abroad, all persons convicted of manufacturing, importing or selling spirituous beverages will be fined and jailed, and those found intoxicated will be liable to imprisonment from three months to two years. Offenders occupying Government positions will forfeit their offices. There will be no appeal from these decisions.
—8 died in fire at St. Boniface College, Winnipeg, Canada.
—7 died in coal mine explosion, Cerillos, New Mexico.
—Strike at Vera Cruz deprives city of street cars, autos, lights and bread.
Nov. 26—Clemenceau laid wreath on Grant's Tomb, N. Y., and visited Aquarium. He left for Chicago.
—Bavarian Fascisti are making anti-Jewish drive.
—Col. Gonatis has formed a new Greek Cabinet.
—Jose Serrato was elected President of Uruguay.

PENN. COAL TAX VALID.

Nov. 27—States may impose a tax upon products produced within their borders before such products enter interstate commerce, even though other States are large consumers of such products and do not produce them, the U. S. Supreme Court held. The decision was handed down in a case challenging the constitutionality of the tax imposed by Pennsylvania upon anthracite coal, and was rendered by Justice McKenna, no dissents being noted. The importance of the decision was emphasized by action of New York, New Jersey, Delaware and the New England States in denouncing the tax as giving Pennsylvania a monopoly, and as levying a tribute upon those States which do not produce but must have anthracite as fuel.
—U. S. Senate defeated Administration bill to lend Liberia $5,000,000. The House defeated 6 per cent. deduction on shippers' income tax in Ship Subsidy Bill.
—Clemenceau arrived at Chicago with Gen. Pershing.
—Russia and Britain, at Lausanne Conference, backed U. S. stand for "open door" in Near East.
—Miss Mary MacSwiney, who had been on a hunger strike in Mountjoy Prison for twenty-three days, was released and taken to the Mater Hospital in Dublin.
—J. J. Leitch killed Miss Rose Sandrisser and self, Huntington, N. Y.
Nov. 28—Clemenceau spoke at Auditorium, Chicago.
—At Athens, the new Greek Government executed, after court martial, ex-Premiers Gounaris, Protopapadakis, and Stratos, ex-Minister of War Theotokis, ex-Cabinet Officer Baltazzis, and Gen. Hadjanestis. They were convicted of treason on account of Turk victories in Asia Minor. Gen. Stratigos and Admiral Goudas were sentenced to life imprisonment.
—Mexico City has a water famine.
—The doors of the Grand Jury chamber in the Somerset County Court House at Somerville, N. J., were thrown open and the foreman, Alfred B. Gibb, announced that the jury had refused to indict Mrs. Frances Noel Stevens Hall or any one else for the murder of the Rev. Edward Wheeler Hall and Mrs. Eleanor Mills.
—At Peking, the House of Representatives adopted a resolution impeaching Wang Chung Hui, Acting Premier, and Dr. Wellington Koo, Foreign Minister, on the ground that they participated in signing the loan agreement with the Sino-Italian Bank, in connection with which Finance Minister Lo Wen Kai was recently arrested. The vote was 262 to 39.
—The President Adams of the United States Lines arrived at Hoboken yesterday with 212 Americans returning from France to begin life anew in this country. There were 108 men, 63 women and 41 children in the party, under the direction of representatives of the American Aid Society in Paris.
—Bricklayers' strike at N. Y. was postponed by armistice to Jan. 1, 1923, and by wage arbitration agreement.
—At New York, Alfred E. Lindsay, former South Nyack broker, was sentenced to five to ten years at hard labor in Sing Sing in General Sessions. Lindsay pleaded guilty last March to grand larceny in the first degree, having been indicted on nine counts.
—Great Britain has suspended her program of scrapping warships under the Washington naval treaty until France and Italy ratify it.
—Lehigh Valley Railroad Co. has agreed with State of New Jersey to give up Morris Canal by paying $875,000 and retaining canal bed in Jersey City.

SHIP SUBSIDY PASSES HOUSE.

Nov. 29—U. S. House, 208 to 184, passed Administration's Ship Subsidy Bill; 69 Republicans voted against the measure.
—At Springfield, Ill., sentences of William Bross Lloyd and 16 associates, serving sentences in Joliet Penitentiary and the Cook County Jail, after violation of the State Anti-Syndicalism law, were commuted to expire at once by Gov. Len Small and they were released at 10.40 P. M. The commutations were presented as Thanksgiving gifts to the prisoners. They began serving their sentences last week.
—Clemenceau visited Chicago slaughter house (Armour's) and Art Museum.
—The Irish bills ratifying the new Free State Constitution and embodying other necessary legislation under the Anglo-Irish Treaty were passed by the House of Commons. The bills were given their third final reading by unanimous vote after brief debate. They were then hurried to the House of Lords, where they received their formal first reading.

Nov. 29—At New York, Dr. K. A. Enlind, convicted of receiving ring stolen by A. E. Lindsay from Mrs. Florence James, got indeterminate penitentiary sentence.
—The Egyptian Cabinet resigned over Soudan question.
—Body of Mrs. Abe Becker, missing since April 6, was found in boiler pit, Bronx.
Nov. 30—Clemenceau left Chicago by way of Springfield, Ill., where he laid a wreath on Lincoln's tomb.
—Serge Trufanoff, known as Iliador the former monk, wife, and three children, reached N. Y.
—The State Council of Chile ratified the Tacna-Arica protocol.
—3 young Irishmen, Jos. Spooner, Patrick Farrelly, and John Murphy, alleged rebel bombers, were executed at Dublin by firing squad.
—98-foot motor boat Specjacks, owned by A. J. Gowan of Chicago, reached Miami, Fla., and ended 35,000-mile trip around globe, begun in September, 1921.
—A score or more of anti-water famine paraders were shot to death by police at Mexico City.

DECEMBER.

Dec. 1—Labor unions called general strike at Mexico City.
—Armed men guarded Clemenceau at home of Joseph Pulitzer, near St. Louis.
—Senators La Follette (Wis.) and Norris (Neb.) called secret Progressive conference at Washington attended by 13 Senators and 21 Representatives, at which was discussed plan for legislative programme.
—11 died when Canadian steamer Maplehurst sank in Lake Superior, at Portage Lake Canal breakwater.
—Fire at Newbern, N. C., destroyed 225 dwellings, 16 lumber mills and 20 stores.
—At New York, John T. Hettrick, the building trades "code of practice lawyer," who was twice convicted on separate indictments charging conspiracy to violate the Donnelly Anti-Trust Act, was suspended for three years from the practice of law in the State, by the Appellate Division of the Supreme Court, acting on complaint of the Grievance Committee of the Bar Association.
—Slain body of Christina Hervish, 17, was found near Paterson plank road, Wallington, N. J.
—It is reported that the tug Lizzie D., alleged rum-runner, has sunk off Long Island, N. Y., with 17 aboard.
—Impeachment charges were made in Congress against United States Attorney Gen. Daugherty by Representative Keller (Rep.), of Minnesota.

GREEK PRINCE BANISHED.

Dec. 2—Revolutionary military tribunal at Athens, Greece, sentenced to perpetual banishment Prince Andrew, brother of former King Constantine, on the charge that it was by his order that 40,000 Greek troops were sent across the Great Salt Desert to their death at the hands of Turks in Asia Minor. He is also deprived of rank in the army. Counter revolutions have broken out in several places in Greece.
—The United States seaplane, S-C II., from New York, reached Para, Brazil.
—The U. S. grows faster than its ideas do, said Clemenceau, in address at St. Louis.
—At Peking, the wedding of Hsuan Tung, the seventeen-year-old deposed Emperor of China, was celebrated with the pomp and ceremonial of imperial days. The former Emperor's bride was the Princess Kuo Chin Si.
—Hostility toward ratification of the Washington naval agreements in the Foreign Affairs Commission of the French Chamber of Deputies, placing Georges Mandel, reporter of the commission, on the minority side, was responsible for the resignation of M. Mandel, former Chief of Cabinet under Clemenceau, from the commission. While M. Mandel refuses to be quoted, it is known that the commission rejected his report recommending ratification by a vote of 26 to 16, with two members absent.
—Fire destroyed 162 dwellings at Terrebonne, Quebec; loss, $800,000.
Dec. 3—U. S. Atty. Gen Daugherty filed with House Judiciary Committee reply to Rep Keller's impeachment charges. He denied the accusations.
—Exiled Prince Andrew of Greece and wife left Phaleron on British warship.
—Ex-N. Y. Port Collector D. F. Malone made public report of his saving steamship Lusitania, when leaving N. Y., May 1, 1915, carried 5,400 cases of ammunition, but no guns, troops nor explosives.
—Switzerland defeated the proposed law providing for a levy on capital for governmental purposes by a vote of about seven to one. Not a single canton gave a majority for the capital tax. The total vote cast was 730,000 against the levy and 108,000 in the affirmative.
Dec. 4—Fourth session of the 67th Congress began at Washington. Dyer Anti-Lynching Bill was withdrawn from Senate. House adopted resolution authorizing retirement of Associate Justice Pitney from U. S. Supreme Court.
—Clemenceau spoke at Baltimore; then went to Washington.
—British House of Lords passed Commons bill establishing Irish Free State constitution.
—Permanent building trades workers' agreement was made at N. Y. to avert strikes in future.
—Four students died in fire at Colby College dormitory, Waterville, Me.
—Indictment against Madelynne Obenchain, charging murder of J. B. Kennedy, was dismissed at Los Angeles, and she was released from prison.
Dec. 5—U. S. Senate Committee on Agriculture made report recommending a constitutional amendment which would put inauguration day in January instead of March, wipe out the Electoral College, and have Congress convene in the January following the election.
—Mrs. Clara Phillips, serving life sentence for killing Mrs. Alberta Meadows, escaped from prison at Los Angeles.
—Fire destroyed Sulpician (R. C.) church and seminary, Oka, Quebec.
—At London, Gerard Lee Bevan, former Chairman of the City Equitable Fire Insurance Company, was sentenced in the Old Bailey to seven years' penal servitude. Bevan was found guilty on nine counts of an indictment for fraud and malversion.
—At Lausanne, Ismet Pasha, chief Turkish delegate at the Near Eastern Conference, came out against the proposed forced migration of Greeks to Greece and Turks to Turkey. He denied Dr. Fridtjof Nansen's figures about the number of refugees who are in a serious plight. Dr. Nansen was the League of Nations Commissioner in Anatolia investigating the situation. Ismet declared the Vatican note about the dangers menacing Christians in Turkey is not based on fact, and was a Greek move against Turkey.
—King George, by signing Irish Constitution Act, put Free State into existence at midnight, with Tim Healy as Governor-General.
—John Carrington was acquitted, at Danville, Ill., of charge of murdering his sister-in-law, Mrs. Lydia Carrington, Grape Creek, Aug. 2, 1903.
—Clemenceau called on President Harding.
—Benny Levinsky, clothing worker, was assassinated in labor feud, at N. Y.
Dec. 6—U. S. Ambassador Child told Lausanne Conference this country demands Straits of Dardanelles be kept open for all ships, including war vessels.

CLEMENCEAU CALLS ON WILSON.

—Clemenceau called on Woodrow Wilson, at Washington.
—Tim Healy was inaugurated at Dublin as Governor General of Irish Free State; the Dail met and re-elected Prof. Hayes Chairman.
—Six were killed when a Fokker scout plane and a Martin bomber collided 250 feet in the air over Langley Field, Va. The dead are: Major G. L. Gearhart, Iowa; Capt. B. A. Doyle, San Francisco; Sergt. A. T. Marsick, Cleveland; Private Tom Jordan, Deepstep, Ga.; Private Felix Blumka, Chicago; Private Leon Rolah, Philadelphia.
—Police killed bank robber at Danville, Cal., and recovered $9,000.
—U. S. steamer George Washington and British steamer Clyne Rock collided off Dover, England.
Dec. 7—Deputy Sean Hales, and Deputy Patrick O'Malley, Vice-Chairman of the Parliament Assembly, were assassinated at Dublin.
—Clemenceau lunched at the White House.
—With the approval of President Harding, Secretary of the Navy Denby announced a general order putting into effect a plan perfecting the organization of the navy afloat, with Admiral Hilary P. Jones as Commander in Chief of both the Atlantic and Pacific branches at all times.
—Brooklyn's first Probation Court formally opened.
—Twelve to fourteen years have been added to the average human life in the last half century by the progress in medical science, John M. Dodson, Dean of Bush Medical College, said in an address before the University of Chicago forum. Infant mortality, he said, had been cut in half; tuberculosis largely robbed of its terrors, and epidemics brought under control, but 600,000 still die in the United States annually from preventable diseases.

Dec. 7—At Burlington, Vt., a verdict for $465,000 was awarded Mrs. Dorrit Van Deusen Stevens Woodhouse in her $1,000,000 alienation suit against Mr. and Mrs. Lorenzo E. Woodhouse, parents of her husband, C. Douglass Woodhouse.

Dec. 8—President Harding, in joint message read by him to Congress, asked law to forbid strikes and demanded a "dry" Nation and also railway consolidation.

—A jury in New Brunswick, N. J., convicted Raymond Schneider of perjury in falsely accusing his erstwhile chum, Clifford Hayes, of the murder of the Rev. Edward Wheeler Hall and Mrs. Elenor Mills, choir singer.

—The business district of Astoria, the oldest city in Oregon, was destroyed by a fire which swept over thirty blocks. Hundreds of persons are homeless and property loss is estimated at $15,000,000. For ten hours the fire held sway. Shortly after noon dynamite stopped its progress.

RORY O'CONNOR EXECUTED.

—At Dublin, four Republican leaders were executed in the rear of Mountjoy Prison without trial and, according to the official report, "as reprisal for the assassination yesterday of Deputy Sean Hales and as a solemn warning to persons associated with those who are engaged in an assassination conspiracy against the Irish people's representatives." Rory O'Connor, Liam Mellowes, the two leaders of the Four Courts siege last summer; Joseph McKelvey and Richard Barrett were the victims of these first reprisals. Protests from various Labor members of the new Parliament and from many citizens of Dublin already have been heard. The Republicans were stunned only for a moment by the executions. In prompt counter-reprisal they entered Mercer's Hospital and killed a Free State soldier who was in bed there. The men escaped.

—Patrick Dealy, highway robber, escaped from Sing Sing prison.

Dec. 9—Conference on Reparations opened at London. Premier Bonar Law presided. The Allies agreed on German debt moratorium.

—N. Y. State Atty. Gen. Newton ruled that radio marriages are illegal, under the Domestic Relations Law, because the parties are not actually "in the presence" of the person performing the ceremony. Mayor Hylan of N. Y., in speech to Cook County Real Estate Board, at Chicago, boomed third party movement.

Dec. 10—Japan restored to China the Kiaochow territory, formerly German.

—Irish irregulars bombed homes of Free State officials at Dublin.

—In defiance of Mayor Hylan's order to Police Commissioner Enright to run the Ku Klux Klan out of the city, a white robed and hooded Klansman spoke from the pulpit of the Baptist Church, Gates and Washington Aves., Brooklyn.

—Dave Treadway, member of a posse of Federal fastnesses of Menifee County, Ky., in pursuit of a band of moonshiners who killed Federal Prohibition Agent Robert E. Duff, Dec. 9, was shot and killed, supposedly by a member of the outlaw band.

—King George appointed Duke of Abercorn the Governor General of North Ireland.

The Nobel Peace Prize was presented, at Christiania, to Dr. Fridtjof Nansen, the explorer, for his relief work in Russia and Asia Minor.

—Gen. Leonard Wood resigned as provost of the University of Pennsylvania.

Dec. 11—Allied Conference on Reparations, at London, adjourned to Jan. 2, 1923, at Paris. It was as impossible for the Tory Prime Minister Bonar Law to commit his Government to invasion of the Ruhr, demanded by Premier Poincare as the price of a German moratorium, as it was for his predecessor to do so.

—Clemenceau talked, at Chicago, to American Farm Bureau Federation Convention.

—The World (Labor) Congress Against War opened at The Hague.

—At Oxford, Miss., a verdict for the defendant was returned in the $100,000 damage suit of Miss Frances Birkhead, stenographer, against Gov. Lee M. Russell, based on charges of seduction and other allegations.

—At London, England, Frederick Bywaters and Mrs. Edith Thompson were sentenced to death for murder of the woman's husband.

—The Irish Free State Parliament was completed by the swearing in of the Senate. Only 45 of the 60 appeared for the ceremony in the Parliament Chamber of Leinster House. Some of the absentees are said to be hesitant about taking the oath.

—President Harding has approved the dismissal of Midshipmen Bruce H. Robinson and Stuart H. Hawkins, who were tried by general court martial at Annapolis recently and found guilty of hazing.

— At Warsaw rioting, in which there was loss of life and injury to many persons, marked the ceremony of the swearing in of Gabriel Narutowicz as President of Poland.

THE POPE CREATES EIGHT CARDINALS.

—The Pope, at secret consistory, created eight new Cardinals. They were: Monsignor Achille Locatelli, Nuncio in Lisbon; Monsignor Giovanni Bonzano, Apostolic Delegate to Washington; Monsignor Henriguez Rey y Casanova, Archbishop of Toledo; Monsignor Alexis Charost, Archbishop of Rennes; Monsignor Eugenio Tosi, Archbishop of Milan; Monsignor Arthur Stanislaus Touchet, Archbishop of Orleans; Monsignor Giuseppe Mori, Secretary of the Congregation Council of Jesuits, and the Rev. Father Franz Ehrle, formerly the Vatican Librarian.

—The 1922 United States cotton crop is estimated by Dept. of Agriculture at 4,767,262,000 pounds (9,964,000 bales); value, $1,134,608,356, not including lint and cotton seed.

## NEW GERMAN CABINET.

The new German Cabinet was constituted, on Nov. 21, 1922, as follows:

Chancellor, Wilhelm Cuno.

Vice Chancellor and Minister of Justice, Dr. Carl Heinze (People's Party).

Minister of Foreign Affairs, Herr von Rosenberg.
Minister of the Interior, Rudolph Oeser (Democrat).
Minister of Finance, Andreas Hermes (Centrist).
Minister of Economics, Johannes Becker (People's Party).
Minister of the Treasury, Dr. Heinrich Albert.
Minister of Transportation, Gen. Wilhelm Groener (Socialist-Democrat).
Minister of Posts and Telegraphs, Herr Stingl.
Minister of Food, Herman Mueller (Socialist).
Minister of Defense, Dr. O. Gessler (Democrat).
Minister of Labor, Dr. Heinrich Brauns (Centrist).

## FIRE LOSSES IN THE UNITED STATES.

(Estimated by the Journal of Commerce.)

| Year (Calendar). | Loss. | Year (Calendar). | Loss. | Year (Calendar). | Loss. | Year (Calendar). | Loss. |
|---|---|---|---|---|---|---|---|
| 1875 | $78,102,285 | 1887 | $120,283,055 | 1899 | $153,597,830 | 1911 | $217,004,575 |
| 1876 | 64,630,600 | 1888 | 110,885,665 | 1900 | 160,929,805 | 1912 | 206,438,900 |
| 1877 | 68,265,800 | 1889 | 123,046,833 | 1901 | 165,817,810 | 1913 | 203,763,550 |
| 1878 | 64,315,900 | 1890 | 108,993,792 | 1902 | 161,078,040 | 1914 | 221,439,350 |
| 1879 | 77,703,700 | 1891 | 143,764,967 | 1903 | 145,302,155 | 1915 | 172,033,200 |
| 1880 | 74,643,400 | 1892 | 151,516,098 | 1904 | 229,198,050 | 1916 | 214,530,995 |
| 1881 | 81,280,900 | 1893 | 167,544,370 | 1905 | 165,221,650 | 1917 | 250,753,640 |
| 1882 | 84,505,024 | 1894 | 140,006,484 | 1906 | 518,611,800 | 1918 | 290,959,885 |
| 1883 | 100,149,228 | 1895 | 142,110,233 | 1907 | 215,084,709 | 1919 | 269,000,775 |
| 1884 | 110,008,611 | 1896 | 118,737,420 | 1908 | 217,885,859 | 1920 | 330,853,925 |
| 1885 | 102,818,796 | 1897 | 116,354,575 | 1909 | 188,705,150 | 1921 | 332,654,950 |
| 1886 | 104,924,750 | 1898 | 130,593,905 | 1910 | 214,003,300 | | |

For fire losses in New York City see index. The 1906 figures in above table include the San Francisco conflagration-earthquake.

## DEATH ROLL OF 1922.

Abarbanell, J. R. (69), editor, N. Y., Nov. 9.
Abbott, Rev. Lyman (86), N. Y., Oct. 22.
Abbott, Wm. T., Chicago banker, Washington, D. C., May 29.
Adams, ex-Gov. Alva of Colo. (72), lawyer, Battle Creek, Mich., Nov 1.
Adams, Rear Admiral Jas. D. (73), Washington, D. C., Feb. 19.
Albany, Duchess of (60), Innsbruck, Sept. 1.
Aldridge, Geo. W. (66), port collector, N. Y., June 13.
Allen, Annie T. (54), Amer. missionary relief worker, in Turkey, Feb.
Andrea, Fern (Andrews), film actress, in airplane fall, Germany, July 4.
Anson, Adrian C. "Pop" (70), ex-baseball player, Chicago, April 14.
Archibald, Mayor Alex (53), Newark, N. J., Feb. 11.
Armstrong, Chas. M. (55), Pres. Bklyn Press Club, Brooklyn, May 8.
Arnold, Francis R. (86), perfumery, father of missing Dorothy Arnold, N. Y., Apr. 1
Auchterlonie, H. B , golfer, Balt., July 8.
Auger, Geo. (39), 8 ft. 4 in. tall, N. Y., Nov. 30.
Austrian ex-Emperor (Chas. Hapsburg), (35), Funchal, Madeira, April 1.
Ayres, Rear Admiral Jos. G. (92), Montclair, N. J., March 21.
Babcock, Dr. Jas. W (66), pellagra expert, Columbia, S. C., March 3.
Bacardi, Emile (70), rum distiller, Santiago, Cuba, Aug. 28.
Bacon, Frank (58), actor, Chicago, Nov. 19.
Bajer, Dr. M. F., noted Peace Prize winner, Copenhagen, Jan 23.
Ballinger, ex-Sec. of the Interior Richard A., (64), lawyer, Seattle, Wash., June 6.
Bancroft, Gen Wm. A. (67), lawyer, Cambridge, Mass., March 11.
Bangs, John K. (60), author, Atlantic City, Jan. 21.
Barbour, Brig. Gen. L. A. (76), banker, Hartford, Conn., Nov. 6.
Barham, Guy B. (59), Los Angeles newspaper publisher, London, June 9.
Baring, Mrs. Maude Lorillard (ex-Mrs. T. Suffern Tailer) (47), London, April 2.
Barnes, Paul (Geo F. Feger) (52), song writer, N. Y., May 3.
Barrett, E. W. (56), editor, Birmingham, Ala., July 9.
Barto, Rudolph S., Pres. U. S. Feature Service Co., N. Y , Feb. 1.
Barton, Rear Admiral J. K. (69), Philadelphia, Dec. 23, 1921.
Baskerville, Dr. Chas. (51), chemist, N. Y., Jan. 28.
Bataille, Henry (50), dramatist, Paris, March 2.
Bates, Prof. Clifton W. of Brooklyn, Paris, March 3.
Baumgarten, Emile (56), art dealer, N. Y., Feb. 4.
Bayard, L. P. (46), golfer, Short Hills, N. J., July 3.
Bayliss, Raymond W. (30), N. Y. broker, Rye, N Y., Feb. 9.
Beach, Mrs. Emily (75), horsewoman, N. Y., Dec. 3.
Beach, Capt. Warren C., N. Y., Jan. 14.
Beatty, P. E. Bishop Coadj. Troy (56), Nashville, Tenn., April 23.
Beaumont, Admiral Sir Lewis (75), England, June 19.
Beck, Lieut. Col. Paul W. (45), aviator, Oklahoma City, April 4.
Belcher, Rev. F. J., Supt. Five Points Mission, N. Y., June 27.
Bell, Dr. Alex. Graham, (75), telephone inventor, Baddeck, Nova Scotia, Aug. 2.
Benedict XV. Pope (1854), (Giacomo della Chiesa), Rome, Jan. 22.
Benjamin, Park (74), lawyer, editor, Stamford, Conn., Aug. 21.
Benjamin, Mrs. Park (56), Goshen, N. Y., Sept. 11.
Bennett, Sam'l J., journalist, Tucson, Ariz., Dec. 25, 1921.
Bensel, John A. (59), civil engineer, Bernardsville, N. J., June 19.
Bensman, Matteo (45), composer, N. Y , April 8.
Bergen, Teunis J. (48), realty, Brooklyn, Feb. 27.
Borglum, Solon H. (54), sculptor, Stamford, Conn., Jan. 30.
Berolzheimer, Emil (60), pencil mnfr., Tarrytown, N. Y., May 25.
Bertillon, Dr. Jacques (70), finger print originator, Paris, July 7.
Beseler, Gen. Hans von (72), Potsdam, Ger., Dec. 22, 1921.
Bjerregaard, Carl H. A. (76), librarian, author, N. Y., Jan. 28.
Blackwood, Brig Gen. Wm. R. (84), Philadelphia, April 26.
Blair, Eugenie (50), actress, Chicago, May 13.
Blake, Henry T. (94), lawyer, New Haven, Conn., April 7.
Blandy, Harold F., U. S. relief worker, Ufa, Russia, May 17.
Bleecker, Jas. (87), Scarsdale, N. Y., Feb. 24.
Bloch, Rosa (42), Ger. Communist leader, Zurich, July 14.
Blunt, W. S. (83), poet, London, Sept. 11.
Bly, Nellie (Mrs. Eliz. Cochrane Seaman) (56), N. Y., Jan. 27.
Babcock, Prof. C. A., founder of "Bird Day," Oil City, Pa., Aug. 10.
Boese, Clifford (65), court clerk, N. Y., March 20.
Boland, H'y J., sec. to de Valera, Dublin, Aug. 1
Bonnat, Leon (89), painter, Paris, Sept. 8.
Bonner, Paul E. (54), banker, N. Y., Jan. 20.
Bonzo, Cardinal Valfre di (69), Rome, June 25.
Bosch, Peter (51), wall paper mnfr., Chicago, April 12.
Bourne, Miss Emily H., philanthropist, N. Y., March 23.
Brady, John R. (72), dancing teacher, N. Y., Dec. 13, 1921.
Braganza, Prince P. B de (75), Paris, July 12.
Brainerd, Chauncey C. (48), newspaper correspondent, Washington, Jan. 28.
Brooke, Alex. H. (63), sports writer, Philadelphia, Jan. 21.
Brann, Rev. H. A. (83), N. Y., Dec. 28, 1921.
Branner, Prof. John C. (72), Pres. Emeritis Stanford Univ., there, March 1
Brantly, Chief Justice Theo., Helena, Mont., Sept. 17.
Brinson, Congressman Sam'l M. (52), New Bern, N. C., April 13.
Briscoe, Capt. Wm. J., Bagio, Philippines, April.
Britt, Jonathan (92), oldest Odd Fellow, Uba City, Cal., Feb. 14.
Brock, Sir Thos. (75), sculptor, London, Aug. 22.
Broome, Isaac (86), sculptor, Trenton, N. J., May 4.
Brown, Elos R. (65), Rep. leader, of Watertown, Cape Vincent, N. Y., Sept. 24.
Brown, Frank L. (59), Sec. World Sunday School Asso., Brooklyn, March 23.
Brown, Rev. John (91), Bunyan's biographer, London, Jan. 16.
Brunet, R. C. Bishop F. X. (54), Montreal, Jan. 7.
Bryce, Viscount Jas. (84), author, diplomat, in England, Jan. 22.
Bubb, Brig. Gen. John W. (78), Wilmington, Del., Feb. 23.
Buck, Prof. Gertrude (51), Po'keepsie, N. Y., Jan. 8.
Buckley, Chris. A. (77), "The Blind Boss," polit. leader, San Francisco, April 20.

Buckstone, Rowland (62), actor, London, Sept. 14.
Buermeyer, H. E. (84), "Father of American Athletics," Brooklyn, Oct. 10.
Buffington, Brig. Gen. A. R. (84), Madison, N. J., July 10.
Bulkeley, ex-Gov. M. G. (85), Pres. Aetna Life Ins. Co., Hartford, Conn., Nov. 5.
Bulkley, R. W. (57), owner of collapsed Knickerbocker Theatre of Washington, in Fla., Feb. 6.
Burbidge, Chas. J., actor, Amityville, N. Y., May 31.
Burian, Baron Stephen (71), Vienna, Oct. 20.
Burlingame, Ed. L. (74), editor, N. Y., Nov. 15.
Burnett, Capt. S. B. (73), ranch owner, Ft. Worth, Tex., June 27.
Burt, Thos. (84), labor leader, New Castle, England, April 13.
Butler, Ed. D. (86), banker, N. Y., Mch. 12.
Butler, Prof. H. C. (50), Amer. archaeologist, Paris, Aug. 15.
Byam, Perry (69), enlisted in Civil War as drummer when 9 yrs. 10 mos. old, Tacoma, Wash., Feb. 10.
Cabrieres, Cardinal F. M. P. (91), in France, Dec. 21, 1921.
Cahill, M. J. (51), Richmond Boro. Pres., W. New Brighton, N. Y., July 14.
Caldwell, B. D. (64), Pres. Wells, Fargo Express, Burlington, Vt., Sept. 24.
Campbell, John H. (65), Treas. Inter. Rap. Tran. Co., Garden City, N. Y., April 5.
Campbell, Regina (25), actress, White Plains, N. Y., Jan. 20.
Capus, Alf. (64), ed. Figaro, member Fr. Acad., Paris, Nov. 1.
Cardinal Almaraz Santos, Archbishop of Seville (75), Madrid, Jan. 22.
Carey, Martin (64), lawyer, Stand. Oil official, in Fla., April 8.
Carleton, W. T. (73), opera singer, Flushing, N. Y., Sept. 25.
Carmody, ex-Atty. Gen. Thos. (63), New Rochelle, N. Y., Jan. 22.
Carr, Sam'l., financier, Boston, May 29.
Carroll, B. H. (48), U. S. Consul, Gibraltar, March 30.
Carroll, Royal P. (60), yachtsman, N. Y., Feb. 7.
Carter, Sir Geo. (62), ship owner, in England, Feb. 9.
Cary, Henry N. (64), newspaper man, Chicago, Nov. 23.
Castellane, Marquise de (49), formerly Miss Frances Syms of N. Y., Nice, Feb.
Castle, Agnes, author, Genoa, Italy, Apr. 30.
Chacon, Admiral Jose, in Spain, April 13.
Chalifoux, R. C. Bishop Hubert O., Sherbrooke, Canada, March 17.
Champney, Mrs.. E. W. (72), author, Seattle, Wash., Oct. 13.
Chapin, Chester W. (80), steamboat owner, N. Y., Nov. 11.
Chatfield, Cyrus H. (78), leather, yachtsman, N. Y., May 24.
Chauvin, Judge Hector (60), Montreal, June 17.
Cheney, John V. (74), poet, San Diego, Cal., May 1.
Cheshire, F. D. (73), ex-U. S. Consul Gen. in China, N. Y., June 13.
Childers, Erskine, Irish Republican Irregular, Dublin, Nov. 24.
Cholmeley-Jones, Col. R. G. (38), ex-Director U. S. War Risk Ins., N. Y., Feb. 21.
Clark, Rear Admiral C. E. (79), Long Beach, Cal., Oct. 1.
Clark, ex-Justice Lester W. (69), N. Y., Sept. 23.
Clark, Mrs. W. J. (Grace Gayler), ex-actress, New Rochelle, N. Y., March 8.
Cobden-Sanderson, Thos. D. (82), printer, in England, Sept. 7.
Cochin, Baron Denys (71), member French Acad., Paris, March 24.
Cocks, Geo. W. (93), historian, Glen Cove, N. Y., May 26.
Collier, Geo. F. (55), college dean, Berea, O., Jan. 16.
Comings, Geo. R. (61), U. S. Assayer, Brooklyn, Jan. 17.
Comparette, T. L. (54), numismatist, Philadelphia, July 3.
Comtesse, Robt. (75), ex-Pres. of Switzerland, Berne, Nov. 17.
Conger, ex-State Sen. Benj., Groton, N. Y., Feb. 28.
Connell, U. S. Rep. C. R., Scranton, Pa., Sept. 26.
Cook, Dr. Jchn W. (78), educator. Chicago, July 16.
Cook, Robt. J. (73), ex-Yale rowing Capt., Belle Vernon, Pa., Dec. 3.
Cook, Gen. Virgil Y. (73), Batesville, Ark., March 13.
Coombs, ex-Congressman Wm. J. (89), banker, Brooklyn, Jan. 12.
Cooper, Col. D. B. (79), slayer in 1908 of ex-U. S. Sen. E. W. Carmack, Nashville, Tenn., Nov. 4.
Corbett, Jennie Parker (76), actress, Amityville, N. Y., Aug. 9
Cottrell, E. H., press mnfr., N. Y., Mch. 8.
Couden, Rev. H. N. (79), blind chaplain U. S. House 1895-1921, Ft. Myer, Va., Aug 22.
Cowgill, Mayor Jas. S. (74), Kansas City, Jan. 20.
Cowles, J. L., "Father of Parcel Post," Richmond, Va., Oct. 22.
Croker, Richard (81), ex-Tammany leader, near Dublin, April 29.
Cross, Dr. Howard B. (32), of the Rockefeller Institute, Vera Cruz, Dec. 27, 1921.
Crow, U. S. Sen. W. E. (52), Uniontown, Pa., Aug. 2.
Cullen, Edgar M. (78), ex-Chief Judge N. Y. State Court of Appeals, Brooklyn, May 23.
Curry, Prof Sam'l. S. (75), Boston, Dec. 24, 1921.
Curtice, U. S. Consul to Nagasaki Raymond S. (37), Wilmington, Del., Feb. 15.
Curtis, Police Commissioner Edwin U. (61), Boston, March 28.
Curtis, Mrs. Eliz. (106), nurse to late King Edward, England, Feb. 17.
Cuyler, T. De W. (68), lawyer, Chairman Asso. Ry. Executives, Philadelphia, Nov. 2.
Daggett, Mrs. Mary S. (66), novelist, Pasadena, Cal., March 9.
Dailledouze, E. J. G. (65), "carnation king," Brooklyn, Nov. 25.
Dale, Mrs. E. D. ("Bunny Burch"), actress, Brooklyn, Jan. 9.
Dana, Mrs. Paul (62), (Mary Butler Duncan), N. Y., Feb. 16.
Daumig, Ernest, Ger. Ind. Soc. leader, Berlin, July 5.
Davis, Rear Admiral Chas. H. (76), Wash. D. C., Dec. 27, 1921.
Davis, Maj. Louis (81), 37 inches high, circus dwarf, Granville, W. Va., June 9.
Davison, Henry P. (55), N. Y. banker, Locust Valley, N. Y., May 6.
Davy, Dr. Sir Henry, Exeter, England, May 10.
Dawson, Arthur (65), artist, Richmond, Va., Aug. 22.
Deery, John (78), ex-billiard champion, N. Y. City, April 8.
De Foe, Louis V. (53), dramatic critic, N. Y., March 13.
Delafield, J. L. (51), lawyer, N. Y., Nov. 20.
Delahunty, John (70), lawyer, N. Y., Sept. 24.
Delano, ex-Congressman Milton (77), Syracuse, N. Y., Jan. 2.
Denniston, Rear Admiral Henry M. (82), Dobbs Ferry, N. Y., May 23.
Denza, Luigi (76), composer, London, Feb. 13.
Depuy, Clarence C. (63), editor, Syracuse, N. Y., March 3.
Derby, Dowager Countess of (82), (Mrs. F. A. Stanley), London, April 17.

Deschanel, Paul E. L., ex-Pres. France (65), Paris, April 28.
De Verona, Ignatius M. (80), ex-Chief Eng. Water Dept., N. Y., May 12.
De Wet, Gen. Christian (68), Boer commander, De Wetsdorp, So. Africa, Feb. 3.
Dewey, Geo. E. (78), wine, Brooklyn, Feb. 3.
Dey, Fred. V. R. "Nick Carter," author, N. Y., April 26.
Deyo, S. L. F. (72), civil eng., helped build first N. Y. subway, Norfolk, Conn., Aug. 19.
Dicey, Prof. Alfred V. (87), law expert, Oxford, England, April 7.
Dickinson, ex-Mayor Franke W. of Springfield, Mass., (72), in Fla., April 7.
Dies, ex-Congressman Martin (52), Kerrville, Tex., July 13.
Dietz, Howard J. (55), airplane inventor, Hempstead, N. Y., May 3.
Dillon, John R. (88), N. Y. ex-stock broker, Lawrence, N. Y., Aug. 10.
Dodworth, T. Geo. (61), ex-N. Y. dancing master, Feb. 24.
Dolge, Alfred, piano felt mnfr., Milan, Italy, Jan. 5.
Dolgorouki, Princess (75), widow of Czar Alex. II. of Russia, Nice, Feb. 15.
Donahue, R. C. Bishop P. J., Wheeling, W. Va., Oct. 4.
Donald, John A. (65), shipping, Rye, N. Y., Jan. 14.
Drake, Francis C. (50), art director The World, N. Y., Feb. 17.
Drew, ex-U. S. Sen. Irving W. of New Hamp. (77). lawyer, Montclair, N. J., April 10.
Duncan, Jessie (Mrs. Geo. Bowles), actress, near Paris, April 6.
Dundas, Lord (68), London, Feb. 16.
Dunham, G. E. (63), editor, Utica, N. Y., Oct. 28.
Dunn, Jas. C., owner Cleveland American League baseball club, Chicago, June 9.
Dupree, Frank (54), playwright, N. Y., Feb. 3.
Durand-Ruel, Paul (90), art dealer, Paris, Feb. 5.
Du Souchet, Henry A., playwright, Kingston, N. Y., Oct. 27.
Duval, Alex., restaurateur, Paris, Feb. 15.
Eaton, Sir John C. (45), dept. store, Toronto, March 30.
Ebling, Wm. (94), brewer, N. Y., Jan. 25.
Edwards, Rear Admiral J. R., Bristol, R. I., Dec. 2.
Ellison, I. S. (75), publisher, N. Y., Nov. 12.
Elston, Congressman John A. of 6th Cal. dist. (47), Washington, Dec. 15, 1921.
Elwell, Col. Francis E. (63), sculptor, Darien, Conn., Jan. 23.
Ely, G. W. (82), ex-Sec. N. Y. Stock Exchange, Tannersville, N. Y., Aug. 16.
Emerson, Prof. Chas. F. (79), Hanover, N. H., Dec. 1.
Emerson, ex-State Sen. Jas. A., Brooklyn, Jan. 31.
Enloe, ex-Congr'n Col. B. A. (74), Nashville, Tenn., July 8.
Esmond, Henry V. (53), actor, Paris, Apr. 17.
Essex, Dowager Countess of (Adele Grant of N. Y.), London, July 28.
Eu, Count d', son-in-law of late Emperor Dom Pedro II. of Brazil, at sea, Aug. 29.
Evans, Bernard W. (78), artist, London, Feb. 27.
Evans, U. S. Judge Beverly D. (57), Savannah, Ga., May 7.
Evarts, Sherman (63), N. Y. lawyer, Hanover, N. H., Oct. 21.
Eyster, Mrs. Nellie B. (92), author, Berkeley, Cal., Feb. 23.
Fabbri, Alex. (45), scientist, N. Y., Feb. 6.
Falkenhayn, Gen. Erich von (61), near Berlin, April 8.
Falkland, Viscount (Byron P. Cary) (77), London, Jan. 10.
Farrar, Edgar H. (73), lawyer, Biloxi, Miss., Jan. 6.
Farrar, Dr. Reginald, Moscow, Dec. 29, 1921.
Farrier, Horace H. (74), fin., Rumson, N. J., April 15.
Fallows, Ref. P. E. Presiding Bishop Sam'l. (87), Chicago, Sept. 5.
Feininger, Karl (77), violinist, Jan. 31.
Festetics, Count G. de (76), N. Y., Aug. 26.
Field, Mrs. C. de P. (Hamersley), N. Y., June 20.
Field, Hamilton E. (49), art critic, Brooklyn, April 9.
Finn, Michael, baseball club owner, Omaha, Neb., May 6.
Fisher, John C., theatre mgr., Chicago, Dec. 18, 1921.
Flagg, Prof. Rufus (74), Ashland, Wis., May 18.
Flagler, Col. Clement A. F. (55), Baltimore, May 7.
Flagler, John H. (84), fin., Greenwich, Conn., Sept. 8.
Fletcher, ex-Gov. Allen M. (69), Rutland, Vt., May 11.
Fletcher, Chas. H. (84), "Castoria" mnfr., Orange, N. J., April 9.
Foley, ex-State Sen. S. J. (59), Central Islip, N. Y., June 25.
Fontoura-Xavier, Dr. A. da, Brazil diplomat, Lisbon, March 31.
Foord, John (78), editor, Wash. D. C., April 17.
Forsyth, Robt. (76), actor, N. Y., Feb. 9.
Forsythe, Mrs. Grace Strachan (59), Associate City Supt. of Schools, N. Y., July 21.
Foulke, Bayard F. (73), N. Y., Feb. 15.
Fox, Richard K. (76), Red Bank, N. J., Nov. 14.
Frear, Dr. Wm. (61), farm expert, State College, Pa., Jan. 7.
Freeberthyser, Martin (89), last of the original Swiss bellringers, St. Louis, Apr. 12.
Fushimi, Prince Y. H. (55), Hayama, Japan, June 26.
Garland, Chas. (53), tennis expert, Linesville, Pa., Nov. 23.
Garretson, ex-Justice Garret J. (75), Amagansett, N. Y., July 9.
Garvin, ex-Gov. L. F. C. (81), Lonsdale, R. I., Oct. 2.
Gates, M. E. (74), ex-Pres. Amherst and Rutgers Colleges, Littleton, N. H., Aug. 11.
Gauthier, R. C. Archbishop Chas. H. (78), Ottawa, Canada, Jan. 19.
Geary, Mannis J. (77), ex-Pres. Big 6, Rockville Centre, N. Y., Feb. 25.
Gelabert, Maria (65), opera singer, Paris, July 14.
Gherardine, A. B. de (55), "King of the Latin Quarter," Paris, June 28.
Gilman, Ada (67), actress, Holmesburg, Pa , Dec. 18, 1921.
Gimbel, Jacob (71), merchant, Atlantic City, Nov. 7.
Gleichen, Lady Feodora, sculptor, St. James Palace, London, Feb. 22.
Glenny, C. H. (65), actor, in England, Oct. 1.
Goldthwaite, Dora, actress, Amityville, N. Y., Aug. 19.
Goddard, Arabella (Mrs. J. W. Davison) (86), pianist, in France, April 20.
Gosford, Earl of (Archibald B. S. Acheson) (63), London, April 11.
Goucher, Rev. J. F. (79), Baltimore, July 19.
Gould, Sir Alf. P. (70), surgeon, London, April 19.
Grace, R. C. Bishop Thos. (81), Sacramento, Cal., Dec. 27, 1921.
Graham, Dr. Harris, Beirut, Syria, March.
Grand Duchess Anastasie-Michailovna (62), near Nice, March 11.
Grand Duchess Marie of Mecklenburg-Schwerin, mother-in-law of Queen of Holland, The Hague, April 22.
Grant, Nellie (Mrs. F. H. Jones) (67), daughter of U. S. Grant, Chicago, Aug. 30.
Green, Burton, (48), composer, Mt. Vernon, N. Y., Nov. 17.
Grenet, Edw. (75), artist, Paris, March.
Griffin, Hugh R. (72), of Woonsocket, L. I., in Red Cross service, Riga, Latvia, May 5.
Griffith, Arthur, Pres. Dail Eireann, Dublin, Aug. 12.

Grimes, R. C. Bishop John, Syracuse, N. Y., July 26.
Grismer, Jos. R. (73), actor and manager, N. Y., March 3.
Griswold, Mrs. D. P. (Annie Robe), ex-actress, Lenox, Mass., July 26.
Gronna, ex-U. S. Sen. Asle J. (64), Lakota, N. D., May 4.
Guggenheim, Isaac (68), Amer. mine owner, Southampton, England, Oct. 10.
Guion, Rich. L. (81), inventor, New Rochelle, N. Y., Jan. 23.
Gunnell, Rear Admiral Francis M. (95), Wash. D. C., June 10.
Gunnison, Fred. E. (53), fin., Brooklyn, Jan. 11.
Gwathmey, Arch. B. (86), N. Y., Jan. 23.
Haff, Capt. Henry P. (61), cup defender skipper, Islip, N. Y., Feb. 1.
Hale, Edw. J. (83), diplomat, Fayetteville, N. C., Feb. 15.
Haigazian, Rev. A. H., Pres. Amer. College, Konia, Asia Minor, Harpoot, May 24.
Hall, Mrs. Florence M. (77), daughter of Julia Ward Howe, High Bridge, N. J., April 10.
Halle, Chas. J. (65), art dealer, N. Y., Dec. 19, 1921.
Halsey, Geo. M. (67), N. Y. banker, L. I. City, Dec. 4.
Halsted, Dr. (Prof.) W. S. (70), Baltimore, Sept. 7.
Hampton, Crystal, film actress, N. Y., June 17.
Hapsburg, Chas. (35), ex-Emperor of Austria, Funchal, Madeira, April 1.
Harcourt, Viscount Lewis (59), London, Feb. 23.
Hardin, Abr. T. (54), N. Y. Cent. Vice Pres., N. Y., Feb. 21.
Hare, Sir John "John Fairs" (77), actor, London, Dec. 28, 1921.
Harland, Marion (Mrs. M. V. Terhune) (81), author, N. Y., June 3.
Harmsworth, Alf. C. W. (Lord Northcliffe) (57), London, Aug. 14.
Harris, Prof. Geo. (77), Pres. Emeritus Amherst College, N. Y., March 1.
Hatch, Roswell D. (90), lawyer, Greenwich, Conn., June 7.
Hathaway, Eugene H. (73), Dominican Dir. Gen. Posts and Telegraphs, in Dominica, March 3.
Havemeyer, John C. (89), sugar refiner, Yonkers, N. Y., June 8.
Hawthorne, Grace (Mrs. Bernard S. de Santelys), actress, London, May 25.
Heidelbach, Alf. S. (70), N. Y. banker, Paris, Feb. 1.
Hendrie, Col. Chas. W., Stamford, Conn., March 28.
Hepburn, Alonzo Barton, (76), banker, N. Y., Jan. 25.
Hicks, ex-Postmaster Thos. L. (70), Philadelphia, March 28.
Hill, Carrie M. S. (70), school teacher 51 yrs., Brooklyn, Feb. 1.
Hill, J. P. (75), theatrical manager, N. Y., Oct. 30.
Hill, Walker (67), of St. Louis, ex-Pres. Amer. Bankers Asso., N. Y., Oct. 6.
Hjoerne, Prof. Harold, historian, Stockholm, Jan. 7.
Hoey, Chas. actor, N. Y., March 8.
Holbrook, Levi (86), N. Y. capitalist, Central Harbor, N. H., July 26.
Holmes, Col. Addison (96), Gen. Grant's valet, Gary, Ind., March 27.
Hopkins, ex-U. S. Sen. A. J. (76), Aurora, Ill., Aug. 23.
Hopkins, Saml. M. B. (80), banker, Brooklyn, Jan. 28.
Horner, Robt. J. (67), furniture, N. Y., Feb. 26.
Horsey, Adm'l De (95), Cowes, Oct. 22.
Hotchkiss, Sup. Court Justice Henry D. (66), N. Y., March 6.
Houghton, Mrs. E. P. Donner (78), one of ill-fated Donner party crossing Rockies 75 years ago, Los Angeles, Feb. 19.
Howard, Geo. B. (38), author, Hollywood, Cal.,, Nov. 20.
Howe, Prof. Henry M. (74), Bedford Hills, N. Y., May 14.
Hoyt, Colgate (72), banker, Oyster Bay, N. Y., Jan. 30.
Hoyt, F. D. (79), N. Y. lawyer, Lakewood, N. J., July 21.
Hoyt, Sheldon H. (78), Stamford, Conn., March 21.
Hudson, W. H., naturalist, London, Aug. 18.
Hue, Otto, Pres. Ger. Miners' Nat. Asso., Essen, April 18.
Huldermann, Bernard (50), steamship director, Berlin, May 5.
Hunnewell, Hollis H. (52), fin., N. Y., Jan. 24.
Hyde, Mrs. Henry B. (76), widow of Equit. Assur. founder, Saratoga, N. Y., June 23.
Hyde, ex-Congr'n Saml. C. (80), lawyer, Spokane, Wash., March 7.
Illingworth, Robt. H. (61), steel, Newark, N. J., April 23.
Ingalls, M. E. (52), lawyer, N. Y., Sept. 22.
Isham, Henry H. (75), banker of Elizabeth, N. J., on train at Wash. D. C., May 15.
Jackson, Fremont M. (73), carpets, and wife (68), Brooklyn, April 26-27.
Jackson, Geo. W. (60), tunnel engineer, Chicago, Feb. 5.
Jackson, Thos. H. (74), bird collector, West Chester, Pa., Feb. 27.
Jacoby, Philo (85), rifle shot champion, San Francisco, March 25.
James, Mrs. Julian, philanthropist, Washington, April 11.
Jenckes, Lawrence B. (55), loom inventor, Worcester, Mass., March 30.
Jenkins, Francis B. (32), imptr. and Titanic survivor, Brewster, N. Y., March 26.
Jenks, Tudor (65), lawyer, Bronxville, N. Y., Feb. 11.
Jennings, Ryerson W., hotel keeper, Mt. Airy, Pa., Feb. 4.
Johnson, Capt. Chas. G. (82), guard over Lincoln's body, Jersey City, March 30.
Johnson, Eugene H., teleg. operator at White House in World War, St. Louis, Jan. 24.
Joline, W. R. (73), yachtsman, Long Branch, N. J., Jan. 7.
Jones, Ada (46), comedy actress, Rocky Mount, N. C., May 2.
Jones, Mrs. F. H. (67), (Nellie Sartoris), daughter of U. S. Grant, Chicago, Aug. 30.
Jones, Walter (51), actor, Brooklyn, May 25.
Jonescue, ex-Premier Take of Roumania, Rome, June 21.
Judd, Edw. U. (97), one of founders of Rep. party, Anacortes, Wash., June 27.
Judson, Mrs. Harriet, founder Brooklyn Y. W. C. A., Brooklyn, Feb. 11.
Justice, Ewan (47), N. Y. newspaper man, Berlin, Oct. 16.
Kabayama, Count Admiral S. (85), Tokio, Feb. 8.
Kalanianaole, Prince J. K., deleg. in U. S. Congress, Honolulu, Jan. 7.
Kapp, Dr. Wolfgang, head of 1920 Berlin revolt, Leipsic, June 12.
Kean, Alex. L. (56), biologist, Orange, N. J., Nov. 28.
Keane, Mrs. Emily (47), actress, N. Y., Jan. 3.
Keating, Robt. M. (55), bicycle inventor, Springfield, Mass., Jan. 20.
Kellar, Harry (73), magician, Los Angeles, March 10.
Kelleher, Raymond "Fatty," actor, N. Y., June 24.
Kelley, Commander Jas. D. J. (75), editor, N. Y., April 30.
Kelly, John T. (70), actor, Bronx, Jan. 16.
Kelly, Rich. B. (71), banker, N. Y., Dec. 3.
Kelly, Dr. Stephen (74), banker, N. Y., Feb. 10.
Kemp, E. R. (50), Okla. oil man, N. Y., June 9.

Kendall, Percival W. (42), golfer, Deal, N. J., May 13.
Kennedy, Jas. (71), built first "L" engine, N. Y., Aug. 14.
Kennedy, Miss Mary Lenox (92), niece of James Lenox, N. Y., April 19.
Kennedy, Dr. Robert (102), Bristol, Conn., May 25.
Ketcham, Wm. A. (75), ex-G. A. R. Commander, Indianapolis, Dec. 27, 1921.
Keyes, John B. "Romeo" (66), capitalist, Brighton, Mass., April 27.
Kilgo, M. E. Bishop (South) John C., Charlotte, N. C., Aug. 10.
King, Geo. Gordon (64), fin., N. Y., Mch. 30.
Kinkaid, M. P. (68), Nebraska 6th Dist. Congressman, Washington, July 6.
Kirk, Sir John (75), child welfare, England, April 4.
Kirk, Sir John (89), explorer, in England, Jan. 15.
Kline, Rear Admiral G. W. (58), Bound Brook, N. J., June 28.
Knapp, Sanford R. (90), lawyer, Peekskill, N. Y., April 15.
Knoedler, Mrs. Roland F. (Mme. Louise Theo), ex-actress, Paris, Jan. 19.
Knox, Dr. S. B. P. (84), Santa Barbara, Cal., June 29.
Koch, Frank (78), theatre owner, N. Y., Dec. 2.
Korolenko, Vladimir, novelist, Poltava, Dec. 25, 1921.
Kronold, Hans (51), composer, N. Y., Jan. 10.
Kurzman, Julius C. (41), costumes, N. Y., Feb. 20.
Lais, Rev. M., Vatican astronomer, Rome, Dec. 26, 1921.
Lancaster, Mrs. Isabelle (87), bareback rider, Poughkeepsie, N. Y., March 25.
Landis, ex-Congr'n Chas. B. of Ind. (64), powder, Asheville, N. C., April 24.
Lane, W. A. (70), N. Y. banker, Paris, Aug. 2.
Langey, Carl (70), composer, N. Y., Mch. 16.
Lantry, F. J. (63), ex-Tammany leader, N. Y., Oct. 7.
Latta, Jas. W. (83), Phila., March 26.
Laurenti, Marie (Luigi Cavadini) (32), singer, N. Y., March 7.
Laurentz, Wm. H., tennis champion, Paris, March 7.
Laveran, Dr. A. (77), Nobel (1907) Prize winner, Paris, May 18.
Lavisse, Ernest (80), historian, member French Acad., Paris, Aug. 18.
Lawler, John J. (54), baseball player, Middletown, N. J., June 17.
Leach, Col. Josiah G. (80), originator of Flag Day, Philadelphia, May 27.
Lee, Col. Robt. E. (53), grandson of Gen. R. E. Lee, Roanoke, Va., Sept. 7.
Lefferts, Marshall (82), N. Y. iron merch., Port Washington, N. Y., May 3.
Leinster, Duke of (Maurice Fitz Gerald) (35), Premier Irish Duke, Edinburgh, Feb. 4.
Leone, Henry (65), actor, Mt. Vernon, N. Y., June 9.
Leullier, Robt., Police Prefect, Paris, July 5.
Lincoln, Alf. G. (83), farmer, cousin of Abraham Lincoln, Exeter, Pa., May 15.
Littlefield, Chas. R. (94), friend of Lincoln, Wash. D. C., April 9.
Lloyd, Marie (52), actress, London, Oct. 7.
Lockwood, Mrs. Mary S. (91), a founder of the Daughters of the American Revolution, Plymouth, Mass., Nov. 10.
Loose, Jos. S. (80), N. Y. cracker mnfr., Kansas City, Mo., June 10.
Lord, Austin W. (62), architect, in Conn., Jan. 19.
Lord, Frank H., fin., N. Y., May 3.
Lovell, Mrs. Sophia (70), "Queen of the Gypsies," Toledo, O., July 20.
Lumholtz, Dr. Carl (71), explorer, Saranac Lake, N. Y., May 11.
McLean, Andrew (74), editor, Brooklyn, Dec. 4.
Magon, R. F., political prisoner, Leavenworth, Kan., Nov. 21.
Maistre, Gen. P. A. M., French aide to Gen. Pershing, Paris, July 25.
Mallory, Robt. sr. (66), N. Y. banker, Port Chester, N. Y., Dec. 15, 1921.
Mann, U. S. Rep. Jas. R. of Ill., Washington, D. C., Nov. 30.
Manson, Sir Patrick (78), "father of tropical medicine," London, April 9.
Marantette, Mme. (73), circus rider, Mendon, Mich., Jan.
Marburg, Capt. Theo. jr., Magdalena, Mex., Feb. 24.
Marceau, T. C. (53), N. Y. photog., New Rochelle, N. Y., June 23.
Marean, ex-Justice Josiah T. of Brooklyn, in Fla., Feb. 8.
Markham, Wm. G. (85), sheep breeder, Rochester, N. Y., May 16.
Marks, Bennett (89), textiles, a Lincoln body guard, N. Y., April 3.
Marks, Mrs. J. P. P. (Josephine Peabody), author, Cambridge, Mass., Dec. 4.
Marsh, E. C. (47), literary critic, Pawling, N. Y., Sept. 24.
Marston, E. S. (71), N. Y. banker, Florham Park, N. J., Oct. 12.
Marx, U. S. Rep.-elect Saml., N. Y., Nov. 30.
Maxwell, R. W. "Tiny" (38), sports editor, Norristown, Pa., June 30.
Mayer, Levy (63), lawyer, Chicago, Aug. 14.
McAlpin, Geo. L. (66), hotel man, N. Y., Nov. 27.
McAndrews, Major Gen. Jas. W., Wash, D. C., April 30.
McCaffrey, Francis X. (56), lawyer, Brooklyn, March 28.
McClaughry, Matt. W., fingerprint expert, Chicago, March 14.
McFarland, Prof. Boynton W. (54), New Haven, March 13.
McGean, Fire Chaplain Rev. V. De P. (46), N. Y., Aug. 30.
McGrath, ex-N. Y. State Adj. Gen. Thos. H. (82), Brooklyn, May 6.
McGuinness, Jos., Sinn Fein leader, Dublin, May 31.
McIntyre, Wm. T., minstrel, Kenosha, Wis., March 13.
McKee, Frank (62), theatre owner, N. Y., Nov. 13.
McLeer, Brig. Gen. Jas. (82), N. Y., Jan. 15.
McMillin, Emerson (78), banker, Mahwah, N. J., May 31.
Menocal, Gabriel (53), Cuban cattle dealer, N. Y., Feb. 13.
Merriman, Mrs. M. K. (49), Pres. Nat. Fed. College Women, Wakefield, Mass., June 28.
Merritt, Mrs. Gertrude "Chinatown Gertie," Salvation Army worker, N. Y., April 9.
Morton, Ada (69), actress, Amityville, N. Y., Aug. 12.
Meunier, ex-Deputy Paul, alleged spy, Paris, May 17.
Meyer, Chas. W., actor, Baltimore, June 3.
Meyer, Miss J. A., actress, N. Y., Jan. 2.
Meyers, Howard, Olympic athlete, Chicago, July 15.
Meynell, Mrs. Alice (72), poet, London, Nov. 27.
Middendorf, Fred. (92), banker, Brooklyn, Jan. 10.
Millard, ex-U. S. Sen. Joseph H. (86), Omaha, Neb., Jan. 13.
Miller, Clarence B. (50), Sec. Repub. Nat. Committee, St. Paul, Jan. 10.
Miller, Chas. R. (73), editor N. Y. Times, N. Y., July 18.
Mills, Enos A. (52), "father of Rocky Mt. Nat. Park," Long's Peak, Col., Sept. 21.
Mills, Mich. K. "Prince Michael" (65), head of Jezreelite sect in England, Jan. 19.
Miriam, Miss Alice (28), opera singer, N. Y., July 22.
Mitsui, Baron Takayasu (73), banker, Tokio, Jan. 5.
Mnason, Paul (79), "Santa Claus" model, N. Y., March 30.

Moen, Levi W. (74), Newark, N. J., Mch. 31.
Monaco, the Prince of "Albert Grimaldi" (74), Paris, June 26.
Montt, Jorge, ex-Pres. of Chile, Santiago, Oct. 7.
Monteith, Prof. Henry R. (74), Storrs, Conn., March 21.
Montgomery, Alf. (65), artist, Los Angeles, April 20.
Moore, Mrs. Alex. P. "Lillian Russell" (61), actress, Pittsburgh, June 6.
Morrell, F. V. (77), genealogist, Brooklyn, Jan. 8.
Morris, Chas. A. (88), minstrel, Staten Island, April 19.
Morrison, M. E. Bishop Henry C. (77), Leesburg, Fla., Dec. 21, 1921.
Mounet, Paul (75), actor, Paris, Feb. 9.
Mountbatten, Lord Leopold (33), brother of Queen of Spain, London, April 23.
Mulhall, Police Lieut. M. J. (48), medallist, Brooklyn, Nov. 21.
Mulligan, Millie (131), colored, ex-slave, Louisville, Ky., May 30.
Murfree, Miss M. N. "Chas. Egbert Craddock," author, Murfreesboro, Tenn., July 31.
Murguia, Gen. F., Tepehuantes, Nov. 1.
Murphy, Arthur H. (53), Tax Commissioner and Bronx Democratic leader, N. Y., Feb. 6.
Murphy, Everett J. (70), prison warden, Joliet, Ill., April 10.
Murphy, Jas. J. (60), ex-Pres. "Big Six" typo. union, N. Y., June 10.
Nash, Wm. A. (82), banker, N. Y., Aug. 30.
Nicholson, Col. John P. (79), Recorder Loyal Legion, Philadelphia, March 8.
Nick Carter "F. V. R. Dey," author, N. Y., April 26.
Niedringhaus, ex-U. S. Rep. F. G. (85), tin mnfr., St. Louis, Nov. 25.
Nikisch, Arthur (66), orchestra leader, Leipsic, Jan. 23.
Nitray, Emil (40), dramatist, Milford, Conn., May 19.
Northcliffe, Lord "Alfred Harmsworth" (57), editor, London, Aug. 14.
Northrop, Mrs. Alice (61), Pres. School Nature League, Mt. Riga, N. Y., May 6.
Northrop, Cyrus, college pres., Minneapolis, April 3.
Norton, Mrs. E. S. (64), actress, N. Y., Sept. 30.
Note, Jean (63), baritone, Brussels, April 1.
Nugent, ex-Coroner John R. (78), Brooklyn, Dec. 13, 1921.
Nunes, Manuel (79), ukulele inventor, Honolulu, July 12.
Nunez, ex-Cuban Vice Pres. Gen. Emilio (62), Havana, May 5.
Oakman, Walter G. (77), banker, N. Y., March 18.
Ober, Mrs. Adelaide D. (70), actress, Hastings, N. Y., Feb.
Odell, Hamilton (87), lawyer, N. Y., Feb. 21.
O'Dwyer, Edw. F. (62), Chief Judge City Court, N. Y., Oct. 9.
Ogan, Maude De H., writer, Englewood, N. J., March 24.
O'Grady, Jos. S. (65), Tax Commissioner, N. Y., Dec. 31, 1921.
Okuma, Marquis Shigenobu (54), Tokio, Jan. 10.
Olney, Peter B. (79), N. Y. lawyer, Lawrence, N. Y., Feb. 9.
O'Neal, ex-Gov. Emmett, Birmingham, Ala., Sept. 7.
Opdyke, W. S. (86), N. Y. lawyer, Englewood, N. J., Oct. 20.
O'Reilly, Lawrence J. (52), N. Y. City Water Supply Commissioner, Brooklyn, Feb. 1.
Owens, W. J. "Doc," card player, Havana, Jan. 14.
Oxnard, Henry T. (62), beet sugar mnfr., N. Y., June 8.
Packard, ex-Gov. Stephen B. of Louisiana, Seattle, Wash., Jan. 31.
Padgett, U. S. Rep. L. P. (67), Washington, Aug. 2.
Page, Gertrude "Mrs. Geo. A. Dobbin," novelist, in Rhodesia, April 1.
Page, Thos. N. (69), author, ex-U. S. Ambassador to Italy, in Va., Nov. 1.
Palitz, Bern. A. (56), Gen. Agt. Baron de Hirsch Fund, N. Y., March 2.
Palmer, Mrs. A. Mitchell (53), Wash. D. C., Jan. 4.
Pariser, Sol. "Pop Perry" (90), hotel keeper, Coney Island, March 23.
Parker, Horace E., lawyer, N. Y., April 10.
Parrish, Congr'n Lucian W. (44), Wichita Falls, Tex., March 27.
Patten, Walter R. (54), steamboat owner, Long Branch, N. J., May 6.
Patterson, Chas. A. (46), Vice Pres. du Pont Powder Co., Philadelphia, July 27.
Patterson, John H. (78), cash-register mnfr. of Dayton, O., Kirkwood, N. J., May 7.
Peabody, F. S. (66), coal operator, Hinsdale, Ill., Aug. 27.
Peabody, Mrs. Geo. F. "Katrina Trask," Saratoga, N. Y., Jan. 8.
Pedrell, Felipe (81), composer, Barcelona, Aug. 20.
Penfield, Frederic C. (67), ex-Ambassador to Austria-Hungary, N. Y., June 19.
Pennie, John C. (63), lawyer, N. Y., Dec. 23, 1921.
Penrose, U. S. Sen. Boies (61), Wash. D. C., Dec. 31, 1921.
Phillips, Capt. J. M. (97), pioneer Chicago grain trader, Sedgwick, Kan., July 18.
Pine, John B. (68), lawyer, N. Y., Oct. 28.
Pingree, ex-Gov. Saml. E. (90), Hartford, Vt., June 1.
Plumb, Glenn E. (56), lawyer for rail labor unions, Washington, Aug. 1.
Pollock, ex-U. S. Sen. W. P. (52), Columbia, S. C., June 21.
Pope Benedict XV. "Giacomo Della Chiesa" (68), Rome, Jan. 22.
Pope, Chas. (79), "Glucose King," Chicago, March 25.
Pope, Henry (85), harness horse driver, So. Glastonbury, Conn., Sept. 26.
Pope, Brig. Gen. Percival C. (80), Milton, Mass., Jan. 23.
Potter, Jas. Brown (69), fin., Richmond, Va., Feb. 22.
Powell, Wm. B., Boston mgr. for R. G. Dun & Co.; and wife, Mrs. Powell, (widow of R. H. White), Newton, Mass., May 2.
Poyer, ex-Gov. of Samoa Commander John M., U. S. N., Wash. D. C., May 12.
Pratt, J. M., Supt. dredging, Panama Canal, Baton Rouge, La., June 11.
Pratt, Saml. (66), N. Y. advertising agt., at sea, Feb. 22.
Prince, L. B. (82), ex-Gov. of New Mexico, Flushing, N. Y., Dec. 7.
Princess Dolgorouki, widow of Emperor Alex. II. of Russia, who was assassinated in 1881; Nice, France, Feb. 15.
Princess Festetics de Tolna, ex-Princess of Monaco (71), Budapest, May 15.
Pritchard, Capt. John, ex-Cunard Commodore, London, Jan. 29.
Prothero, Sir Geo. (74), editor, London, July 11.
Querze, Angelo (61), tenor, Flushing, N. Y., Feb. 27.
Quinby, H. C., lawyer, N. Y., Oct. 23.
Raeburn, Sir Ernest M. (43), shipbuilder, N. Y., June 1.
Randolph, Edm. (58), broker, N. Y., Feb. 18.
Rathenau, Dr. Walter (55), Ger. Foreign Minister, Berlin, June 24.
Rellihan, P. T. (60), newspaper man, Brooklyn, Aug. 21.
Remick, Wm. H. (55), ex-Pres. Stock Exchange, N. Y., March 9.
Reynolds, Miss Anna M., ex-Sec. of the Y. W. C. A., North Haven, Conn., Feb. 2.
Richardson, S. J. (71), ex-newspaper circulation manager, N. Y., July 28.
Rindom, Ellen, actress, Copenhagen, May 10.
Riordan, Mrs. W. M. "Ann Spencer," theatre costumer, N. Y., May 4.

Robertson, Capt. J. F. (31), a Marine Corps hero of World War, Wash. D. C., Aug. 17.
Robertson, Jas. L. "Hugh Haliburton," author, Edinburgh, June 14.
Robie, Louis (67), theatrical mgr., N. Y., March 6.
Robinson, M. E. Bishop John E. (75), Bangalore, Asia, Feb. 16.
Rockefeller, Wm. (81), financier, Tarrytown, N. Y., June 24.
Rockefeller, Wm. G. (52), capitalist, N. Y., Nov. 30.
Roe, Major Gen. Chas. F. (74), N. Y. Natl. Guard Veteran, Highland Falls, N. Y., Dec. 1.
Roosevelt, Robt. B. jr. (22), N. Y., Apr. 1.
Rosen, ex-Ambassador Baron Roman R. (74), N. Y., Dec. 31, 1921.
Rosenfeld, Simon B. "Beansey," card player, N. Y., Feb. 11.
Ross, A. Y. (92), ex-stage driver, Ogden, Utah, April 3.
Rothrock, ex-State Forester Dr. Jos. T. (84), West Chester, Pa., June 2.
Rumsey, Chas. C. (42), sculptor, Floral Park, N. Y., Sept. 21.
Russell, Lillian "Mrs. Alex. P. Moore" (61), actress, Pittsburgh, Pa., June 6.
St. Clair, Edith, actress, N. Y., Dec. 31, 1921.
Saint-Saens, Camille (87), composer, Algiers, Dec. 16, 1921.
Saltus, J. S. (69), numismatist, London, June 22 or 23.
Sandys, Sir John, scholar, Cambridge, England, July 6.
Santley, Sir Chas. (86), singer, London, Sept. 21.
Satterlee, C. A. (87), marine eng., New London, Conn., Dec. 17, 1921.
Saunders, Mrs. Sallie (92), sister of Ann Rutledge, Lincoln's boy sweetheart, Lompoc, Cal., May 1.
Scheele, Dr. W. T. (52), chemist, Hackensack, N. J., March 5.
Schenck, Henry A. (66), N. Y. banker, Englewood, N. J., Feb. 20.
Schlatter, Francis (66), "healer," St. Louis, Oct. 16.
Schroeder, Rear Admiral Seaton (73), Washington, Oct. 19.
Schultze, Dr. Louis W. (67), N. Y., Mch. 23.
Scidmore, U. S. Consul Gen. G. H. (68), Yokohama, Nov. 27.
Scott, Prof. Austin (74), ex-Pres. Rutgers College, New Brunswick, N. J., Aug. 16.
Scott, ex-Justice Francis M. (74), Chairman N. Y. City Charter Revision Commission, N. Y., Feb. 5.
Seabury, Chas. L. (61), yacht builder, N. Y., April 7.
Seaman, Mrs. E. C. "Nellie Bly" (56), N. Y., Jan. 27.
Searle, Rev. J. P. (68), Pres. Theolog. Sem. of Dutch Ref. Ch. at New Brunswick, N. J., Cragsmoor Lake, N. Y., July 27.
Sebree, Rear Admiral U. (74), Coronado, Cal., Aug. 6.
Seitz, Rev. J. A. (85), Cos Cob, Conn., Sept. 30.
Seldon, Geo. B. (77), gasoline vehicle inventor, Rochester, N. Y., Jan. 17.
Sembat, Marcel, French Socialist leader, Chamonix, Sept. 5.
Sforza, Count G. (75), historian, in Italy, Oct. 1.
Shackleton, Sir Ernest (48), explorer on steamer Quest, in Antarctic Sea, Jan. 5.
Shafroth, ex-U. S. Sen. John F. (67), Denver, Feb. 20.
Sharkey, Marquis de L. (64), theatr., Brooklyn, March 18.
Sharp, Wm. G. (63), ex-U. S. Ambassador to France, Elyria, O., Nov. 17.
Shelton, Rev. Alf. L., Amer. missionary, killed by Chinese brigands, Feb. 17.
Shepard, ex-Judge William H., Belmar, N. J., March 24.
Sheridan, Lieut.-Com. Philip H. (32), Great Neck, N. Y., March 10.
Shibe, Benj. F., baseball club owner, Philadelphia, Jan. 14.
Shire, ex-Police Capt. Nathaniel (72), N. Y., Feb. 22.
Shrady, Henry M. (51), sculptor, N. Y., April 12.
Sigel, Franz (49), lawyer, Bronx, Feb. 19.
Silo, Jas. P. (73), auctioneer, N. Y., Feb. 1.
Simpson, Henry E. (82), People's Christian Party Pres. candidate in 1912, Broken Arrow, Okla., May 30.
Sims, Geo. R. (75), playwright, London, Sept. 4.
Skinner, Col. Wm. C. (67), arms mnfr., Hartford, Conn., March 8.
Sloan, Jos. M. (81), actor, Phila., Feb. 5.
Sloane, Wm. (49), fin., Southampton, N. Y.
Smith, Prof. Alex. (57), chemist, Edinburgh, Sept. 9.
Smith, Delevan (61), Indianapolis newspaper publisher, Lake Forest, Ill., Aug. 25.
Smith, Gerrit (67), N. Y. lawyer, Nyack, N. Y., March 30.
Smith, John "Ga-be-nah-gewn-wonce" (137), Chippewa Indian, Cass Lake, Minn., Feb. 7.
Smith, Lincoln C. (65), biographer, in ocean at N. Y., March 20-21.
Smith, Richard (63), editor, Indianapolis, Sept. 3.
Smith, Sir Ross M., aviator, near London, April 13.
Smith, Dr. Stephen (99), founder Amer. Pub. Health Asso., Montour Falls, N. Y., Aug. 26.
Solvay, Ernest (84), soda mnfr., Brussels, May 26.
Sonnino, ex-Premier Baron Sidney (75), Rome, Nov. 23.
Son Pyung Hi, Korean leader, Seoul, May 19.
Southwell, Rev. E. P. (82), ex-Provincial Irish Carmelites, Tarrytown, N. Y., May 10.
Sparks, John G. (54), actor, B'klyn, May 3.
Spencer, Chris. M. (88), rifle inventor, Hartford, Conn., Jan. 14.
Spencer, Earl (65), London, Sept. 26.
Spitzka, Dr. Edw. A. (46), alienist, Mt. Vernon, N. Y., Sept. 4.
Stahl, G. "Jake" (41), Chicago banker, ex-ball player, Los Angeles, Sept. 19.
Stegler, R. P., alleged ex-spy in U. S., Muskan, Germany, Oct. 25.
Stern, Louis (75), N. Y. dept. store owner, Paris, June 21.
Stimson, Dr. Dan'l. M. (78), N. Y., Feb. 21.
Storer, Bellamy (75), ex-U. S. diplomat, Paris, Nov. 12.
Storer, Dr. H. P. (92), oldest Harvard grad., Newport, R. I., Sept. 18.
Story, Geo. H. (87), artist, N. Y., Nov. 24.
Stout, Geo. C. (46), organist, B'klyn, Jan. 10.
Stowell, ex-Congr'n Wm. H. H. (82), Amherst, Mass., April 27.
Sturges, Henry C. (76), book collector, Fairfield, Conn., Feb. 16.
Sudduth, H. T. (72), poet, Brooklyn, July 4.
Swift, Mrs. Gust's F. (78), Chicago, May 19.
Swift, Mrs. Louis F. (62), Chicago, Apr. 5.
Tag, Louis (70), Treas. Amer. Tract Soc., Brooklyn, Feb. 18.
Taggart, Rush (73), lawyer, Vice Pres. W. U. Tel. Co., New Canaan, Conn., Sept. 28.
Takamine, Dr. J. (67), chemist, N. Y., July 22.
Taylor, Chas. A. (65), Pres. Carnegie Hero Fund, Santa Barbara, Cal., Feb. 3.
Taylor, ex-Premier James S. (67), Redfern, New So. Wales, April 8.
Taylor, Wm. D. (45), movie director, Los Angeles, Feb. 1-2.
Terhune, Mrs. Mary V. (91), "Marion Harland," author, N. Y., June 3.
Tetreault, Pierre, pioneer Butte, Mont. copper man, Montreal, May 15.
Thoburn, M. E. Bishop J. M. (86), Meadville, Pa., Nov. 28.
Thorne, Silvia (55), actress, N. Y., May 9.
Thorpe, Col. Freeman (78), portrait painter, Hubert, Minn., Oct. 20.

Thurber, D. W. (69), spiritualist leader, Greenfield, Mass., July 27.
Tibbetts, Howard M. (46), college registrar, Hanover, N. H., April 12.
Tomkinson, Herbert "Bert Kelly Forrest" (54), actor, Freeport, N. Y., March 1.
Tompkins, H. B. (78), author, Newport, R. I., Dec. 23, 1921.
Townsend, ex-Surrogate Chas. DeKay, of Oyster Bay, N. Y. (71), Milford, Pa., March 2.
Townsend, Horace (63), author, N. Y., May 9.
Townsend, Isaac (71), fin., Nice, France, Feb. 21.
Tracy, Lieut.-Col. Evarts (53), N. Y. architect, Paris, Jan. 31.
Treat, J. F. ex-head Mystic Shrine, Fargo, N. D., Oct. 12.
Tregarthen, Jas. (81), shipbuilder, Brooklyn, April 11.
Tridon, Andre (45), psychoanalyst, N. Y., Nov. 22.
Tuthill, Theo. R. (54), Supreme Court Justice, Binghamton, N. Y., Dec. 14.
Tunis, Bey of "Sidi Mohamed En Naccur" (67), Tunis, Africa, July 10.
Uhlmann, Ernst (56), "father of near beer," Cincinnati, April 25.
Urriola, Dr. C., ex-Pres. of Panama, Panama, June 27.
Van Benthuysen, Rear Admiral John (75), New Orleans, Feb. 19.
Van Buskirk, Police Lieut. Chas. (53), N. Y., Feb. 20.
Van Deventer, Lieut. Gen. Sir L. J., Johannesburg, So. Africa, Aug. 27.
Van Name, Prof. A. (87), Yale Univ. Librarian, New Haven, Conn., Sept. 29.
Van Volkenburgh, Thos. S. (78), lawyer, N. Y., Dec. 26, 1921.
Van Wyck, ex-Justice Augustus (72), N. Y., June 8.
Vare, State Sen. E. H. (60), Ambler, Pa., Oct. 16.
Vaughan, Rev. Bernard (76), Engl'd, Oct. 31.
Verga, Giovanni (82), novelist, Rome, Jan. 27.
Viereck, Louis (71), writer, in Germany, Sept. 16.
Vignaud, Henry (92), U. S. dipl., in France, Sept. 18.
Villiers, Fred'k (70), war correspondent, London, April 5.
Vizetelly, Ernest A. (69), author, London, March 26.
Voigt, Herman (65), chess player, Philadelphia, Feb. 12.
Voigt, Wilhelm (72), "Captain of Koepenick," Luxemburg, Jan. 4.
Vokes, Harry (55), ex-actor, Boston, Apr. 15.
Von Hausen, Gen. Baron Max (76), Dresden, March 20.
Wade, Capt. J. L., hero of Gen. Slocum (burning steamer) disaster, Bronx, Oct. 12.
Walker, W. F., bank embezzler, New Britain, Conn., July 25.
Walker, Williston, Yale Provost, New Haven, March 9.
Wallace, Rothvin (40), N. Y. newspaper man, Oceanport, N. J., Nov. 10.
Walsh, Fire Batt. Chief Jas. J. (45), Brooklyn, April 3.
Walter, Prof. Sir Walter (61), Oxford, England, May 13.
Walton, Edw. A. (61), artist, Edinburgh, March 20.
Walton, Wm., ex-Brooklyn Sheriff (74), Southampton, N. Y., Dec. 16, 1921.
Wanamaker, John (84), merchant, Philadelphia, Dec. 12.
Ward, Ellis F. (77), oarsman, Philadelphia, Aug. 25.
Ward, Genevieve (85), actress, London, Aug. 18.
Ward, Geo. G. (77), Vice Pres. Commercial Cable Co., N. Y., June 15.
Warren, Lloyd, architect, N. Y., Oct. 25.
Washburn, F. S. (61), dam builder, Rye, N. Y., Oct. 9.
Watson, U. S. Sen. Thos. E. of Ga. (66), Washington, Sept. 26.
Watson, Sir David (51), owner Daily Chronicle, Quebec, Canada, Feb. 19.
Watson, Jos. "Baron Manton," soap, in England, March 13.
Watterson, Henry (81), editor, Jacksonville, Fla., Dec. 22, 1921.
Weeks, Justice Bartow S. of N. Y. City (61), Miami, Fla., Feb. 3.
Weir, Mrs. Emma "Big Emma," "million dollar shop lifter," Chicago, May 23.
Wendell, Prof. Geo. V. (51), N. Y., Mch. 15.
Wendell, State Comptroller Jas. A. (53), Albany, N. Y., May 10.
West, Edmund A. (99), lawyer, one of founders of Rep. party, Chicago, April 30.
Westacott, U. S. Vice Consul Richard (73), London, Jan. 28.
Weston, Frank (72), actor, N. Y., Jan. 28.
Wheaton, Fred. E. (59), member Dem. Nat. Committee, Minneapolis, Jan. 29.
Wheaton, J. Frank, Negro lawyer, N. Y., Jan. 15.
Wheeler, Wm. (85), lumber, Staten Island, Jan. 21.
Wheelock, Wm. E. (75), piano mnfr., Brooklyn, Feb. 14.
Whelan, David (70), tobacco, N. Y., Jan. 14.
Whitehead, P. E. Bishop Cortlandt (79), Niagara Falls, N. Y., Sept. 18.
Whitehouse, Worthington (56), realty, Elmsford, N. Y., Feb. 14.
Willcox, G. B. (96), oldest Yale grad., Chicago, July 22.
Williams, Egbert A., "Bert," colored, (45), actor, N. Y., March 4.
Willson, Prof. R. W., astronomer, Cambridge, Mass., Nov. 1.
Wilmerding, L. K. (74), stock broker, N. Y., Dec. 8.
Wilson, Major Gen. Erastus W. (62), Montreal, May 15.
Wilson, John F. (45), editor, Venice, Cal., March 5.
Wilson, Field Marshal Sir Henry (58), London, June 22.
Wilson, Stewart (96), "Hermit of Sacandaga," Osborne Bridge, N. Y., Feb. 10.
Winslow, Erving (83), merch., New Haven, March 10.
Winter, Mrs. Wm. (81), Los Angeles, Cal , April 7.
Woeste, Baron, Minister of State, Brussels, April 5.
Wolf, Rennold (50), playwright and editor, N. Y., Jan. 2.
Woolley, John G. (72), U. S. Prohibition leader, Granada, Spain, Aug. 13.
Worm, A. Toxen (55), theatr. mgr., Paris, Jan. 13.
Wright, ex-Sec. of War Gen. Luke E. (76), Memphis, Tenn., Nov. 17.
Wu Ting Fang (81), ex-Chinese Minister to U S., Canton, June 23.
Wyeth, Dr. John A. (77), N. Y., May 28.
Wynn, Dr. F. P., of Indianapolis, Pres. Amer. Alpine Club, Glacier Nat. Park, Mont., July 27.
Wynne, ex-Postmaster Gen. Robt. J. (71), Wash. D. C., March 11.
Yamagata, Field Marshal Prince Aritomo (83), Odawara, Feb. 1.
Young, Col. Chas. (colored) (58), U. S. A. Vet., in Nigeria, Jan.
Zaldivar, ex-Pres. of Salvador Dr. Rafael (60), Chicago, May 13.
Zietz, Luise, woman's rights advocate, member of German Parliament, Berlin, Jan. 27.
Zucca, ex-Coroner Antonio (70), N. Y., April 15.
Zuckerman, Lazar (70), actor, N. Y., June 17.

## BENEFACTIONS OF 1922.

Mrs. Cornelia Adair, daughter of Gen. Wadsworth, to Adair Hospital at Clarendon, Texas, $35,000; to St. Matthew's Home for Children at Dallas, Texas, $10,000.

Maude Adams to diocese of Long Island, for use of R. C. Sisterhood of Our Lady of the Cenacle, 300-acre estate at Lake Ronkonkoma, L. I.

Anonymous gift to Northern Baptist Fund of $500,000.

Wm. P. Armstrong, by will, to Wesleyan University at Middletown, Conn., $100,000 in cash and residue of estate over $1,000,000; to New York East Conference M. E. Church, Home for Missions and Church Expansion of M. E. Church, each $100,000; Gen. Hospital Soc. of Conn. and M. E. Hospital of Brooklyn, $25,000; Grace M. E. Church of New Haven, $15,000.

Lord Atholstan of Montreal, for cancer research, $100,000.

Geo. F. Baker to Metropolitan Museum of Art, $1,000,000 as an endowment fund.

George F. Baker to American Museum of Natural History, $250,000.

George F. Baker to Columbia University to buy 46-acre Dyckman tract for stadium, $700,000.

George F. Baker to the New York Hospital, $500,000.

Ball brothers, Muncie, Ind., to charitable and educational institutions, $1,000,000; largest to Indiana State Normal School, Eastern Division, $250,000; Hillsdale College, Mich., $100,000; to J. Whitcomb Riley Memorial Hospital at Indianapolis, $25,000.

Mrs. P. M. Barker, by will, to Cooper Union, $50,000.

Morris S. Barnet, by will, to Mount Sinai Hospital, $50,000.

Mrs. Beatrice Boeke, widow of cocoa manufacturer, 28,000 shares valued at $1,000,000, in "Cadbury Bros." which she inherited from her father, the late Sir George Cadbury, to "Cadbury Bros." employees.

Mrs. Josephine W. Beeson, by will to House of Calvary at 170th St. and Belmont Ave., Bronx, and the United Catholic Charities, each $20,000.

Mrs. O. H. P. Belmont to National Woman's Party, the buildings and grounds known as the Old Capitol, in Washington.

Frederick Bertuch, by will, to Columbia University, $100,000; to widow, $10,000 and use of realty for life; to Charity Organization Society of the City of New York, $25,000; German Liederkranz of New York, $5,000; Lenox Hill Hospital, $50,000; Wartburg Farm School of the Evangelical Lutheran Church, $25,000; Cooper Union, $50,000; St. John's Guild, $25,000; Norwegian Lutheran Deaconesses' Home, Brooklyn, $25,000; Children's Aid Society and New York Society for the Prevention of Cruelty to Children, $50,000, and the Trondhjems Tekniske Skole of Trondhjem, Norway, $25,000; residue to Bowery Mission.

Anita Bliss of New York and Manchester, Vt., by will, to Little Mothers' Aid Association for Ernest Bliss Memorial Home, $350,000.

Mrs. Angie M. Booth, widow of Ward Line's former President, by will, to Sailors' Snug Harbor, $50,000; to Flushing Hospital, $25,000.

Miss Emily Howland Bourne, by will, to Bourne Workshop for the Blind at 338 E. 35th St., $20,000; to New York Association for Improving Condition of Poor, $300,000; many bequests made to institutions in Boston, New Bedford and Bourne, Mass.; to Henry Street Settlement and New York Eye and Ear Infirmary, $10,000 each.

William Jennings Bryan to Methodist Episcopal Hospital Association, his $100,000 home situated southeast of Lincoln, Neb.

The Carnegie Corporation, during its fiscal year Oct. 1, 1921 to Oct. 1, 1922, donated to various colleges and organizations $3,816,510. Among the largest of the gifts were: to New York University, $300,000; to University of Cincinnati, $200,000; California Institute of Technology, $150,000; Georgia School of Technology, $150,000; Stevens Institute of Technology, $100,000; Flora MacDonald College, $50,000; Kings College, Windsor, N. S., $40,000; to the Institute of Economics, $1,650,000; American School of Classical Studies at Athens, $200,000; National Research Council, $182,500; Marine Biological Laboratory, $100,000; National Institute of Public Administration, $60,000; the President's Conference on Unemployment, $50,000; American Council on Education, $50,000; Institute for Educational Research, $45,000; American Classical League, $30,000; American Fine Arts Society, $25,000; Committee of Establishment of Permanent Organization for Improvement of Law, $25,000; Libraries at Braddock, Homestead and Duquesne, Pa. $25,000; public libraries at Washington, D. C., $167,000.

Carnegie Corporation to College of William and Mary, in Virginia, $25,000 for library.

Carnegie Corporation of New York sets aside $1,600,000 for establishment and maintenance of Institute of Economics in Washington, D. C.

Josephine Carrier, by will, to Berkshire Industrial Farm at Canaan, Conn., $20,000; residuary estate to be divided equally between American Red Cross and Evangelistic Committee of 541 Lexington Ave.

Mrs. Lydia C. Chamberlain of Des Moines, Iowa, by will, to Columbia University for establishment of fellowships, $500,000.

Mrs. Helen T. Cole of Hotel Biltmore, New York, by will, to Presbyterian Hospital, $150,000; and to Dr. W. Laurence Whittemore of hospital, $10,000.

Mayor James Couzens, Detroit, to new Children's Hospital, $1,000,000 in securities.

S. F. Cowdrey, by will, to New Rochelle for public park, his country place on Davenport's Neck.

Charles R. Cross of Brookline, Mass., by will, to Harvard College and Harvard Observatory, $100,000.

Edmund J. Curley of Monte Carlo and New York, by will, to Metropolitan Museum of Art, $25,000; to Good Samaritan and St. Joseph's Hospitals at Lexington, Ky., each $10,000.

Mrs. A. Gertrude Cutter, by will, to Hospital for Deformities and Joint Diseases, $796,704; City of Newburyport, Mass., $50,000; to Presbyterian, Methodist Episcopal and Mount Vernon Hospitals and American Society Prevention of Cruelty to Animals, each $20,000; to Society for Prevention of Cruelty to Children, $25,000.

Robert W. De Forest and Emily Johnston De Forest to the Metropolitan Museum of Art, "American Wing," estimated to cost $2,000,000.

Cleveland H. Dodge to American Colleges in Near East, $165,000.

George Doheny, lawyer and banker, of Syracuse, N. Y., by will, to St. Joseph's Hospital, $250,000; to Memorial Hospital, House of Providence, Onondaga Orphans' Home, Homeopathic Hospital, St. Vincent Orphan Asylum, Syracuse Home Association, Syracuse Free Dispensary and St. Mary's Maternity Hospital, each $150,000.

J. B. Duke to Trinity College, Durham, N. C., $1,125,000.

Educational Foundation of Commission for Relief in Belgium to University of Brussels, 15,000,000 francs. This makes a total, it was announced, of 110,000,000 francs given by this foundation to Belgian educational institutions. This includes a previous gift of 20,000,000 francs to the University of Brussels, 20,000,000 francs to the University of Ghent, 20,000,000 to the University of Liège, 20,000,000 to the University of Louvain, 5,000,000 to the School of Mines, Mons, and 10,000,000 to the Higher Colonial School, Antwerp.

Arthur B. Emmons of Providence, R. I., by will, to Museum of Fine Arts of Boston, $50,000; to Children's Hospital of Boston, $25,000; to Newport Hospital, $25,000; to Redwood Library, to People's Library, Berea College, Hampton Normal Institute, and Tuskegee Institute, each $10,000.

Amos F. Eno, by will, to American Museum of Natural History, $272,000.

Marshall Field, Chicago, pledges $50,000 per year for five years to Field Museum of Natural History; Stanley Field gives $200,000 to clear off building deficit, and $6,500 to cancel last year's operating deficit.

John H. Flagler, by will, to St. Luke's, the New York and the Presbyterian Hospitals, share and share alike, $1,000,000; to the St. Cecilia Club, $70,000.

Henry Ford buys Burroughs Farm and gives it to John Burroughs Memorial Association; also establishes fund to preserve it.

Charles Garland inherited fortune of about $800,000; to American Fund for Public Service.

Edwin Gould to Veterans' Mountain Camp of American Legion, $10,000. Last spring Mr. Gould gave $20,000 toward purchase of property at Big Tupper Lake in Adirondacks.

Edwin Gould has provided funds for building in this city a Temporary Home for Orphans, to be used as a clearing house for the Sheltering Arms, the Society for Half Orphans and Destitute Children and the Leake and Watts Home of Yonkers, to care for them while pedigrees are taken and investigations made.

Bishop Grimes of Syracuse, N. Y., by will, for education of ecclesiastical students, $10,000; for emergency cases at St. Vincent de Paul's Society, $10,000; Home for Boys, $10,000; St. Vincent's Summer Home, $5,000; to St. Mary's Hospital,

St. Joseph's Hospital, St. Vincent Asylum and House of Providence, $1,000 each; residue of $100,000 estate to Grimes Foundation.

Frank Grossbard, by will, $100,000 to be distributed through the Brooklyn Federation of Charities.

Mrs. Edward S. Harkness, who owns a summer place at Goshen Point, Conn., purchased Hoffman property adjoining her estate to establish a Home for Convalescent Children.

Mrs. Stephen Harkness to Fifth Avenue Presbyterian Church, $750,000 for parish house.

Harkness Family Fund to Joint Committee on Methods of Preventing Delinquency, $165,000.

Mrs. Stephen V. Harkness to establish the Commonwealth Fund for "The Welfare of Mankind, $16,000,000.

Mrs. Stephen V. Harkness of New York City, to Yale University, $3,000,000 to increase salaries of members of Yale faculty.

Rush C. Hawkins estate to Norwich University, $350,000.

August Heckscher of New York to Munich, Bavaria, 10,000,000 marks for hospital for shell-shocked soldiers.

Alfred S. Heidelbach, banker, of New York, London, and Paris, by will, to Mount Sinai Hospital, $150,000; to Hebrew Orphan Asylum, Institute for Improved Instruction of Deaf Mutes, Children's Charitable Union, Sanitarium for Poor Children, and Lenox Hill Hospital, $5,000 each.

A. Barton Hepburn, by will, to Hepburn Hospital at Ogdensburg, $250,000; to Middlebury College, Vt., $200,000; to Columbia University, $150,000; to St. Lawrence University at Canton, N. Y., $100,000.

A. Barton Hepburn to Hepburn Hospital at Ogdensburg, N. Y., $500,000.

Mrs. Irene Botsford Hoffman of Stockbridge, Mass., and Santa Barbara, Cal., by deed, her $60,000 estate known as Overbrook, in Stockbridge, to Stockbridge Vacation House, Inc.

Mrs. Sarah L. Holden of Newburgh, N. Y., by will, to maternity hospital connected with St. Luke's, $100,000; to fund for A. F. Holden Memorial Home for Aged Women, $100,000 and two large buildings on Grand Street, Newburgh.

Margaret A. Howard, a Fifth Avenue modiste, by will, $400,000 to establish the Margaret A. Howard Home for Indigent Needlewomen and residue of estate to maintain it.

Henry E. Huntington of Los Angeles, Cal., announces his purpose to give the public his art collections and his library, the finest in the world; enough money will go with the treasures, valued at several millions of dollars, to keep the collections intact for all time.

Mrs. H. B. Hyde, widow of founder of Equitable Life Assurance Soc., by will, $1,000,000 to four hospitals, Presbyterian, $50,000; New York Orthopedic, $25,000; Babies', $15,000, and Woman's, $10,000.

Mrs. Alice Tobey Jones of Wareham, Mass., bulk of $3,000,000 estate eventually to Bide-a-Wee Home Association, Inc., of New York, and Mass. Soc. for Prevention of Cruelty to Animals.

Mrs. Harriet Judson of Brooklyn, by will, to Harriet Judson Branch of Y. W. C. A., $10,000 cash and four-fifths of residue of estate (estate more than $1,000,000).

Col. and Mrs. Anthony B. Keuser of Bernardsville, N. J., to State of New Jersey for park, tract of land east and southeast of Port Jervis, known as High Point property, more than 10,000 acres.

Geo. Gordon King, Newport, R. I., by will, to P. E. Domestic and Foreign Miss. Soc., $10,000; to St. George's Preparatory School of Newport, $10,000; to Trinity and to United Congregational Churches of Newport, each $5,000.

Mrs. Mary J. Kingsland, by will, to Grace Church, Sheltering Arms New York Society for Relief of Ruptured and Crippled, Nursery and Child's Hospital, Diocesan Convention of the Protestant Episcopal Church, General Theological Seminary, Teachers' College and New York Protestant Episcopal Mission Society, $50,000 each. New York House and School of Industry, Children's Aid Society, New York Association for Improving the Condition of the Poor, Charity Organization Society, and the Tarrytown Hospital Association, each $25,000, and St. Luke's Hospital, $20,000.

In addition to these bequests, the executors paid as their share in the residuary estate to Grace Church, $326,000, and a like sum to the Metropolitan Museum of Art, while $65,000 each was paid to the New York Association for the Blind, Society for the Relief of Ruptured and Crippled, Church Mission to Deaf Mutes, House of the Holy Comforter and the Berry School.

Fred Morgan Kirby of Wilkes-Barre, Pa., to Hobart College, $50,000.

Will of Miss Lucy Kirtland to N. Y. Assoc. for Blind, $10,000 in cash, $725, amount for which earrings were sold, and $250,000, residue of estate; also to Brooklyn Bureau of Charities, $5,000, and to St. Giles Home for Crippled Children, $3,000.

Mrs. Mamie Klein, by will, to Servants for Relief of Incurable Cancer as memorial to husband, Charles T. Klein, $500,000.

Mrs. Helen M. Knickerbocker, by will, to Hawley Home for Children, Saratoga Hospital and Bethesda P. E. Church, $25,000 each; Church Aid Fund of P. E. Church of N. Y., $25,000.

Jerome H. Koehler, by will, income of residuary estate for life to mother and sister, reversion to Yale University and Nu Deuteron Chapter of Phi Gamma Delta Fraternity.

Lasker family (Chairman of United States Shipping Board, President of Texas Star Flour Mills and others) to American Society for Control of Cancer, $50,000, in memory of Harry M. Lasker.

Jonas M. Libbey to Manhattan Eye, Ear and Throat Hospital, $5,000; to General Memorial Hospital and Woman's Hospital, $10,000 each, after certain personal bequests residue of estate goes to Columbia University for research in biological and pathological chemistry, electro-chemistry and electro-physics.

Samuel Mather of Cleveland for construction of medical school buildings at Western Reserve University, about $2,530,000.

Mrs. Calista S. Mayhew, widow of former Village President of South Orange, N. J., after a number of personal bequests, left bulk of $3,000,000 to various charities, viz., two-sevenths to Snow Hill Normal School, Ala.; two-sevenths to Good Will Home, East Fairfield; one-seventh to Tuskegee Institute, one-seventh to Hampton Normal Institute, one-seventh to Atlanta University.

A. W. Mellon, Secretary of Treasury, to Carnegie School of Technology, his Forbes St. residence for use of dormitory by girl students.

W. H. Merriman of Brooklyn by will, to Brooklyn Museum, art collection estimated to be worth $1,000,000.

Miss Phoebe Mills of White Plains leaves fortune of $500,000 to Presbyterian Church and hospitals and charitable institutions.

Frank A. Munsey, to Bowdoin College, Me., $100,000.

Nathaniel Myers, by will, to Hebrew Technical School for Girls, $42,350; 26 bequests of $1,000 each to various charitable and religious organizations of all denominations.

Miss Mary Oakley to numerous charitable and religious organizations and hospitals named, estate of $300,000.

Mrs. Lucy W. S. Opdycke, by will, to New York Assoc. for Improving the Condition of the Poor, $25,000.

James H. Ottley of New York and Glen Cove, L. I., to Nassau Hospital at Mineola, L. I.; the New York Infirmary for Women and Children, the New York Eye and Ear Infirmary, the Knickerbocker Hospital and New York University, $10,000 each.

Mrs. John E. Parsons, by will, to Catharine St. Mission, building in which Mission is housed and $450,000; to Home for Incurables in Fordham, $10,000; to Grace Church, $10,000.

Pennsylvania Railroad, in pensions, $26,777,976; $1,392,455 to officers, rest to men below rank of Division Supt.

Cora M. Perkins to Columbia University for chemical research, $30,000; to Trudeau Sanitarium at Saranac Lake and New York Soc. for Relief of Ruptured and Crippled, $5,000 each. After a number of personal bequests, residuary estate to Columbia University.

Mary Quinlan of Ridgewood, N. J., by will, to Carmelite Order at Englewood, N. J., $1,000, and $500 each to eleven other organizations.

Charles E. Rhinelander, by will, to Soc. for Relief of Ruptured and Crippled and the Seamen's Church Institute, each $25,000.

Baroness Solomon de Rothschild to City of Paris, estate of about 10,000,000 francs.

Canon and Mrs. J. Townsend Russell, 130 acres city property in Washington, D. C., to complete site for National Cathedral.

Heirs of Jacob H. Schiff to City of Frankfort, Germany, 2,000,000 marks for municipal purposes.

The charitable gifts of $1,350,000, made in will of Jacob Schiff: Federation for the Support of Jewish Philanthropic Societies, $500,000; Jewish Theological Seminary of America, $100,000; Union of American Hebrews Congregation, $100,000; Montefiore Home, $300,000; Harvard University, $25,000; Charity Organization Society, $10,000; Babies' Hospital, $5,000; Solomon and Betty Loeb Memorial Home, $25,000; New York Association for the Blind, $10,000; Metropolitan Museum of Art, $25,000; New York Public Library, $25,000; New York Zoological Society, $25,000; Tuskegee

Institute, $10,000; Hampton Normal, $10,000; New York University, $50,000; Jewish Theological Seminary, $50,000, and Henry Street Settlement, $50,000.

Mrs. Mary E. Scranton of New Haven, Conn., leaves residue of estate estimated at about $850,000 to charities.

Mrs. Julia Seligman of Deal, N. J., by will, to Mount Sinai Hospital, $25,000; to New York Post Graduate Hospital, $25,000; to other charities, $50,000.

Herman Sielcken, a German-American, by will, to Baden-Baden, $600,000 for a City Maternity Home for Poor Mothers.

William Sloane of Mount Kisco, N. Y., to International Committee of Y. M. C. A., $100,000; to Presbyterian Hospital, $100,000; to Yale University, $100,000; Metropolitan Museum of Art, $50,000; Museum of Natural History, $50,000; New York Public Library, $50,000; Brick Presbyterian Church, $50,000.

Delevan Smith, publisher of Indianapolis News, by will, to Methodist Episcopal Hospital, $100,000; to Indiana Historial Society, $150,000; to Lake Forest (Ill.) Hospital Assoc., $100,000; to Art Assoc. of Indianapolis, $20,000.

Mrs. Dexter Smith, Springfield, Mass., by will, to Wesleyan University, $100,000; to Springfield Hospital, $50,000.

Mrs. Harriet A. Smith of Springfield, Mass., by will, to Wesleyan University, $170,000; to Springfield Hospital, $120,000.

John H. Smith, class of 1868, Princeton, by will, to Princeton, funds for five scholarships in memory of ancestors.

Susie D. Smith of Forest Hills, L. I., to Jamaica Hospital and Church in the Gardens, Forest Hills, each $40,000; $5,000 and $10,000 bequests to numerous other charities.

Charles Steele, senior warden of St. Thomas's Episcopal Church, presents buildings for permanent choir school at cost of $100,000 to parish; and increased number of scholarships in school from two to ten, each being $500 a year.

Dr. Ernest G. Stillman to Palisades Interstate Park Commission, 600 acres bordering both sides of Storm King Highway.

Dr. Daniel M. Stimson to Presbyterian Church on University Place, $40,000; to Union College, $10,000; to New York Infirmary for Women and Children, $10,000; to Albany Law School, $5,000.

Mrs. William Straight to Vassar College, salary fund, $25,000.

Mrs. Anna M. Swift, widow of founder of Swift & Co. of Chicago, in charitable bequests, $500,000 (estate of nearly $5,000,000).

Hamilton B. Tompkins, by will, to Hamilton College, Utica, N. Y., $650,000.

Dr. Karl Von Ruck of Asheville, N. C., by will, $700,000 for scientific research into prevention and cure of tuberculosis (Von Ruck Research Laboratory, Inc.).

Mrs. J. T. S. Wells of Tacoma, Wash., and New York City, $300,000 estate in New York City (ultimately) to City and Suburban Homes Co. and Open Air Tenement Co.

Jacob Wertheim, by will, to Federation for Support of Jewish Philanthropic Societies, $100,000.

George R. White of Boston, by will, to the City of Boston, for works of utility and beauty for use of citizens, to Children's Hospital, Boston Museum of Fine Arts and Massachusetts General Hospital, $25,000 each; town of Acton, $25,000, in memory of White's mother, Elizabeth.

Dr. I. C. White, W. Va. State Geologist, to West Virginia University and City of Morgantown, 1,900 acres of coal land in Marion Co., estimated to produce a total revenue of more than $3,000,000.

Samuel Clark Williams, estate valued $200,000 to $1,000,000, to Salvation Army, to be known as Hiram Williams Foundation.

John D. Rockefeller Jr., to American Museum of Natural History, $1,000,000.

John D. Rockefeller Jr., funds to establish a Library of Industrial Relations at Princeton University, or $12,000 a year for five years.

William Rockefeller to Park Ave. Baptist Church, at Park Ave. and 64th St., $100,000 as memorial to Mrs. William Rockefeller.

PRINCIPAL ACTIVITIES OF THE ROCKEFELLER FOUNDATION IN 1922.

| | | | |
|---|---|---|---|
| Johns Hopkins School of Hygiene and Public Health | $6,000,000 | Medical schools and hospitals in China | $1,510,000 |
| London School of Hygiene | 2,000,000 | Measures for the relief and control of hookworm, malaria, yellow fever and tuberculosis | 2,500,000 |
| Institute of Hygiene, Warsaw, Poland | 212,500 | | |
| University of Hongkong | 293,750 | | |

THE GENERAL EDUCATION BOARD.

General Education Board—*Chief Appropriations for the fiscal year 1921-1922:*

For Medical Schools and Departments—Baylor University, Dallas, Tex., $30,000; Johns Hopkins University, Baltimore, Md., $300,000; University of Cincinnati, Cincinnati, Ohio, $105,000; University of Colorado, Boulder, Col., $700,000; medical fellowships, $25,000—total, $1,160,000.

To colleges and universities for teachers' salaries, $5,141,223.

For co-operation with State universities and State Departments of Education in Southern States in the field of secondary and rural education $267,289.

Lincoln School—Equipment and other expenses, $477,363.

Fellowships and scholarships, $50,000.

For educational surveys, $189,300.

For Negro Education—For colleges and schools, $638,700; medical schools, $35,000; county training schools, $106,000; supervising industrial teachers of the Jeanes Foundation, $79,500; critic teachers, $12,000; scholarships, $15,000; miscellaneous purposes, $50,525—$936,725.

Total appropriations, $8,221,900.

## THE BUSINESS CYCLE AND UNEMPLOYMENT.

(By Edward Eyre Hunt, Secretary, President Harding's Conference on Unemployment.)

Early in 1923 results of the first serious attempt to estimate the direct economic losses caused by crises and business depressions will be made public in the report on the Business Cycle and Unemployment by a sub-committee of President Harding's Conference on Unemployment, which has been at work on the subject since March, 1922.

The President's Conference on Unemployment in 1921 suggested that an analytical study of the business cycle be prepared and an attempt be made to collect statistics and facts as to the methods for offsetting the bad results of those periods of expansion and depression which have been characteristic of our industries.

A committee on the business cycle was appointed by Secretary Hoover, consisting of Owen D. Young, Chairman, Clarence Mott Woolley, Joseph H. Defrees, Matthew Woll, Miss Mary Van Kleeck, and Edward Eyre Hunt, Secretary.

The so-called business cycle is that recurring process of booms and slumps which affects industry and business directly, and agriculture indirectly. The solution of this problem is to lop off from the peak in boom times to fill up the trough in depressions—in other words, to temper an industrial crisis by acting before the crisis becomes inevitable. If it can be accomplished, the idea is to plan for the future by applying a knowledge of the past.

This business cycle is marked by peak periods of boom between valleys of depression and unemployment. The peak periods of boom are times of speculation, overexpansion, extravagance in living, relaxation in effort, wasteful expenditure in industry and commerce, with consequent destruction of capital. The valleys are marked by business stagnation, unemployment, and suffering. Both of these extremes are vicious, and the vices of the one beget the vices of the other. It is the wastes, the miscalculations, and the maladjustments grown rampant during booms that make inevitable the painful process of liquidation. The most hopeful way to check the losses and misery of depression is therefore to check the feverish extremes of "prosperity." The best time to act is at a fairly early stage in the growth of the boom.

The committee, from the information in the bureau's report, and from other sources, has drawn up a series of recommendations and a plan of action which the Department of Commerce will submit for a nation-wide referendum to business generally. These recommendations deal with the question of what part of the cycle is controllable, the necessity for group action, the importance of information on the trend of current business and closer study of business problems, advance planning, financial stabilization, public works, reserve projects and employment exchanges.

# Financial and Economic Review of 1922.

By S. S. Fontaine, Financial Editor of The World.

While the world has begun during the last twelve months to make a reassuring recovery from the havoc of war under the reconstructive influence of four years of comparative peace, it cannot be said that the economic difficulties that beset many of the victims as well as victors of the great conflict have been composed or that the problems of lifting the prostrate to their feet, or restoring the social and financial balance of civilization, or setting to work along normal lines the productivity of the nations as a whole, and thereby re-establishing world trade and credit—the reward of labor and efficiency—have been solved. And until the solution is found the ablest minds in finance do not believe that full prosperity can come to any member of the family of nations, even to us, who have been blessed during the past year with abundance far out of proportion to that which has come to the greater part of our neighbors of the world.

In the restoration of sound underpinnings for our financial structure, in the reconstruction of our credit functions, in the revalorization of our securities to a marked degree, in the rehabilitation of our industries and our system of distribution and purveying, in the revival of our agricultural production on a fairly profitable plane, and in the reconciliation, generally speaking, of our major great productive forces, capital and labor, we have made great and satisfactory progress. And yet, while we maintain an attitude of aloofness from the councils of the world prostrate, while we are content to remain mere observers of their struggles to rise to the posture of upstanding nations of the world, we cannot, in all conscience, feel, on the threshold of the new year, that we have performed the full functions of the first citizen of the world.

With Germany facing imminent bankruptcy, due partly to the inexorable demands of her ravished neighbor, now become her implacable enemy, and very largely to her own fatalism and financial folly, with the Soviet Government knocking mainly at the gates of civilization for readmission and recognition, with the Turk standing at the moat of Europe's citadel with a firebrand whose flame an ill wind may at any moment carry to the magazine of the Balkans, whose explosions have heretofore shaken the foundations of civilization, neither the retrospect nor the outlook is sufficiently reassuring for us to sit down in snug comfort and consider ourselves immune from evils that menace our neighbors.

The Continental financial situation, as the writer has been pointing out in the columns of The World, is a canker that is gnawing at the world's vitality, whether we, in our heedless, headlong rush to mind our own business, pass it by like the careless engineer ignores the red signal that warns of the open drawbridge ahead. But in the long run it will be our business, and our very serious business, if we do not halt our pace to take counsel of our conscience and our common sense.

It may take time—years perhaps—months most likely—for the virus of this sore to spread through the veins of the entire political and financial system of civilization. Corrective measures, forceful as they may be required to be, are as yet available and may be employed effectively. As the surgeon with the greatest skill and resourcefulness, we must take our place at the operating table. We have grown beyond the irresponsibility of youth's estate in the family of nations. We may no longer absent ourselves from its councils nor put aside, pettishly or petulantly, the obligations and responsibilities of redblooded manhood; we may not, in honor, or in the charity of our hearts, refuse, like the Priest and the Levite, to kneel by the side of our sore beset wayfaring neighbor, to anoint and bind his wounds and bear him to the inn by the wayside, even if he has not the pence to pay his reckoning.

So far as our own domestic affairs are concerned, they have been gradually on the mend since the termination of the drastic deflation imposed by the country's financial mentors upon practically every form of enterprise through the rationing of credits and the placing of a premium on the commercial dollar, so prohibitive that it not only had the effect of restraining speculation but in many instances business initiative as well. It was a major operation which, though scientifically successful, has imposed upon the patient a protracted convalescence, from which he has only now emerged.

## RESUMPTION OF BUSINESS ACTIVITY.

The years 1920 and 1921 were twelve months of depression, accompanied by falling prices, although the trend was full of irregularities and the readjustments, particularly of costs of production, were not of a character to bring about a compensating reduction in the costs of living. Now that the tendency of domestic business is toward expansion, we have entered the first stage of secondary inflation, which has found its expression in increased costs of commodities without, generally speaking, a corresponding rise in the wage scale of the producers.

The year 1922 has been marked by a resumption of general business activity in most sections of the country and progress toward a complete restoration of the domestic, financial and industrial equilibrium has been retarded only by the differences that have developed between those two great agencies of production—capital and labor. The channels of distribution were for a time seriously clogged by the railroad strike, while the country's productive energies were impaired very seriously by the great coal strike, from whose debilitating influences the country's vigor has not yet made a full recovery.

Our foreign trade has shown throughout the year the unfortunate influences of Europe's financial prostration, which has not only weakened her productive power, which is the essential foundation for the rebuilding of her economic structure, but has impaired her purchasing power here, which, when world balance is maintained, furnishes our producers, and particularly our farmers, a market for their exportable surplus. We have still further restrained these agencies of reconstruction by the erection of a tariff wall around our trade confines, which not only prevents our customers abroad from trading with us on terms of equity and comity but imposes a still heavier burden upon our consumers, whose shoulders are already bowed by the heft of the tax load.

Generally speaking, the prosperity of our country depends very largely upon the returns from agricultural harvests, one of our greatest agencies in the yearly production of new wealth.

PRODUCTION (000 omitted).

| Crops. | 1922 (Preliminary). | 1921 (Dec. estimate). | 1916-20 average. |
|---|---|---|---|
| Corn, bus. | 2,896,108 | 3,080,372 | 2,830,942 |
| Wheat, bus. | 810,123 | 794,893 | 799,083 |
| Oats, bus. | 1,229,774 | 1,060,737 | 1,412,602 |
| Barley, bus. | 196,431 | 151,181 | 197,447 |
| Rye, bus. | 79,623 | 57,918 | 67,762 |
| Buckwheat, bus. | 13,643 | 14,079 | 14,426 |
| Potatoes, bus. | 432,905 | 346,823 | 373,417 |
| Sweet potatoes, bus. | 110,359 | 98,660 | 88,750 |
| Hay, tons. | 108,736 | 96,802 | 102,129 |
| Cotton, bales. | 10,135 | 7,954 | 11,931 |
| Flaxseed, bus. | 12,101 | 8,112 | 10,972 |
| Rice, bus. | 39,159 | 36,515 | 41,651 |
| Sugar beets, tons. | 5,000 | 7,782 | 6,623 |
| Kafirs (7 States), bus | 81,488 | 115,110 | 91,330 |
| Beans (7 States), bus | 13,013 | 9,118 | 13,317 |
| Broom corn (7 States), tons. | 32 | 35 | 50 |
| Cloverseed, bus. | 1,878 | 1,411 | 1,564 |
| Peanuts, lbs. | 691,057 | 816,465 | 1,043,292 |

The price index of all crops on November 1 was 17.2 per cent. more than a year ago and 40.2 per cent. less than the average of the preceding five years. The production index is about 12 per cent. more than last year's aggregate production and 0.3 per cent more than the average of the preceding five years, 1916-1920.

According to a survey of economic conditions made by the National City Bank, the iron and steel industry is operating on about 80 per cent. of capacity, stimulated by liberal buying for the railroads, the building industry, automobile and implement manufacturers. It seems to have plenty of work ahead for the winter.

In the textiles buying has been stimulated by the rise of raw materials, wool, cotton and silk, all being in strong positions statistically. The industries are busy with capacity well sold up for several months. Merchants, however, continue to buy with caution, not convinced that the public will follow price advances far.

The building industry is experiencing the seasonal slowdown, but it is completing the greatest year of its history, and the plans in hand and contracts under negotiation give every reason to expect that this activity will continue through next year. In the opinion of experts building activity has been the largest single factor in the business recovery that has taken place.

On the whole the outlook for business during the winter months is good, with a promise of continuance next spring, providing developments in Europe are not unfavorable. The fact cannot be neglected that the prices of farm products are dependent upon Europe's taking its accustomed

supplies. The price level is not yet fully readjusted, but the gains made by farm products in the last two months have done much for the relief of that situation. Conditions still partake largely of the character of a rally, stimulated by shortage in certain lines. Many experienced observers do not believe that industrial costs are yet low enough to furnish a basis for stable prosperity.

GOLD RESERVES.

The extent to which the financial foundations of the country have been strengthened is shown by the heavy retirement of Federal Reserve notes in circulation, the contraction in the total earning assets of the regional institutions. There has been an increase of over $223,000,000 in our gold reserves. The banks now hold total gold reserves of $3,083,325,000. The following is a short summary of the increase or decrease in principal assets and liabilities of the Federal Reserve Bank on Nov. 29 as compared with Nov. 30, 1921, in millions of dollars:

| | Increase or decrease |
|---|---|
| Total reserves | +213.7 |
| Gold reserves | +223.4 |
| Total earning assets | —246.1 |
| Discounted bills, total | —532.2 |
| Secured by United States Government obligations | —161.1 |
| Other bills discounted | —371.1 |
| Purchased bills | +186.3 |
| United States securities, total | + 99.9 |
| Bonds and notes | +130.1 |
| Pittman certificates | —102.5 |
| Other Treasury certificates | + 72.3 |
| Total deposits | +117.4 |
| Members' reserve deposits | +137.3 |
| Government deposits | — 12.5 |
| Other deposits | — 7.4 |
| Federal Reserve notes in circulation | — 36.2 |
| Fed. Res. Bank notes in circ., net liab | — 55.0 |

While there have been some striking advances here and there in commodity prices, especially in farm products, which have greatly increased the purchasing power of the farmer who supplies over 60 per cent. of the purchasing power of the country as a whole, the index numbers of the price tables of 404 commodities, prepared by the Bureau of Labor, show an increase in the general level of only ¾ of 1 per cent. These index numbers of wholesale prices are as follows:

| | 1921. | 1922. | |
|---|---|---|---|
| | Oct. | Sept. | Oct. |
| Farm products | 124 | 133 | 138 |
| Foods | 140 | 138 | 140 |
| Cloths and clothing | 180 | 183 | 188 |
| Fuel and lighting | 189 | 244 | 226 |
| Metals and metal products | 116 | 134 | 135 |
| Building materials | 159 | 180 | 183 |
| Chemicals and drugs | 131 | 124 | 124 |
| Housefurnishing goods | 180 | 173 | 176 |
| Miscellaneous | 118 | 116 | 120 |
| All commodities | 142 | 153 | 154 |

Comparing prices in October with those of a year ago, as measured by changes in the index numbers of the above groups it is seen that the general level has increased 8½ per cent.

The work of reconstruction that has made such progress in the country during the year has naturally been reflected in an expansion in activity in the security markets, accompanied by a marked revalorization in the prices of stocks and bonds. The average daily trading in November was 921,000 shares against 708,000 shares in the preceding year.

The following is a retrospect of the stock market as of Dec. 2, 1922, prepared by Dow, Jones & Co., and showing the daily average prices at the close of twenty industrial and 20 railroad stocks for the periods indicated:

| | 20 Industrials. | 20 Rail's. |
|---|---|---|
| Low, 1921 | Aug. 24, 63.90 | June 20, 65.52 |
| High, 1922 | Oct. 14, 103.43 | Sept. 11, 95.99 |
| | 1922. | 1922. |
| Last high point | Oct. 14, 103.43 | Sept. 11, 93.99 |
| Last low point | Nov. 27, 92.03 | Nov. 27, 82.17 |
| Declined to | Oct. 31, 96.11 | Oct. 31, 89.25 |
| Rallied to | Nov. 8, 99.53 | Nov. 3, 91.11 |
| Declined to | Nov. 27, 92.03 | Nov. 27, 82.17 |
| Rallied to | Dec. 2, 95.91 | Dec. 2, 85.86 |

ENORMOUS STOCK DIVIDENDS.

One of the most notable financial developments of the year has been the enormous distribution of stock dividends, which, according to a compilation made by a reliable authority, has totalled $1,007,000,000 during the twelvemonth. This movement on the part of the superprosperous corporations of the country has undoubtedly been taken as a precaution against legislation by Congress with a view to making the surpluses of corporations subject to income tax levies by the Federal Government. Under the decision of the United States Supreme Court, which is the existing law, stock dividends are not taxable.

Singularly enough, the great disbursements call attention in a striking way to the futility, in one direction at least, of the decision rendered years ago by this supreme tribunal of the United States ordering the dissolution of the Standard Oil Trust under the Sherman Anti-Trust Law. Financial analysts call attention to the fact that when the original Standard Oil Company of New Jersey with its thirty-three subsidiaries was ordered dissolved it had a total capitalization of $100,000,000, which was selling in the market for about $400,000,000.

During the last year, and principally within the last three months, seven of these independent units, namely, Standard Oil of New Jersey, Standard Oil of New York, Standard Oil of California, Ohio Oil, Vacuum Oil, Atlantic Refining, Standard Oil of Kentucky, have disbursed $781,324,311 in stock dividends.

## REVIEW OF THE BOND MARKET FOR 1922.

By Burton L. Read.

Market values of bonds in 1922 have reflected a continued lowering of money rates up to the fall months, followed by a firmer tendency in money due to crop-moving requirements and increasing activity of business.

As reflected by the Dow, Jones & Co. average of forty corporation issues, the general level of bond prices at the middle of September was about equal to that of May, 1917, shortly after America's declaration of war against Germany, and more than twenty points above the low mark of May, 1920, which marked the extreme depression of investment values due to the war and ensuing over-expansion of credit. The change in money and credit conditions which brought about this recovery is shown by a decline in the interest rate on prime commercial paper from 8 per cent. in the summer of 1920 to 4 per cent. or less in the corresponding period of 1922.

Bond market changes for about eight years may be seen by the following comparison of average prices:

| Year. | High. | Low. | |
|---|---|---|---|
| | | (To Dec. 1, 1922.) | |
| *1922 | 92.12 | (Sept. 14) 84.34 | (Jan. 4) |
| 1921 | 84.13 | (Dec. 7) 75.11 | (June 22) |
| 1920 | 80.40 | (Jan. 12) 71.96 | (May 21) |
| 1919 | 86.53 | (Jan. 8) 78.39 | (Dec. 16) |
| 1918 | 88.58 | (Nov. 14) 81.94 | (Sept. 24) |
| 1917 | 96.25 | (Jan. 18) 82.19 | (Dec. 26) |
| 1916 | 95.67 | (Nov. 27) 93.66 | (Aug. 31) |
| †1915 | 94.64 | (Nov. 24) 89.64 | (Sept. 16) |

* To December 1. † From April 1.

On Nov. 29, 1922 the average stood at 88.42, showing the extent of the autumn reaction.

A distinguishing feature of the bond market year has been the advance in all Liberty Loan issues to record high prices, in all cases well over par. In the 4¼ per cent. loans the apex of the rise occurred in July, two months earlier than the highest point of the advance in corporation bonds. Extreme range of the more active Government securities has been as follows:

| | High. | Low. |
|---|---|---|
| | (To Dec. 1, 1922.) | |
| Liberty first 3½s, 1932-'47 | 103.02 (Oct., 1922) | 86.00 (July, 1920) |
| Liberty first converted 4¼s, 1932-'47 | 101.78 (July, 1922) | 84.00 (May, 1920) |
| Liberty second converted 4¼s, 1927-'42 | 101.50 (July, 1922) | 81.10 (May, 1920) |
| Liberty third 4¼s, 1928 | 101.98 (July, 1922) | 85.60 (Dec., 1920) |
| Liberty fourth 4¼s, 1933-'38 | 101.86 (July, 1922) | 82.00 (May, 1920) |
| *Liberty-Victory 4¾s, 1922-'23 | 101.00 (June, 1922) | 94.70 (May, 1920) |
| †United States Treasury 4¼s, 1947-'52 | 100.14 (Oct., 1922) | 98.90 (Oct., 1922) |

* July 26, 1922, all Victory 4¾% notes designated A, B, C, D, E, or F, approximately $1,000,000,000, were called for payment December 15. Balance due June 15, 1923. Quotations only for uncalled notes.

† Refunding issue of 1922. Listed on New York Stock Exchange October 25.

From the prices of Liberty Bonds, as shown above, losses of approximately three to three and one-half points occurred in later months due to increased business activity, firmer money rates and the issue of a new refunding loan in October. On Nov. 29 the Liberty first 3½s closed at 100.08, first 4¼s at 98.32, second 4¼s at 97.84, third 4¼s at 98.40, and fourth 4¼s at 98.08.

Foreign Government bonds also have sold at much advanced prices, reflecting both the improved money market situation and financial improvement in the issuing countries. But this group as a whole has shown a wider reaction, owing to a heavy volume of new flotations, and in a part of the list, especially French and Belgian loans, to the uncertainty over reparations and unsettling influence of the Near East disturbance.

High and low price range of the principal Allied loans floated in this country is shown by the following table:

| Bond. | High. | | Low. (To Dec. 1, 1922.) | |
|---|---|---|---|---|
| Kingdom of Belgium 25-year s.f. 7½s, 1945 | 109½ | (Apr., 1922) | 94 | (Dec., 1920) |
| Kingdom of Belgium 20-year s.f. 8s, 1941 | 108⅝ | (Apr., 1922) | 96¾ | (Mar., 1921) |
| French Republic 25-year s.f. 8s, 1945 | 108¾ | (May, 1922) | 93 | (Nov., 1922) |
| French Republic 20-year s.f. 7½s, 1941 | 104¾ | (Apr., 1922) | 91 | (Nov., 1922) |
| United Kingdom of Great Britain and Ireland 20-year 5½s, 1937 | 106⅞ | (Aug., 1922) | 80½ | (Dec., 1919) |
| United Kingdom 10-year convertible 5½s, 1929 | 110⅞ | (July, 1922) | 83 | (Aug., 1920) |
| Kingdom of Italy 6½s, 1925 | 96¾ | (July, 1922) | 79 | (Dec., 1920) |

The two French loans touched their lowest points in November, 1922, recovering to 97¾ and 92¾ respectively at closing prices November 29. Belgian 7½s closed November 29 at 100½, Belgian 8s at 99¾, United Kingdom 5½s of 1937 at 102⅛, convertible ten-year 5½s at 110½, reflecting the strong sterling market, and Kingdom of Italy 6½s at 93½.

Based on figures for the eleven months to and including November, total bond dealings on the New York Stock Exchange for the year 1922 will approximate $4,150,000,000, making a new high record. For 1921 the total was $3,086,000,000, and for 1920, the previous high record year, it was $3,887,000,000. These figures compare with $955,000,000 in 1915, the first year in which dealings reflected war stimulation.

Total for eleven months to the end of November was $3,836,000,000, of which amount about 40 per cent. was in Liberty and Victory bonds, including the new Treasury issue of October. It is important to note the changing ratio of Government bond dealings in late years. In 1917, when Liberty bonds first appeared on the market, the proportion of such dealings was 27.8 per cent. In 1918 it rose to 70.9 per cent. and in 1919 to 76.8 per cent., which was the maximum. In 1920 it declined to 72.7 per cent., in 1921 to 60.7 per cent., and, as noted, a further very pronounced decline in this ratio has occurred in 1922.

Dealings in foreign bonds, relatively unimportant before the war, have been steadily increasing. The total for 1922 may be estimated at well in excess of $500,000,000. Transactions in domestic corporation bonds since the year 1915 have more than doubled.

While the only definite statistics available are those of Stock Exchange trades, such figures represent only a small proportion of aggregate transactions, as the greater part of all bond sales take place directly between bankers or between the banker and the investor. The above record is mainly significant as showing the general trend in total bond investments and dealings in the various classes.

## NEW FINANCING.

Bond and note flotations in eleven months from January to November, inclusive, 1922, may be stated at approximately $4,635,817,000, not including United States Government issues. The Government during this period sold Certificates of Indebtedness, Treasury Notes, and Treasury Bonds to an aggregate amount of $3,922,000,000, making a total of Government and other financing of about $8,557,817,000.

In the following summary of financing, other than United States Government, the total of State and municipal issues is supplied by the Daily Bond Buyer. Figures for corporation securities are based principally on the compilations of the Commercial and Financial Chronicle, and in the division of foreign loans the statistics have been prepared by the Guaranty Trust Company of New York.

**Bond and Note Issues.**
January to November (inclusive), 1922.

| *Domestic Loans.* | |
|---|---|
| State and Municipal | $1,177,699,000 |
| Railroad | 595,239,000 |
| Public Utility | 645,521,000 |
| Farm Loan | 366,665,000 |
| Industrial and Miscellaneous | 1,049,019,000 |
| Total domestic | $3,834,143,000 |
| *Foreign Loans.* | |
| Government and Municipal—Other than Canada | $422,608,000 |
| Canada | 206,119,000 |
| Corporation—Other than Canada | 136,115,000 |
| Canada | 36,831,500 |
| Total foreign | $801,674,700 |
| Total foreign and domestic | $4,635,817,700 |

For purposes of comparison the appended figures from the Commercial and Financial Chronicle give totals of domestic and foreign financing (other than United States Government) for previous full yearly periods:

| Year. | Total Issues. |
|---|---|
| 1921 | $4,231,320,000 |
| 1920 | 4,010,048,000 |
| 1919 | 4,361,188,000 |

It will be noted that the total for eleven months of 1922 exceeds that of each of the complete years of 1919 to 1921.

The record volume of tax-exempt issues, including State, municipal, and farm loan bonds, is a feature of 1922 financing. State and municipal issues have about tripled as compared with the output previous to the participation of the United States in the World War. This has been due to a variety of causes, of which one that has contributed largely is the tax-exempt character of such bonds, resulting in a heavy demand for these securities by investors subject to the surtax rates of income tax. Increased cost of public improvements has added to the amount of bonds issued; also the extensive movement toward construction of roads. An important item in this class of securities has been the issue of about $350,000,000 of bonds by various States for soldier bonus purposes, this figure being the aggregate as reported by the Bond Buyer, to Nov. 16, 1922, including earlier years.

Farm Loan bonds include two joint issues of the Federal Land Banks, of $75,000,000 each, the remainder consisting mostly of bonds of the Joint Stock Land Banks, with a small amount issued by individual Federal Banks. These bonds, like State and municipal issues, are in the tax-exempt class.

Of the domestic and foreign loans in the above tabulation, approximately 20 per cent. were issued for refunding purposes. The remainder represent new capital. In the case of United States Government issues the proportion is much larger. Compared with the total of $3,922,000,000 of new issues, as above stated, the Government paid off in the eleven months $2,432,595,000 of maturing obligations, in cash or by exchange for new securities. This does not include payments on account of Victory notes and other obligations in December.

While the above figures deal with bond financing only, a large additional volume of capital has been raised by stock issues. According to Dow, Jones & Co., the total of stock issues in the eleven months period to Nov. 30, 1922, was $710,272,000.

## FOREIGN LOANS FLOATED IN AMERICA IN 1922.

The following compilation of foreign Government and municipal loans floated in the United States from January to November, inclusive, 1922, has been prepared for The World Almanac by the Guaranty Trust Company of New York:

| Issue. | Coupon. | Maturity. | Amount in Dollars. | |
|---|---|---|---|---|
| *Far East.* | | | | |
| Dutch East Indies | 6s | 1947 | $ 40,000,000 | |
| Dutch East Indies | 6s | 1962 | 60,000,000 | |
| City of Brisbane, Australia | 6½s | 1941 | 758,000 | (a) |
| State of Queensland, Australia | 6s | 1947 | 10,000,000 | |
| Total | | | $110,758,000 | |
| *Europe.* | | | | |
| City of Greater Prague, Czechoslovakia | 7½s | 1952 | 7,500,000 | |
| City of Soissons, France | 6s | 1936 | 6,000,000 | |
| Dept. of the Seine, France | 7s | 1942 | 25,000,000 | |
| Kingdom of the Netherlands | 6s | 1972 | 47,400,000 | (b) |
| Kingdom of Norway | 6s | 1931 | 2,475,000 | (c) |
| Kingdom of Norway | 6s | 1970 | 1,100,000 | (c) |
| Kingdom of Norway | 6s | 1952 | 18,000,000 | |

| Issue. | Coupon. | Maturity. | Amount in Dollars. | |
|---|---|---|---|---|
| *Europe—Cont.* | | | | |
| Kingdom of the Serbs, Croats & Slovenes* | 8s | 1962 | $15,250,000 | |
| Republic of Czechoslovakia | 8s | 1951 | 14,000,000 | |
| Total | | | $136,725,000 | |
| *South America and West Indies.* | | | | |
| City of Buenos Aires, Argentina | 5s | 1946 | 1,095,000 | (a) |
| City of Montevideo Uruguay | 7s | 1952 | 6,000,000 | |
| City of Porto Alegre, Brazil | 8s | 1961 | 3,500,000 | |
| City of Rio de Janeiro, Brazil | 8s | 1947 | 13,000,000 | |
| City of Sao Paulo, Brazil | 8s | 1952 | 4,000,000 | |
| Govt. of the Argentine | 7s | 1927 | 27,000,000 | |
| Repub. of Bolivia | 8s | 1947 | 24,000,000 | |
| Repub. of Chile | 8s | S.F. | 1,350,000 | (d) |
| Repub. of Chile | 7s | 1942 | 18,000,000 | |
| Repub. of Colombia | 6½s | 1927 | 5,000,000 | |
| Repub. of Haiti | 6s | 1952 | 16,000,000 | |
| Repub. of Peru | 8s | 1932 | 2,500,000 | |
| State of Bahia† | 8s | 1942 | 100,000 | |
| State of Ceara | | .... | 2,000,000 | |
| State of Santa Catharina, Brazil | 8s | 1947 | 5,000,000 | |
| U. S. of Brazil | 7s | 1952 | 25,000,000 | |
| U. S. of Brazil | 7½s | 1952 | 8,8 0,000 | (a) |
| Dominican Republic | 5½s | 1942 | 6,700,000 | |
| Total | | | $169,125,000 | |
| *North America—Canada.* | | | | |
| Dominion of Canada | 5s | 1952 | 100,000,000 | |
| Provinces and Municip.‡ | | .... | 106,119,500 | |
| Total | | | $206,119,500 | |

| Issue. | Coupon. | Maturity. | Amount in Dollars. |
|---|---|---|---|
| *Newfoundland.* | | | |
| Govt. of Newfoundland | 5½s | 1942 | $6,000,000 |
| Total | | | $6,000,000 |
| Summary: | | | |
| Foreign Governments, Canada omitted | | | 422,608,000 |
| Canada | | | 206,119,500 |
| Total Foreign Govt. Issues. | | | $628,727,500 |

*$25,000,000 offered; subscriptions understood to have amounted to $15,250,000.

† $5,000,000 offered; figure is given for estimated amount subscribed.

‡ Total through October only.
(a) Issued in Pounds Sterling.
(b) Issued in Guilders.
(c) Issued in Kroner.
(d) Issued in Chilean Pesos.
(e) Issued in French Francs.

In addition to Government and municipal issues, bonds of foreign corporations have been floated in the United States in the same period to the amount of $136,115,000, omitting Canada, and $36,831,500 of Canadian companies, making a total of $172,947,200, and aggregate of all foreign issues, $801,674,700. In addition, stock issues of foreign companies amounted to $7,075,000.

Of the foreign corporation loans, $64,995,000 were issues of railroads, $8,761,000 of public utilities, and $99,190,000 of industrial companies. The largest foreign loan in this class was that of $40,000,000 for the Paris-Lyons-Mediterranean Railroad Company. Countries represented, other than Canada, include France, Holland, Belgium, Denmark, Cuba, Australia, and Brazil.

## COURSE OF FOREIGN EXCHANGE FOR 1922.

(Cable quotations, as certified by the Federal Reserve Bank to the United States Treasury.)

| | Great Britain (£ Sterl'g) | France (Francs) | Belgium (Francs) | Holland (Guilders) | Denmark (Kroner) | Sweden (Kroner) | Norway (Kroner) | Italy (Lire). |
|---|---|---|---|---|---|---|---|---|
| *Par of Exchange* | *$4.8665* | *$0.1930* | *$0.1930* | *$0.4020* | *$0.2680* | *$0.2680* | *$0.2680* | *$0.1930* |
| Jan. 3, 1922 | 4.2089 | .0803 | .0765 | .3684 | .2002 | .2497 | .1582 | .0426 |
| Feb. 1, 1922 | 4.2878 | .0835 | .0795 | .3699 | .2019 | .2544 | .1587 | .0466 |
| Mar. 1, 1922 | 4.4408 | .0921 | .0871 | .3836 | .2123 | .2663 | .1763 | .0540 |
| Apr. 1, 1922 | 4.3765 | .0902 | .0840 | .3778 | .2107 | .2602 | .1774 | .0517 |
| May 1, 1922 | 4.4291 | .0922 | .0846 | .3822 | .2119 | .2590 | .1877 | .0533 |
| June 1, 1922 | 4.4513 | .0910 | .0841 | .3871 | .2180 | .2593 | .1782 | .0520 |
| July 1, 1922 | 4.4240 | .0840 | .0798 | .3850 | .2145 | .2581 | .1675 | .0470 |
| Aug. 1, 1922 | 4.4447 | .0811 | .0774 | .3864 | .2146 | .2608 | .1687 | .0453 |
| Sept. 1, 1922 | 4.4613 | .0778 | .0738 | .3896 | .2142 | .2645 | .1668 | .0441 |
| Oct. 2, 1922 | 4.3869 | .0757 | .0712 | .3870 | .2038 | .2639 | .1716 | .0426 |
| Nov. 1, 1922 | 4.4575 | .0704 | .0654 | .3909 | .2015 | .2681 | .1819 | .0421 |
| Dec. 1, 1922 | 4.5198 | .0702 | .0650 | .3952 | .2038 | .2692 | .1849 | .0488 |

COURSE OF FOREIGN EXCHANGE FOR 1922—*Continued.*

| | Spain (Pesetas). | Germany (Reichsmarks). | Austria (Kronen). | Czechoslovakia (Kronen). | Canada (Dollars). | Japan (Yen). | Argentina (Pesos). | Brazil (Milreis). |
|---|---|---|---|---|---|---|---|---|
| *Par of Exchange* | *$0.1930* | *$0.2382* | *$0.2026* | *$0.2026* | *$1.00* | *$0.4985* | *$0.9648* | *$0.5462* |
| Jan. 3, 1922 | .1495 | .005298 | .000381 | .015481 | .952656 | .4792 | .7579 | .1264 |
| Feb. 1, 1922 | .1520 | .004914 | .000309 | .018613 | .956406 | .4735 | .8105 | .1261 |
| Mar. 1, 1922 | .1603 | .004360 | .000199 | .017272 | .979844 | .4720 | .8423 | .1358 |
| Apr. 1, 1922 | .1549 | .003302 | .000137 | .018938 | .968917 | .4740 | .8110 | .1354 |
| May 1, 1922 | .1553 | .003547 | .000125 | .019422 | .984653 | .4738 | .8153 | .1356 |
| June 1, 1922 | .1577 | .003740 | .000093 | .019411 | .990104 | .4750 | .8232 | .1373 |
| July 1, 1922 | .1559 | .002947 | .000052 | .019103 | .982514 | .4773 | .8137 | .1358 |
| Aug. 1, 1922 | .1549 | .001543 | .000029 | .022889 | .993472 | .4768 | .8229 | .1358 |
| Sept. 1, 1922 | .1551 | .000798 | .000014 | .032533 | .999288 | .4773 | .8270 | .1321 |
| Oct. 2, 1922 | .1513 | .000551 | .000014 | .030997 | 1.000137 | .4803 | .8044 | .1154 |
| Nov. 1, 1922 | .1529 | .000224 | .000014 | .031706 | 1.000979 | .4816 | .8152 | .1131 |
| Dec. 1, 1922 | .1536 | .000126 | .000014 | .031722 | .999507 | .4851 | .8375 | .1211 |

## RAILWAY CAR OUTPUT IN THE UNITED STATES.

| | 1921. | 1919. |
|---|---|---|
| Total value | $329,250,935 | $556,664,807 |
| Steam-railroad cars: | | |
| Number | 50,361 | 153,288 |
| Value | $170,325,626 | $373,945,213 |
| Passenger: | | |
| Number | 1,355 | 234 |
| Value | $33,932,334 | $4,854,768 |
| Freight and oth. varieties | | |
| Number | 49,026 | 153,054 |
| Value | $136,393,292 | $369,090,445 |
| Electric-railroad cars: | | |
| Number | 1,533 | 1,898 |
| Value | $10,540,565 | $13,502,653 |
| Passenger: | | |
| Number | 1,436 | 1,726 |
| Value | $9,803,405 | $11,495,791 |
| Other varieties: | | |
| Number | 97 | 172 |
| Value | $737,160 | $2,006,862 |
| All other products | $148,384,744 | $169,216,941 |

"All other products" includes value of rebuilt cars.

## STOCK MARKET PRICES 1921-1922.

| NAME. | 1921. Clos. Price. | 1922. High. | 1922. Low. | 1922. Close | Net Chge. Inc. |
|---|---|---|---|---|---|
| Adams Exp | 50 | 83 | 48 | 69 | 19 |
| Adv Rumely | 10⅜ | 23 | 10⅞ | 12¼ | 1⅜ |
| Ad Rum pf | 31½ | 60¼ | 31⅝ | 44⅛ | 13 |
| Air Reduct | 49 | 66 | 45½ | 61⅛ | 12½ |
| Ajax Rubr | 17⅛ | 18¾ | 9½ | 12⅛ | –5 |
| Alas Gld M | ⅛ | ⅛ | ⅛ | ⅛ | .... |
| Alask Jun | ⅛ | 2 | ⅝ | 1⅜ | ¼ |
| All Am Cabl | 103¼ | 119¾ | 107 | 125 | 21¾ |
| Al Chem & D | 57½ | 91¾ | 55⅛ | 73⅛ | 15⅝ |
| Al Chem & D pf | 103 | 115⅛ | 101 | 110¼ | 7¼ |
| Allis Chalm | 39⅛ | 59¾ | 37¾ | 43¼ | 3¾ |
| Allis Ch pf | 88½ | 104 | 86½ | 94¾ | 6¼ |
| Am Ag Ch | 30¼ | 42⅞ | 28⅜ | 31⅜ | 1⅛ |
| Am A Ch pf | 57½ | 72½ | 55¾ | 61 | 3½ |
| Am Bk Nt | 56¾ | 90 | 57 | 90 | 33¼ |
| Am B N pf | 50 | 55 | 51½ | 55 | 5 |
| Am B Sug | 34¾ | 49 | 31¾ | 41 | 6¼ |
| Am B Su pf | 58⅜ | 80½ | 61 | 80 | 21⅞ |
| Am Bsch Mg | 35 | 49 | 31¼ | 35½ | ½ |
| Am Brsk S F | 53¼ | 88½ | 51 | 74 | 20¾ |
| Am Br S F pf | 99½ | 113 | 98¼ | 111 | 11½ |
| Am Can | 34¾ | 76⅓ | 32¼ | 70⅞ | 36⅛ |
| Am Can pf | 94 | 112 | 93¼ | 111 | 17 |
| Am Car & F | 146¼ | 201 | 141 | 182 | 35⅛ |
| Am Car F pf | 115 | 126⅛ | 115½ | 126⅛ | 67 |
| Am Chicle | 11⅜ | 14 | 5 | 6¾ | –4⅝ |
| Am Cot Oil | 21½ | 30½ | 14¾ | 19½ | –2 |
| Am Cot Oil pf | 44⅛ | 61 | 33⅞ | 39¼ | –5⅝ |
| Am Drg Syn | 4⅜ | 7¼ | 4½ | 6⅛ | 1½ |
| Am Express | 128⅜ | 162 | 126 | 139 | 10⅜ |
| Am Hid & Lr | 13¼ | 17⅜ | 10⅞ | 11⅛ | –2⅛ |
| Am H & L pf | 58⅜ | 74¾ | 58 | 66¾ | 7⅛ |
| Am Ice | 82 | 122 | 78 | 105 | 23 |
| Am Ice pf | 72½ | 95¼ | 72 | 85½ | 13 |
| Am Int Corp | 41⅝ | 50⅝ | 25½ | 28½ | –12⅛ |
| Am-L Fran | 9¾ | 13⅛ | 9¼ | 11⅛ | 1¾ |
| Am Linseed | 30¾ | 42½ | 28 | 29⅝ | – ⅞ |
| Am Lin pf | 56 | 64½ | 48 | 50 | –6 |
| Am Locom | 108 | 136¾ | 102 | 120¾ | 12¾ |
| Am Loc pf | 113 | 121½ | 112 | 121 | 8 |
| Am Radiat | 88¾ | 129 | 82 | 118 | 29¼ |
| Am Saf Raz | 4 | 8⅞ | 3⅝ | 6¾ | 2¾ |
| Am Ship Cm | 6 | 25¼ | 5½ | 19¾ | 13¾ |
| Am Smelt | 45¼ | 67⅛ | 43⅝ | 54⅛ | 8⅛ |
| Am Smelt pf | 86⅛ | 104½ | 86⅛ | 99½ | 13¼ |
| Am Smelt pf A | 87⅛ | 101⅞ | 81 | 101⅞ | 14⅜ |
| Am Snuff | 111⅛ | 159 | 109½ | 151¾ | 40⅝ |
| Am Snuff pf | 90 | 100⅞ | 90 | 100¾ | 10⅜ |
| Am S Fy | 33⅞ | 46⅛ | 30¾ | 44⅝ | 10¾ |
| Am St Fdry pf | 95 | 107⅜ | 91 | 107¾ | 12¾ |
| Am Sugar | 56¾ | 85⅞ | 54½ | 75½ | 18¾ |
| Am Sug pf | 83¾ | 112 | 84 | 106½ | 22½ |
| Am Sum Tob | 33¼ | 47 | 23¼ | 28¾ | –4½ |
| Am S Tob pf | 68 | 71 | 52¼ | 59⅛ | –8½ |
| Am Tel & Cb | 53 | 70 | 54 | 60¾ | 7¾ |
| Am Tel & Tel | 114⅞ | 128¼ | 114⅛ | 123⅝ | 8⅝ |
| Am Tobac | 131⅞ | 169½ | 129⅛ | 154 | 22½ |
| Am Tob pf | 96¼ | 108⅜ | 96½ | 104⅜ | 7⅞ |
| Am Tob B | 128⅜ | 165⅜ | 126 | 152 | 23⅞ |
| Am Wat Wks | 5¾ | 33¼ | 6 | 28¾ | 22½ |
| Am Wat Wks pf | 96¼ | 93⅞ | 77 | 90 | –46¼ |
| Am Whol pf | 93 | 95 | 86 | 87½ | –5½ |
| Am Wool | 87⅞ | 105 | 78¼ | 96⅛ | 14½ |
| Am Wool pf | 103 | 111 | 102½ | 110½ | 7½ |
| A Wtg P pf | 23 | 37⅛ | 22⅛ | 27⅞ | 4⅛ |
| Am Zinc & Ld | 13½ | 21 | 12⅜ | 15 | 1⅜ |
| Am Zinc & Ld pf | 36 | 57 | 36 | 48 | 12 |
| Anaconda | 49⅞ | 57 | 45½ | 49 | – ⅞ |
| Ann Arbor | 12 | 24 | 10 | 15 | 3 |
| Ann Arb pf | 29¼ | 52 | 29 | 31 | 1¾ |
| Art Metal | 15 | 16½ | 15 | 15¾ | ¾ |
| Assets Realization | 1 | 3 | ⅞ | 1 | .... |
| Asso Dry Gd | 45½ | 68¾ | 43 | 65½ | 20 |
| A D Gd. I pf | 75⅜ | 86 | 75 | 83¾ | 8⅜ |
| A D Gds 2 pf | 76¾ | 91½ | 75⅞ | 88 | 11¼ |
| Assoc Oil | 102½ | 135½ | 99 | 115¼ | 13 |
| Atchison | 92⅝ | 108½ | 91¾ | 101¾ | 9⅛ |
| Atchison pf | 85 | 95½ | 85 | 90¾ | 5⅜ |
| Atl, Blr & Atl | 1 | 5½ | ¾ | 1⅞ | ⅞ |
| Atl Coast Ln | 84 | 124⅞ | 83 | 114⅓ | 30⅓ |
| Atl Fruit | 2½ | 5½ | 1⅜ | 1⅞ | – ⅝ |
| Atl Gulf & W I | 31½ | 43¼ | 21 | 24⅞ | –6⅜ |
| At G & W I pf | 21¼ | 31¼ | 16⅛ | 17¾ | –3⅛ |
| Atl Refin | 1030 | 1575 | 900 | 1240 | 210 |
| Atl Ref pf | 113 | 119 | 114 | 119 | 6 |
| Atlas Tack | 12⅜ | 22½ | 13½ | 17 | 4⅝ |
| Austin Nich | 9½ | 40⅜ | 9¼ | 33½ | 24 |
| Aust Nich pf | 64 | 91 | 68 | 88½ | 24½ |
| Auto Sales | 4 | 7 | 2 | 3¼ | – ¾ |
| Auto Sales pf | 14½ | 15½ | 10½ | 12 | –2½ |
| Bald Loco | 98¾ | 142¾ | 92¾ | 117⅛ | 18⅞ |
| Bald Loco pf | 104 | 118 | 104 | 117 | 13 |
| Balt & Ohio | 34¾ | 60¼ | 32½ | 44 | 9¼ |
| Balt & Ohio pf | 52⅜ | 66¼ | 52½ | 58 | 5⅜ |
| Barnet Leather | 40 | 67⅝ | 40 | 46 | 6 |
| Bar Lr pf | 86 | 97½ | 89 | 93½ | 7½ |

| NAME. | 1921. Clos. Price. | 1922. High. | 1922. Low. | 1922. Close | Net Chge. Inc. |
|---|---|---|---|---|---|
| Barnsdall Corp A | 19 | 56¾ | 19¾ | 31⅝ | 12⅝ |
| Barnsdall Corp B | 20 | 59 | 17 | 22 | 2 |
| Batoplis Min | ½ | 1⅜ | ½ | ½ | .... |
| Bayuk Bros | 29 | 65 | 33 | 48½ | 14½ |
| Beth Steel | 52⅛ | 79 | 51 | 62¾ | 10¼ |
| Beth Stl B | 57¾ | 82¼ | 55½ | 63¼ | 5½ |
| Beth St 7 pf | 90 | 100¼ | 94 | 96½ | 6½ |
| Beth St 8 pf | 106 | 116⅝ | 104 | 110 | 4 |
| Booth Fish | 5½ | 10½ | 3½ | 5 | – ½ |
| Booth F pf | 39 | 46 | 34 | 48 | 9 |
| Bklyn Edsn | 100½ | 124⅝ | 100 | 117¼ | 16¾ |
| Bklyn Rp Tr | 6⅞ | 29 | 6¾ | 17½ | 10⅝ |
| Bk Rp Tr ctf | 5⅛ | 24⅞ | 5⅝ | 14¾ | 9⅛ |
| Bklyn Un Gas | 73½ | 124⅞ | 70 | 114¾ | 41¼ |
| Brit Emp Stl | 8¾ | 14½ | 8½ | 9 | ¼ |
| Brit Emp Stl 1st pf | 58⅜ | 77 | 58 | 68 | 9⅜ |
| Brit Emp Stl 2d pf | 23⅜ | 21½ | 19⅛ | 26½ | 2⅞ |
| Brown Shoe | 43¾ | 84⅜ | 42 | 61½ | 17¾ |
| Brown Shoe pf | 88 | 99¾ | 89 | 99¾ | 11¾ |
| Brunswick | 2¾ | 5⅜ | 2 | 2½ | – ¼ |
| Buff, R & P | 49½ | 73 | 50½ | 65 | 15½ |
| Buff & Susquehanna | 65 | 85 | 73 | 73 | 13 |
| Burns Bros A | 118 | 139½ | 115 | 145 | 27 |
| Burns Bros B | 31¼ | 53 | 28⅜ | 47 | 15¾ |
| Burns Bros pf | 108½ | 103¾ | 94 | 93⅜ | –15½ |
| Bush Term Bldg pf | 87⅜ | 101½ | 87¼ | 97½ | 9¾ |
| But Cop & Zc | 5¾ | 8⅞ | 5¼ | 7¾ | 2 |
| But & Sup Cop | 22 | 35¼ | 20⅝ | 30 | 8 |
| Butterick | 31¼ | 34 | 16 | 18⅝ | –12⅝ |
| Caddo Oil | 11½ | 15¼ | 7¼ | 8½ | –3 |
| Callahan Zinc Lead | 5⅞ | 11⅜ | 5¼ | 7¼ | 1⅜ |
| Cal Pack'g | 70 | 86½ | 68 | 80 | 10 |
| Cal Petrol | 48⅛ | 71⅞ | 43⅛ | 57⅜ | 9¼ |
| Cal Pet pf | 83¼ | 98½ | 83 | 103¼ | 20 |
| Cal & Arlz | 59 | 66½ | 50½ | 55 | –4 |
| Can Pac | 120¼ | 151⅝ | 119½ | 141¾ | 21½ |
| Can South | 44¼ | 56¼ | 51 | 52 | 7¾ |
| Carson Hill | 11¼ | 16⅝ | 6½ | 6½ | –4¾ |
| Case, J I pf | 70 | 93¼ | 68 | 79 | 9 |
| Case Plow | 3½ | 9½ | 3 | 3 | – ½ |
| Cen Ltht | 31¼ | 44½ | 29⅜ | 34½ | 3¼ |
| Cen Ltht pf | 65 | 82¾ | 63⅝ | 71 | 6 |
| Cen of N J | 190 | 245 | 184 | 214½ | 24½ |
| Cerro De Pas | 34¾ | 41⅜ | 32¾ | 41½ | 5⅜ |
| Certainteed | 32½ | 53⅛ | 34 | 44 | 11½ |
| Certainteed 1st pf | 85 | 95 | 85 | 93¼ | 8¼ |
| Chand Mot | 49⅜ | 79¼ | 47¾ | 60⅜ | 11¼ |
| Ches & Ohio | 55¾ | 79 | 54 | 67⅜ | 11⅝ |
| Chi & Alt | 5 | 12¾ | 1⅜ | 2½ | –2⅞ |
| Ch & Atl pf | 6⅜ | 20⅞ | 3½ | 3½ | –2⅞ |
| Chic, E Ill | 14⅛ | 43¾ | 12⅛ | 31 | 16⅜ |
| Ch, E Ill pf | 34 | 64½ | 31⅜ | 54⅜ | 20½ |
| Ch Gt West | 6½ | 10½ | 4 | 5 | –1½ |
| Ch Gt W pf | 15⅝ | 24½ | 8 | 10 | –5⅜ |
| C, M & St P | 19 | 36⅜ | 16½ | 25½ | 6½ |
| C, M & St P pf | 32⅞ | 55 | 29 | 38¾ | 5⅞ |
| Ch & N W | 63½ | 95⅛ | 59 | 84 | 20⅝ |
| Ch & N W pf | 101⅞ | 125 | 100 | 123 | 21½ |
| Ch Pneu Tl | 60 | 89⅝ | 59 | 81¼ | 21¼ |
| C, R I & P | 31⅝ | 50 | 30¾ | 33⅜ | 1¼ |
| C, R I & P pf | 71 | 93¾ | 70½ | 77½ | 16½ |
| C, R I & P 7 pf | 84½ | 105 | 83¼ | 97½ | 13 |
| C, St P, M & O | 53¼ | 90 | 51 | 75 | 21¾ |
| C, S P, M & O pf | 82 | 107 | 83 | 101 | 19 |
| Chile Cop | 15¾ | 29¼ | 15½ | 27⅛ | 11¾ |
| Chino Cop | 28 | 33⅝ | 22⅜ | 24⅞ | –3⅛ |
| C, C, C & St L | 54½ | 80½ | 54 | 78½ | 24 |
| C, C, C & St L pf | 74 | 100½ | 72¾ | 100 | 26 |
| Cluet-Peab | 47½ | 68¼ | 43 | 63½ | 16 |
| Cluet-P pf | 89 | 103 | 87½ | 102 | 13 |
| Coco-Cola | 43¼ | 82¾ | 41 | 77¾ | 34½ |
| Col Fu & Ir | 25 | 37 | 24 | 26½ | 1½ |
| Col Fu & Ir pf | 106 | 106 | 101⅞ | 105 | –1 |
| Col Gas & E | 66 | 114⅞ | 64⅜ | 101⅛ | 35⅛ |
| Col & Sou | 39 | 53⅛ | 38 | 44¾ | 5¾ |
| Col & So 1 pf | 58 | 64 | 55 | 61¾ | 3¾ |
| Col & Sou 2 pf | 49½ | 60¾ | 49 | 58 | 8½ |
| Col Graph | 2½ | 5¾ | 1¼ | 2⅜ | ⅜ |
| Col Graph pf | 10¼ | 21 | 5 | 8¾ | –1½ |
| Comp Tabulating | 58⅜ | 79¾ | 55⅛ | 69½ | 11¼ |
| Consol Cig | 20 | 42¾ | 18⅝ | 36½ | 16½ |
| Cons Cig pf | 60 | 87¼ | 47 | 83 | 23 |
| Cons Distrib | ⅓ | 2½ | ¼ | ⅜ | – ⅛ |
| Cons Gas | 91 | 145¾ | 85 | 127⅛ | 36⅛ |
| Cons Textl | 14 | 15⅜ | 9 | 13¼ | – ¾ |
| Cont Can | 47 | 103½ | 45¾ | 105½ | 58½ |
| Cont Can pf | 100 | 115 | 100¼ | 110 | 10 |
| Cont Insur | 71 | 93¾ | 66 | 92 | 21 |
| Corn Prod | 97 | 134¾ | 91¼ | 129 | 32 |
| Corn Prod pf | 111⅛ | 122¾ | 111 | 120 | 8½ |
| Cosden | 37 | 53¼ | 31⅝ | 48¾ | 11¾ |
| Crex Carp | 30 | 35⅛ | 24 | 92 | 62 |
| Cruc Stl | 65⅞ | 98⅜ | 52¾ | 64½ | –1⅜ |
| Cruc Stl pf | 87 | 100 | 80 | 90 | 3 |
| Cuba Cane Su | 8¾ | 19¾ | 8⅛ | 14 | 5¼ |
| Cuba Cane Su pf | 16⅜ | 41⅞ | 15¼ | 38 | 21⅝ |

| Name. | 1921. Clos. Price. | 1922. High. | 1922. Low. | 1922. Close | Net Chge. Inc. |
|---|---|---|---|---|---|
| Cuban Am Su | 15¾ | 28 | 14½ | 23¾ | 8 |
| Cuban Am Su pf | 79½ | 99 | 78½ | 99 | 19½ |
| Davidson Ch | 52¾ | 65⅝ | 23½ | 27½ | –25¼ |
| De Beers Co | 16 | 24⅜ | 15½ | 22¼ | 6¼ |
| Del & Hud | 107¾ | 141½ | 106¾ | 122½ | 14¾ |
| D L & West | 117½ | 143 | 110½ | 134½ | 17 |
| Deere Co pf | 61½ | 80 | 61 | 71¼ | 9¾ |
| Detroit Ed | 99½ | 118½ | 100⅜ | 110½ | 10⅝ |
| Det Un R R | 69 | 70¼ | 57½ | 70¼ | 1¼ |
| Dome Mine | 19 | 46½ | 18½ | 41 | 22 |
| Duluth S S & At | 3 | 6 | 2⅜ | 3 | .... |
| D S S & At pf | 3¾ | 10½ | 3¾ | 4⅝ | ½ |
| Dur'm Hos | 29 | 26 | 20 | 22 | – 7 |
| Dur Hos pf | 88¼ | 81½ | 72 | 80 | –8¼ |
| Elk Horn C | 16¼ | 25 | 14¼ | 24 | 7¾ |
| Elk H Cl pf | 37½ | 39 | 34 | 40 | 2½ |
| Em Brant | 2¾ | 11½ | 2⅝ | 6 | 3¼ |
| Em Bran pf | 19½ | 44¼ | 22 | 27 | 7½ |
| Endi-John | 78¼ | 90⅜ | 76¼ | 89¼ | 11 |
| En-John pf | 105 | 118½ | 104 | 118 | 13 |
| Erie | 10½ | 18¾ | 7 | 10⅝ | ½ |
| Erie 1st pf | 15⅜ | 28½ | 11½ | 15¼ | – ⅛ |
| Erie 2d pf | 10⅛ | 20¼ | 7⅛ | 11⅝ | 1½ |
| Fairbanks | 22 | 20¾ | 13 | 13¼ | –8¾ |
| Fam Play | 78¾ | 107 | 75⅛ | 91¼ | 12½ |
| Fam Play pf | 95¾ | 107⅜ | 91½ | 97 | 1¼ |
| Fed M & S | 10 | 16½ | 9 | 10 | .... |
| Fed M & S pf | 39 | 62¾ | 37 | 52⅛ | 13½ |
| Fisher Body | 80 | 165¼ | 75 | 182¼ | 102¼ |
| Fisher B pf | 101 | 112 | 100¼ | 96½ | –4½ |
| Fish B Oh pf | 78 | 103½ | 76½ | 96⅛ | 18½ |
| Fisk Rubr | 12⅜ | 19½ | 10⅝ | 12⅜ | .... |
| Freep't-Tx | 13½ | 27¼ | 12½ | 19½ | 6 |
| Gen Am Tank | 51 | 80 | 45¾ | 72½ | 21½ |
| Gen Asphalt | 65½ | 73¾ | 37¼ | 43 | –22½ |
| Gen Asphalt pf | 104¼ | 111 | 68½ | 77 | –27¼ |
| Gen Cigar | 68 | 83 | 65 | 81 | 13 |
| Gen Cig pf | 100 | 110 | 100¼ | 107 | 7 |
| Gen Cig pf db | 95 | 106 | 94 | 103 | 8 |
| Gen Electric | 139¾ | 189 | 136 | 182 | 42¼ |
| Gen Motors | 10 | 15¼ | 8⅛ | 13⅝ | 3⅝ |
| Gen Mot pf | 71 | 86 | 69 | 82½ | 11½ |
| G Mot 6% db | 70¼ | 86 | 67¾ | 82¾ | 12½ |
| G Mot 7% db | 82¼ | 100 | 79½ | 98½ | 16¼ |
| Goodrich BF | 36⅛ | 44⅞ | 28½ | 32 | –4⅛ |
| Good BF pf | 83 | 91 | 79½ | 79¾ | –3¼ |
| Granby Min | 28½ | 35 | 22 | 25 | –3½ |
| Gray & Dav | 12¾ | 19⅞ | 8 | 10 | –2¾ |
| Gt North pf | 73½ | 95⅞ | 70¼ | 83⅝ | 10⅛ |
| Gt N Or sub | 32 | 45⅝ | 28⅛ | 31 | –1 |
| Greene C Cop | 27¾ | 34⅝ | 22 | 24½ | –3¼ |
| Guantan Su | 9¼ | 14⅝ | 6⅞ | 11¾ | 2½ |
| Gulf, Mobile & Nor | 4¾ | 19 | 5 | 14⅜ | 9⅝ |
| G, Mo & N pf | 15 | 47 | 16 | 43 | 28 |
| Gulf States Stl | 46¾ | 94⅞ | 44⅞ | 76 | 29¼ |
| Habirshaw | 1 | 3⅞ | ¾ | 1⅝ | ⅝ |
| Hartmn Cr | 85 | 103 | 80¼ | 81½ | –3½ |
| Hendee Mfg | 17½ | 27¼ | 15 | 17½ | .... |
| Homestake | 55 | 82 | 55 | 58 | 3 |
| Housn Oil | 77½ | 91¾ | 61¾ | 69 | –8½ |
| Hupp Mot | 11⅜ | 23⅜ | 10⅞ | 23⅝ | 12¼ |
| Hydraul St | 5 | 14⅛ | 3½ | 4⅛ | – ⅞ |
| Illinois Cen | 97⅜ | 115¾ | 97½ | 109¾ | 12⅜ |
| Inhom Ref | 7 | 25 | 14⅛ | 15¼ | 8¼ |
| Indian Ref | 3⅜ | 11⅝ | 5¾ | 6⅞ | 3¼ |
| Inspir Cop | 40¼ | 45 | 31½ | 35⅛ | 5⅛ |
| Intbor-Con | 1¼ | 5 | ⅛ | ¼ | –1 |
| Int-Con pf | 3¼ | 12¾ | ½ | 2¾ | –2½ |
| Int Agricul | 7⅝ | 11¾ | 6½ | 7⅜ | – ¼ |
| Int Agri pf | 34¼ | 43¼ | 28½ | 33⅜ | – ⅞ |
| Int Cement | 27 | 38¾ | 26 | 35½ | 8½ |
| Int Har Co new | 83 | 115⅞ | 79⅜ | 92½ | 9½ |
| Int Har pf new | 103 | 119 | 105½ | 117 | 14 |
| In Mer Mar | 14½ | 27½ | 9⅝ | 11⅞ | –2⅝ |
| Int Mar pf | 65¼ | 87⅜ | 44¾ | 49½ | –15¾ |
| Int Nickel | 12 | 19¾ | 11¼ | 14⅞ | 2⅞ |
| Int Nickel pf | 65 | 84¼ | 60 | 72¼ | 7¼ |
| Int Paper | 52¼ | 63⅞ | 43½ | 54 | 1¾ |
| Int Pap pf | 101 | 95 | 94½ | 95 | –6 |
| Int pap pf stpd | 70½ | 80½ | 59 | 71⅜ | ⅝ |
| Int Salt | 55 | 75 | 60 | 75 | 20 |
| Invinc Oil | 14¼ | 20¼ | 12⅜ | 15⅜ | ⅞ |
| Iowa Cent | 4 | 13¾ | 4 | 4¼ | ¼ |
| Iron Prod | 25½ | 53½ | 24 | 40¼ | 14¾ |
| Island Oil | 2½ | 3 | ¼ | ⅝ | –2¼ |
| Jewel Tea | 11⅜ | 22½ | 10 | 20 | 8⅝ |
| Jewel Tea pf | 39 | 73½ | 38½ | 65½ | 26½ |
| Jones Tea | 36¾ | 54¾ | 34½ | 51⅜ | 14⅝ |
| Kan C Sou | 23¼ | 30¼ | 17 | 19⅝ | –3⅝ |
| K C Sou pf | 52¼ | 59½ | 52¼ | 54 | 1¾ |
| Kan-Gulf Co | 7¾ | 7½ | 2 | 2¼ | –5⅝ |
| Kel-Spring | 43⅜ | 53¾ | 34¼ | 43 | – ⅜ |
| Kel-Spg pf | 75 | 86 | 71½ | 81 | 6 |
| K-Sp 8% pf | 92 | 107¾ | 90½ | 99½ | 7½ |
| Kelsey Wh | 64⅞ | 111 | 61 | 98 | 33⅛ |
| Kelsey Wh pf | 91 | 106 | 90½ | 101½ | 10½ |
| Keok & D M | 4½ | 9¾ | 5 | 5 | ½ |
| Kennecott Cop | 26⅝ | 39⅝ | 25½ | 34½ | 7⅞ |
| Keystone Tire | 17⅜ | 24⅝ | 4¾ | 9 | –8⅜ |
| Kresge S S | 172 | 189½ | 110 | 183 | 11 |
| Kress & Co | 94 | 105 | 105 | 105 | 11 |
| Lack Steel | 45¾ | 85 | 44 | 76¼ | 30½ |
| Laclede Gas | 47¾ | 94½ | 42 | 88 | 40¼ |
| L Erie & W | 12 | 39⅞ | 10 | 33 | 21 |
| L E & W pf | 29 | 76¾ | 26½ | 75 | 46 |
| Lee Rub & T | 28¼ | 35⅛ | 24¼ | 26⅝ | –1⅝ |
| Lehigh Val | 57 | 72 | 56⅜ | 64⅜ | 7⅛ |
| Lig & Myr To | 160 | 235 | 153¼ | 225 | 65 |
| Lig & M T pf | 108 | 123 | 107¼ | 121 | 13 |
| Lig & M pf B | 164 | 220 | 150 | 200¼ | 36¼ |
| Lima Loco pf | 100 | 126 | 98 | 123½ | 23½ |
| Loew's, Inc | 13⅞ | 23¾ | 11 | 18½ | 4⅝ |
| Loft Candy | 9½ | 14¼ | 9 | 12 | 2½ |
| Loos W Bls | 36¼ | 67⅞ | 36 | 57 | 20¾ |
| Lo Wil B 1 pf | 96¼ | 109 | 97 | 109 | 12¾ |
| Lo Wil B 2 pf | 94½ | 116 | 109¾ | 116 | 21½ |
| Lorillard P | 150½ | 180 | 147¼ | 172½ | 22 |
| Lorild P pf | 110 | 121 | 109 | 118 | 8 |
| Lou & Nash | 109¾ | 144⅞ | 108 | 133 | 23⅝ |
| Mack Trucks | 27 | 61⅞ | 25½ | 54½ | 27½ |
| Mack Trucks 1st pf | 70 | 94⅜ | 68¼ | 90½ | 20½ |
| Mack Trucks 2d pf | 55 | 87¾ | 54 | 82 | 27 |
| Mackay Co | 71 | 109 | 72 | 103 | 32 |
| Mackay pf | 59⅞ | 70 | 57 | 69¼ | 9⅜ |
| Mallinson H R | 15⅞ | 40 | 15½ | 33¾ | 18⅛ |
| Mallinson pf | 62 | 97¾ | 62¼ | 92 | 30 |
| Manati Sug | 32½ | 52 | 30¼ | 47 | 14⅞ |
| Manati S pf | 82 | 84¼ | 73¼ | 81 | –12 |
| Manhat El | 36½ | 58 | 35 | 47 | 10¼ |
| Manhat Shirt | 33⅞ | 59⅜ | 32 | 45¼ | 11⅜ |
| Market St Ry | 2⅞ | 11 | 3 | 8¼ | 5⅜ |
| Mar S R pf | 14 | 50¼ | 17 | 38⅝ | 24⅝ |
| Mar S R pri pf | 35½ | 76 | 35 | 69 | 33½ |
| Mar S R 2 pf | 6 | 32 | 5⅝ | 25 | 19 |
| Marland Oil | 26½ | 46⅜ | 22⅝ | 29⅝ | 3⅛ |
| Marlin Rockwell | 6 | 26⅜ | 5½ | 13 | 7 |
| Mart Parry | 21¾ | 36¼ | 20½ | 26 | 4¼ |
| Math Alk W | 22 | 54 | 22 | 52 | 30 |
| Max Motor A | 45½ | 74¾ | 42½ | 41¼ | –4¼ |
| Max Motor B | 13½ | 25⅞ | 11 | 13⅞ | ⅜ |
| May Dept St | 108¼ | 168¼ | 101 | 164½ | 56¼ |
| May D St pf | 109 | 115 | 106 | 116 | 7 |
| Mex Petrol | 113⅞ | 235 | 106¾ | 226½ | 112⅝ |
| Mex Pet pf | 86⅛ | 102⅞ | 79¼ | 98 | 11⅞ |
| Mex Seaboard | 27½ | 31⅜ | 25 | 27¼ | ¼ |
| Michigan Central | 84 | 245 | 156 | 238 | 153 |
| Mid States Oil | 13¾ | 16 | 11 | 12¾ | –1 |
| Midvale Stl | 27¾ | 45½ | 27⅛ | 29 | 1⅝ |
| Min & St L | 5¾ | 14½ | 15 | 5⅞ | ⅛ |
| M, S P & S S M | 65¾ | 75¾ | 55 | 65 | – ¾ |
| M, S P & S S M pf | 88 | 94½ | 80 | 81¼ | –6¾ |
| Mo, K & T | 1 | 14 | ⅝ | 15⅞ | 14⅞ |
| Mo, K & T pf | 2⅜ | 14½ | 1½ | 41 | 38⅝ |
| Mo K & T w i | 8¾ | 19¾ | 7½ | 15⅞ | 7⅛ |
| Mo K & T pf w i | 26 | 48¾ | 24½ | 41 | 15 |
| Mo Pac | 17¼ | 25¼ | 15½ | 17¼ | .... |
| Mo Pac pf | 45⅝ | 63¾ | 40 | 44¾ | – ⅞ |
| Montana Power | 64⅜ | 76⅝ | 63 | 68⅞ | 4¼ |
| Montana pow pf | 101 | 110¾ | 100½ | 110¾ | 9¾ |
| Montgomery Ward | 13½ | 25¾ | 12 | 21½ | 8 |
| Mullins Body | 20⅜ | 34 | 17 | 19½ | – ⅞ |
| Nash & Chat | 100½ | 125 | 100½ | 125 | 24½ |
| Nat Acme | 10¾ | 21¼ | 9½ | 12½ | 2¼ |
| Nat Biscuit | 126¼ | 263 | 123¼ | 248 | 121¾ |
| Nat Biscuit pf | 114 | 126 | 113½ | 123¾ | 9¾ |
| Nat Clk & St | 25 | 66⅞ | 26 | 62 | 40 |
| N Clk & S pf | 70 | 100 | 69 | 101½ | 31½ |
| Nt Con & Cable | 1 | 4¼ | 1 | 1½ | ½ |
| Nt En & Stp | 36¾ | 68½ | 30¾ | 65½ | 28¾ |
| N En & St pf | 95 | 105 | 81 | 98 | 3 |
| Nat Lead | 87 | 118¼ | 85 | 115¾ | 28¾ |
| Nat Lead pf | 108 | 117 | 108 | 113¾ | 5¾ |
| Nat R R of Mex | 8½ | 16 | 6½ | 6½ | –2 |
| N R R Mx 2 pf | 3 | 7¼ | 2⅜ | 2¾ | – ¼ |
| Nev. Cons. Copper | 14⅞ | 19⅛ | 13⅛ | 15 | ⅛ |
| N O, Tex & Mex | 56⅛ | 85¾ | 54⅞ | 83⅛ | 27 |
| N Y Air Brk | 59 | 41⅝ | 25½ | 28⅝ | –30⅜ |
| N Y Central | 73¾ | 101⅛ | 72¾ | 97⅜ | 23⅝ |
| N Y C & St L | 53 | 91½ | 51⅝ | 86 | 33 |
| N Y C & St L 1 pf | 71 | 102 | 72 | 98 | 27 |
| N Y C & St L 2 pf | 60½ | 93 | 61¾ | 84½ | 24 |
| N Y Dock | 30⅞ | 46 | 20 | 26 | –4⅞ |
| N Y Dock pf | 55 | 68⅛ | 46 | 50 | –5 |
| N Y N H & H | 13 | 35¼ | 12⅜ | 22½ | 9¼ |
| N Y On & W | 20⅞ | 30½ | 19¾ | 21½ | ⅝ |
| N Y Ship Bldg | 13¼ | 25 | 13 | 13½ | ¼ |
| Norf Southern | 9¾ | 22½ | 8⅝ | 13½ | 3¾ |
| Nor & West | 97⅛ | 125½ | 96¼ | 112⅞ | 15¾ |
| Nor & W pf | 69¾ | 82 | 72 | 76½ | 6¾ |
| Nor Amer | 45 | 100¾ | 44½ | 93⅝ | 48⅝ |
| Nor Am pf | 39 | 47¼ | 38 | 45¼ | 6¼ |
| Nor Pac | 77¼ | 90⅜ | 73½ | 78 | ¾ |
| No Sco Stl | 23 | 40 | 20¾ | 30 | 7 |
| Nunnally | 9¼ | 12¾ | 8 | 11 | 1¾ |
| Ohio Body B | 11½ | 14¼ | 5 | 5½ | –6 |
| Ohio Fuel | 46 | 59½ | 47 | 59 | 13 |
| Okla P & R | 2¾ | 4⅜ | 2 | 2⅛ | –⅝ |
| Ontario Silver | 4 | 9⅜ | 4½ | 6 | 2 |

| Name. | 1921. Clos. Price. | 1922. High. | 1922. Low. | 1922. Close | Net Chge. Inc. |
|---|---|---|---|---|---|
| Orpheum Circuit | 14 | 28 | 12⅜ | 20¾ | 6¾ |
| Otis Elev | 122 | 168¾ | 116 | 144 | 22 |
| Otis Steel | 10¼ | 16½ | 8 | 7½ | 2¾ |
| Otis Stl pf | 41½ | 66⅞ | 40 | 40 | −1½ |
| Owens Bot | 25¾ | 42⅜ | 24⅞ | 37 | 11¼ |
| Pac Develop | 8 | 14⅛ | 1 | 1¼ | −6⅜ |
| Pac G & E | 63⅝ | 91½ | 62¾ | 86 | 22⅜ |
| Pac Mail | 11⅛ | 19 | 11 | 13 | 1⅞ |
| Pacific Oil | 47⅜ | 69¾ | 42½ | 47¼ | ⅛ |
| Pac T & T | 58 | 68 | 55 | 68 | 10 |
| Pan A Pet | 52½ | 95¼ | 48⅞ | 93⅜ | 40⅞ |
| Pan A Pet B | 47¼ | 94⅝ | 44 | 89½ | 42¼ |
| Panhandle Prod | 11½ | 12 | 4½ | 5 | −6½ |
| Panhandle pf | 76 | 73 | 62½ | 62½ | −13½ |
| Par & Bing | 13¼ | 17 | 7½ | 10 | −3¼ |
| Penn R R | 33⅝ | 49¾ | 33¼ | 47 | 13⅜ |
| Penn Sea Steel | 9¾ | 13⅜ | 3¼ | 3½ | −6¼ |
| Penny J Cpr | 90 | 101¾ | 90¼ | 101¾ | 11¾ |
| Peoples Gas | 63 | 99 | 59¾ | 93½ | 30½ |
| Peor & East | 11¼ | 26⅜ | 10¾ | 15½ | 4¼ |
| Pere Marq | 20½ | 40⅝ | 19 | 33¼ | 12¾ |
| Pere M pri pf | 65½ | 82 | 63 | 73½ | 8 |
| Pere Mar pf | 51 | 74¾ | 50⅜ | 66 | 15 |
| Phila Co | 32½ | 45⅜ | 31½ | 40½ | 8 |
| Phillips Pet | 33⅜ | 59¼ | 28¼ | 43½ | 9⅞ |
| Phil Jones | 105 | 102½ | 73½ | 74 | −31 |
| Phil Jones pf | 91¼ | 95⅛ | 88½ | 97 | 6¼ |
| Pierce Arrow | 13½ | 24⅝ | 8 | 12¾ | − ¾ |
| Pierce Ar pf | 31 | 49 | 18⅜ | 28⅞ | −2⅛ |
| Pierce Oil | 12 | 12 | 4 | 4⅝ | −7⅜ |
| Pierce O pf | 71 | 71 | 32 | 43½ | −27½ |
| Pitts Coal | 63 | 72⅝ | 55 | 57 | −6 |
| Pitts C pf | 93 | 100½ | 90⅛ | 97¼ | 4¼ |
| Pitts Stl pf | 84 | 97⅝ | 85 | 92 | 8 |
| Pitts & W Va | 25 | 41⅜ | 23 | 35½ | 10½ |
| Pitts & W Va pf | 77⅝ | 94 | 76 | 90 | 12⅜ |
| Pond Cr Coal | 15¼ | 24¾ | 14¼ | 19½ | 4¼ |
| Pr Stl Car | 65⅛ | 95¼ | 63 | 78¾ | 13⅝ |
| Pr Stl C pf | 92 | 106 | 91 | 99¾ | 7¾ |
| Prod & Ref | 29¾ | 51 | 24½ | 41¼ | 11½ |
| Prod & Ref pf | 39 | 49 | 36 | 42 | 3 |
| Pub Ser C N J | 67 | 100 | 66 | 95¾ | 28¾ |
| Pullman Co | 108¼ | 139¾ | 105½ | 126¼ | 18 |
| Punta Al Sug | 33⅛ | 53¼ | 30¾ | 47⅜ | 14¼ |
| Pure Oil | 38⅛ | 38⅝ | 26½ | 28¼ | −9⅞ |
| Ry Stl Spg | 90½ | 126¼ | 94 | 111 | 11½ |
| Ry St S pf | 107 | 120 | 108¼ | 118 | 11 |
| Rand Mine | 20 | 36½ | 19¾ | 34 | 14 |
| Ray Con Copper | 15⅛ | 19 | 12⅛ | 13½ | −1⅝ |
| Reading | 72½ | 87⅛ | 71⅛ | 77⅝ | 5⅛ |
| Read 1st pf | 44½ | 57 | 43 | 50 | 5⅞ |
| Read 2d pf | 45⅝ | 59½ | 45⅞ | 51¼ | 5⅝ |
| Reis & Co | 8 | 21 | 8½ | 14½ | 6½ |
| Reis 1st pf | 48¼ | 75 | 49 | 75 | 26¾ |
| Remington Type | 25 | 42 | 24 | 32 | 7 |
| Rem T 1st pf | 55¼ | 102 | 55 | 100 | 44¾ |
| Rem T 2d pf | 49 | 80¼ | 14 | 75 | 26 |
| Replogle Stl | 27 | 41 | 21½ | 25 | −2 |
| Rep I & Stl | 51¾ | 78⅝ | 43½ | 47 | −4¾ |
| Rep I & S pf | 86½ | 95½ | 74 | 83 | −3½ |
| Royal Dutch | 50¾ | 67 | 47¼ | 52⅝ | 1⅞ |
| St Jo Lead | 12⅞ | 20¼ | 17⅝ | 19¾ | 6⅞ |
| St L S F | 21 | 32⅝ | 20¼ | 23⅞ | 2⅞ |
| St L S F pf | 36¼ | 56 | 34¾ | 41¾ | 5½ |
| St L Southwestern | 21½ | 36⅞ | 20¼ | 31¾ | 10¼ |
| St L Sou pf | 39 | 60½ | 32¾ | 58⅞ | 24⅞ |
| Santa Cecelia Sugar | 2¼ | 6¼ | 1½ | 2½ | ⅜ |
| Savage Arms | 11⅝ | 24½ | 10 | 18 | 6⅜ |
| Saxon Motor | 2⅜ | 5¼ | 1¾ | 2 | − ⅝ |
| Seaboard A L | 3 | 10 | 2⅝ | 5¼ | 2¼ |
| Sea A L pf | 4½ | 15 | 3½ | 8 | 3½ |
| Sears Roebuck | 64 | 94⅞ | 59⅜ | 83 | 19 |
| Sears Roeb pf | 93 | 112 | 91 | 109 | 16 |
| Seneca Cop | 23 | 23¼ | 6 | 8¾ | −14⅝ |
| Shattuck Ariz | 8¼ | 12 | 6½ | 8 | − ¼ |
| Shell Transport | 38¾ | 48½ | 35⅓ | 34⅝ | −4⅓ |
| Sinclair Con | 21¼ | 38¾ | 18¾ | 32½ | 11¼ |
| Sloss Sheffield | 37 | 54½ | 34½ | 37¾ | ¾ |
| Sloss Shef pf | 72 | 80 | 65 | 76 | 4 |
| South Porto Sugar | 43 | 57¼ | 33 | 43½ | ½ |
| Sou Porto Su pf | 78 | 98 | 83 | 90 | 12 |
| Sou Pac | 78¾ | 96¼ | 78⅛ | 88⅝ | 9⅞ |
| Southern R R | 18½ | 28⅝ | 17¼ | 24⅛ | 5⅜ |
| Southern R R pf | 46½ | 71 | 45¾ | 64 | 17½ |
| Stand Milling | 115 | 141 | 113 | 134 | 19 |
| Stand Mill pf | 81½ | 96 | 83 | 95 | 13½ |
| Stand Oil Cal | 98 | 135 | 91¾ | 117½ | 19½ |
| Stand Oil N J | 182½ | 250⅛ | 169 | 197½ | 15 |
| Stand Oil N J pf | 114⅛ | 120 | 113⅜ | 117¾ | 3⅝ |
| Stl & Tube pf | 78 | 90 | 68 | 75 | −3 |

| Name. | 1921. Clos. Price. | 1922. High. | 1922. Low. | 1922. Close | Net Chge. Inc. |
|---|---|---|---|---|---|
| Stern Bro pf | 95 | 106 | 91 | 105¼ | 10¼ |
| Stewart Warner | 24⅞ | 60 | 24⅛ | 57⅛ | 32⅜ |
| Strom Carb | 37 | 59⅝ | 35¼ | 56¼ | 19¼ |
| Studebaker | 83⅜ | 139½ | 79⅞ | 123½ | 40⅛ |
| Studebaker pf | 95⅞ | 118¼ | 100 | 116 | 20⅛ |
| Submarine Boat | 4 | 8⅛ | 3¾ | 7¾ | 3¾ |
| Superior Oil | 6¾ | 10¼ | 4¼ | 4½ | −2¼ |
| Superior Stl | 25¾ | 39½ | 26 | 28⅛ | 2⅜ |
| Sup Stl 1st pf | 93¾ | 95¼ | 90 | 90 | −3¾ |
| Tenn Copper | 10 | 12¾ | 8¾ | 9 | −1 |
| Texas Com | 46½ | 52¼ | 42 | 46⅞ | ⅜ |
| Texas Gulf Sulph | 41 | 67½ | 38½ | 61½ | 20½ |
| Tex & Pac | 26⅝ | 36 | 19 | 22⅜ | −4 |
| Tex & Pac Coal & O | 27 | 32¾ | 18½ | 20⅞ | −6⅛ |
| Third Ave | 14 | 25⅝ | 14 | 16¼ | 2¼ |
| Tide W Oil | 142¾ | 154 | 109¾ | 125⅛ | −17⅝ |
| Tob Prod | 63¼ | 84¼ | 49¼ | 54¼ | −9 |
| Tob Pro pf | 88¼ | 115 | 88 | 80⅞ | −7⅜ |
| T St L & Western | 15 | 75½ | 14 | 64½ | 49½ |
| Trans C Oil | 11¼ | 20⅛ | 7½ | 12⅝ | 1⅜ |
| Transue Williams | 32½ | 45⅜ | 32 | 32 | − ½ |
| Twin C R T | 31¾ | 62½ | 34 | 58 | 26¼ |
| Und Typwr | 130 | 145¾ | 125 | 139 | 9 |
| Und Typ pf | 107⅛ | 118 | 107½ | 118 | 10¾ |
| Union Bag & Paper | 70⅜ | 78 | 55 | 69 | −1⅛ |
| Union Oil | 18¾ | 25 | 13⅞ | 16¼ | −2 |
| Union Pac | 126 | 154¾ | 125 | 143¾ | 17¾ |
| Un Pac pf | 72⅛ | 80 | 71¼ | 74 | 1½ |
| Un Tank Car | 96 | 122 | 96 | 120 | 24 |
| Un Tank Car pf | 103⅛ | 113 | 102 | 109½ | 6⅜ |
| Unit Alloy Steel | 25¾ | 41¼ | 25 | 34 | 8¼ |
| Unit Cig Stores | 150 | 185 | 140 | 185 | 35 |
| Uni Cig St pf | 105 | 120 | 104⅝ | 115 | 10 |
| Unit Drug | 72 | 85 | 60⅞ | 78 | 6 |
| Unit D 1st pf | 44⅞ | 57⅞ | 41⅜ | 46 | 1⅛ |
| United Dyewood | 30½ | 36¼ | 32 | 34¾ | 4¼ |
| United Fruit | 123½ | 162 | 119¾ | 155½ | 32 |
| Unit Ry Invest | 8 | 19⅜ | 7½ | 12½ | 4½ |
| Uni Ry Inv pf | 20⅜ | 36½ | 20¼ | 26 | 5⅝ |
| Unit Ret Stores | 52 | 87½ | 43½ | 70¾ | 18¾ |
| U S Cas Iron Pipe | 17 | 39 | 16⅞ | 26½ | 9½ |
| U S C I P pf | 51 | 78 | 50 | 60 | 9 |
| U S Express | 6⅞ | 8 | 6⅛ | 7 | ⅛ |
| U S Food Prod | 10 | 10⅛ | 2¾ | 5 | −5 |
| U S Ind Alcohol | 40 | 72⅜ | 37 | 62⅛ | 22⅛ |
| U S Ind Alcoh pf | 90¼ | 102 | 89½ | 100 | 9¾ |
| U S R & Improv | 61½ | 92⅞ | 55¾ | 85 | 23½ |
| U S Rubber | 54½ | 67¼ | 46 | 52½ | −2 |
| U S Rubber 1st pf | 100½ | 107 | 91 | 96 | −3½ |
| U S Smelt & Ref | 36 | 45¾ | 32¾ | 38 | 2 |
| U S Sm & Ref pf | 45 | 50 | 42⅞ | 47¾ | 2¾ |
| U S Steel | 84¼ | 111½ | 82 | 103¼ | 19 |
| U S Steel pf | 115 | 123 | 114¼ | 121 | 6 |
| Utah Cop | 63⅜ | 71½ | 59½ | 63¼ | − ⅛ |
| Utah Sec Cor | 11 | 23⅛ | 9⅞ | 17½ | 6½ |
| Van Raalte 1st pf | 88½ | 100 | 90 | 97 | 8½ |
| Vanad Corp | 31⅞ | 53¾ | 30¼ | 35 | 3⅛ |
| Va Car Chem | 28¾ | 36⅞ | 23¼ | 26⅞ | −1⅞ |
| Va Car Chem pf | 70¼ | 82 | 58 | 63½ | −6¾ |
| Va Iron Coal & C | 86 | 94½ | 43 | 55 | −31 |
| Vivaudou | 6½ | 14⅞ | 6⅜ | 14 | 7½ |
| Wabash | 6¾ | 14⅜ | 6 | 9⅝ | 2⅞ |
| Wabash pf A | 20⅛ | 35½ | 19⅛ | 25 | 4⅞ |
| Wabash pf B | 13⅛ | 24⅞ | 12¼ | 17¼ | 4 |
| Walker Hill | 11⅜ | 17 | 5⅜ | 11⅜ | − ⅝ |
| Wells Fargo Exp | 68⅞ | 98⅛ | 66¼ | 88 | 19⅜ |
| West Maryland | 8¾ | 17¼ | 8¼ | 12⅛ | 3⅜ |
| West Md 2d pf | 14¼ | 27⅞ | 13 | 25 | 10¾ |
| West Pac | 17 | 24⅞ | 13¾ | 16½ | − ½ |
| West Pac pf | 51½ | 64⅞ | 51⅝ | 59 | 7½ |
| West Un Tel | 90⅝ | 121¼ | 89 | 110¾ | 20⅛ |
| West Air B | 95 | 104 | 80 | 99 | 4 |
| Westingh E & M | 50½ | 65⅛ | 49⅛ | 60¼ | 9¾ |
| West E & M 1st pf | 65 | 75 | 65 | 73 | 8 |
| Wh & L E | 6¾ | 16½ | 6 | 9¼ | 3 |
| W & L E pf | 12½ | 29⅝ | 12¼ | 16 | 3½ |
| White Motor | 39¼ | 54 | 35⅛ | 48¼ | 9¼ |
| White Oil | 10½ | 11⅜ | 4 | 4½ | −6¼ |
| Wickwire Spen | 15⅜ | 21⅞ | 8½ | 11⅛ | −3½ |
| Willys Overland | 5¼ | 10 | 4¾ | 5⅝ | ⅛ |
| Willys Ov pf | 26⅝ | 49½ | 24 | 40 | 13⅜ |
| Wilson Co | 28½ | 50½ | 27⅛ | 39¼ | 10¾ |
| Wilson Co pf | 69 | 91 | 66 | 85 | 16 |
| Wis Cent | 24 | 33¾ | 25 | 27 | 3 |
| Woolworth F W | 139¾ | 223 | 137 | 210 | 70¼ |
| Woolworth pf | 115½ | 125½ | 117 | 125½ | 9⅜ |
| Worthington Pump | 45¼ | 55⅞ | 27⅝ | 28¼ | −17 |
| Worth P pf A | 84 | 94 | 83 | 86¾ | 2¾ |
| Worth P pf B | 69¼ | 79 | 63½ | 64 | −5¼ |
| Wright Aero | 8½ | 11 | 6 | 9¼ | 1 |

## PIANO INDUSTRY IN THE UNITED STATES.

| | 1921. | 1919. |
|---|---|---|
| No. of establishments | 185 | 191 |
| Persons engaged | 17,883 | 25,760 |
| Props.'& firm members | 33 | 33 |
| Salaried employees | 2,011 | 2,770 |
| Wage earn. (avg. No.) | 15,839 | 22,957 |

| | 1921. | 1919. |
|---|---|---|
| Salaries and wages | $23,551,000 | $31,872,000 |
| Salaries | 4,657,000 | 6,398,000 |
| Wages | 18,894,000 | 25,474,000 |
| Paid for contract work | 113,700 | 27,600 |
| Cost of materials | 38,655,000 | 54,365,600 |
| Value of products | 73,647,000 | 107,088,000 |

## PLAN FOR CONSOLIDATING UNITED STATES RAILROADS.

The Interstate Commerce Commission opened in Washington on Nov. 17, 1922, hearings in the matter of consolidation of the railway properties of the United States into a limited number of systems. The roads immediately concerned in the first hearing were those covered in the group systems Nos. 14 and 15 of the tentative plan prepared by the commission.

The following table gives the outstanding capital stock, funded debt and the total mileage owned, leased and controlled by the four companies immediately concerned as of Dec. 31, 1921. It shows an aggregate stock and bond capitalization of almost $2,500,000,000.

| | Outstanding Stock. | Funded Debt. | Mileage. |
|---|---|---|---|
| No. Pacific... | $248,000,000 | $453,513,600 | 11,287 |
| Gt. Northern. | 249,478,250 | 257,721,515 | 11,475 |
| Burlington.... | 170,839,100 | 173,619,300 | 9,393 |
| St. Paul..... | 233,725,100 | 574,240,055 | 16,106 |
| Total..... | $902,042,450 | $1,458,094,470 | 48,261 |

Of the outstanding capital stock of the Burlington 97.09 per cent. is owned in equal parts by Northern Pacific and Great Northern, and the two roads guarantee an important part of the bonded debt of the controlled road.

The tentative plan which the Interstate Commerce Commission put out is herewith presented. The commission finds for the purposes of this tentative plan that the railway properties of the continental United States may be consolidated under the statute into the following systems:

### SYSTEM No. 1—NEW YORK CENTRAL.

New York Central.
Pittsburgh & Lake Erie.
Rutland.
Michigan Central.
Chicago, Kalamazoo & Saginaw.
Cleveland, Cincinnati, Chicago & St. Louis.
Cincinnati Northern.
Western Maryland.
Fonda, Johnstown & Gloversville.
Lake Erie & Pittsburgh.
Central Indiana.
Pittsburgh, Chartiers & Youghiogheny.
Monongahela.
Boston & Maine.
Maine Central.
Bangor & Aroostook.
And all railway properties controlled by the above carriers through lease, stock ownership, or otherwise, except:
Lake Erie & Western and Toledo & Ohio Central. (Both now controlled by New York Central.)
Zanesville & Western and Kanawha & Michigan. (Both now controlled by Toledo & Ohio Central.)
Indiana Harbor Belt, now controlled by New York Central, 30 per cent.; Michigan Central, 30 per cent.; Chicago & North Western, 20 per cent.; Chicago, Milwaukee & St. Paul, 20 per cent.

### SYSTEM No. 2—PENNSYLVANIA.

Pennsylvania.
West Jersey & Seashore.
Long Island.
Baltimore, Chesapeake & Atlantic.
Cumberland Valley.
Maryland, Delaware & Virginia.
New York, Philadelphia & Norfolk.
Pittsburgh, Cincinnati, Chicago & St. Louis.
Waynesburg & Washington.
Grand Rapids & Indiana.
Cincinnati, Lebanon & Northern.
Ohio River & Western.
Louisville Bridge & Terminal.
Wheeling Terminal.
Toledo, Peoria & Western.
Lorain, Ashland & Southern.
Lake Erie & Pittsburgh.
Central Indiana.
Pittsburgh, Chartiers & Youghiogheny.
Monongahela (see No. 1 also for last four).
And all other railway properties controlled by any of the above carriers under lease stock ownership, or otherwise, except the Norfolk & Western and railway properties controlled by it, which may be included in system No. 9, Norfolk & Western.

### SYSTEM No. 3—BALTIMORE & OHIO.

Baltimore & Ohio.
Sandy Valley & Elkhorn.
Staten Island Rapid Transit.
Reading system, comprising the Philadelphia & Reading, Central Railroad of New Jersey, and various others.
Cincinnati, Indianapolis & Western.
Chicago, Indianapolis & Louisville.
New York, New Haven & Hartford.
Central New England.
Lehigh & New England.
Lehigh & Hudson.

### SYSTEM No. 4—ERIE.

Erie.
Chicago & Erie.
New Jersey & New York.
New York, Susquehanna & Western.
Delaware & Hudson.
Delaware, Lackawanna & Western.
Ulster & Delaware.
Bessemer & Lake Erie.
Buffalo & Susquehanna.
Pittsburgh & Shawmut.
Pittsburgh, Shawmut & Northern.
Lorain, Ashland & Southern.
Wabash lines east of the Missouri River.

### SYSTEM No. 5—NICKEL PLATE-LEHIGH VALLEY.

Lehigh Valley.
New York, Chicago & St. Louis.
Toledo, St. Louis & Western.
Detroit & Toledo Shore Line.
Lake Erie & Western.
Wheeling & Lake Erie.
Pittsburgh & West Virginia.
Bessemer & Lake Erie.

### SYSTEM No. 6—PERE MARQUETTE.

Pere Marquette.
Detroit & Mackinac.
Ann Arbor.
Detroit, Toledo & Ironton.
Boyne City, Gaylord & Alpena.

### SYSTEM No. 7—NEW ENGLAND

New York, New Haven & Hartford.
New York, Ontario & Western.
Central New England.
Boston & Maine.
Maine Central.
Bangor & Aroostook.
Lehigh & Hudson River.
Lehigh & New England.

### SYSTEM No. 7A—NEW ENGLAND-GREAT LAKES.

Same as system No. 7 with addition of the following, which otherwise with the exception of the Buffalo, Rochester & Pittsburgh, may be included in system No. 4, Erie. That carrier may be included in system No. 5, Nickel Plate-Lehigh Valley.
Delaware & Hudson.
Ulster & Delaware.
Delaware, Lackawanna & Western.
Buffalo, Rochester & Pittsburgh.
Pittsburgh & Shawmut.
Pittsburgh, Shawmut & Northern.

### SYSTEM No. 8—CHESAPEAKE & OHIO.

Chesapeake & Ohio.
Hocking Valley.
Virginian.

### SYSTEM No. 9—NORFOLK & WESTERN.

Norfolk & Western.
Toledo & Ohio Central.
Zanesville & Western.
Kanawha & Michigan.
Kanawha & West Virginia.

### SYSTEM No. 10—SOUTHERN.

Southern.
Alabama Great Southern.
Georgia, Southern & Florida.
Mobile & Ohio.
Southern Railway in Mississippi.
Northern Alabama.
Cincinnati, New Orleans & Texas Pacific.
New Orleans Great Northern.
Alabama & Vicksburg.

SYSTEM No. 11—ATLANTIC COAST LINE-LOUISVILLE & NASHVILLE.

Atlantic Coast Line.
Atlanta & West Point.
Charleston & Western Carolina.
Louisville & Nashville.
Nashville, Chattanooga & St. Louis.
Louisville, Henderson & St. Louis.
Western Railway of Alabama.
Richmond, Fredericksburg & Potomac.
Norfolk Southern.
Atlanta, Birmingham & Atlantic.
Winston-Salem Southbound.
Roanoke to Winston-Salem branch of Norfolk & Western.
Florida East Coast.
Carolina, Clinchfield & Ohio.
Georgia & Florida.
Gulf, Mobile & Northern.
Mississippi Central.

SYSTEM No. 12—ILLINOIS CENTRAL-SEABOARD.

Illinois Central.
Yazoo & Mississippi Valley.
Central of Georgia.
Seaboard Air Line.
Lynchburg, Va., to Durham, N. C., branch of Norfolk & Western.
Gulf & Ship Island.
Tennessee Central.
Carolina, Clinchfield & Ohio.

SYSTEM No. 13—UNION PACIFIC-NORTH WESTERN.

Union Pacific.
St. Joseph & Grand Island.
Oregon Short Line.
Oregon-Washington Railroad & Navigation Co.
Los Angeles & Salt Lake.
Chicago & North Western.
Chicago, St. Paul, Minneapolis & Omaha.
Lake Superior & Ishpeming.
Wabash lines west of the Missouri River.

SYSTEM No. 14—BURLINGTON-NORTHERN PACIFIC.

Chicago, Burlington & Quincy.
Northern Pacific.
Chicago Great Western.
Minneapolis & St. Louis.
Spokane, Portland & Seattle.

SYSTEM No. 15—MILWAUKEE-GREAT NORTHERN.

Chicago, Milwaukee & St. Paul.
Great Northern.
Chicago, Terre Haute & Southeastern.
Duluth & Iron Range.
Duluth, Missabe & Northern.
Green Bay & Western.
Spokane, Portland & Seattle.
Butte, Anaconda & Pacific.

SYSTEM No. 16—SANTA FE.

Atchison, Topeka & Santa Fe.
Gulf, Colorado & Santa Fe.
Colorado & Southern.
Fort Worth & Denver City.
Denver & Rio Grande.
Western Pacific.
Utah Railway.
Northwestern Pacific.
Nevada Northern.

SYSTEM No. 17—SOUTHERN PACIFIC-ROCK ISLAND.

Southern Pacific Company.
Nevada Northern.
Chicago, Rock Island & Pacific.
Chicago, Rock Island & Gulf.
Arizona & New Mexico.
El Paso & Southwestern.
San Antonio & Aransas Pass.
Trinity & Brazos Valley.
Midland Valley.
Vicksburg, Shreveport & Pacific.
Chicago, Peoria & St. Louis.

SYSTEM No. 18—FRISCO-KATY COTTON BELT.

St. Louis-San Francisco.
St. Louis Southwestern.
Louisiana Railway & Navigation Co.
Chicago & Alton.
Missouri, Kansas & Texas.
Trinity & Brazos Valley.
San Antonio, Uvalde & Gulf.

SYSTEM No. 19—CHICAGO-MISSOURI PACIFIC.

Chicago & Eastern Illinois.
Missouri Pacific.
Kansas City Southern.
Kansas City, Mexico & Orient.
Kansas, Oklahoma & Gulf.
Texas & Pacific.
Fort Smith & Western.
Louisiana & Arkansas.
Gulf Coast Lines.
International & Great Northern.

Certain lines such as the Minneapolis, St. Paul and Sault Ste. Marie and the Central Vermont, which are controlled by Canadian carriers, have not been specifically included in this tentative plan because these lines form parts of through trans-continental Canadian systems in active competition with systems above set forth.

The carriers included in this tentative plan comprise most of the Class I. steam railroads, but very few of those in Class II. and Class III. Those not so included, whether industrial common carriers, terminal carriers, interurban electric railways operated as a part of general steam railroad systems of transportation or engaged in the general transportation of freight, "short lines," or others, will be considered at the hearings to be hereafter assigned so that in the plan to be ultimately adopted provision can be made for their inclusion in the systems.

Water carriers where now controlled by carriers by rail will be considered as being included tentatively in the systems in which the controlling rail carrier has been included.

## RAIL ACT TINKERING OPPOSED.

The Railway Business Association at its annual meeting in New York, Nov. 9, 1922, adopted this resolution:

"Prosperity is here. Let us make it last. Recovery in agriculture, industry and trade has its mainstay in railway building. It was the replacement and addition of locomotives, cars, tracks, terminals and accessories which largely revived general business. Railway improvements must continue if the traffic is to be carried. Car shortages are upon us. October almost brought a new peak in car loadings. Shippers are confronted by congestion in freight, limit upon industry and sacrifice of farm products.

"The foundation of railway purchases is the confidence of railway managers and investors. For Congress to consider early amendments to the Transportation Act would open the door to assaults upon the policy which is designed to give the roads an opportunity to make sufficient earnings. To let it clearly be seen that no amendments of any kind are under serious consideration will leave all concerned free for the work of railway rehabilitation and preparation for the coming burden of traffic.

"We urge that Congress refrain at this time from all amendments to the Transportation Act."

## GOVERNMENT PAYMENTS AND LOANS TO CARRIERS.

Secretary of the Treasury Mellon, in his annual report to Congress, listed the payments made to various railroads up to Nov. 15, 1922, for the reimbursement of deficits on account of Federal control. The total from Nov. 16, 1921, to Nov. 15, 1922, was $1,949,181; the grand total, $5,139,550.

The payments to carriers from Nov. 16, 1921, to Nov. 15, 1922, for the guarantee provided for in Sec. 209 of the Transportation Act of 1920 as amended amounts to $19,622,040 and the total payments to Nov. 15, 1922, amounted to $450,090,804.

The loans to carriers under Sec. 210 of the same act showed that the loans outstanding on Nov. 15, 1921, amounted to $238,208,184.

New loans made from Nov. 16, 1921, to Nov. 15, 1922, were $58,419,450.

Repayments during that period were $77,425,512.

The loans outstanding Nov. 15, 1922, were $219,202,122.

The total amount of money that the Government has loaned out to the carriers was $317,886,667. Of this amount, $98,684,545 had been repaid up to Nov. 15, 1922.

The Treasury held securities of railroads on June 30, 1922, as follows:

Obligations of carriers accrued under Sec. 7 of the Federal Control Act, approved March 21, 1918, $55,867,000.

Equipment Trust 6% Gold Notes, acquired by Director General of Railroads pursuant to Federal Control Act of March 21, 1918, as amended, and act approved Nov. 19, 1919, to provide for the reimbursement of the United States for the motive power, cars, and other equipment ordered for carriers under Federal control, $49,999,800.

Obligations of carriers acquired pursuant to Sec. 207 of the Transportation Act approved Feb. 28, 1920, as amended, $116,646,500.

Obligations of carriers acquired pursuant to Sec. 210 of the Transportation Act approved Feb. 28, 1920, as amended, $233,991,830.

Total United States railroad securities owned by the Government, $456,505,130.

# Labor Review for 1922.

(By John J. Leary, Jr.)

Developments in the labor world in 1922 fall naturally into two classifications—the spectacular and the non-spectacular—and, as is frequently the case, the non-spectacular was on the whole the more important.

Of the spectacular developments, the successful fight of the miners to retain the 1920 wage scales, and the unsuccessful strike of the railroad shopmen were easily the more important, with the strike of New England cotton mill hands against lower wages and longer hours, still on in the early days of November, a good third.

The less spectacular developments included the conversion of a mass of unemployment of peak proportions in January to an actual shortage of unskilled labor, in some sections and of skilled men in some trades, notably building, before the summer was half through, and a change in the wage trend from a sharp curve downward to an almost equally sharp upward curve. With these the "open shop" drive, always in evidence when the labor reservoir is full to overflowing, slowed down until it all but stopped.

For the shift in the wage trend, called to the attention of the least observing by an increase in the wages of the unskilled of 20 per cent. by the United States Steel Corporation in late August, the speeding up of industry and the consequent absorption of the labor slack and restriction of immigration were mainly responsible, with the fight waged by the miners a contributing factor of no small value. Had they accepted, or been compelled to take a cut, their reduction would unquestionably have had an adverse effect upon wages in other lines.

The shopmen's strike, costly though it was to the carriers, the unions and their members and to the general public, also contributed to this result—a negative value, perhaps, to those injured, and intangible to all others, but worth bearing in mind in appraising the results of that strike.

Taken altogether, therefore, and bearing in mind that the 1,100,000 who suffered large direct losses through these major strikes constitute something less than 3 per cent. of the number scheduled by the Census Bureau as engaged in gainful occupations, it is clear that labor, organized and unorganized, finds itself much better off than it was at the beginning of the year. This applies as strongly to the so-called "white collar" classes as to those who do manual labor.

Unquestionably the loss of the shopmen's strike has caused a loss in membership that will be felt for a considerable time to come, but the probabilities are that the close of the year finds the unions, as a whole, stronger numerically than they were on January 1, losses in the railroad unions being largely, if not altogether, offset by heavy gains of the United Mine Workers as a result of their strike, and gains in other craft organizations.

Official figures as to union membership are, as in the past, unobtainable. However, taking the 3,195,000 dues-paying members reported by Secretary Frank Morrison to the annual convention of the American Federation of Labor in June as a base, adding the 600,000 then on strike and not paying dues, and allowing another 600,000 for the "Big Four" railroad brotherhoods and miscellaneous unions not affiliated with the federation, the total union membership of the country as the year closes is not far from 4,400,000, or about the 1921 level when the federation reported 3,906,520, and membership in the non-affiliated unions was somewhat larger.

## THE COAL STRIKE.

Of the two great strikes in 1922, the most stubbornly contested was that of the coal miners who, on April 1 downed tools in both anthracite and bituminous fields. This general strike, precipitated in the bituminous fields by the failure of the operators of the Central Competitive Field to keep an agreement to confer on wages prior to April 1, and in the anthracite fields through inability of operators and miners to agree upon wage schedules, was, when all camouflage was stripped away, a contest to maintain the old wage scales. In the soft coal fields, the desire of the operators was a return to the scale made in 1917 to which 26 per cent. was added in the 1920 scale fixed by President Wilson's bituminous commission. In the hard coal fields, the operators matched a demand for a 20 per cent. increase on the part of the union with a demand for a 22 per cent. reduction.

Both groups of operators stressed competition as reason for demanding reductions—the bituminous operators that of the non-union fields, and particularly those of West Virginia, and the anthracite operators that of bituminous coal, in the raw, or in the form of coke and gas, and fuel oil. Necessity of placing miners' wages in line with the wages paid other industries was also urged. Against these, the United Mine Workers, through their chief spokesmen, President John L. Lewis, and Vice President Philip Murray, urged the cost of living, the hazards of the industry and that, large though the increases of 1920 might be over prewar wages, the existing rates were justified because the prewar rates were unconscionably low. The chief reliance of the miners, however, was the 100 per cent. membership in the hard coal country and in 70 per cent. of the bituminous territory.

The strike began on April 1, when approximately 550,000 union miners quit work, followed within the next few weeks by 90,000 men in the non-union fields of Pennsylvania and West Virginia. The ability of the union to cripple the Connellsville coke field, non-union for a generation, and to take thousands more out of other equally strong non-union districts in Central Pennsylvania was the surprise of the strike, and in the opinion of many, the determining factor in enabling the union to carry its point. Whether this be so or not, it is a fact that important producing interests had confidentially informed official Washington that by taking one field away from the union the non-union output of the country with the stocks above ground April 1 would be sufficiently large to break the strike. This information checked with data prepared by a Government bureau but withheld from publication.

Actual figures as to the stocks above ground April 1 were also withheld, the total of 63,000,000 tons or 43,000,000 above the minimum of safety, estimated by the Geological Survey as of that date, omitting such items as fuel in transit, in consumers' hands and at the head of the lakes, as to make it comparatively valueless. The acutal figures, as prepared by Federal experts, and published in advance of the strike in The World, showed 120,000,000 tons available. That this estimate was the more nearly accurate is shown by the fact that it was not until late summer, when the difference in non-union production and national consumption was far in excess of 63,000,000 tons, that the Administration felt called upon to intervene to force a settlement.

This took the form of conferences in Washington where the President proposed an immediate resumption of mining and the submission of all disputed points to arbitration. This was declined by John L. Lewis, acting for the miners, who shortly thereafter called a joint meeting of Central Competitive Field Operators and union leaders in Cleveland. This conference met August 7, when it was expected operators representing the bulk of Central Field tonnage would agree to renew the old scale, this to be followed by a like renewal in other union fields whose scales for more than twenty years have been based on that of the Central Field. This plan failed, whereupon a second conference, embracing operators and miners from all fields, agreed on August 15 to renew the old scales to run to March 31 next and to set up machinery for the making of a new agreement to be signed before that date. To this agreement operators representing an annual tonnage of 60,000,000 were immediate parties. Within a fortnight the entire union tonnage of the country had accepted the agreement, and Mr. Lewis had accomplished what the operators and a large part of his membership had felt to be impossible—the avoidance of a reduction.

Securing this, the union chief waived the demand for a six hour day and five day week framed at a national convention held in March and other demands of lesser importance imposed by the radical element in the organization. These demands, however, were later agreed upon by union representatives as the basis on which they will enter new negotiations in January, 1923.

## IN THE ANTHRACITE FIELD.

Following the bituminous settlement, the union chiefs and the anthracite operators, headed by Samuel D. Warriner, resumed peace negotiations in Philadelphia, first meeting on August 17. Here the operators insisted upon arbitration of future disputes as a condition of renewing the old scales. After a fortnight's negotiations, in which Senator George Wharton Pepper and Secretary of Labor James J. Davis actively intervened, it was agreed on September 4, to extend the old scale to August 31, 1923, without conditions. In reaching this agreement, the fact that Congress was expected to authorize the appointment of a fact finding commission served to mollify the operators whose final proposal,

prior to signing, was an inquiry by a joint board whose findings would be binding on neither side.

This board, subsequently authorized by Congress, was named by President Harding on October 9, and organized October 17, with John Hays Hammond, of Gloucester, Mass., the noted metal mining engineer, as Chairman. With Mr. Hammond on the board, the President named Thomas Riley Marshall, of Indiana, former Vice President of the United States; Judge Samuel Altschuler of Chicago; Clark Howell, editor of the Atlanta, (Ga.,) Constitution; George Otis Smith, director of the United States Geological Survey, Washington; Dr. Edward T. Devine, sociologist, New York; and Charles P. Neill, former Commissioner of Labor, Washington. Each is to receive a salary of $7,500 a year.

Under the Winslow-Borah law, providing for its appointment, the commission is required to make a report of conditions in the bituminous industry by Jan. 15, 1923, and on anthracite by July 10. To attain the material for these reports, the commission is authorized to investigate all phases of the coal industry including, among other things, the advisability of nationalizing the mines. In making up the commission, President Harding declined to name representatives of operators or miners.

As stated by the commission, following its organization, its object is "to endeavor to get all the essential facts touching the coal industry to the end that practical measures may be found to insure a constant supply of this most necessary commodity at as reasonable prices as are consistent with fair wages and profit to those engaged in the industry. The policy of the commission will be to invite and welcome every suggestion and offer of assistance from the mine workers, operators, dealers and consumers of coal."

Settlement of the strike in the old union fields left 90,000 newly organized miners in the Connellsville and other Pennsylvania fields, previously non-union, unprovided for. In these fields the strike remains in effect, the union in order to concentrate its strength there calling off late in October, the strike in Mingo County, West Virginia, that in the two years it was on, cost the union $2,000,000 in benefits, upward of two score lives and caused the uprising of union miners in August, 1921, that required the use of United States troops to end.

The cost of the strike in the soft coal fields is impossible to estimate because of the overdeveloped state of that branch of the industry which, had there been no strike, would have kept practically all of those who struck in the unionized fields on part time, or less, most of the summer. In the anthracite part of the industry, which has been practically a full time basis for years, the losses to the combatants, based mainly on figures furnished by the Anthracite Bureau of Information, were as nearly as can be estimated, $250,000,000. Of this amount, the loss in wages, is placed at $125,738,400. The balance includes cost of labor in maintaining the mines while idle, $35,000,000, lost profits $11,000,000, and uninsurable damage to mines, which, with losses incidental to inability to mine at capacity for months on some properties, cost the operators tens of millions more.

The loss to the public in tons of anthracite approximated 35,000,000 or about 45 per cent. of the annual supply. As this cannot be made up for months, the Atlantic seaboard consumers, chief users of hard coal, will have to do with something like a 50 per cent. supply of normal and rely on bituminous and other substitutes for the balance of its fuel this winter. Users of bituminous are more fortunate, the supply from union and non-union fields subsequent to the breakdown of the shopmen's strike being at a rate that threatens a surplus before the spring of 1923.

## THE SHOPMEN'S STRIKE.

The shopmen's strike, begun three months after the miners quit work, was a factor in forcing a settlement of the coal strike, through impeding the flow of non-union coal from the South which at one time touched, according to the United States Geological Survey, the high level of 5,500,000 tons a week. Threatening since the spring of 1920, when the roads were released from Government control, the dangers of a strike first became really acute in June when at meetings of the shopcraft unions held in Cleveland as an adjunct to the convention of the American Federation of Labor, John L. Lewis joined in the deliberations. Just what arguments the miners' leader used was not disclosed, but it was not until after his arrival and participation in their conferences that Bert M. Jewell, President of the Railway Department of the American Federation of Labor and his associates served notice on the United States Railroad Labor Board of intention to strike July 1.

As officially stated, the causes of the strike were the reduction of wages averaging 12 per cent., effective July 1; changes in working conditions previously ordered by the board, and the practice of some roads, condemned by the board, of leasing shop and other work to private contractors to place it beyond the jurisdiction of the board, and thereby permit lower labor costs. It was an evasion of the spirit if not the letter of the Esch-Cummins act, under which the board was created, and as such was condemned by railroad executives not resorting to the practice as well as by the unions. Of these grievances, the contracting out and changes in rules were the most serious, the latter depriving the men on many roads of conditions they had enjoyed twenty or more years.

Actually, the strike was the outcome of the struggle begun by the unions before the roads were returned to their owners in 1920 to retain as much as possible of what they had gained during the period of Government control, including the national agreements and of the executives to restore as nearly as possible, prewar conditions.

In this contest, the roads had attained two general reductions in wages and changes in rules contained in the national agreements that cut heavily into the earnings of the shopmen. Abrogation of the national agreements had been approved by the board, conditional on agreements between unions and executives, but had not been made effective because the unions insisted on writing the national agreements into all system contracts. The changes in rules and wages ordered by the board with the contracting out practice previously referred to, and the refusal of the Pennsylvania Railroad to obey a ruling of the board fixing the manner in which employed representatives on wage boards were to be selected, led to the taking of the strike votes and the decision of the union heads to resort to a test of strength. It was the feeling of many, if not of a majority of the union heads, that only by a strike could they prevent the gradual destruction of their organizations and the whittling down of wages and favorable working conditions. They further argued that the board was unable or unwilling to protect them, citing the contracting out practice and the Pennsylvania case as proofs.

Though notice of the intention of the unions to strike July 1 was served on the Labor Board a week in advance of that date, the board took no official action until June 30 when it issued subpoenas to carriers and union heads to appear before it and show cause why they should not be ordered to refrain from interrupting traffic. The carriers were represented in force, but the union chiefs, never legally subpoenaed, were missing, having departed for their several headquarters to direct the strike, a necessary precaution according to Bert. M. Jewell, to prevent a headless, disorganized and disorderly movement.

The board, after some delay, did secure the attendance of two union heads who had not approved strike votes. One of these, Daniel W. Helt, chief of the signalmen, never did permit his men to quit. The others, Timothy Healy, President of the stationary firemen, issued the necessary approval a few days later. At this meeting, the executives agreed to obey all rulings of the board, including a majority of those who had previously contracted out work and who agreed to abandon the practice.

## AGAINST ORDERS OF THE BOARD.

Ignoring the board, the shopcrafts in a letter to T. DeWitt Cuyler, as Chairman of the Association of Railway Executives demanded that the roads restore the second cut made by the board and working conditions changed by it. This demand was refused and no peace being in sight the board on July 11 declared the strike not against the roads, but against its orders and that men who took strikers' places were not to be considered strike-breakers and were entitled to official and public support.

The programme of the strike leaders called for all crafts other than telegraphers and train service men ("Big Four" brotherhoods and the Switchmen's Union of North America) who were not affected by the changes in wages and rules and the "contracting out" practice to down tools. It failed in that the Brotherhood of Maintenance of Way Men and Shop Laborers declined to authorize a strike of the 400,000 men under its jurisdiction as did the International Brotherhood of Signalmen with 16,000 members. The Brotherhood of Clerks and Freight Handlers struck only in spots. This left the burden to be carried by the machinists, blacksmiths, boilermakers, sheet metal workers, electricians and carmen who quit generally on July 1 and the stationary firemen who officially went on strike ten days later. The shops of practically every road in the country were crippled and the movement of trains was made difficult by the walkout of car inspectors, but with reserve rolling stock, and the drafting of men from supervisory and other forces, the roads maintained fairly close schedules while rebuilding

their forces. Only in the West and South were any considerable number of trains cancelled.

The strike leaders had not counted on an early victory. On the contrary, they told their followers and the public it would be a matter of weeks before the breaking down of rolling stock would compel the executives to surrender. Stated otherwise, they hoped to win by a process of attrition. It soon became apparent, however, that the roads were more than holding their own and rebuilding their forces and, abandoning their demands, the strike leaders on July 14 proposed to send the strikers back to work, conditional on their being given their old places and seniority ratings, the Labor Board to give re-hearings on all matters in dispute. The proposal was rejected by the roads, acting through Mr. Cuyler. They insisted that all strikers must return as new men and juniors to (a) those who remained at work and (b) men employed after July 1 and lose the preference as to class of work to be done, hours of duty, etc., that was theirs prior to the strike by reason of long service.

The next move for peace came when the President called both sides to the White House for conferences. Out of this grew a proposal, accepted by the unions, but rejected by the Association of Railway Executives that in effect was restoration of the status quo ante, with the strikers retaining all seniority rights. Following this, the "Big Four" brotherhoods sought to make peace at conferences in New York City, but nothing resulted. Eventually, on September 23, an agreement was reached on what has come to be known as the Willard-Jewell plan between the unions and roads that had been unable for one reason or another to rebuild their forces to their entire satisfaction.

## THE WILLARD-JEWELL PLAN.

This agreement as published in a special circular by the Railway Department of the American Federation of Labor, dated Chicago, September 14, was in the form of a memorandum reading as follows:

"1. In order to bring to an end the existing strike of employees upon the undersigned railroads and relieve the country from the adverse effects thereof and to expedite the movement of essential traffic, the following memorandum of agreement is made upon the understanding, which the parties hereto accept, that the terms hereof shall be carried out by the officers of the companies and the representatives of the employees in a spirit of conciliation and sincere purpose to effect a genuine settlement of the matters in controversy referred to below. This paragraph does not apply to or include strikes in effect prior to July 1, 1922.

"2. All men to return to work in positions of the class they originally held on June 30, 1922, and at the same point. As many of such men as possible are to be immediately put to work, at present rates of pay, and all such employees who have been on strike be put to work or under pay not later than thirty days after the signing of this agreement, except such men as have been proved guilty of acts of violence which in the opinion of the commission, hereinafter provided for, shall be sufficient cause for dismissal from service.

"3. The relative standing as between themselves, of men returning to work and men laid off, furloughed or on leave of absence, including General Chairmen and others who were as of June 30, 1922, properly on leave of absence, will be restored as of June 30, 1922, and they will be called back to work in that order.

"4. If a dispute arises as to the relative standing of an employee or if any other controversy arises growing out of the strike that cannot be otherwise adjusted by the carrier and said employee or the duly authorized representatives thereof, the matter shall be referred by the organization, parties to this agreement, the employees or the carrier in the interest of any employee who may be aggrieved, to a commission to be established and constituted, as hereinafter provided, for final decision by a majority vote.

"5. The commission referred to in paragraph 4 hereof shall be composed of six representatives to be named by the chief officers of the organization parties hereto and six railroad officers or representatives selected from and by the railroads agreeing hereto. This commission shall be constituted within fifteen days from the signing of this agreement and shall have jurisdiction to decide all cases that may properly be referred to it on or before May 31, 1923, but not thereafter.

"6. Inasmuch as this agreement is reached for the purpose of composing in a spirit of compromise this controversy, all parties hereto agree that neither this settlement nor any decision of the commission above provided for shall be used or cited in any controversy between these parties or between the railroads signing the same or any other class or classes of their employees in any other controversy that may hereafter arise.

"7. Both parties pledge themselves that no intimidation nor oppression shall be practised or permitted against any of the employees who have remained at work or have taken service or as against those who resume work under this understanding.

"8. All suits at law now pending as the result of the strike to be withdrawn and cancelled by both parties."

Under this it will be noticed that the unions abandoned the claim to seniority save "as between themselves" and the earlier position that any settlement would have to be on a national basis. The process of settlement with individual roads is still under way up to Nov. 15, 1922, though so far as any visible effect on transportation the strike, still on officially, ceased in late summer.

## HEAVY COST OF THE STRIKE.

The cost of the strike to the railroads has been estimated at $150,000,000. Through it they succeeded, on many of the more important roads, in loosening, if not entirely breaking the hold of the unions upon their shop employees and by the formation of new associations, or company unions, have in some instances paved the way to escape from the remaining provisions of the national agreements by amending or deleting rules held by them to be onerous, such as that forbidding piece work, and rid their payrolls of men who for one reason or another were objectionable.

The cost to the strikers in wages is estimated by the Labor Board at $177,535,524. It also cost many thousands of them positions earned by long service, and it cost the unions in membership.

Against these losses, the union leaders balance the claim that by striking they checked further reductions in wages which, they assert, were due after January 1. The further claim is made by them that though the loss in membership may be considerable it is small as compared with what would have resulted from a policy of non-resistance, and that it will be much easier to rebuild the membership than it would be had the membership been allowed to shrink because of apparent unwillingness to strike no matter how serious the grievances might appear to the rank and file. In these contentions experts in trade union matters not connected with the shopmen are inclined to agree while questioning the strategy of calling a strike at a time when the executives of important roads were prepared and not altogether unwilling for a test of strength. In this criticism, however, the value of hindsight over foresight is once more apparent.

Compared with other great railroad strikes, such as that of 1877 or the Debs American Railway Union strike of 1894, the strike was remarkably free from violence. At such places as Bloomington and Aurora, Illinois, and Denison, Texas, there was much disorder, necessitating the use of United States Marshals and militia. In New York, State troopers were used at several points. Charges, as yet unsustained so far as the public record goes, as this is written, were made of deliberate wrecking of trains and the killing of employees and passengers. Disorders, however, were by no means general, and, as measured by previous industrial disputes, rarely serious, the one thing that more than anything else alienated public opinion being the desertion of trains by their crews at isolated points, particularly in the great western desert.

## DAUGHERTY'S STRIKE INJUNCTION.

This fact, however, did not prevent Attorney General Harry M. Daugherty applying to the United States District Court in Chicago on September 1, when the strike was practically over, for a blanket injunction restraining the strike leaders, their associates and members from further interfering with transportation and, among other things, forbidding picketing, publication by advertisements or in the form of interviews of anything calculated to prolong the strike or interfere with traffic. In many respects it was the most sweeping order ever asked for in a labor dispute. Over the bitter protest of the unions, Judge Wilkerson issued the order requested by the Attorney General, which remains in force pending review by higher courts.

Because of this, an effort was made to impeach Mr. Daugherty in the House of Representatives, the Committee on Judiciary, to which it was referred, tabling the resolution by a party vote. Since then Mr. Daugherty has declared he will welcome a thorough investigation.

The promise made to the Brotherhood of Maintenance of Way men of a re-hearing of their case, a large if not the chief factor in keeping that group out of the strike, was kept by the Railroad Labor Board, which in October granted an increase of two cents an hour over the July 1 scale, making the minimum for this class of labor 25 cents an hour.

in making this award the board estimated that it added $20,000,000 to the annual wage bill of the roads, and that through remaining at work during the strike, the men received "about $147,656,866 which they would have lost."

Within the labor organizations the most important development of the year was the announcement of William G. Lee that hereafter the "Big Four" brotherhood will not function as a whole, the trainmen and conductors' organizations working as one unit and leaving the engineers and firemen, with the Switchmen's Union of North America, a rival of the trainmen, to work as another unit. This split, really in effect for over a year, had its beginning in 1918 in Lee's refusal to stand back of the now almost forgotten Plumb plan.

In the American Federation of Labor, the most important move was the drive launched at the Cincinnati convention for an amendment to the Constitution abrogating the power of Federal and State Supreme Courts to nullify acts of Congress or Legislatures by holding them to be unconstitutional.

## FEDERAL UNEMPLOYMENT

Proposals for the prevention of future unemployment crises and for the reduction of the normal number of workless men in the country were put forth by Secretary of Labor James J. Davis in his annual report. He said:

"Less than a year ago it was estimated that between five and six million workers were without jobs. We were in the throes of one of the greatest industrial depressions we had ever known. There was a grave danger that the mere operation of the law of supply and demand would force a drastic rearrangement of wages which would seriously depress our standard of living and radically alter our whole economic structure. The Nation fought its way through this period of unemployment, and today the demand for labor practically equals the supply. We are back at normal in our employment. But we have made the startling discovery that normal in America means that approximately a million and a half workmen are detached from any payroll.

"Here we have two problems to meet—to prevent a recurrence of the employment depression which threw between five and six million men into idleness and to reduce the number of our workingmen who are daily without means of livelihood.

"We have a powerful agency in meeting both of these problems in the United States Employment Service, which, fully organized and equipped, would have its finger at all times upon the pulse of the labor supply and demand of the country. The past year this service, with its co-operating agencies, proved its effectiveness. It listed between 2,500,000 workers seeking employment, and placed nearly 1,500,000 of them in jobs without expense to the worker or employer. . . .

"The lesson of the past year seems to be not so much a problem of an actual dearth of employment but rather one of inability of the American workmen to adjust themselves to changing circumstances. I would urge upon every idle workman that when there is inactivity in his trade he use every effort to adapt himself to some other line of work. Manifestly, the skilled workman can, if he will, do work of some other kind, but my experience has been that too often when idleness is forced upon him he rejects the thought of other employment for one or more of several reasons: He may not be able to secure as high wages in other employment; he may be under the impression that the secondary employment will lose him prestige in his primary occupation."

The Secretary, after reviewing the work of the conciliation service, said:

"The limitations of appropriations have made it impossible for me to work out some plans which I hope I may have the opportunity to work out during my term of office. I believe with the creation of an organization such as I have in mind and with an appropriation of approximately $1,000,000 per year, this gradually to be increased with the growth of industry, practically every labor controversy can be adjusted and nearly every strike can be avoided.

"When the conciliation service began its work, 70 per cent. of the disputes in which its intervention was sought had already reached the strike stage. Recently conditions have so improved and the services of the department have been so generally recognized that less than 30 per cent. of the cases before the service have reached the point where work was suspended. . . .

"The success of the conciliation methods of the department is adequately demonstrated by the record of disputes in which the good offices of the department, through commissioners of conciliation, have been used, from the beginning of the present Administration, March 4, 1921, to June 30, 1922, a period of sixteen months. In that time a few more than 500 cases of strikes and threatened strikes and lockouts have been acted upon by department officials. Three hundred and forty-five cases were satisfactorily adjusted by the commissioners of conciliation, fifty-nine were adjusted by the commissioners of conciliation in co-operation with local officials and agencies, and thirty-nine cases were pending or in the process of adjustment. The period of industrial readjustment through which the country has been passing made the settlement of industrial disputes more difficult, but despite that fact nearly 90 per cent. of the controversies in which the department used its good offices were equitably and satisfactorily adjusted. Without doubt these settlements did much to aid in the stabilizing of the generally disturbed industrial situation. Nearly a million and a half workers were involved in the disputes under consideration."

## THE HERRIN MINE KILLINGS.

The Special Grand Jury of Williamson County, Illinois, which investigated the massacre of coal miners in Herrin, Illinois, made its final report Sept. 23, 1922. It returned 214 indictments against seventy-four men: for murder, forty-four; for conspiracy to murder, fifty-eight; for rioting, fifty-eight; and for assault with intent to murder, fifty-four.

The trials began on November 13. It took one month and the examination of 220 talesmen to secure a jury, which was filled on December 8. The opening speeches were made December 13, and the trial was in progress as this Almanac went to press.

The miners' union has raised a fund which will be used for the defense of union men who have been indicted. The union refused to co-operate in any way with the Grand Jury.

Of the seventy-four men under indictment, fifty-five were at once arrested and admitted to bail furnished in a blanket bail bond by prominent citizens of the locality of the State where the massacre took place.

### TEXT OF THE REPORT.

The text of the Grand Jury's report follows:

"We, the special Grand Jury of Williamson County, empanelled to make an investigation of the crimes committed in and about the strip mine near and in about Herrin on Wednesday and Thursday, June 21 and 22, 1922, and heedful of the instructions given by Your Honor to make a thorough investigation of the facts and circumstances, with a view of fixing the responsibility of the killing of some twenty-four persons and the wounding of many others, beg to report that we have examined approximately 300 witnesses, and from their testimony learned these conditions:

"About the middle of June of this year, after suspension of the coal industry as the result of a strike of the United Mine Workers of America, the Southern Illinois Coal Company decided to operate a strip mine owned by it and located about midway between Marion and Herrin. The miners apparently raised no objections to the mining of coal by the use of steam shovels, but when the company began to ship there was bitter resentment on the part of the miners.

"The coal company aggravated this resentment by employing armed guards and closing the public established highways traversing the mine property and treating as trespassers citizens attempting to use the accustomed highways.

"The flaunting of arms in a community devoted almost exclusively to mining was conducive to strife. It was a challenge certain to be accepted, and for four or five days preceding the tragedy it was known by the authorities that a conflict was inevitable.

"The State Administration showed it undoubtedly realized the acute situation by sending to Williamson County Colonel Hunter of the Adjutant General's staff. This representative of the State testified that he recognized upon his arrival in Marion the imminence of a conflict, and immediately asked the Adjutant General to send State troops to protect property and conserve the peace. This request Colonel Hunter renewed several times before the actual conflict, and was invariably asked by the Adjutant General of Illinois if the Sheriff of Williamson County had asked for troops.

"The Adjutant General denied his authority to order them into Williamson County except upon the Sheriff's request, which, as Your Honor knows, is not the law.

COUNTY SHERIFF A UNION MAN.

"Melvin Thaxton, the Sheriff of Williamson County, is the holder of a card in the miners' union and a candidate for County Treasurer at the forthcoming election.

"Either because of loyalty to the union or from fear for his candidacy the Sheriff would make no demands for troops nor did he take adequate measures to preserve the peace.

"From the evidence heard, the attack of June 21 upon the men employed at the strip mine was the result of a conspiracy which had been several days in the perfecting, the object of which was the closing of the strip mine. Sheriff Thaxton could not have been unaware of the developments of this plan.

"On Monday, June 19, State Senator W. A. Sneed, District President of the United Mine Workers of this district, received from John L. Lewis, President of the United Mine Workers of America, a telegram as follows:

William Sneed, President Sub-District 10, District 13, United Mine Workers of America, Herrin, Ill.:

Your wire 18th. Steam Shovel Men's Union was suspended from affiliation with American Federation of Labor some years ago. It was ordered suspended from the mining department of the A. F. of L. at the Atlantic City convention.

We now find that this outlaw organization is permitting its members to act as strikebreakers at numerous pits in Ohio. This organization is furnishing steam shovel engineers to work under armed guards under no agreement which exists by and between this organization and the mining department or any branch of the A. F. of L. permitting them to work under such circumstances.

We have through representatives officially taken this question up with the officers of the Steam Shovel Men's Union and have failed to secure any satisfaction.

Representatives of our organization are justified in treating this crowd as an outlaw organization and in viewing its members in the same light as they do any other common strikebreaker. JOHN L. LEWIS.

"A copy of this telegram was posted and read in various places. Following the publication of the telegram from President Lewis preparations for an attack upon the mine were made. The hardwares in all the cities of Williamson County were searched for firearms. The weapons were either taken by force or upon a verbal assurance that the local would pay for hem.

"The men working at the strip mine were evidently ignorant of being strikebreakers. The men operating the steam shovel were affiliated with a union, even though unrecognized by the A. F. of L.

"The guards were told they were to protect valuable machinery and did not wake to the real situation until noon of June 21, when bullets were flying in the mine in such volume as to compel them to take refuge in the office and to seek safety under the steel railroad cars on the strip mine property.

"Superintendent McDowell telephoned a number of times to Colonel Hunter for protection and was invariably informed by the latter that the Sheriff could not be found. Finally Colonel Hunter suggested a flag of truce, which was displayed by the mine defenders, but caused no abatement of the fire.

"In the evening of June 21, upon the return to Marion of Sheriff Thaxton, a conference was held between the Sheriff, Colonel Hunter and officers of the miners' union, at which it was stated that the officials of the coal company were willing to discontinue the operation of the strip mine and the union officials were willing that the workmen employed there should be permitted to depart in safety. The substance of this agreement was transmitted to Superintendent McDowell at the strip mine.

ATTACK ON THE MINE.

"Nevertheless at the break of day the following morning firing began in a severe volume, the attacking party having crept up in the cover of the darkness. They were checked sufficiently to permit of a parley, and after a time a spokesman for the strip mine workers asked to speak to the leader.

"A long range conversation was held and it was agreed by the spokesman of the attacking party that safe conduct would be accorded the men if they laid down their arms and marched out with hands up.

"This was done and from behind the earth embankments created by the shovel operators came a great number of unarmed men and more from the surrounding hills until the forty-seven surrendering men were surrounded by the many hundreds of men mostly armed.

"The captive men were marched down the road toward Herrin in double file. After they had marched about one mile Superintendent McDowell, being crippled and unable to keep up with the procession, was taken by members of the mob and shot to death. The remainder of the captives were marched on the public road and were stopped at the power house of the interurban railroad, about three miles from Herrin. Here a change in the leadership took place and the man who had guaranteed the safety of the men who had surrendered was deposed and another leader installed.

"The new commander ordered the captive men to march into the woods adjacent to and around the power house. Here the new leaders directed that only those in the crowd who had guns should follow into the woods, and those who were unarmed should remain without.

"The surrendered men were then marched some 200 yards back of the power house to the vicinity of a barbed wire fence, where they were told they would be given a chance to run for their lives under fire.

"The firing began immediately, and thirteen of the forty-seven non-union men were killed and most of the others severely wounded.

"The mob pursued those who had escaped and two were hung to trees, six were tied together with a rope about their necks and marched through the streets of Herrin to an adjacent cemetery, where they were shot by the mob and the throats of three were cut. One of six survived.

ATROCITIES AND CRUELTIES.

"The atrocities and cruelties of the murders are beyond the power of words to describe. A mob is always cowardly, but the savagery of this mob in its relentless brutality is almost unbelievable. The indignities heaped upon the dead did not end until the bodies were interred in unknown graves.

"On the first day of attack upon the mine two union miners were killed by answering shots from the men in the strip mine and another so seriously injured as to die subsequently from his wounds.

"It has been difficult for this Grand Jury to determine who fired the shots from the strip mine which caused the deaths of the union miners. When asked to present evidence to the Grand Jury which would tend to fix the responsibility, counsel for the miners' union announced that they would lend no aid to the Grand Jury.

"The Grand Jury has made no attempt to determine the equities between the operators and the miners in the strike controversy. It has had but the sole thought of bringing to the bar of justice the persons who committed the crimes which have brought such universal criticism upon the people of Williamson County.

"Without discrimination, we feel keenly the horror of the tragedy. We protest, however, against the intimation that all the people of Williamson County are lawless and un-American. The development of the mining industry in Williamson County and the surrounding counties has tremendously increased the population within the last decade.

"All of the adjoining counties contributed their quota of marauders, and the entire shame of the inhuman murders should not rest upon Williamson County alone.

"It is true the electorate of the county is responsible for those of its supine, weak and cowardly officials who permitted the disorders to grow from the desultory rioting into a hideous massacre. Those evils can be corrected by the great majority of the population who believe in law and order asserting themselves and no longer consenting to be intimidated by a disorderly minority.

PUBLIC OFFICIALS CULPABLE.

"The Adjutant General's office and the Sheriff's office alternated in passing responsibility, with neither taking decisive action to prevent disorders and protect property.

"The ease with which firearms were obtained causes the Grand Jury to believe that legislation should be enacted to regulate or prohibit the manufacture or indiscriminate sale of firearms.

"We condemn the laxity of the local police in the various cities wherein stores were looted for firearms without interference by them.

"We commend the State's Attorney of Williamson County, Delos Duty, for his courage and fidelity to his oath of office, and we express our gratitude to the Attorney General of Illinois, and his efficient assistants, who have greatly facilitated the great task confronting the Grand Jury.

"In concluding this report the Grand Jury begs leave to state that it has indicted some forty persons for murder, fifty-eight for conspiracy to commit murder fifty-eight for rioting and five for assault to murder, and your jury asks leave for a recess of thirty days for the purpose of completing its labors.

"The Grand Jury is deeply grateful to the many representative law abiding citizens of Williamson County for their assistance and encouragement in its efforts to enforce the law fearlessly and impartially."

## BRITISH LABOR PARTY'S PLATFORM.

The British Labor Party won 142 seats in the British Parliamentary election of November 15; the poll returning 344 Conservatives, 142 Laborites, 60 Independent Liberals, 57 Lloyd George Liberals, and 12 others. Its parliamentary leader, J. Ramsay Macdonald, is leader of the opposition in the House of Commons.

The National Executive of the Labor Party on October 25 issued the following manifesto, which sets out the official policy of Labor for the general election. The manifesto is signed by all the members of the Labor Party Executive Committee:

The Coalition has been destroyed and a Conservative Government has been formed to carry out a policy of naked reaction. Labor is appealing to the men and women of the country on a policy of international peace and national reconstruction.

Revision of the peace treaties, which have caused greater international wrongs than they removed, is the first step to peace.

German reparations must be brought within Germany's capacity to pay.

Turkey's relations with Europe and the freedom of the straits can only be dealt with in an international conference attended by representatives of all countries concerned.

Labor is working for an all-inclusive League of Nations, with power to deal with international disputes by methods of judicial arbitration and conciliation. Through the League of Nations an agreement can be reached for a limitation of armaments with general disarmament as the goal.

Labor advocates the recognition of the real independence of Egypt and self-government for India.

Labor demands the prompt and cordial acceptance of the new Constitution of the Irish Free State, and supports every effort to make Ireland united, prosperous and contented.

Labor recognizes the urgent need of lifting from the trade and industry of the country the deadweight burden of the national debt. It therefore proposes the creation of a war debt redemption fund by a special graduated levy on fortunes exceeding £5,000.

Labor will not penalize thrift, but will require some restitution from the profiteers out of the huge fortunes made in the war.

To secure the necessary annual revenue Labor advocates a system of taxation which will distribute the burden fairly according to "ability to pay."

It proposes an increase of the death duties on large estates and of the supertax on large incomes. Incomes below £250 a year would be exempt from taxation, and there would be a reduction in the tax on all incomes under £500 a year, with a steeper graduation of the scale above that limit.

Taxation of land values will secure to the community socially created wealth now diverted to private hands.

Labor is in principle opposed to indirect taxation. It stands for an untaxed breakfast table and wishes to free trade and industry from all burdensome imposts, whether customs, excise, or stamp duties.

Labor attaches the utmost importance to economy in the public administration. But we do not believe in starving the public services. Least of all do we countenance the notion of economies at the expense of the poor for the benefit of the rich. Reduced expenditure on the children's education and health, the safety of the workers, and the well-being of mothers and babies is the costliest kind of waste.

By a revision of the national grants-in-aid to local authorities we believe an equitable reduction of rates in all the severely pressed districts can be secured.

Unemployment and low wages caused largely by the policy of the Liberal and Unionist Government have brought distress to the bulk of the working people. Labor's policy is to provide work or maintenance for the unemployed by reopening trade with foreign countries, by the national organization of production, and by a large program of necessary and useful public works.

The plight of agriculture can only be dealt with by a bold policy of reorganization. Those who produce the nation's food must not go hungry. Labor proposes to require the landlords to sacrifice rents rather than to ask the farm workers to accept starvation wages. We advocate the restoration of the Agricultural Wages Board to enforce an adequate national wage standard. We propose also the establishment of representative Councils of Agriculture to promote all-round improvement in the use of the land, the reduction of transport charges, the development of co-operative methods and the fostering of rural industries.

Revision of the game laws, improved school facilities, more and better cottages, increased hospital accommodation, and fuller opportunities of recreation are included in Labor's rural policy.

Labor is resolved to change as speedily as possible by constructive measures the social and economic system which confers unfair privileges on the few and undeserved hardship on the many.

The working of this system has brought unemployment and reduced wages to the workers, suffering and starvation to their families, loss of opportunities for full mental and physical development to their children, anxiety and worry to the salaried and professional workers and small traders.

Labor means to bring about a more equitable distribution of the wealth produced by the common effort of the workers by hand and brain.

Our industrial policy involves the prompt nationalization of mines as recommended by the Sankey Commission, and the nationalization of railways, with an increased share of control for the workers, an improved Workmen's Compensation Act, and other measures for the protection of the workpeople.

We oppose all attempts to interfere with the Trade Boards.

Our social program includes a national scheme of housing which will end the scandal of a homeless population and replace the slums by decent homes.

More generous provision for the old-age pensioners has been one of Labor's constant demands, and is one we shall continue to press. We shall also urge the removal of the present unjust deductions from old-age pensioners where friendly society or trade union benefits or small savings exist, whereby thrift is at present penalized.

We stand for the complete supersession of the Poor Law and the institution of a system of pensions for widowed mothers.

Labor will strive to stop the continual attempts now being made to cut off or cut down the ex-service men's pensions. It demands the conversion of conditional into permanent pensions, and it will resist all attempts to transfer the mentally or physically infirm to the Poor Law. In our view the rule to be applied by the Pensions Ministry throughout its administration should be "Fit for service, fit for pension."

The Labor Party has always declared its opposition to measures which increase the power of the wealthier classes to frustrate the people's will. The Parliament Act must stand, and there must be no restoration of the Lords' veto.

Our policy is to remove all existing disabilities affecting women as citizens, voters and workers. Adult suffrage, reform of Parliamentary procedure, and control of Ministers by the House of Commons are included in our program to make the people's will effective by constitutional means.

In accordance with these democratic principles Labor must stand for the control of the liquor traffic according to the people's will.

The task of Government is to raise the standard of life and labor for those whose work of hand and brain increases the nation's wealth. Parliaments have in the past been too much concerned to protect the privileges and extend the power of the rich. Labor wants to increase the happiness and prosperity of the poor by better housing, better schooling, better living, better health, more leisure, more freedom, more opportunities for enjoying the good things of life.

We shall defend the school as we defend the home and we aim at providing the rising generation with full protection from harmful and degrading moral and social conditions.

Labor's program is the best bulwark against violent upheaval and class wars. Democratic government can be made effective in this country without bloodshed or violence. Labor's policy is to bring about a more equitable distribution of the nation's wealth by constitutional means. This is neither Bolshevism nor Communism, but common sense and justice.

This is Labor's alternative to reaction and revolution.

An analysis of the popular vote in the election shows that 13,643,000 votes were cast out of a possible 20,000,000, or approximately 68 per cent. Before the advent of Woman Suffrage the total electorate was 12,000,000 in round numbers, which was increased by approximately 8,000,000 women's votes.

The popular vote by parties was as follows: Conservatives, 5,378,634; Labor, 4,232,739; Asquithian Liberals, 2,614,761; Georgian Liberals, 1,572,204; all others, 343,870. These figures are for the contested seats only, which numbered 547, as 68 seats were uncontested, with an electoral poll of about 500 000. Thus the Conservatives are really a minority Government.

## COMPARATIVE WHOLESALE PRICES OF COMMODITIES.

THE following data from "Bradstreet's Journal" show ruling prices on November 1 for commodities:

| COMMODITIES. | 1922. | 1921. | 1920. | 1917. | 1915. | 1913. |
|---|---|---|---|---|---|---|
| FOODSTUFFS, ETC. | | | | | | |
| Wheat, No. 2, red Winter, in elevator, per bu. | $1.3725 | $1.335 | $2.38 | $2.27 | $1.25 | $0.98 |
| Corn, No. 2, mixed, in elevator, per bush. | .845 | .61 | 1.33 | 2.15 | .76 | .80 |
| Oats, in elevator, per bush. | .55 | .47 | .66 | .65 | .415 | .445 |
| Barley, No. 2 (Milwaukee), per bush. | .65 | .69 | 1.07 | 1.44 | .64 | .79 |
| Rye, Western, per bush. | .98 | 1.05 | 1.99 | 1.98 | 1.08 | .70 |
| Flour, straight Winter, per barrel | 5.75 | 6.00 | 10.50 | 10.75 | 5.20 | 4.15 |
| Beeves, best, native steers (Chic.), per 100 lbs. | 12.50 | 9.75 | 17.25 | 17.65 | 10.30 | 9.70 |
| Sheep, prime (Chic.), per 100 lbs. | 7.00 | 4.25 | 7.50 | 12.50 | 6.50 | 5.15 |
| Hogs, prime (Chic.), per 100 lbs. | 8.05 | 7.20 | 15.10 | 19.50 | 7.50 | 8.00 |
| Milk (New York), per quart | .125 | .1225 | .131 | .10 | .06 | .0505 |
| Eggs, State, fresh (New York), per dozen | .54 | .50 | .72 | .46 | .35 | .38 |
| Beef, family, per barrel | 15.00 | 15.00 | 25.00 | 32.00 | 18.00 | 19.00 |
| Pork, new mess, per barrel | 29.00 | 25.00 | 31.00 | 48.50 | 17.00 | 23.25 |
| Bacon, short ribs, smoked (Chic.), per lb. | .1375 | .10 | .20 | .30 | .11875 | .1250 |
| Hams, smoked, per lb. | .22 | .25 | .37 | .29 | .17 | .16 |
| Lard, Western steam, per lb. | .11 | .1025 | .1975 | .25 | .0915 | .1070 |
| Butter, creamery, State, best, per lb. | .50 | .45 | .615 | .4625 | .2875 | .32 |
| Cheese, choice East factory, per lb. | .265 | .22 | .285 | .2625 | .1575 | .155 |
| Mackerel, No. 1, bays (Boston), per barrel | 32.00 | 25.00 | 25.00 | 27.00 | 21.00 | 22.00 |
| Codfish, large dried, per quintal | 11.00 | 14.00 | 14.00 | 10.50 | 8.00 | 8.00 |
| Coffee, Rio, No. 7, per lb. | .1075 | .0825 | .0775 | .08625 | .07 | .1075 |
| Sugar, granulated, per lb. | .07 | .055 | .13 | .084 | .0515 | .0435 |
| Tea, Formosa Oolong, superior, per lb. | .25 | .19 | .20 | .28 | .185 | .17 |
| Molasses, New Orleans, prime, per gallon | .57 | .30 | .95 | .53 | .40 | .35 |
| Salt, fine domestic, sacks, 224 pounds | 1.59 | 1.87 | 2.27 | 1.42 | 1.10 | 1.08 |
| Rice, domestic, good, per lb. | .0725 | .0675 | .13 | .095 | .05875 | .065 |
| Beans (New York), choice marrow, per 100 lbs. | 7.00 | 6.00 | 10.50 | 14.25 | 8.25 | 5.35 |
| Peas, choice (New York), per 100 lbs. | 6.50 | 5.50 | 10.00 | 10.00 | 4.95 | 3.00 |
| Potatoes, Eastern, per 180 lbs. | 2.75 | 4.25 | 3.50 | 4.00 | 2.50 | 2.10 |
| Apples (State), per barrel | 5.00 | 5.00 | 4.25 | 2.50 | 2.50 | 2.50 |
| Lemons, choice, per box, 300s | 8.00 | 6.00 | 2.00 | 10.50 | 4.00 | 5.50 |
| Raisins, layer, per lb. | .13 | .165 | .245 | .095 | .085 | .0725 |
| HIDES, LEATHER, TEXTILES. | | | | | | |
| Native steer hides, No. 1, per lb. | .225 | .145 | .27 | .335 | .26 | .1975 |
| Hemlock, packer, middleweight, No. 1, per lb. | .35 | .34 | .52 | .50 | .34 | .31 |
| Cotton, middling uplands, per lb. | .247 | .211 | .25 | .2525 | .1195 | .1410 |
| Wool, Ohio & Pa. X, washed (Boston), per lb. | .57 | .345 | .65 | .75 | .30 | .23 |
| Silk, best No. 1, filature, per lb. | 8.40 | 6.05 | 6.45 | 6.10 | 3.75 | 3.875 |
| Print cloths, 64s (Boston), per yard | .08 | .065 | .10 | .075 | .03625 | .04 |
| Standard sheetings (Boston), per yard | .15 | .13 | .20 | .15 | .0750 | .0825 |
| METALS, COAL, OILS. | | | | | | |
| Iron ore, old range, Bess'r, hematite, per ton | 5.95 | 6.45 | 7.45 | 5.95 | 3.75 | 4.40 |
| Pig, No. 1, foundry, Eastern (N. Y.), per ton | 34.27 | 24.52 | 55.52 | 33.00 | 16.75 | 16.13 |
| Steel billets, Bessemer (Pittsburgh), per ton | 40.00 | 29.00 | 55.00 | 60.00 | 25.00 | 22.00 |
| Steel rails, Standard (Pittsburgh), per ton | 43.00 | 45.00 | 55.00 | 38.00 | 28.00 | 28.00 |
| Tin plate, American (Pittsburgh), per 100 lbs. | 4.75 | 5.25 | 9.00 | 12.00 | 3.10 | 3.40 |
| Steel beams (Pittsburgh), per ton | 44.80 | 35.84 | 69.44 | 89.60 | 26.00 | 27.00 |
| Silver, commercial bars (N. Y.), per ounce | .9925 | .9925 | .995 | .9075 | .49625 | .59625 |
| Copper, Electrolytic (N. Y.), per lb. | .13625 | .125 | .185 | .2350 | .178751 | .1650 |
| Lead, pig, Western (New York), per lb. | .068 | .047 | .0775 | .0795 | .0490 | .043375 |
| Tin, pig, spot (New York), per lb. | .37 | .2675 | .435 | .6055 | .35875 | .40 |
| Quicksilver (San Fran.), per flask, 75 lbs. | 71.00 | 38.00 | 72.00 | 105.00 | 95.00 | 38.50 |
| Anthracite, stove sizes (New York), per ton | 10.35 | 10.56 | 10.46 | 6.175 | 5.35 | 5.25 |
| Bituminous (Pitts.), f. o. b. Chic., per ton | 8.50 | 6.75 | 7.60 | 4.10 | 3.40 | 3.55 |
| Connellsville coke, per short ton, f. o. b. | 7.50 | 3.25 | 16.50 | 6.00 | 2.60 | 1.90 |
| Petroleum, crude, in barrels (N.Y.), per barrel | 3.00 | 2.50 | 6.10 | 3.50 | 1.80 | 2.50 |
| Petroleum, refined, in cases, per gallon | .15 | .13 | .19 | .0865 | .0775 | .0875 |
| Cottonseed, crude, prime (N. Y.), per lb. | .075 | .0775 | .095 | .1715 | .0765 | .0694 |
| NAVAL STORES AND BUILDING MATERIALS. | | | | | | |
| Rosin, good strained (Savannah), per barrel | 6.80 | 3.80 | 11.40 | 6.00 | 4.40 | 3.60 |
| Turpentine, machine, reg. (Savannah), per gal. | 1.555 | .6725 | 1.275 | .45 | .505 | .42 |
| Tar, regular (Wilmington, N. C.), per barrel | 2.89 | 2.60 | 4.50 | 3.50 | 2.00 | 2.20 |
| Brick, Hudson River, hard, per M. | 15.00 | 15.00 | 18.00 | 8.00 | 6.50 | 6.00 |
| Lime, Eastern common, per barrel | 3.75 | 3.63 | 5.20 | 1.90 | 1.20 | .92 |
| Cement, dom. (Portland), spot, per barrel | 3.20 | 2.50 | 4.10 | 2.12 | 1.67 | ..... |
| Nails, wire, from store, base price, per keg | 2.70 | 2.90 | 4.25 | 4.00 | 1.90 | 1.90 |
| Glass, window, 10x15, per box 50 sq. feet | 3.61 | 5.13 | 7.12 | 3.71 | 2.10 | 2.14 |
| Pine, yellow, 12 inches and under, per M. | 58.50 | 49.00 | 70.00 | 40.00 | 26.50 | 25.00 |
| Timber, Eastern spruce, wide, random, per M. | 38.00 | 40.00 | 66.00 | 27.00 | 24.00 | 24.00 |
| CHEMICALS AND MISC. | | | | | | |
| Bicarbonate soda, American, per lb. | .0215 | .0225 | .02875 | .0275 | .0110 | .0110 |
| Borax, crystals, per lb. | .055 | .055 | .0875 | .0775 | .0575 | .04 |
| Carbolic acid, in bulk, per lb. | .40 | .09 | .16 | .41 | 1.00 | .0875 |
| Alcohol, 94 per cent., per gallon | 4.75 | 4.65 | 5.00 | 4.00 | 2.60 | 2.50 |
| Opium, per lb. | 6.75 | 5.50 | 7.50 | 30.00 | 10.00 | 5.70 |
| Quinine, domestic, in bulk, per ounce | .50 | .70 | .90 | .75 | .50 | .23 |
| Tobacco, med. leaf, Burley (Louisville), per lb. | .28 | .25 | .30 | .2231 | .0817 | .0970 |
| Paper, news, roll, per lb. | .04 | .0475 | .11 | .03 | .0215 | .0225 |
| Hay, prime (New York), per 100 lbs. | 1.35 | 1.45 | 1.95 | 1.20 | 1.35 | 1.05 |
| Cottonseed (Houston), per ton 2,000 lbs. | 40.00 | 41.00 | 33.00 | 63.00 | 36.00 | 22.00 |

## MOHAMMEDAN POPULATION BY COUNTRIES.

| | | | |
|---|---|---|---|
| Southeastern Europe | 4,000,000 | Tripoli | 2,000,000 |
| Asiatic Turkey (before the war) | 15,000,000 | Tunis | 2,000,000 |
| Asiatic Russia (before the war) | 14,000,000 | Algeria | 5,000,000 |
| Persia | 9,000,000 | Morocco | 5,000,000 |
| Afghanistan | 5,000,000 | Liberia | 1,000,000 |
| India | 70,000,000 | British, French, Belgian, Italian and former German colonies in West, East and Central Africa | 25,000,000 |
| China | 12,000,000 | | |
| Indo-China and Siam | 2,000,000 | | |
| Malay Archipelago and Pacific Islands | 35,000,000 | | |
| Egypt | 12,000,000 | | |
| Soudan | 4,000,000 | | |
| Abyssinia | 5,000,000 | Approximate total Mohammedan population of the world | 227,000,000 |

## WHOLESALE PRICE INDEX IN U. S., SINCE 1860.

(Known as Dun's Index Number; prepared by R. G. Dun & Co., N. Y.)

| July 1. | Bread-stuffs. | Meat. | Dairy and Garden. | Other Food. | Cloth-ing. | Metals. | Miscel-laneous. | Total. |
|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1860.... | 20.530 | 8.973 | 12.662 | 8.894 | 22.439 | 25.851 | 15.842 | 115.191 |
| 1861.... | 15.749 | 7.485 | 10.813 | 7.653 | 21.147 | 22.500 | 16.573 | 101.920 |
| 1862.... | 18.057 | 7.150 | 13.406 | 10.987 | 28.413 | 23.207 | 17.290 | 118.510 |
| 1863.... | 26.154 | 10.115 | 13.530 | 16.359 | 45.679 | 37.079 | 24.264 | 173.180 |
| 1864.... | 45.616 | 15.685 | 26.053 | 27.303 | 73.485 | 59.192 | 31.653 | 278.987 |
| 1865.... | 25.404 | 16.112 | 18.049 | 21.057 | 49.307 | 38.956 | 25.551 | 194.436 |
| 1870.... | 25.322 | 14.161 | 16.112 | 13.308 | 31.480 | 26.612 | 21.786 | 148.781 |
| 1871.... | 24.809 | 12.177 | 20.799 | 13.823 | 30.624 | 27.371 | 21.907 | 151.510 |
| 1872.... | 22.171 | 11.055 | 16.019 | 14.845 | 32.427 | 32.643 | 21.319 | 150.479 |
| 1873.... | 20.460 | 10.114 | 15.629 | 13.625 | 29.411 | 32.298 | 21.552 | 143.089 |
| 1874.... | 25.657 | 11.560 | 19.142 | 13.678 | 27.260 | 25.254 | 19.582 | 143.133 |
| 1875.... | 24.848 | 13.287 | 14.918 | 14.418 | 25.318 | 23.515 | 18.398 | 134.702 |
| 1876.... | 18.777 | 10.726 | 15.912 | 12.914 | 21.747 | 20.452 | 15.951 | 116.479 |
| 1877.... | 21.812 | 10.036 | 11.790 | 13.321 | 21.850 | 15.578 | 15.160 | 109.547 |
| 1878.... | 15.672 | 8.181 | 10.608 | 11.346 | 19.836 | 15.789 | 14.836 | 96.268 |
| 1879.... | 17.054 | 8.239 | 10.253 | 9.884 | 20.420 | 15.149 | 16.286 | 97.285 |
| 1880.... | 17.461 | 9.230 | 12.594 | 11.539 | 21.984 | 18.708 | 17.139 | 108.655 |
| 1881.... | 20.369 | 11.381 | 11.311 | 11.663 | 20.982 | 19.295 | 16.900 | 111.901 |
| 1882.... | 25.494 | 13.740 | 14.685 | 11.627 | 21.202 | 19.832 | 16.650 | 123.230 |
| 1883.... | 19.018 | 11.210 | 12.250 | 10.726 | 20.209 | 18.071 | 15.764 | 107.248 |
| 1884.... | 17.871 | 11.172 | 11.369 | 9.323 | 19.014 | 16.272 | 14.685 | 99.706 |
| 1885.... | 16.370 | 9.205 | 10.872 | 8.712 | 17.740 | 14.132 | 13.666 | 90.697 |
| 1886.... | 15.311 | 8.906 | 10.241 | 8.570 | 18.063 | 14.466 | 13.669 | 89.226 |
| 1887.... | 15.156 | 8.667 | 11.188 | 9.252 | 18.174 | 16.035 | 15.153 | 93.624 |
| 1888.... | 16.984 | 9.416 | 11.849 | 9.917 | 17.447 | 15.366 | 14.155 | 95.134 |
| 1889.... | 14.351 | 8.244 | 9.695 | 10.912 | 17.107 | 14.782 | 14.600 | 89.691 |
| 1890.... | 14.867 | 8.036 | 10.711 | 9.749 | 17.264 | 15.506 | 15.416 | 91.549 |
| 1891.... | 19.782 | 9.217 | 12.455 | 9.339 | 16.501 | 15.107 | 13.691 | 96.092 |
| 1892.... | 17.426 | 8.700 | 10.403 | 8.733 | 15.648 | 14.827 | 14.252 | 90.105 |
| 1893.... | 14.963 | 10.135 | 11.710 | 9.188 | 15.871 | 14.030 | 14.716 | 90.613 |
| 1894.... | 15.115 | 9.389 | 10.394 | 8.478 | 13.860 | 12.015 | 14.041 | 83.292 |
| 1895.... | 14.765 | 8.622 | 9.874 | 8.689 | 15.315 | 11.021 | 13.233 | 81.519 |
| 1896.... | 10.504 | 7.058 | 7.872 | 8.529 | 13.602 | 13.232 | 13.520 | 74.317 |
| 1897.... | 10.587 | 7.529 | 8.714 | 7.887 | 13.808 | 11.642 | 12.288 | 72.455 |
| 1898.... | 12.783 | 7.694 | 9.437 | 8.826 | 14.663 | 11.843 | 12.522 | 77.768 |
| 1899.... | 13.483 | 7.988 | 10.974 | 9.157 | 15.021 | 15.635 | 12.969 | 85.227 |
| 1900.... | 14.898 | 8.906 | 10.901 | 9.482 | 16.324 | 14.834 | 16.070 | 91.415 |
| 1901.... | 14.904 | 9.430 | 11.030 | 9.086 | 15.098 | 15.344 | 16.617 | 91.509 |
| 1902.... | 20.534 | 11.628 | 12.557 | 8.748 | 15.533 | 16.084 | 16.826 | 101.910 |
| 1903.... | 17.473 | 9.269 | 13.083 | 9.186 | 17.136 | 16.544 | 16.765 | 99.456 |
| 1904.... | 18.244 | 9.033 | 10.648 | 10.406 | 16.514 | 15.428 | 16.919 | 97.192 |
| 1905.... | 18.833 | 8.614 | 9.983 | 9.922 | 17.986 | 15.916 | 17.061 | 98.312 |
| 1906.... | 17.923 | 9.677 | 12.890 | 9.645 | 19.177 | 16.649 | 19.555 | 105.216 |
| 1907.... | 20.306 | 10.196 | 14.767 | 10.013 | 20.355 | 17.688 | 20.335 | 113.660 |
| 1908.... | 22.826 | 10.197 | 12.552 | 10.465 | 17.233 | 16.542 | 18.359 | 108.174 |
| 1909.... | 25.854 | 9.955 | 15.268 | 10.628 | 20.062 | 16.426 | 20.828 | 119.021 |
| 1910.... | 21.690 | 11.406 | 14.663 | 10.556 | 21.173 | 16.744 | 22.936 | 119.168 |
| 1911.... | 21.283 | 9.414 | 17.473 | 11.384 | 19.324 | 16.583 | 22.669 | 118.130 |
| 1912.... | 25.964 | 10.715 | 15.501 | 11.828 | 20.449 | 16.349 | 21.471 | 122.277 |
| 1913.... | 21.192 | 13.090 | 13.039 | 10.213 | 20.534 | 16.512 | 21.739 | 116.319 |
| 1914.... | 21.086 | 12.979 | 17.244 | 10.449 | 20.834 | 15.691 | 21.425 | 119.708 |
| 1915.... | 26.467 | 12.134 | 15.563 | 10.724 | 20.902 | 16.607 | 22.561 | 124.958 |
| 1916.... | 26.378 | 14.400 | 19.435 | 12.156 | 25.800 | 21.174 | 25.799 | 145.142 |
| 1917.... | 53.918 | 18.824 | 26.449 | 14.225 | 36.527 | 32.390 | 29.617 | 211.950 |
| 1918.... | 51.420 | 23.719 | 24.750 | 21.929 | 45.238 | 30.170 | 35.349 | 232.575 |
| 1919.... | 51.728 | 25.660 | 26.160 | 23.342 | 45.623 | 25.759 | 35.435 | 233.707 |
| 1920.... | 57.170 | 22.019 | 28.044 | 25.521 | 50.268 | 31.172 | 46.220 | 260.414 |
| 1921.... | 26.373 | 13.114 | 18.012 | 17.268 | 28.034 | 23.037 | 33.795 | 159.833 |
| 1922.... | 27.022 | 17.469 | 20.061 | 18.427 | 34.459 | 21.450 | 34.855 | 173.743 |

## INDEX NUMBERS SHOWING CHANGES IN U. S. RETAIL PRICES, 1907 TO 1921.

(By Bureau Labor Statistics, U. S. Dept. of Labor. Average for year 1913 = 100.)

| YEAR. | Sir-loin Steak. | Rib Roast. | Pork Chops. | Ba-con. | Ham. | Lard. | Eggs. | But-ter. | Milk. | Flour. | Pota-toes. | Su-gar. | All Ar-ticles Com-bined. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907.... | 71 | 76 | 74 | 74 | 76 | 81 | 84 | 85 | 87 | 95 | 105 | 105 | 82 |
| 1908.... | 73 | 78 | 76 | 77 | 78 | 80 | 86 | 86 | 90 | 102 | 111 | 108 | 84 |
| 1909.... | 77 | 81 | 83 | 83 | 82 | 90 | 93 | 90 | 91 | 109 | 112 | 107 | 89 |
| 1910.... | 80 | 85 | 92 | 95 | 91 | 104 | 98 | 94 | 95 | 108 | 101 | 109 | 93 |
| 1911.... | 81 | 85 | 85 | 91 | 89 | 88 | 93 | 88 | 96 | 102 | 130 | 117 | 92 |
| 1912.... | 91 | 94 | 91 | 91 | 91 | 94 | 99 | 98 | 97 | 105 | 135 | 115 | 98 |
| 1913.... | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1914.... | 102 | 103 | 105 | 102 | 102 | 99 | 102 | 94 | 100 | 104 | 108 | 108 | 102 |
| 1915.... | 101 | 101 | 96 | 100 | 97 | 93 | 99 | 93 | 99 | 126 | 89 | 120 | 101 |
| 1916.... | 108 | 107 | 108 | 106 | 109 | 111 | 109 | 103 | 102 | 135 | 159 | 146 | 114 |
| 1917.... | 124 | 126 | 152 | 152 | 142 | 175 | 139 | 127 | 125 | 211 | 253 | 169 | 146 |
| 1918.... | 153 | 155 | 186 | 196 | 178 | 211 | 165 | 151 | 156 | 203 | 188 | 176 | 168 |
| 1919.... | 164 | 164 | 201 | 205 | 209 | 134 | 182 | 177 | 174 | 218 | 224 | 205 | 186 |
| 1920.... | 172 | 168 | 201 | 194 | 206 | 187 | 197 | 183 | 188 | 245 | 371 | 353 | 203 |
| 1921.... | 153 | 147 | 166 | 158 | 181 | 114 | 148 | 135 | 164 | 176 | 182 | 145 | 153 |

The yearly average index numbers for "all articles combined" in the above table includes also, round steak, chuck roast, plate beef, hens, cheese, bread, corn, rice, coffee, and tea. Figures since 1913 are based on 100 as the 1913 index number.

# Scientific Progress in 1922.

(Compiled by the National Geographic Society, Washington, D. C. Gilbert Grosvenor, President.)

*ARCHAEOLOGY AND PALEONTOLOGY.*

Neil M. Judd, Director of the National Geographic Society's Pueblo Bonito Expedition, continued his work in the exploration of prehistoric Pueblo Bonito, in Chaco Canyon, northwestern New Mexico, during the year 1922. About thirty-five secular rooms and five kivas, or ceremonial chambers, were added to the 1921 series of previously unexplored habitations, leaving approximately one-half of Pueblo Bonito yet to be excavated. A considerable collection of valuable antiquities was forwarded to the United States National Museum, and entirely unexpected data was gathered in relation to the culture sequence at this vast aboriginal village. In the 1921 World Almanac it was predicted that exploration of Pueblo Bonito would disclose evidence of immigration from other centres of ancient human activity. Such evidence has now been obtained and it bids fair to alter existing beliefs as to the commingling of prehistoric Pueblo peoples in that section of the southwest where their characteristic arts reached their highest form. The work shows that the ancient village was erected on a slight elevation, which has since been buried by shifting sand and the silt deposited by wandering flood waters during the uncounted centuries that have passed since abandonment of the stone-walled town.

The Field Museum of Natural History of Chicago sent an archaeological expedition to Panama and an ethnological one to the Malay Peninsula The former is attempting to trace the relationship between the Mayas and the Incas and the latter to study the origin and follow the migrations of the Malay and Negrite races. Another expedition under the auspices of the same institution sought fossil specimens in the Santa Cruz beds of Patagonia, in the Pampean formation of northern Argentina and amid the cave deposits of Brazil.

The American Museum of Natural History of New York put expeditions into the field in search of fossils in Snake Creek beds in Nebraska, in the Siwalik Hills of India, and in eastern Asia.

Excavations undertaken by the French on the site of ancient Carthage reveal three cities within twenty feet of the surface, the oldest that of Hannibal, the second that of the Caesars.

The Los Angeles Museum of History, Art and Science has assembled a complete skeleton of the sabre-toothed tiger which roamed the earth about 500,000 years ago. The bones were found in the La Brea pits in the city of Los Angeles.

Scientists of the Bishop Museum, Honolulu, who have been attempting, in conjunction with Yale University, to solve the mystery of the origin of the Hawaiian race, conducted work on the Island of Guam to ascertain whether the Polynesian civilization there was antecedent to the Polynesian migration to Hawaii and, if so, what other racial influences submerged the Polynesian culture now extinct in Guam, which fact forms the basis for the belief that the settlement of that island was prior to the migration to Hawaii. Evidences of the primitive Polynesian civilization were found in the similarity of war implements unearthed in Guam to those used subsequently by the Polynesians in Hawaii. Skulls found in Guam also bear a marked resemblance to those of Hawaiians.

In an effort to unearth the history of the great mammalian families which were cradled in Asia and eventually spread to the ends of the earth, and of whose beginnings little is known but that told by the few discovered fossils of India, China and Burma, the Chinese Geological Survey is engaged in a study of the fossil history of China and Mongolia, with the aid of Prof. C. P. Berkey of Columbia University and Walter Granger, of the American Museum of Natural History. At the same time the Geological Survey of India co-operated with Barnum Brown in the Siwalik Hills, in Bugti, and in Burma.

The Jewish Palestine Exploration Society undertook the work of excavating the site of the Acropolis of Tiberias and that of the Obelisk of Absalom on the Mount of Olives. It also was authorized to make soundings near the source of the Siloa, in the vicinity of the ruins of the Wall of Nehemiah.

Prof. W. F. Hover, of the University of South Dakota, excavated a number of mounds which point to the conclusion that the prehistoric mound-builders of the Mississippi Valley included that State within their domain.

Excavations at Civita Lavinia, the site of ancient Lanuvium, Italy, brought to light a fine Roman theatre.

One of the galleons of the Spanish Armada was discovered in the mud of Tobermory Bay, Scotland.

In excavations in Bologna, Italy, parts of an old Roman arena were discovered.

The base of what is believed to have been a statue of Pisistratus the Tyrant was found in Greece with the name of Endolos, the sculptor, still legible.

Dr. J. A. Mason, University of Chicago, located the ruins of what is thought to have been a great city on the Magdalena River, in Colombia.

On a brick dug up at Nippur is recorded the first loan definitely secured by collateral of which the world has knowledge. It was for thirty bushels of dates and pledged the borrower's field and fief estate.

A cave in the open veldt on the Zeerust Railway near Koster, South Africa, was discovered containing vast numbers of mummified birds and animals.

Harold J. Cook discovered a small molar tooth belonging to an anthropoid primate in the Pliocene beds of Snake Creek, Nebraska. It is evidently that of a primate hitherto unknown to paleontologists.

Excavations were continued by the Metropolitan Museum of Art's expedition to Egypt on the pyramid Amenemhat I., copying pictures in the ruins at Thebes was continued, and the tomb of Queen Aashait was further studied. She was small, stout and wore bobbed hair.

In Bone Cave, at the Broken Hill Mine, Rhodesia, a skull of pre-human type was found which seems to represent the transitional stage between the erect ape-man Pithecanthropus, discovered in Java, and the Neanderthal man. Other bones were also discovered, making one of the finest paleontological finds yet recorded.

Parts of a new Sauropod Dinosaur skeleton were found in the Ojo Alamo formations of New Mexico.

Excavations were carried on by the Italian Government at Rome, Ostia, and Pompeii. The latter particularly have yielded much valuable material.

The remains of a giant prehistoric armadillo of the tertiary period were unearthed forty-five feet under ground in the course of city works excavations in Rosario, Brazil.

Dr. William H. Holmes advanced the idea that Mayan culture is the outgrowth of Buddhist missionaries who, he thinks, reached American shores a thousand years before Columbus, and many years before Ericsson.

A Harvard expedition excavated the tombs of a series of Ethiopian queens. Some had their attendants buried with them. In one case 388 retainers appear to have been buried thus.

A fossil fish of Devonian times, perhaps four hundred million years old, was studied at the Field Museum. It came from the bottom of the primeval ocean where Leroy, New York, now stands. The brain, nerve canals, arterial canals and ear structure were well preserved.

*ASTRONOMY.*

Prof. A. A. Michelson, of Chicago University, in addition to his work on measuring stars, spent a part of the year testing some phases of the Einstein theory. In order to determine the matter of the deflection of the rays of light by the sun, Prof. Michelson is proposing to build a steel vacuum tube a mile long and a foot in diameter, and to despatch two rays of light in opposite directions, the one in the direction of the earth's rotation and the other opposite thereto. If they arrive at their respective goals in identically the same length of time the Einstein theory will have been shown to lack foundation in one of its vital aspects. Prof. Michelson also worked on the problem of the closer determination of the velocity of light. He hopes to measure this eventually with an accuracy down to one part in a million, in other words down to a fraction of a mile per second. He is now working on the immediate task of reducing the measurement of its velocity down to an error of not more than two miles per second. This will be of aid in triangulation work, the determination of distances between points, etc.

Approximately 2,000 hitherto unknown nebulae were discovered by Donald H. Menzel at the Harvard University at Arequipa, Peru. Of the 800 brightest, approximately a third appear to be spirals.

The 300,000 photographic plates made by the Harvard Astronomical Observatories over a period of a third of a century are now being used to determine the distance of the stars they record. This is done by studies of their spectra. With the nearer

stars, where parallax measurements are possible, the two methods check up admirably.

The Australian expedition for studying the total eclipse of the sun on Sept. 20 had fine weather and got splendid sets of photographs. The expeditions that chose Christmas Island as a base for observations failed, for, although they had travelled half way round the earth for the six minutes of totality, the clouds obscured the phenomena. The necessary work has not yet been done to determine whether the Einstein theory was supported or shown untenable by the eclipse.

Prof. W. W. Campbell, of Lick Observatory, succeeded in measuring the amount of curvature in a ray of light passing through a gravitational field through the study of a series of photographs of stars near the limb of the sun. His work is said to bear out the eclipse observations of 1919 and to confirm the Einstein theory. The bending of light waves in gravitational fields, the distortion of the oval orbits of the sun's planets and the shifting of the spectral lines toward the red end of the spectrum in the case of light coming from stars of appreciable mass were the things Einstein predicted would be found to take place if his theory were sound. Campbell has shown that the first takes place; others have proved that the second holds good in the case of Mercury, and work now being done tends to show that the spectral lines do shift toward the red in light coming from stars known to possess mass. Einstein is said to be drifting back toward the corpuscular as opposed to the wave theory of light.

Dr. Harlow Shapley, the new director of the Harvard Observatory, suggests that the changes of climate in the earth resulting now in glacial ages well down in the temperate zones and tropical ages in the polar regions were due to the passage of the solar system through dense dust clouds known as "coal sacks," such as exist in the constellation of Orion. This resulted in part of the heat of the sun being cut off. At other times it has passed through sections of space free from dust which let the sunlight through in all its intensity.

Dr. Hartmann, of La Plata Observatory, Argentina, announced the discovery of a new planet between the orbits of Mars and Jupiter. It is about fifteen and one-half miles in diameter.

After many years of drilling it was announced that the core of the Canon Diablo Meteor probably had been found. It has been estimated that the meteor may have been 1,500 feet in diameter. It is supposed to have displaced 1,000,000 tons of sandstone, thrown out 200,000 tons and uplifted 300,000,000 tons. The fragments found show 92% iron and nearly 8% nickel, with platinum and iridium present to the extent of ¾ ounce per ton.

Dr. C. G. Abbott, of the Astrophysical Observatory of the Smithsonian Institution, announced that he had developed a solar stove, consisting of a parabolic cylindrical mirror with a polished aluminum surface, which focuses the sun's rays on a tube of mineral oil, which in turn communicates the heat to two ovens in an iron reservoir containing two sealed ovens of the fireless cooker type. Dr. Abbott expressed the belief that in the fluctuations of the temperature of the sun, our weather is cooler when the sun is hotter, and hotter when the sun is cooler, this being due to a bombardment of electrons when the sun is hottest, which produces a cloud screen for the earth.

Prof. J. S. Plaskett announced the measurement of a spectroscopic binary star in which he found one of these celestial twins to be 75 times as heavy and 15,000 times as bright, and the other 63 times as heavy and 12,000 times as bright as our sun. They burn with a heat of about 30,000° Fahrenheit.

Ohio Wesleyan University is planning to install a 61-inch reflecting telescope to be used in teaching more than for research.

Lowell Observatory reported a huge white spot on Mars, covering 300,000 square miles of Martian territory.

### *BIOLOGY.*

The American Museum of Natural History had expeditions in Ecuador, South Australia, Peru, Eastern Brazil, British Guiana, the Dominican Republic, and elsewhere, studying animal life in its various phases and collecting specimens.

The Danish Deep Sea Expedition investigated numerous biological problems incident to marine life in the open sea in tropical American waters. It found that the common eel spends its "sea periods" in West Indian waters. One species returns to American streams and the other crosses the Atlantic and visits the streams of the European west coast.

The Field Museum of Natural History sent zoological and botanical expeditions to the mountains of Peru and an expedition to study the aboriginal tribes of the Island of Hainan, China.

Through the support of the Mexican Government and the National Geographic Society, the California Academy of Science, the San Diego Museum of Natural History, the Scripps Institution for Biological Research, and the Pacific Division of the American Association for the Advancement of Science united their forces and sent an expedition to the west coast of Mexico to study the problem of the southern fur seal, the elephant seal, and the sea otter, until lately thought to be extinct, but recently found to exist in small numbers. Steps are being taken looking to a treaty between Mexico and the United States protecting these small, struggling herds.

Prof. W. J. V. Osterhout, of the department of botany, Harvard University, has found that plants resist electrical currents when normal and do not when dead. Their resistance to electrical currents goes down in the same ratio as a wound approaches to a mortal nature. Ultimately Dr. Osterhout believes it may be possible to predict certain aspects of the behavior of living matter, immensely complicated as it is, just as now we predict the course of the tides of the oceans.

Rollo H. Beck, of the American Museum of Natural History, headed the Whitney South Sea Expedition for the collection of botanical and zoological material in a five-year cruise among the South Sea Islands.

Dr. E. C. Rosenow, of Rochester, Minn., announced that he had perfected a serum which, injected into human beings in the early stages of sleeping sickness, has produced a cure.

Dr. Pozerski, of the Pasteur Institute, has built a curious apparatus with which he can produce the same rhythmic oscillations as are encountered on ships at sea. With it he has found that guinea pigs and hens are immune and that 30 per cent. of the dogs developed attacks of seasickness. Dr. Pozerski is using the instrument in his researches for a cure of this malady.

The study of rickets at Johns Hopkins University resulted in the discovery of a fourth type of vitamin (vitamin D). Investigations in the treatment of this same disease at Columbia University indicated that sunlight may produce vitamins directly in the human blood. Whether it produces new ones or merely increases the activities of those already in existence is not definitely known, but X-ray photographs and blood analyses corroborate the assertion that sunlight produces the same effect on the impaired bones as cod liver oil, the vitamin content of which is a specific for rickets. The Department of Agriculture discovered vitamin in meats.

Dr. Serge Voronoff announced that his laboratory experiments indicated that it is possible to transplant all the vital organs of a chimpanzee to human beings. He plans to present a full report to the world on all of the transplantations as made to date, to tell of their consequences.

Plans are being developed by Scandinavian scientific societies for the establishment of a tropical station for biological research in the Dutch East Indies. The probable site of the station will be in the Kei Islands, where what is really deep water fauna is found at comparatively small depths of from 200 to 300 metres.

The International Health Board of the Rockefeller Foundation agreed to provide the League of Nations with a fund for five years maintenance of an international epidemiologic intelligence service. It also made a three-year appropriation to put into effect a scheme for the international exchange of public health personnel.

The United States Department of Agriculture announced the completion of a series of experiments, begun in 1917, demonstrating that citrus fruits can be stored like apples, ripening off of the tree. After a curing process of three weeks, during which time the temperature of the fruit is maintained at about 70°, it is put into cold storage. The sugar content does not increase appreciably during storage but the acid content does decrease markedly.

It was announced that Dr. Philip Rantjen had succeeded in isolating the germ of pernicious anaemia and in developing an antitoxin and serum therefor.

### *CHEMISTRY.*

A new light alloy named "silumin" has made its appearance in Europe. It contains 14 per cent. silicon and 86 per cent. aluminum. It is about 10 per cent. lighter than usual alloys of aluminum, zinc and copper, and 25 per cent. stronger than those alloys, and has double the elongation properties they possess.

It was announced that Germany had discovered a substitute for coal, made by combining several chemicals with native minerals, which has heat producing qualities equal to those of anthracite.

The claim is made that the substitute costs only one-half as much as coal.

An instrument was perfected capable of measuring currents of electricity flowing from ore bodies where they are generated by the chemical action of water, air and minerals on the ore—a sort of electrical divining rod.

Dr. Charles P. Steinmetz succeeded in producing a bolt of artificial lightning in which he got a discharge of 10,000 amperes at over 100,000 volts, that is, a horsepower of over 1,000,000. A piece of small tree exposed to the discharge was mechanically torn to pieces. A piece of wire struck by the flash vanished into dust.

It was announced that the transmutation of metals has finally been accomplished through treatment of tungsten in heat of from 50,000 to 60,000°. Dr. Gerald L. Wendt and C. E. Irion, working at the University of Chicago, were able to change that element into helium.

Princeton University announced that Prof. E. Newton Harvey had succeeded in producing a continuous cold light. The substance, which glows without producing heat, comes from a small crustacean about the size of a flea. It is non-luminous if kept away from oxygen. With a flask of the substance one may read a newspaper three or four feet away.

Georges Urbain, professor in the Sorbonne, announced that he had succeeded in isolating a new element which he called "celtium." He was assisted in his researches by Frederick Webb, a graduate of the Harvard School of Applied Chemistry.

The United States Bureau of Mines announced that it had worked out a new method of refining copper ores. The finely ground ore is leached by the use of hot sulphur dioxide gas in the new process.

At a meeting of the American Chemical Society it was announced that a new food is produced from seaweed kelp which contains iodine, both in organic and inorganic combination, this food being valuable in the treatment of goitre.

Dr. H. B. Russell of London succeeded in restoring the heart beat of a patient after it had ceased for more than an hour. He accomplished this by the injection of a stimulant, the massaging of the heart with the hands inside the pericardium and the final injection of adrenalin. At the end of an hour the man began to breathe, and lived again.

Announcement was made of the formation of a syndicate for the development and perfection of a process of coloring motion pictures in their natural tints, invented by Daniel Comstock, former member of the faculty of the Massachusetts Institute of Technology. In this process the negative is developed just as in an ordinary film, and then is passed through additional chemical baths and processes for fixing the colors in tints natural to the objects shown on the film. It is said that the cost of treating the film is negligible.

## *ENGINEERING.*

Important results were obtained in the direction of transmitting motion pictures by radio. Many applications for patents have been filed in the Patent Office.

An instrument designed to guide aircraft when the ordinary magnetic compass is unreliable won the Magellanic premium awarded annually by the American Philosophical Society. The award was made jointly to Paul R. Heyl and Lyman J. Briggs of the United States Bureau of Standards. It is known as the "earth inductor" compass.

An instrument known as the "superphone" has been perfected by the Signal Corps of the Army. It is based on the "wired wireless" or "line radio" invented ten years ago by Major-General George O. Squier. The invention consists of a small portable set of instruments, which may be installed in any office or residence in a few minutes and connected directly with existing telephone lines. High frequency alternating currents are employed.

The General Electric Company demonstrated before a group of engineers the possibility of communication between moving trains. The representatives of four big eastern railroads and a party of radio experts and engineers witnessed the test of conversations being carried on between a moving trolley on the Schenectady Railroad and a substation three miles away, the trolley wire being the carrier of the message. The message is carried by another current of different frequency, superimposed on the one used for driving the vehicle. During its journey over the trolley wire this carrier current, properly modulated by speech, is drawn off by special apparatus, and used to operate a telephone instrument. At any point along the line, with the proper apparatus the message may be picked off the wire and carried a short distance through the air to a conveniently located telephone.

It was reported that a new daylight motion picture projection machine has been developed. It reverses the present plan of picture projection, the light being reflected behind the screen instead of from the rear of the theatre.

The United States Government conducted experiments with a searchlight possessing 1,100,000 candle power. The light has been seen at a distance of 100 miles from New York. Sometimes, at great heights, its rays are reflected by half-formed clouds of irregular shape in which the moisture is still so attenuated that the stars shine through, sometimes the under side of a cloud stops and reflects the whole beam.

Herr Hentzen, student flyer of the Hanover (Germany) Technical School, established the world's record for sustained flight in a motorless airplane (glider). He stayed up more than three hours and was able to rise more than 1,000 feet above the starting point.

An aeronautical lighthouse, with a searchlight said to give a flash visible at a distance of 200 miles, was being set up on Mt. Africa, nine miles from Dijon, where it will be permanently used as a guiding light for the great airways to the east and south of Europe.

Spanish engineers have been considering the matter of an undersea tunnel beneath the Straits of Gibraltar. The Federal Government approved a plan to span San Francisco Bay with a combined tube, bridge, trestle and fill.

Plans were afoot to secure legislation for the construction of a Boulder Canyon Dam with which to regulate the waters of the Colorado River and to prevent the yearly floods that do such damage in the Imperial Valley of California. Under the proposals that will go before Congress, the water of the Colorado River will be used for power purposes as well as irrigation.

The Queenston-Chippewa Power Canal for the utilization of the surplus water of Niagara Falls neared completion. The water brought through this channel without a fall will have a head of 305 feet.

The United States Navy Department announced the perfection of an instrument which is able to detect the echo of a sound passing from shipboard to the bottom of the sea, where it is reflected back to the ship. This very greatly simplifies the task of sounding the depths of the ocean.

The Western Maryland Railway decided to increase the capacity of its Port Covington grain elevator to 5,800,000 bushels, making it the largest in the world.

Work progressed during the year in the construction of the trans-Zambesi Railway which will ultimately figure in the Cape-to-Cairo route.

The President ordered work to proceed on the Wilson Dam in the Muscle Shoals project. This work was undertaken through the availability of $600,000 from an unexpended fund.

The Westinghouse Electrical Manufacturing Company tested out a large gyro-stabilizer designed to eliminate seasickness by preventing the rolling of ships. The stabilizer weighs 120 tons and will be installed on the Shipping Board steamer Hawkeye State. It is said that the stabilizer can be used also to roll ships, this being effective in moving stranded vessels from shoals.

Plans were in the making for the transmission of a large volume of electric energy from Norway and Sweden to Denmark, the cables being laid under the Kattegat.

The British Government granted a concession for the hydro-electric development of the River Jordan.

A device for checking up the operation of airplanes, showing both the action of the plane and the movements the pilot made in the control of his machine, has been worked out under Government auspices. A trio of recording devices makes up the system, the record being made on a photographic film.

Construction work was begun in Detroit on what is said to be the longest and largest single-span suspension bridge in the world. It is being built under the joint authority of the Dominion Parliament and the United States Congress. The bridge's span is to be 1,803 feet, 203 feet longer than the Williamsburg Bridge. The lower deck will contain four electrified railway tracks, the upper two roadways carrying six lanes of traffic, two sidewalks and two trolley tracks.

Japan is undertaking to build a submarine tunnel four miles long under the Moji-Shimonoseki Channel. It is estimated that the work will cost 18,000,000 yen and will not be completed before 1929.

Work was started on the Delaware River bridge connecting Philadelphia and Camden. The bridge is expected to cost $28,000,000.

The United States Navy Department succeeded in perfecting an airplane catapult with which it can launch a service-type airplane, carrying a pilot and passenger, from the deck of a battleship.

Ground for the Jersey City land shaft of the Hudson River vehicular tunnel was broken May 31.

A new link of approximately 45 miles in the International Railway of Central America was opened on March 17. This part of the line extends from Cojutepeque to San Salvador, giving Salvador direct railway connection with La Union.

San Francisco started work on the Hetch Hetchy water supply project, which next to those of New York and Boston, will be the largest in America. It will carry 400,000,000 gallons of mountain water to the San Francisco metropolitan area every day. This water will pass through huge wheels installed in electric power plants, and yield 200,000 horsepower of electricity before arriving at the Golden Gate.

A new locomotive capable of delivering more power for its weight than any other engine in the world and producing more energy from every ton of coal was tried out on the New York Central lines. It has a "booster," which turns the trailing wheels into driving wheels, thus adding 26 per cent. to the drawbar pull in starting on all grades. The locomotive weighs 167 tons.

### *GEOGRAPHY.*

**North America**—Most of the expeditions on the North American Continent during the past year had archaeological researches as their object. The work done by Neil M. Judd in the National Geographic Society's investigations of Chaco Canyon, and that by Dr. J. Walter Fewkes, representing the Smithsonian Institution, in the Mesa Verde National Park, yielded much material. The expedition of the National Geographic Society is described under Archaeology. Dr. Fewkes undertook his work on a large mound in the neighborhood of Mummy Lake. Here he found a rectangular building about 70 feet square and one story high, accurately oriented to the cardinal points, with a circular tower midway in the western wall.

Popocatepetl, the great volcano south of Mexico City, was in eruption on Dec. 12, 1921. It entered a period of great activity in January.

Three earthquakes were experienced at Elsinore and Monroe, Utah, Sept. 29 and Oct. 1, 1921, caused by the slipping of the blocks of the earth's crust on the great Sevier fault, largest in the known world, damaging buildings and causing thousands of tons of rock to tumble from cliffs bordering nearby canyons. The Chicago Weather Bureau reported an earthquake whose centre of disturbance was 2,865 miles southwest of Chicago, Oct. 15, 1921. Severe earthquake shocks, centring in the state of Vera Cruz, were reported from Mexico from Nov. 1 to 4, 1921. Shocks were reported in Kingston, Jamaica and Guatemala City, Nov. 25, 1921.

The University of California announced that Dr. Andrew C. Lawson has discovered a method by which earthquakes may be foretold. The discovery is based on observations made at Lick Observatory on Mount Hamilton and the stations on both sides of the great San Andreas rift, along which occurred the earthquake of April, 1906.

Rockwood, Tenn., reported an earthquake of considerable intensity on Dec. 15, 1921. Georgetown and Fordham Universities reported shocks at a distance of 2,500 miles south of Washington on Dec. 18, 1921. Panama experienced an earthquake lasting about a minute, but doing no damage, on Jan. 2, 1922. Five seismic disturbances occurred on Jan. 8, 9, 10, according to the Balboa Meteorological Station in Panama.

Ometepe Volcano, Nicaragua, was in active eruption Jan. 10, doing considerable damage. Concepcion, near Granada, also was active.

With Los Angeles as the centre, earthquake shocks in Southern California broke window panes and cracked plaster Jan. 17, 1922. Shocks of considerable intensity and quick succession were felt during the month of January, 1922, on the Island of Guadeloupe and the surrounding islands.

The University of Washington reported an earthquake shock Jan. 26. Shocks were felt on Jan. 31 throughout the coast regions of Northern California and Oregon. It was said that the earth shifted its axis slightly on Jan. 31 and that millions of tons of solid rock somewhere off the western coast of United States slipped a hundred feet or so to make the necessary adjustment. The violence of this slip was attested by the quavering seismographs which in some instances were thrown from the recording rolls, while a "strong machine" at Berkeley, California, was set in motion for the first time in many years. Two craft arriving in San Francisco Feb. 1 reported having felt earthquakes some miles off the north California coast. Their masters believed their ships had grounded, so sharp were the shocks.

The wireless operator at Kenai on Feb. 9 reported clouds of steam rising from Mount Redoubt on Cook Inlet.

Granada, on the northwest shore of Lake Nicaragua, reported that part of its cathedral and other buildings were damaged by an earthquake on Feb. 15.

The steamship Hollywood reported having encountered, 240 miles northeast of New Caledonia, from Jan. 5 to 7, immense areas of volcanic dust, at some places extending several feet below the surface and so dense as to give the water a slushy consistency. The ashes had a yellowish tint. Black smoke was observed arising in columns from the crater of Mount Jefferson, near Madras, Oregon, on March 9.

Southern California reported earthquake shocks on March 10 which at San Luis Obispo were severe enough to break an oil pipe line. Several earth shocks were recorded on the seismograph at St. Louis University on March 22. These shocks were also felt in Western Tennessee and in the vicinity of Hickman, Kentucky.

The volcano Chaparrastique in Southeastern Salvador was reported in eruption on March 11. The volcano Santa Maria was reported in active eruption on July 2, covering the Chuva and Colombo regions with ashes and doing great damage to the surrounding country.

**South America**—An expedition was sent to Peru by the Royal Society to study the adaptation of man to life at or above the altitude of 14,000 feet. The advantages of Peru for this type of investigation are that, being near the Equator, the effects of altitude are less complicated by those of cold than in higher latitudes; the Central Railway of Peru, the highest standard-gauge railway in the world, ascends the Andes to an altitude of 15,885 feet; a mining population lives and works in localities situated above 14,000 feet. It is said that the porters of the town of Cerro de Pasco, in the Andes, raise ore 600 feet from the mines and carry many loads of 160 pounds a day. There is probably no other population which carries on such heavy work in so rare an atmosphere.

Dr. Henry H. Rusby, Dean of the College of Pharmacy at Columbia University, was compelled by sickness to relinquish his leadership of the Mulford biological expedition in the Amazon Basin. To the date of his departure collections included 25,000 insects, 12,000 botanical specimens, and large numbers of fishes and reptiles.

The following earthquakes were reported from South American points during the year ending Oct. 1, 1922: Four sharp shocks felt in Lima, Peru, Nov. 2, 1921, were thought to centre near Ica; on Nov. 14, a shock whose centre was estimated as only 60 miles distant; the seismographs of the Lima Geographical Society registered a violent earthquake at a point estimated to be in Northern Peru on Dec. 18. A strong earth shock occurred March 1 in the western part of the Province of Mendoza, Argentina.

**Europe**—After playing a quiescent role since 1906, during which time a main cone grew to a height of about 230 feet, Vesuvius became active again, causing the cone to collapse. Since that time a new cone has formed, but lava flows thirty feet wide are reported from fissures in its side. Mt. Etna was in eruption in March and for some time thereafter, with streams of lava flowing from all sides of its crater.

Earth shocks of such violence that the people abandoned their houses occurred in San Lorenzo, Nuoro, Italy, Dec. 1, 1921. Four violent earthquake shocks occurred in the vicinity of Terni, about 50 miles from Rome, May 27. A long series of earth shocks occurred in northern Serbia, beginning on March 23. A number of hot springs came up through earth fissures caused thereby.

Earthquake shocks experienced in the city of Massa e Carrara, on the Tuscan coast of Italy, were of such intensity as to cause the people to spend the night of October 25, 1921 in the open fields.

A landslide destroyed the cathedral, the post office and many dwellings in the town of San Fratello, Sicily, Jan. 9, 1922. The landslide was believed due to heavy rainfalls. The city hall and two churches were wrecked and 500 people made homeless by landslides in Corato in May. The city is situated over an underground lake and cave-ins are frequent. The Government plans to drain this.

**Asia**—The expedition led by Gen. C. G. Bruce in a second attempt to climb Mt. Everest failed to reach the summit of the world's highest mountain. **Geoffrey Bruce and George Finch succeeded in reaching an altitude of 27,300 feet**, leaving only 1,800 feet to be scaled. The previous highest point reached by a mountain climber was 24,583 feet, made by the Duke d'Abruzzi in 1910.

An expedition led by Professor Gregory undertook to determine exactly where the Himalayas end. To the north of Assam a range extends at right angles

to the Himalayan range, curving to the south and west. To the east of this range another continues in the general direction of the Himalayas, and extends eastward into China. To determine which of these is the main range and therefore the eastern extension of the Himalayas is the object of the expedition.

Tokio experienced its worst earthquake in twenty years on Dec. 9, 1921. Many houses were damaged, a number of people were injured and the water mains of the city broken.

Frederick McCormick reported having witnessed a great eruption of the volcano Karimskaya, in Kamchatka, which has 65 volcanoes. He viewed it from Semlachik. "Above a mountain ridge which lay between we could see, without the aid of glasses, the expulsion of showers of rocks, many of which must have been larger than ships, as they flew through the sky in giant parabolas." It was reported that the temperature of the water in Kronotskii Bay was raised 5½ degrees by the eruption. Mt. Asama-Yama, 90 miles northwest of Tokio, erupted large quantities of smoke and ashes, with a loud report, on April 21. An earthquake followed, which did some damage in Tokio, killing several natives, slightly damaging the American Embassy and breaking some of the exhibits at the Peace Exposition. In Yokohama the Chinese quarter was largely destroyed and the water works disrupted. Eight earthquake shocks were registered in Formosa during the early half of September. The culminating one destroyed several buildings.

**Africa**—The joint Anglo-French commission for the delimitation of the Darfur-Wadai boundary was engaged in settling the boundary issue between the kingdom of Darfur which belongs to the British Empire and that of Wadai which belongs to France.

An account of the expedition organized by Prince William of Sweden for zoological research in the region of Kirunga volcanoes, north of Lake Kivu, was published. The expedition passed through the Kenya colony and Uganda. Near Lake Kivu it was found that the eruption of a new volcano in December, 1912, had destroyed most of the vegetation but that new growth was coming back in many spots. About 1,000 mammals, 1,700 birds, and several hundreds of reptiles were carried back to Stockholm.

**Polar**—Donald B. MacMillan and his party returned from the Frozen North, Sept. 7, bringing back much data and many specimens. He found Hecla Strait frozen solid, evidence that the ice never leaves Fox Channel, and that existing maps of Baffin Island are incorrect. Also he found traces of the Norsemen, who apparently had visited the Baffin Bay country, probably from Greenland, in the eleventh century.

The Shackleton-Rowett expedition returned to South Africa without finding any new lands in the Weddell Sea regions of the Antarctic, which it had undertaken to explore. Sir Ernest Shackleton, the commander, died during the cruise and was buried on the sub-Antarctic island of South Georgia.

Knud Rasmussen reported that his expedition had successfully wintered on Danish Island in Lyon Inlet, Melville Peninsula, and was planning a sledge expedition for the autumn of 1922, beyond the Barren Lands and along the Northwest Passage to Bering Sea and back.

Roald Amundsen postponed his projected airplane flight across the North Pole, owing to the bad weather and heavy ice prevailing in the region he would have to traverse in his ship, the Maud, in order to reach a point for starting his airplane trip.

**Oceanica**—The following more or less severe earthquake shocks were reported from the islands of the Pacific: severe shocks in Guam on Dec. 16, and 17, 1921; five persons were killed and many injured by a severe quake that shook the city of Cebu and vicinity on Feb. 28, 1922, shaking down concrete walls and corrugated roofs of a number of buildings. Melbourne, Australia, reported a violent quake on April 10. A series of earthquakes, lasting forty days in the Taupo thermal district, New Zealand, began on May 10.

*GEOLOGY.*

A geological expedition to study the gem producing areas of Brazil, the gold and iron producing areas of Peru and Bolivia, and the nitrate regions of Chili was continued in the field by the Field Museum of Chicago.

A proclamation by President Harding set aside a 593-acre tract in the Nevada National Forest as the Lehman National Caves Monument. Located at the base of Mt. Wheeler, this cave, at an altitude of 7,200 feet, has remarkable stalagmitic and stalactitic formations.

The Aussee Sandling, a mountain 5,000 feet high not far from Vienna, was in the process of crumbling, over 3¾ miles of territory being involved. Large masses of rock and forest were reported moving down into the valleys. The explanation offered was that the heavy rains of last year caused the disintegration of the chalky limestone core and the consequent movement of the superimposed strata.

A Norwegian expedition to Nova Zembla found traces of land vegetation and fresh water fish dating from Devonian times. Twelve ocean level marks subsequent to the glacial epoch were found.

Fossil plants found in abundance in the Fort Union section of North Dakota show that what is now a treeless plain was alternately a hardwood and conifer forest and a sub-tropical jungle. Fig trees and fan palms grew profusely at one time and hardwoods and conifers at another.

The Germans undertook to extract gold from the waters of the River Eder.

Rock salt deposits were discovered near Whycocomagh, Cape Breton.

Radioactive deposits were found in the Congo region of Africa, including two new minerals, which have been named "curite" and "kasolite." The crystals of these are soluble in nitric acid, thereby permitting the extraction of the radium salts without the usual calcination processes.

Drillings were carried on in Kilauea volcano, Hawaii, to determine the heat and steam pressure inside, to ascertain what chemical and other changes take place in lava flows of known date, and to disclose the possibilities of utilizing the volcano's energy as a source of power.

## PHOTOGRAPHIC FILM REPRODUCES SOUND.

The Pallo Photo Phone, now being developed by C. A. Hoxie, radio engineer, was shown to the public for the first time on Oct. 18, 1922, by the General Electric Company at its works in Schenectady, N. Y., the occasion being the visit of Thomas A. Edison to its 523 acres of factories on the Mohawk River.

The Pallo Photo Phone is a contrivance for recording sound upon a photographic film so that the sound may be reproduced in ordinary telephones, loud speakers, and in other ways. Mr. Edison saw it work. He saw two ordinary drums full of film, as in a motion picture projecting machine, with a horn nearby. A man speaks into the horn, his voice is recorded, not by a stylus on a wax plate as in a phonograph but by a dancing beam of light reflected by a mirror onto the photographic film. The film is developed, run through the machine again and out comes the voice, perfect, with delicate overtones and without the slightest "scratch."

As a motion picture and the voice of the actor or actors can be photographed on the same strip of film simultaneously there may possibly come of it the much sought after "talking movie," in which voice and movement are perfectly synchronized.

Louis T. Robinson of the general engineering laboratory describes it thus:

"The record is made by causing the sound waves to produce vibrations on an exceedingly minute and very delicate mirror. A beam of light reflected by this mirror strikes a photographic film which is kept in continuous motion. The film when developed shows a band of white with delicate markings on the edges which correspond to the sound which has been reproduced.

"On account of the exceedingly small size of the mirror, its low inertia, etc., it is possible by this means to produce a sound record which includes the very delicate 'overtones' which give quality to speech and musical sounds. This has not been so successfully accomplished by any other method of recording sound waves.

"The reproduction of the sound from the film is accomplished by moving the film in front of an exceedingly delicate electrical device which produces an electromotive force which varies with the amount of light that falls upon it.

"By an ingenious combination of vacuum tubes there has been produced an apparatus which responds to variation in the light falling on it with a speed which is so high that it can only be compared with the speed of light itself, or with the speed of propagation of wireless waves in space.

"Therefore, when this film is moved continuously in front of such a device the device produces an electric current which corresponds very accurately to the original sound wave. This electric current may be used to actuate a telephone or loud speaker. It was actually used recently to operate the radio transmitting station WGY of the General Electric Company."

# Aviation Progress and Records in 1922.

Marvellous achievements and advance in aviation in its various branches marked 1922. New inventions, new records and new departures featured the art of flying from the standpoint of military, naval, commercial and sport aviation. In every department great progress was made both in America and abroad. The development of the motorless glider from the initial planes making flights of two or three minutes to elaborate monoplanes and biplanes capable of sustained flights ranging from two to three hours was accomplished within the year.

New speed, duration and weight-carrying records were established and military and naval air manoeuvres demonstrated the constantly growing place of importance of the airplane in offensive and defensive warfare. If progress keeps step with predictions, during the next twelve months aviation may be expected to assume a position of the greatest importance in the life of nations throughout the world. The part that airplanes will play in future warfare has been stressed by military authorities of all countries. Rear Admiral W. W. Fullam, in a recent address, stated emphatically that, in his opinion, aircraft would win the next war.

Tests in theoretical bombing of Washington were repulsed by defensive airplane fleets, and in somewhat similar trials the British airplanes scored decisively over the navy. Based on this showing, Premier Lloyd George announced in the House of Commons the Government's decision to provide an aerial force of some 500 machines at a cost of some £2,000,000 per annum. It has been stated that a majority of these planes will be all-metal, varying in size, speed and carrying capacity. All nations are considering carefully the possibilities and prospects of aviation for both warlike and peaceful purposes.

Secretary of War Weeks stated that as a result of a two months' investigation by Brig. Gen. William Mitchell, Assistant Chief of Air Service, it was shown that European powers were spending more money and developing types of planes in advance of the United States. Demonstrations in the closing months of the year, however, appeared to indicate that the balance of plane superiority was shifting to this country. A campaign of aviation education has been proposed in Japan where it is said the plane forces are but three to a hundred as compared to English and American aerial equipment.

The commercial aviation reports from England indicate that the Government is considering the development of high power planes capable of carrying a hundred passengers. Cruising speed in excess of a mile a minute is stated to be entirely feasible and proposed routes would include frequent flights to America, Australia and India. As the result of the marvellous speed developed by American planes in the Pulitzer Trophy race at Detroit in October, Brig. Gen. William Mitchell, upon his return to Washington, said, that in view of his world record speed flight over a kilometre course at the rate of 224.48 miles per hour, flying at the rate of 300 miles per hour within five years was not improbable. A twenty-eight-hour mail service, between New York and San Francisco and three hours between New York and Chicago, were also predictions likely to be realized in the near future, according to Second Assistant Postmaster General Paul Henderson in a talk before the Aeronautical Chamber of Commerce in September.

Among the latest developments reported during the closing months of 1922 were an automatically controlled plane, demonstrated in England, which, by the aid of a new devised stabilizer, flew 200 miles without being actuated by a human agency. A somewhat similar plane tested at Washington which flew ninety miles in Army Air Service experiments was declared to be more dependable than the human aviator, being especially steady in "bumpy" air currents.

A new dirigible observation balloon was also successfully tested at Dayton, O., late in October.

French aeronauts report the building of a tailless plane which has developed high speed. Dr. George H. Madelung, designer of the Hanover motorless glider that established a three-hour flight record, predicted that under certain wind and weather conditions, flights of several hundred miles and altitude ascensions to extreme heights were not impossible. Brig. Gen. Mitchell announced that the United States had produced four types of plane capable of a sustained speed in excess of 200 miles per hour.

The French Army tested out on Oct. 26 an armored aerial dreadnought that mounted a 75-millimetre field gun; it was manufactured by the Scheider Steel Works.

Senator Wadsworth introduced in the present Congress a bill which provides for the creation of a Bureau of Civil Aeronautics in the Department of Commerce to encourage and regulate the operation of civil aircraft. It would be the duty of the commissioner of this bureau to safeguard life and property by the proper inspection and certification of commercial aircraft and the licensing of pilots. The bill provides for the establishment of rules and regulations governing the air; encouraging the laying out of new air routes, fields, and stations; investigation of the causes of accidents, and the survey and promotion of the industry so that it may be best fitted to serve the Nation. It prohibits the lunacies of dangerous trick flying.

All the leading governmental and civil agencies connected with aviation have indorsed this bill and urged that it be passed. The Senate passed it on Feb. 14. Then it went to the House, where it has been resting in the Committee on Interstate and Foreign Commerce, of which Representative Samuel E. Winslow of Massachusetts is Chairman.

Great Britain and France enacted codes immediately after the armistice.

## UNITED STATES NATIONAL AIRPLANE RACES.

Held at Selfridge Field, Mount Clemens, Mich., Oct. 12-13-14, 1922, The United States National Airplane Races were the competition feature of the season, seven events being held with special trophies, prizes and purses. Entrants were drawn from all parts of the nation, and the United States Army and Navy were strongly represented, the service entries winning a majority of the contests.

The Pulitzer Trophy Race was the most important event, two world records, one for 100 kilometres and the other for 200 kilometres, being created during the race. It was the third competition for the Pulitzer Trophy, the deed of gift which reads: "The Pulitzer Trophy, donated by Messrs. Ralph Pulitzer, Joseph Pulitzer, Jr., and Herbert Pulitzer to the Aero Club of America, shall be perpetual and shall be competed for annually by airplanes under rules prepared each year by the Contest Committee of the Aero Club of America, and shall be awarded each year to the Aero Club represented by the pilot of the winning airplane, and this club shall be entitled to the possession of the trophy until one month prior to the next succeeding contest, at which time the trophy shall be returned to the Aero Club of America. The Contest Committee of the Aero Club of America, with the consent of the Board of Governors, has the privilege of conducting each annual contest for the Pulitzer Trophy, or of assigning this privilege, under sanction, to any other club or organization.

"Gold, silver and bronze plaques will be given by the donors to the pilot winning first, second and third places in every contest for the Pulitzer Trophy."

The winners have been:

1920—Lieut. C. C. Moseley, Verville-Packard airplane.

1921—Bert Acosta, Curtiss navy racer.

1922—Lieut. R. L. Maughan, Curtiss H. S. pursuit plane.

The results of United States National Airplane Races were as follows, the names of those who finished only being given:

*LIBERTY ENGINE BUILDERS' TROPHY.*

*Total Distance, 257.74 Miles (Ten Laps of 25.774 Miles). Cash Prizes: First, $1,200; Second, $600; Third, $200.*

| Position. | Airplane. (H. S. means High Speed.) | Pilot. (A, Army; N, Navy.) | Entrant. | Total Elapsed Time H. | M. | S. | Miles PerHr. | Motor. | H. P. |
|---|---|---|---|---|---|---|---|---|---|
| 1st... | LaPere Observation..... | T. J. Koenig, 1st Lt. A... | A. S.. | 2 | 00 | 01.54 | 128.8 | Liberty.. | 400 |
| 2d.... | DeHaviland 4-B Observ... | Follet Bradley, Lt. A.... | A. S.. | 2 | 02 | 14.21 | 126.5 | Liberty.. | 400 |
| 3d.... | DeHaviland 4-B Observ... | W. A. Carter, Lt. A..... | A. S.. | 2 | 10 | 50.62 | 118.1 | Liberty . | 400 |
| 4th... | DeHaviland 4-B Observ... | J. D. Givens, Lt. A..... | A. S.. | 2 | 15 | 23.75 | 114.1 | Liberty.. | 400 |
| 5th... | DeHaviland 4-B Observ... | B. R. Morton, Lt. A..... | A. S.. | 2 | 17 | 08.98 | 112.7 | Liberty.. | 400 |

### *PULITZER TROPHY.*

*Total Distance, 250 Kilometres, 155.342 Miles (Five Laps of 50 Kilometres, 31.068 Miles). Cash Prizes: First, $1,200; Second, $600; Third, $200—Detroit, Oct. 14, 1922.*

| Position. | Airplane. (H. S. means High Speed.) | Pilot. (A, Army; N, Navy.) | Entrant. | Total Elapsed Time H. | M. | S. | Miles Per Hr. | Motor. | H. P. |
|---|---|---|---|---|---|---|---|---|---|
| 1st.... | Curtiss H. S. Pursuit..... | R. L. Maughan, Lt. A... | A. S.. | | 45 | 16.62 | 205.8 | Curtiss.. | 375 |
| 2d.... | Curtiss H. S. Pursuit..... | L. J. Maitland, Lt. A.... | A. S.. | | 46 | 52.57 | 198.8 | Curtiss.. | 375 |
| 3d.... | Curtiss CR-2..... | H. J. Brow, Lt. N..... | Navy. | | 48 | 07.19 | 193.8 | Curtiss.. | 400 |
| 4th... | Curtiss CR-1..... | A. J. Williams, Ensign N. | Navy. | | 49 | 34.71 | 186.7 | Curtiss.. | 400 |
| 5th... | Verville Sperry Racer..... | E. H. Barksdale, Lt. A... | A. S.. | | 51 | 28.70 | 181.2 | Wright.. | 350 |
| 6th... | VCP-1 Verville Packard... | C. C. Moseley, Lt. A..... | A. S.. | | 52 | 07.54 | 178.9 | Packard. | 600 |
| 7th... | Verville Sperry Racer..... | F. B. Johnson, Lt. A..... | A. S.. | | 52 | 21.01 | 178.0 | Wright.. | 350 |
| 8th... | Loening H. S. Pursuit..... | F. C. Whitehead, Lt. A... | A. S.. | | 54 | 48.12 | 170.0 | Packard. | 600 |
| 9th... | Loening H. S. Pursuit..... | L. D. Schulze, Lt. A..... | A. S.. | | 57 | 59.73 | 162.2 | Packard. | 600 |
| 10th.. | Morse H. S. Pursuit..... | C. L. Bissell, Lt. A..... | A. S.. | | 59 | 58.17 | 155.5 | Packard. | 600 |
| 11th.. | Morse H. S. Pursuit..... | F. O. D. Hunter, Capt. A. | A. S.. | 1 | 02 | 26.88 | 154.2 | Packard. | 600 |

### *DETROIT NEWS AERIAL MAIL TROPHY.*

*Total Distance, 257.74 Miles (Ten Laps of 25.774 Miles). Cash Prizes: First, $1,200; Second, $600; Third, $200.*

| Position. | Airplane. | Pilot. (A, Army; N, Navy.) | Entrant. | Total Elapsed Time H. | M. | S. | Miles Per Hr. | Motor. | H. P. |
|---|---|---|---|---|---|---|---|---|---|
| 1st.... | Martin Transport | E. H. Nelson, Lt. A..... | A. S.. | 2 | 27 | 20.72 | 105. | Liberty (Ford).. | 400 |
| 2d.... | Martin Bomber.. | Philip Melville, Lt. A.... | A. S.. | 2 | 29 | 40.33 | 103.2 | Liberty..... | 400 |
| 3d.... | Martin Bomber.. | C. M. Cummings, Lt. A.. | A. S.. | 2 | 32 | 29.07 | 101.5 | Liberty..... | 400 |
| 4th... | Martin Bomber.. | W. R. Lawson, Capt. A... | A. S.. | 2 | 32 | 31.16 | 101.2 | Liberty (Ford).. | 400 |
| 5th... | Martin Bomber.. | B. E. Ballard, Lt. A..... | A. S.. | 2 | 39 | 59.54 | 96.7 | Liberty..... | 400 |

### *BRIG. GEN. WM. MITCHELL TROPHY.*

*Total Distance, 200 Kilometres, 124.274 Miles (Four Laps of 50 Kilometres, 31.068 Miles). Cash Prize, $250.*

| Position. | Airplane. | Pilot. | Total Elapsed Time M. | S. | Miles Per Hr. | Motor. | H. P. |
|---|---|---|---|---|---|---|---|
| 1st..... | Morse, MB-3.. | D. F. Stace, Lt. A..... | 50 | 25.73 | 147.8 | Wright.. | 300 |
| 2d..... | Morse, MB-3.. | A. M. Guidera, Capt. A..... | 54 | 48.32 | 136.0 | Wright.. | 300 |
| 3d..... | Morse, MB-3.. | O. W. Broberg, Capt. A..... | 55 | 07.87 | 135.1 | Wright.. | 300 |
| 4th..... | Morse, MB-3.. | B. K. McBride, Lt. A..... | 55 | 23.11 | 134.4 | Wright.. | 300 |
| 5th..... | Morse, MB-3.. | H. N. Elmendorf, Capt. A..... | 59 | 48.77 | 128.2 | Wright.. | 300 |

### *ON TO DETROIT RACE.*

*Cash Prizes: First, $500; Second, $250; Third, $100.*

| Pilot. | Plane. | Start. | Elapsed Time. H. | M. | Distance. |
|---|---|---|---|---|---|
| W. H. Beech..... | Laird Swallow..... | Oct. 9, 7.30 A. M... | 57 | 18 | Wichita, Kan., 810 miles. |
| C. S. Jones..... | Curtiss Oriole..... | Oct. 9, 2.43 P. M... | 1 | 57 | Buffalo, N. Y., 200 miles. |
| Ed. Stinson..... | J-L Monoplane..... | Oct. 12, 11.15 A. M... | 2 | 32 | Chicago, Ill., 242 miles. |
| S. S. Moore..... | Canadian Curtiss... | Oct. 13, 8.45 A. M... | 3 | 10 | Toronto, Can., 188 miles. |
| Shirley Short..... | Brequet..... | Oct. 11, 9.50 A. M... | 5 | 43 | Monmouth, Ill., 401 miles. |
| B. H. Pearson.... | Curtiss Oriole..... | Oct. 8, 11.33 A. M... | 98 | 55 | Garden City, N. Y., 484 miles. |
| J. M. Johnson.... | Vought VE-7..... | Oct. 10, 1.10 P. M... | 31 | 06 | Dayton, Ohio, 206 miles. |

### *ON TO DETROIT RACE—Continued.*

| Pilot. | Plane. | Av. Speed (M. P. H.) | Passengers | Motor. | Horse Power. | Total Points. |
|---|---|---|---|---|---|---|
| W. H. Beech..... | Laird Swallow..... | 14.2 | 2 | Curtiss OX-5..... | 90 | 220 |
| C. S. Jones..... | Curtiss Oriole..... | 102.5 | 2 | Curtiss C-6..... | 160 | 207 |
| Ed. Stinson..... | J-L Monoplane..... | 96.0 | 4 | German B. M. W..... | 233 | 181 |
| S. S Moore..... | Canadian Curtiss... | 59.4 | None. | Curtiss OX-5..... | 90 | 179 |
| Shirley Short..... | Brequet..... | 70.14 | 5 | German Benz..... | 250 | 161 |
| B. H. Pearson.... | Curtiss Oriole..... | 4.88 | 2 | Curtiss C-6..... | 160 | 155 |
| J. M. Johnson.... | Vought VE-7..... | 6.64 | 2 | Wright 1..... | 154 | 155 |

### *CURTISS MARINE TROPHY RACE.*

*Total Distance, 160 Miles (Eight Laps of 20 Miles). Cash Prizes. First, $1,200; Second, $600; Third, $200 For Fastest Flight of Laps 2, 3 and 4, $300.*

| Position. | Airplane. | Pilot. | Total Elapsed Time M. | S. | Miles Per Hr. | Motor. | H. P. |
|---|---|---|---|---|---|---|---|
| 1st.... | Navy TR-1, Navy Aircraft Fact. | A. W. Gorton, Lt. N.. | 85 | 13.17 | 112.6 | Lawrence J-1 | 220 |
| 2d..... | Vought, VE7-H..... | H. A. Elliott, Lt. N... | 88 | 18.38 | 108.7 | Wright E-3.. | 220 |

Lieut. L. H. Anderson won special prize for greatest speed in the Curtiss 18-T plane, with a record of 124.6 miles per hour. He was forced to drop out of race on the last lap, due to fuel shortage.

### *AVIATION COUNTRY CLUB OF DETROIT TROPHY.*

*Total Distance, 257.74 Miles (Ten Laps of 25.774 Miles). Cash Prizes: First, $1,200; Second, $600; Third, $200.*

| Position. | Airplane. | Pilot. | Entrant. | Total Points | Elapsed Time. H. | M. | S. | Miles Per Hr. | Motor. | H. P. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1st.... | HoneymoonEx. | H. R. Harris, Lt. A... | A. S..... | 600 | 1 | 54 | 40.35 | 134.9 | Liberty.... | 440 |
| 2d.... | Curtiss, Oriole.. | C. S. Jones..... | CurtissEx.Co | 100 | 2 | 21 | 17.54 | 109.4 | Curtiss,C-6 | 160 |
| 2d.... | Army, T-2..... | R.S.Worthington,Lt.A | A. S..... | 100 | 2 | 50 | 22.55 | 90.7 | Liberty.... | 400 |

NOTE—Jones and Worthington tied for second place.

Points awarded winner of race and those finishing within 20 minutes of the winner—Harris, 600; Jones none—finished 26 minutes late; Worthington, none—finished 55 minutes late.

Points awarded for self-starter—Harris, none; Jones, 100; Worthington, 100.

## OTHER NOTABLE CONTESTS.

**The Midwestern Flying Meet** was held at Monmouth, Ill., June 15-17. The names and performances of the winners and seconds in the main events of the meet are as follows:

*Free For All Cup Race*—Class "A"—horse power no limit; three heats—15 miles each. First: E. Hamilton Lee, Mail DH, 400 h. p., fastest heat, 8m. 30s.; second: James M. Curran, SVA, 220 h. p., fastest heat, 8m. 33s.

*Free For All Cup Race*—Class "B"—horsepower, 150 limit; three heats—15 miles each. First: Harry Smith, Bellanca CF, 90 h. p., fastest heat, 9m. 15s.; second: Shirley Short, Oriole K-6, 150 h. p., fastest heat, 11m. 22s.

*Free For All Cup Race*—Class "C"—OX 90 horse power only; three heats—15 miles each. First: Walter H. Beech, Laird Swallow, 90 h. p., fastest heat, 10m. 52s.; second: E. M. Laird, Laird Swallow, 90 h. p., fastest heat, 11m. 37s.

*Altitude Cup Contest*—Same instrument used on all machines. First: Shirley Short, W. A. Yackey, Breguet, 300 h. p., 20,000 ft.; second: James M. Curran, SVA, 220 h. p., 17,800 ft.

*Acrobatic Cup Contest*—First: Walter H. Beech, Laird Swallow, 21 points; second: Dan Hunter, Canuck, 20 points.

*Parachute Jump for Spot Landing Cup*—First: Edward Kohlstedt (Smith Pack), distance from spot, 300 ft.; second: Aaron Rowe (Hardin Pack), distance from spot, 1,000 ft.

*Gliding Contest*—Dead engine from 2,000 ft., last man on the ground is the winner. Winner: Harry Smith, Bellanca CF; second: Walter H. Beech, Laird Swallow.

## *DEUTSCH DE LA MEURTHE CUP RACE.*

Held at Etampes, France, September 30.

| Nation'lity. | Type. | Pilot. | Engine Type and H. P. | Time (Min., Sec.) Over Distance. | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 50 Km. | | 100 Km. | | 200 Km. | | 300 Km. | |
| | | | | M. | S. | M. | S. | M. | S. | M. | S. |
| French | Nieuport 1920 (modified) | Lasne | Hispano 320 | 10 | 14.2 | 20 | 41.8 | 41 | 27.2 | 62 | 11.8 |
| French | Nieuport 1921 (modified) | Sadi-Lecointe | Hispano 320 | 9 | 15.4 | 18 | 26.0 | Out. | | | |
| French | Spad 38 | Casale | Lorraine 400 | | | 24 | 21.8 | Out. | | | |
| Italian | Fiat | Brack-Papa | Fiat 700 | 10 | 43. | 20 | 58.0 | Out. | | | |
| British | Gloucestershire Mars | H. James | Napier 450 | Out. | | | | | | | |

## ROUND BRITAIN RACE.

Held September 9-10, over 810 mile course from Croydon to Birmingham, to Newcastle, to Glasgow to Manchester, to Bristol, to Croydon. Results:

| Pos. | Pilot. | Hcap. Time. | | | Actual Time. | | | Pos. | Pilot. | Hcap. Time. | | | Actual Time. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | H. | M. | S. | H. | M. | S. | | | H. | M. | S. | H. | M. | S. |
| 1. | F. L. Barnard | 5 | 42 | 59 | 6 | 30 | 57 | 7. | S. Cockerell | 6 | 59 | 49 | 9 | 16 | 30 |
| 2. | F. P. Raynham | 5 | 46 | 57 | 7 | 43 | 54 | 8. | W. H. Longton | 7 | 14 | 30 | 11 | 13 | 23 |
| 3. | A. J. Cobham | 5 | 55 | 28 | 7 | 28 | 54 | 9. | C. T. Holmes | 7 | 42 | 31 | 10 | 24 | 34 |
| 4. | M. M. Piercey | 6 | 24 | 27 | 7 | 45 | 11 | 10. | A. F. Muir | 7 | 47 | 46 | 9 | 12 | 3 |
| 5. | A. S. Butler | 6 | 27 | 43 | 7 | 45 | 13 | 11. | J. E. Tennant | 7 | 58 | 15 | 10 | 31 | 22 |
| 6. | L. Hamilton | 6 | 49 | 13 | 8 | 30 | 16 | | | | | | | | |

That so many of the competitors completed the course surprised everybody.

## BRITISH AIRPLANE DERBY.

Handicap race over 200-mile course. Results:

| No. | Pilot. | Machine. | Engine. | Flying Time. | | | M. P. H. |
|---|---|---|---|---|---|---|---|
| | | | | H. | M. | S. | |
| 1 | Bert Hinkler | Avro Baby | 35 Green | 2 | 35 | 4 | 76.6 |
| 2 | L. L. Carter | Bristol Monoplane | 100 Bristol Lucifer | 1 | 50 | 0 4-5 | 107.8 |
| 3 | F. P. Raynham | Martinsyde F6 | 200 Wolseley-Viper | 1 | 48 | 12 | 109.6 |
| 4 | A. S. Butler | D. H. 37 | 275 Rolls Royce | Failed to finish. | | | |
| 5 | L. R. Tait-Cox | Mars III | 200 B. R. 2 | Failed to finish. | | | |
| 6 | H. H. Perry | S. E. 5 A | 200 Wolseley-Viper | Failed to finish. | | | |
| 7 | R. H. Stocken | Martinsyde F4 | 300 Hispano-Suiza | Failed to finish. | | | |
| 8 | A. deH. Haig | Bristol Bullet | 400 Bristol Jupiter | 1 | 21 | 57 | 145 |
| 9 | J. H. James | Mars I Bamel | 450 Napier-Lyon | 1 | 6 | 48 2-5 | 177.8 |

Won by No. 9; second, No. 8; third, No. 3.

## *NATIONAL BALLOON RACE.*

Started from Milwaukee, Wis., May 30. Entrants—Roy Donaldson, Springfield, Ill., balloon capacity, 50,000 cubic feet; Major Oscar Westover, Washington, balloon capacity, 80,000 cubic feet; Ralph Upson, Detroit, 65,000 cubic feet; Capt. John Berry, St. Louis, 78,000 cubic feet; Lieut. Commander J. P. Norfleet, Lakehurst, N. J., 75,800 feet; Lieut. W. Freed, Pensacola, Fla., 70,000 cubic feet; J. C. McKibben, St. Louis, 77,500 cubic feet; Warren Rasor, Brookville, Ohio, 50,000 cubic feet; Lieut. James T. Neely, Ross Field, Cal., 80,160 cubic feet; Capt. Harold Weeks, Langley Field, Va., 80,000 cubic feet; Bernard von Hoffman, St. Louis, 80,000 cubic feet; Ward T. Van Norman, Akron, Ohio; 77,600 cubic feet; H. E. Honeywell, St. Louis, 78,000 cubic feet.

Results, as checked by United States Coast and Geodetic Survey, Department of Commerce, Washington, D. C.—

| Entrant. | Aid. | Landed Near. | Distance Miles. | Entrant. | Aid. | Landed Near. | Distance Miles. |
|---|---|---|---|---|---|---|---|
| Westover | Bond | St. Jerome, Can. | 866.5 | McKibben | Muller | Auxvasse, Mo. | 350.5 |
| Honeywell | Wade | Neosho, Mo. | 553.4 | Neely | Jordon | Bay Village, O. | 325.3 |
| Reed | Mullenax. | Eminence, Mo. | 431.0 | Weeks | Burt | Witt, Ill. | 275.2 |
| Van Orman | Morton | Fayette, Mo. | 370.6 | Berry | Ramsdill. | Monticello, Ill. | 205.0 |
| Rasor | Williams. | Fulton, Mo. | 359.3 | Von Hoffman | Vencill | Fort Wayne, Ind | 197.4 |
| Upson | Andrus | Chardon, Ohio | 356.3 | Norfleet | Shade | Hancock, Mo. | 416.1 |

The first three place winners, or substitutes, win the right to compete in the Gordon-Bennett International Race.

## *GORDON BENNETT INTERNATIONAL BALLOON RACE.*

Started from Geneva, Switzerland, August 6. Results:

| Pilot. | Nation. | Landed. | Distance. | Time. | |
|---|---|---|---|---|---|
| | | | *Miles.* | H. | M. |
| DeMuyter | Belgium | Oknitsa, Roumania | 852.53 | 25 | 40 |
| Honeywell | United States | Tapio-Szecso, Hungary | 659.28 | 26 | 30 |
| Bienaime | France | Mor, Hungary | 573.53 | 19 | 32 |

Other entrants were: Labrousse, of Belgium, landed at Steinamanger, Hungary; Armbruster, of Switzerland, landed at Kirschschlag, Austria; Westover, of the United States, landed at St. Gotthard, Hungary.

Eighteen competitors, representing six nations, started. DeMuyter was awarded first prize and trophy on distance, and Capt. H. E. Honeywell, of St. Louis, who finished second, the duration prize.

## WORLD'S RECORDS RECOGNIZED BY INTERNATIONAL AVIATION FEDERATION, Corrected to Nov. 1, 1922.

*Class A (Free Balloons)*—

No. 1. Duration—H. Kaulen (Dec. 13-17, 1913), 87 hours.

No. 2. Distance—Berliner (Feb. 8-10, 1914), 3,052 kilometres (1,896.86 miles).

No. 3. Altitude—Suring & Berson (June 31, 1901), 10,800 metres (35,434.8 feet).

*Class B—Dirigibles (Airships)*—

No. 1. Duration—Castracane & Castruccio (June 25, 1913), 15 hours.

No. 2. Distance—Castracane & Castruccio (July 30, 1913), 810 kilometres (493.31 miles).

No. 3. Altitude—Cohen (June 18, 1912), 3,080 metres (10,105.5 feet).

No. 4. Maximum Speed—Castracane & Castruccio (July 30, 1913), 64 kilometres, 800 metres per hour (40.26 miles per hour).

*Class C—Airplanes*—

No. 1. Duration—Ed. Stinson & Lloyd Bertaud at Roosevelt Field (Dec. 30, 1921), J. L.-6 monoplane, 26h. 19m. 35s.

No. 2. Distance—L. Boussoutrot and Jean Bernard, over the course from Villesauvage to La Marmogne. (June 3-4, 1920), Goliath-Farman airplane with two 260 h. p. Salmson motors.

No. 3. Altitude—Lieut. MacReady, at Dayton, Ohio (Sept. 28, 1921), Lepere biplane, Liberty motor, 400 h. p., 10,518 metres (34,509.5 feet).

No. 4. Speed for the Following Recognized Distances: 100 kilometres (62.137 miles)—Lieut. R. L. Maughan, at Detroit, Mich., Oct. 14, 1922, Curtiss High Speed Pursuit plane with 375 h. p. Curtiss D-12 motor, 18m. 6.78s., equalling 205.31 miles per hour, or 330.4 kilometres per hour.

200 kilometres (124.274 miles)—Lieut. R. L. Maughan, at Detroit, Mich., Oct. 14, 1922, Curtiss High Speed Pursuit plane with 375 h. p. Curtiss D-12 motor, 36m. 12.17s., equalling 205.94 miles per hour, or 331.46 kilometres per hour.

500 kilometres (310.685 miles)—No record.

1,000 kilometres (621.37 miles)—Lucien Boussoutrot and Jean Bernard, over the course from Villesauvage to La Marmogne (June 3-4, 1920), Goliath-Farman airplane with two 260 h. p. Salmson motors. 10h. 19m. 46s.

1,500 kilometres (745.64 miles)—Lucien Boussoutrot and Jean Bernard, over the course from Villesauvage to La Marmogne (June 3-4, 1920), Goliath-Farman airplane with two 260 h. p. Salmson motors, 16h. 42m. 8s.

2,000 kilometres (1,242.74 miles)—No record.

No. 4. Maximum Straightaway Speed—Timed over a 1 kilometre course, during which contestant shall make two complete trips in each direction, the average speed for four trips to constitute time.—Brigadier Gen. William Mitchell, at Detroit, Mich., Oct. 18, 1922, Curtiss High Speed Pursuit plane with 375 h. p. Curtiss D-12 motor. Time of flights: 9.17; 10.95; 9.25; 10.76 seconds. Average, 224.48 miles per hour, or 361.28 kilometres per hour. (Subject to I. A. F. ratification.)

No. 5. Records Carrying Useful Load:

Duration—Useful load carried, 1,500 kilos. (3,306.9 lbs). Capt. C. T. R. Hill, at Cricklewood, England (June 4, 1920), Handley-Page (W-8) airplane with two 450 h. p. Napier Lion motors, 1h. 20m.

Distance—No record.

Altitude—Useful load carried, 250 kilos. (551.1 lbs.)—Jean Le Boucher, at Bourget (July 6, 1921), Breguet Rateau airplane, 280 h. p. Renault motor 6,782 metres (22,251.7 feet).

Altitude—Useful load carried, 1,500 kilos. (3,306.9 lbs.)—Capt. C. T. R. Hill, at Cricklewood, England (May 4, 1920), Handley-Page (W-8) airplane with two 450 h. p. Napier Lion motors, 4,267 metres (14,000 feet).

## *WORLD'S RECORDS FOR RUBBER DRIVER MODEL AIRPLANES.*

Revised to September, 1922. by Illinois Model Aero Club.

| Type of Model. | Kind of Contest. | Record. | | Held By |
|---|---|---|---|---|
| | | Feet. | Seconds. | |
| Twin Pusher, hand launched | Duration | ..... | 265 | R. Jaros. |
| Twin Pusher, hand launched | Distance | 5,337 | ..... | Thomas Hall. |
| Twin Pusher, R. O. G. | Duration | ..... | 209 | R. Jaros. |
| Twin Pusher, R. O. G. | Distance | 4,029 | ..... | W. Schwietzer. |
| Twin Pusher, Hydro | Duration | ..... | 172 | B. Pond. |
| Tractor, hand launched | Duration | ..... | 240 | D. Lathrop. |
| Tractor, hand launched | Distance | 2,465 | ..... | B. Pond. |
| Tractor, R. O. G. | Duration | ..... | 227.4 | P. Breckenridge. |
| Tractor, R. O. G. | Distance | 2,685 | ..... | P. Breckenridge. |
| Tractor, Hydro | Duration | ..... | 116 | L. Hittle. |
| Indoor, hand launched | Duration | ..... | 170 | B. Pond. |
| Scale Model | Duration | ..... | 21 | R. Jaros. |

## SPEED TESTS.

Speed records over measured courses were broken several times during 1922, although it is not certain that all times will be recognized by the I. A. F., due to lack of official timers, observers and other technicalities. The best times were made late in the season. They follow:

### One Kilometre.

(Average for four laps, two in each direction.)

| Pilot. | Date. | Speed. Km. P. H. | M. P. H. |
|---|---|---|---|
| *Sadi-Lecointe, France | Sept. 18, 1921 | 330.275 | 205.22 |
| Brack-Papa, Italian | Aug. 29, 1922 | 336.468 | 209.08 |
| Sadi-Lecointe, France | Sept. 21, 1922 | 341.717 | 212.34 |
| Gen. Mitchell, United States | Oct. 18, 1922 | 360.496 | 224.48 |
| †Lieut. Maughan, United States | Oct. 16, 1922 | ..... | 248.50 |
| ‡Lieut. Maughan, United States | Oct. 16, 1922 | ..... | 232.22 |
| §Lieut. Maughan, United States | Oct. 16, 1922 | ..... | 229.00 |

*World's record for 1921 as recognized by I. A. F.
† 1 lap; ‡ 4 laps; § 8 laps. Official timing, observing doubtful.

### 100 and 200 Kilometres.

| Place. | Date. | Pilot. | Plane. | Time Over Distance. 100 Km. M. S. | 200 Km. M. S. |
|---|---|---|---|---|---|
| Detroit | Oct. 14, 1922 | Lieut. Maughan | Army-Curtiss | 18 6.78 | 36 12.17 |
| Detroit | Oct. 14, 1922 | Lieut. Maitland | Army-Curtiss | 18 57.46 | 37 37.16 |
| Detroit | Oct. 14, 1922 | Lieut. Brow | Navy-Curtiss | 19 11.56 | 38 29.04 |
| Detroit | Oct. 14, 1922 | Lieut. Williams | Navy-Curtiss | 19 48.70 | 39 38.75 |
| Detroit | Oct. 14, 1922 | Lieut. Barksdale | Verville-Sperry | 20 40.78 | 41 18.09 |
| Etampes, France | Sept. 30, 1922 | F. Lasne | Nieuport-Delage | 20 41.80 | 41 27.50 |
| Etampes, France | Sept. 30, 1922 | Sadi-Lecointe | Nieuport-Delage | 18.26 | ..... |

## DURATION, DISTANCE, AND ALTITUDE FLIGHTS.

A number of long duration flights, both over restricted territory, cross-country, and cross-water, featured the season of 1922. Several world's records were broken and rebroken and other flights would have qualified in this category had the necessary technical recording details been arranged in advance. All claims for aviation records have to be filed with the International Aviation Federation and rigid rules observed. Every claim is carefully investigated and passed upon solely on the basis of these regulations. As a result it is frequently months after the performance that these claims receive official recognition. The details of the more prominent flights, regardless of their ultimate status from a record standpoint, follow:

Dec. 30-31, 1921—Edward Stinson and Lloyd Bertaud flew continuously for 26h. 12m. 35s. over Roosevelt Field, New York, in a Larsen all-metal plane driven by a 185 h.p. Bavarian Motor Works engine. The flight ended when oil in the lubrication tanks froze in zero weather. Accepted as world's record by I. A. F.

Oct. 5-6, 1922—Lieuts. J. A. Macready and O. G. Kelly, U. S. A. S., flew continuously for 35h. 18m. 30s. over Rockwell Field, Coronado, Cal., exceeding by close to nine hours the flight of Stinson and Bertaud. Macready and Kelly intended to try for a transcontinental flight when they took off and little preparation was made for recording a duration flight over restricted territory when fog prevented the cross-country flight. They used the army monoplane T-2, motored by a 400 h.p. Liberty engine.

Oct. 13-14, 1922—Lieut. Bossoutrot and M. Drouhin flew continuously for 34h. 14m. 7 1-5s. around Paris, France, with start and finish at La Bourget airport, under supervision of Aero Club of France. They used a Farman Goliath plane with two 300 h.p. Renault engines and appeared to comply with all I. A. F. record requirements. The plane travelled approximately 3,200 miles at an altitude ranging from 600 to 5,000 feet, the latter height being reached as the gas tanks lightened.

Nov. 3-4, 1922—Lieuts. J. A. Macready and O. G. Kelly flew from San Diego, Cal., to Indianapolis, Ind., 27h. 52s., approximate time, without stop in an endeavor to establish a non-stop transcontinental flight. They were forced to land when the engine burned out. The flight was made in the Army monoplane T-2 with a 400 h.p. Liberty engine. In an endeavor to keep the engine going the aviators poured soup, coffee, and milk, their food supplies, into the engine to replace the water leaking out when the cylinder jackets cracked under the strain of continuous engine operation in storms and rapidly changing temperatures. Unofficial charts showed approximately 2,200 miles covered or five-sevenths of the distance between San Diego and New York. The plane carried at the start 725 gallons of gasoline, 30 gallons of oil and 20½ gallons of water.

Sept. 4-5, 1922—Lieut. J. H. Doolittle, U. S. A. S., flew from Pablo Beach, Fla., to Rockwell Field, San Diego, Cal., in 21h. 20m. actual flying time and 22h. 35m. lapsed time with one stop at Kelly Field, Tex., to replenish fuel tanks. He used a special De Haviland plane and was estimated to have covered approximately 2,275 miles.

Calbraith P. Rodgers, flying a Wright Model B, started from New York City, on Sept. 17, 1911, and landed at Pasadena, Cal., Nov. 5, 1911. His longest single flight was 133 miles.

Robert G. Fowler flew across the continent from West to East, landing at Jacksonville, Fla., on Feb. 17, 1912. He was 122 days on the way.

The late Lieut. W. D. Coney, Army Air Service, negotiated a flight similar to the one recently completed by Lieut. Doolittle, his total flying time being 22h. 27m., but it took him several days to accomplish his journey.

The complete record of non-stop duration flights of record proportions since the early days of aviation follows:

Nov. 12, 1906—Santos-Dumont, 21s.
Oct. 26, 1907—Henry Farman, 52s.
Jan. 13, 1908—Henry Farman, 1m. 28s.
Sept. 21, 1908—Wilbur Wright, 1h. 31m. 25s.
Dec. 31, 1908—Wilbur Wright, 2h. 20m. 23s.
Aug. 27, 1909—Henry Farman, 3h. 4m. 56s.
Nov. 3, 1909—Henry Farman, 4h. 17m. 53s.
July 10, 1910—Olieslaegers, 5h. 3m. 5s.
Oct. 28, 1910—Tabuteau, 6h.
Dec. 18, 1910—Henry Farman, 8h. 12m. 23s.
Sept. 1, 1911—Maurice Farman, 11h. 1m. 20s.
Sept. 1, 1912—Fourny, 13h. 17m. 57s.
Feb. 4, 1914—Langer, 14h. 7m.
Apr. 24, 1914—Poulet, 16h. 28m. 56s.
June 24, 1914—Basset, 18h. 10m.
June 28, 1914—Landmann, 21h. 50m.
July 10, 1914—Boehm, 24h. 14m.
June 4, 1920—Bossoutrot and Bernard, 24h. 19m.
Dec. 30-31, 1921—Bertaud and Stinson, 26h. 19m. 35s.
Oct. 7-8, 1922—Macready and Kelly, 35h. 16m. 30s.
Oct. 14-15, 1922—Bossoutrot and Drouhin, 34h. 14m. 7 1-5s.

### ALTITUDE FLIGHTS.

Oct. 23—Etampes, France, Mountofier, 32,866 feet. New French record, but some 1,700 feet short of world's record of 34,509 feet made by Lieut. J. A. Macready at Dayton, Ohio, Sept. 28, 1921.

### PARACHUTE JUMP.

June 12—Capt. A. W. Stevens made a parachute jump over Dayton, Ohio, from an airplane at an approximate height of 24,206 feet. His equipment consisted of a double parachute 28- and 18-foot spread respectively. The smaller parachute, for emergency use only, was not opened. An oxygen tank was also strapped to the jumper. From the time Capt. Stevens jumped from the plane until he landed five miles beyond Jamestown, Ohio, the drift amounted to some thirty miles and the time consumed in the drop in the four and one-half mile jump was more than twenty minutes.

## UNITED STATES AIR MAIL SERVICE.

(Compiled for The Almanac by Second Assistant Postmaster General Paul Henderson.)

| Month. | Trips Possible (Scheduled.) | Trips Attempted. | Mileage Possible (Scheduled.) | Miles Travelled With Mail. | Mail Carried, (Pounds.) | No. of Letters Advanced. | Cost of Service. |
|---|---|---|---|---|---|---|---|
| 1921. | | | | | | | |
| July | 624 | 623 | 131,450 | 130,555 | 77,276 | 3,091,040 | $109,799 |
| August | 693 | 689 | 136,974 | 134,549 | 84,680 | 3,387,200 | 106,986 |
| September | 657 | 651 | 127,706 | 125,914 | 88,401 | 3,536,040 | 102,988 |
| October | 714 | 707 | 140,080 | 138,759 | 99,057 | 3,962,280 | 122,205 |
| November | 672 | 633 | 131,520 | 117,529 | 93,519 | 3,740,760 | 117,417 |
| December | 726 | 660 | 142,240 | 125,416 | 101,198 | 4,047,920 | 118,264 |
| 1922. | | | | | | | |
| January | 699 | 633 | 136,880 | 119,966 | 93,283 | 3,731,320 | 116,553 |
| February | 635 | 558 | 124,960 | 107,944 | 92,902 | 3,716,080 | 86,898 |
| March | 729 | 690 | 144,720 | 134,503 | 123,312 | 4,932,480 | 95,884 |
| April | 675 | 652 | 134,000 | 127,634 | 116,303 | 4,652,120 | 80,066 |
| May | 702 | 694 | 139,360 | 136,973 | 121,888 | 4,875,520 | 79,611 |
| June | 702 | 697 | 139,360 | 138,185 | 132,904 | 5,316,160 | 78,480 |
| Total | 8,228 | 7,887 | 1,629,250 | 1,537,927 | 1,224,723 | 48,988,920 | $1,215,167 |

### NOTES ON THE ABOVE TABLE.

Temporary service from Elko to Ely, Nevada, was begun Oct. 19, 1921. East day service on the Elko-Ely route was begun Feb. 15, 1922.

Trips defaulted, 341; trips uncompleted, 211; fog or storm trips, 2,433; clear-weather trips, 5,454; forced landings, 760 (of which 281 were due to mechanical causes); total miles travelled, including ferry and test, 1,727,265; per cent. of performance, 94.39.

Time in flight, 19,036 H., 53 M.; cost per hour, $63,83; cost per mile, $0.7035.

Gasoline used, 502,631; cost of gasoline, $149,027; cost of repairs and accessories, $226,735; cost of pilots, $174,407; cost of mechanics and helpers, $172,892.

Length of New York-San Francisco route—2,680 miles.

Number of airplanes in service—80.

There were no fatal accidents, it is stated, in the last year.

**Commercial Aircraft Operations in United States, 1921.**

| | |
|---|---|
| Estimated No. of aircraft in operation | 1,200 |
| Estimated total mileage | 6,500,000 |
| Estimated number of persons flown | 250,000 |
| Operators making reports | 125 |
| Equip. of these operators (No. mach.) | 500 to 600 |
| Mileage flown by these operators | 2,907,245 |
| No. of pass. carried by these operators | 122,512 |
| Pounds of freight carried by these opera | 123,227 |
| Number of flights by operators | 130,736 |
| Average duration of flights | 21 min. |
| Average charge per short flight | $9.00 |
| Avg. charge per mile, inter-city flight | .55 |
| Average charge per lb. of freight | .33 |
| States in which operations were carried on | .34 |

Operators reporting as above had in 1921 but 146 air terminals for seaplanes and airplanes. Only sixteen of the 146 were publicly owned or controlled.

**Data on Aircraft Manufacturing.**

| | |
|---|---|
| No. of plants, prod. and exp. in 1921 | 25 |
| Invested capital | $10,000,000 |
| Number of persons employed | 5,000 |

States in which plants are located: New York, Ohio, Kansas, Rhode Island, Michigan, New Jersey, California, Washington, West Virginia and Wisconsin.

No. of trades required in aircraft constr. ..... 72

**Commercial Aeronautics, 1921.**

| 1921. | No. of Flights. | Miles Covered. | Passengers Carried. | Weight of Goods Carried. |
|---|---|---|---|---|
| Belgium (Jan.–Sept. 30) | 1,224 | 161,800 | 2,199 | 28,000 lbs. |
| France | 6,221 | 1,457,437 | 10,336 | 396,000 lbs. |
| Great Britain (Oct. 1920–Sept. 1921) | 22,676 | 533,700 | 41,956 | 94,000 lbs. |
| Holland (April 17–Oct. 15) | 1,000 | 465,000 | 1,511 | 30,856 kgs. |
| United States | 130,736 | 2,907,245 | 122,512 | 123,227 lbs. |

Holland service did not operate during winter months. Holland mileage is in kilometres.

**Aircraft Appropriations, United States and Foreign.**

| United States 1921 | |
|---|---|
| Air mail | $1,250,000 |
| Army air service | 19,200,000 |
| Naval air service | 13,413,431 |
| National advisory com. for aeronautics | 200,000 |
| | $34,063,431 |

| Foreign 1921 | |
|---|---|
| Argentina | $271,263.17 |
| Belgium, francs | 22,000,000 |
| Canada | $1,625,000 |
| Chile | $500,000 |
| Czechoslovakia, kroner | 6,800,000 |
| Cuba | $10,970.76 |
| Ecuador, sucres | 20,000 |
| Great Britain | £19,033,400 |
| France (1922), francs | 436,000,000 |
| Italy, lire | 64,760,000 |
| Japan, yen | 43,000,000 |
| Mexico, pesos | 6,000,000 |
| Peru | $500,000 |
| Portuguese East Africa, escudes | 100,000 |
| Roumania, leis | 35,000,000 |
| Serbia, dinars | 12,000,000 |

**Foreign Subsidies for Civilian Aviation.**

| Country 1922 | |
|---|---|
| Algiers, francs | 1,000,000 |
| Belgium, francs | 3,000,000 |
| Czechoslovakia, kroner | 6,000,000 |
| France, francs | 45,832,000 |
| Great Britain | £200,000 |
| Netherlands, florins | 370,000 |
| Switzerland, francs | 150,000 |

In the United States there is no subsidy for civilian aviation.

The report of the Royal Dutch Air Service Lines on operation up to August 1st, 1922, is as follows:

From January 1st to August 1st on the line Amsterdam-Paris 332 flights were made, 272 passengers, 10.6 tons of merchandise and 300 lbs. of mail were transported.

On the line Amsterdam-London from April 18th until August 1st 230 passengers, 30.2 tons of merchandise and 1.1 tons of mail were transported.

Thus on 593 flights, covering a total of about 112,700 miles, 502 passengers, 40.8 tons of merchandise and 1.2 tons of mail were transported from January 1st to August 1st, 1922.

## MOTORLESS GLIDERS IN CONTEST.

The rapid development of the motorless glider or sailplane attracted international attention in 1922. There were several glider meets abroad and new duration records were made and broken frequently. A number of prominent aviators took part in the tests and also in constructing the gliders. The leading record flights follow:

| Date. | Place. | Pilot. | Duration. H. | Duration. M. | Passengers. | Plane. |
|---|---|---|---|---|---|---|
| Oct. 21 | Lewes, England | Moneyrolle | 3 | 21 | 0 | Tandem Monoplane. |
| Oct. 21 | Lewes, England | Olley | | 49 | 1 | Tandem Monoplane. |
| Aug. 24 | Gersfeld, Germany | Hentzen | 3 | 07 | 0 | Single Decker. |
| Aug. 19 | Gersfeld, Germany | Hentzen | 2 | 10 | 0 | Single Decker. |
| Aug. 19 | Gersfeld, Germany | Maertens | 1 | 06 | 0 | Single Decker. |
| Oct. 20 | Lewes, England | Gray | 1 | 04 | 0 | Monoplane. |
| Aug. 27 | Gersfeld, Germany | Fokker | | 13 | 1 | Biplane. |

No description of the Moneyrolle plane has been received in this country up to press time, but Hentzen's Greif and Maertens's Vampire have been described in cable despatches from The World correspondent as follows: Both Maertens's Vampire and Hentzen's Greif were built at the expense of a group of students at the Hanover Technical High School interested in the science of aerial navigation and of the Hanover Society for Aerial Navigation. They embody the result of wide experience, unceasing study and experiments gathered under the leadership of Prof. Brial and put to practical use by the constructing engineers of the Hanover railway car factory under the supervision of Hentzen.

Hentzen's machine, the Greif, his latest creation, may be described as a monoplane, a fuselage of wood occupying the centre between the two wings, with which it is connected by a number of levers that enable the pilot to make his machine ascend or drop, the wings being movable. These consist of stout linen of light weight stretched over wooden frames. The span of both wings, inclusive of the fuselage, measures not quite twelve yards. The area of both wings is about fifteen square yards.

The steering apparatus, very much like that of an ordinary airplane, but much lighter in weight, extends behind from two rods about three metres long. The other details of construction are kept strictly secret.

Maertens's Vampire is a little heavier than Hentzen's Greif. Prof. Brial of the Hanover Technical High School states that the flights of Maertens and Hentzen had proved conclusively that sailing through the air without motors was possible if the atmospheric conditions permitted it, which in Germany they did at least on 200 days of the year.

## CROSS-WATER FLIGHTS.

Several long distance continent to continent flights over ocean stretches featured aviation in 1922. Among those attempted were the hydroplane flights of Lieut. Walter Hinton from New York to Rio de Janeiro; Capts. Sacadara and Coutinho from Lisbon, Portugal, to Pernambuco, Brazil, and Major W. T. Blake, the English aviator's proposed round-the-world flight.

Capts. Sacadara and Coutinho, the Portuguese aviators, arose from the water near Lisbon on March 30 and alighted at Las Palmas, Canary Islands, the same day, a distance of about 700 miles. Unfavorable weather delayed departure until April 5, when the 800-mile flight to St. Vincent, Cape Verde Islands, was made the same day. Further delay for proper weather conditions retarded flight until April 18, when the flight was resumed from Porto Praya, Cape Verde Islands, to St. Paul Rocks, in mid-Atlantic, a distance of 900 miles. The jump was made in one day but the plane was badly damaged in alighting. The aviators then went to the Island of Fernando Noronha, off the South American coast, where another plane was secured. To complete the trip record the aviators on May 11 flew back from Fernando Noronha to and around St. Paul Rocks. On the return trip motor trouble caused a descent and the second plane was wrecked. The aviators were rescued by the steamship Paris City and returned to Fernando Noronha. A third plane was secured and the flight resumed on June 5, arriving at Pernambuco the same day after a 275-mile flight. On June 17 they completed their trip at Rio de Janeiro.

Lieut. Walter Hinton started his New York to Brazil flight on Aug. 17. Some 8,500 miles will be covered by intermittent stages. Hinton drove the Sampaio Correia II., a powerful seaplane, and after several stops at Atlantic seaports, including St. Petersburg, Fla., hopped off for Key West on Sept. 4. Arriving at Port-au-Prince, Haiti, there was a delay of several weeks while new engines were installed. On Oct. 7, Lieut. Hinton resumed flight. Details of the later portions of the trip are shown in the following table.

| Date. | Flown. From | To | Miles Flown. | Flying Time in Minutes. |
|---|---|---|---|---|
| Oct. 7.... | Port-au-Prince, Haiti..... | San Domingo..... | 254 | 182 |
| Oct. 8.... | San Domingo..... | San Juan, Porto Rico..... | 220 | 150 |
| Oct. 11.... | San Juan, Porto Rico..... | Point-a-Pitre, Guadeloupe..... | 300 | 330 |
| Oct. 12.... | Point-a-Pitre, Guadeloupe..... | Fort de France, Martinique..... | 200 | 150 |
| Oct. 15.... | Fort de France, Martinique..... | Port of Spain, Trinidad..... | 250 | 326 |
| Nov. 20.... | Port of Spain, Trinidad..... | Siddi..... | 303 | 305 |
| | | Total..... | 1,527 | 1,443 |

On Nov. 20 the plane reached South America, twenty-five miles from Georgetown, British Guiana. The flight, dependent upon favorable weather, was being continued when The Almanac went to press.

Major W. T. Blake arose from Croydon, England, on May 24, in his attempted 30,000-mile flight around the world. After a number of minor accidents and delays the aviators reached Sibi, British Beluchistan, near Quetta, on July 25. Later the trip was temporarily abandoned.

## BUILDING AND LOAN ASSOCIATIONS.

(By H. F. Cellarius, Cincinnati, O., Secretary United States League of Local Building and Loan Associations.)

Fiscal year ended June 30, 1922.

| Rank | States. | No. of Associations | Total Membership. | Total Assets. | Rank | States. | No. of Associations | Total Membership. | Total Assets. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Pennsylvania... | 2,997 | 1,193,372 | $546,884,501 | 23 | Minnesota..... | 75 | 26,000 | $12,400,000 |
| 2 | Ohio..... | 778 | 1,152,121 | 525,696,242 | 24 | Utah..... | 16 | 24,570 | 12,284,112 |
| 3 | New Jersey..... | 986 | 536,391 | 285,014,487 | 25 | West Virginia... | 44 | 30,000 | 11,644,805 |
| 4 | Massachusetts.. | 206 | 308,791 | 196,195,049 | 26 | Colorado..... | 42 | 22,000 | 10,986,445 |
| 5 | Illinois..... | 709 | 348,000 | 174,360,342 | 27 | Maine..... | 39 | 18,200 | 10,176,958 |
| 6 | New York..... | 280 | 279,749 | 131,270,091 | 28 | Connecticut.... | 32 | 25,000 | 9,383,012 |
| 7 | Indiana..... | 364 | 245,983 | 121,595,380 | 29 | Rhode Island... | 8 | 18,398 | 9,275,587 |
| 8 | Nebraska..... | 76 | 133,782 | 84,071,013 | 30 | South Carolina.. | 139 | 18,315 | 6,975,583 |
| 9 | Maryland..... | 777 | 161,045 | 80,522,440 | 31 | Oregon..... | 12 | 18,626 | 6,816,954 |
| 10 | California..... | 96 | 54,102 | 56,496,548 | 32 | New Hampshire. | 25 | 14,458 | 5,255,668 |
| 11 | Louisiana..... | 67 | 90,000 | 55,911,962 | 33 | Texas..... | 40 | 12,420 | 4,464,056 |
| 12 | Michigan..... | 78 | 106,250 | 54,306,848 | 34 | Montana..... | 21 | 17,000 | 4,050,000 |
| 13 | Wisconsin..... | 105 | 105,000 | 53,000,000 | 35 | North Dakota... | 13 | 8,100 | 4,041,443 |
| 14 | Missouri..... | 190 | 94,882 | 49,768,530 | 36 | South Dakota... | 16 | 6,515 | 4,006,312 |
| 15 | Kansas..... | 110 | 103,575 | 46,820,132 | 37 | Delaware..... | 24 | 8,000 | 3,945,522 |
| 16 | Kentucky..... | 117 | 95,000 | 40,000,000 | 38 | Tennessee..... | 11 | 5,800 | 3,500,000 |
| 17 | Oklahoma..... | 73 | 66,684 | 39,348,311 | 39 | New Mexico.... | 13 | 4,700 | 1,937,744 |
| 18 | Dist. of Col.... | 24 | 48,569 | 33,261,000 | 40 | Arizona..... | 4 | 3,500 | 1,315,782 |
| 19 | North Carolina.. | 219 | 65,000 | 29,500,000 | 41 | Vermont..... | 8 | 1,601 | 658,360 |
| 20 | Washington.... | 48 | 59,459 | 23,950,160 | | Other States.... | 240 | 197,905 | 102,675,981 |
| 21 | Iowa..... | 70 | 52,800 | 19,000,000 | | | | | |
| 22 | Arkansas..... | 54 | 28,225 | 17,997,261 | | Total..... | 9,255 | 5,809,888 | $2,890,764,621 |

Increase in assets over previous year was $370,849,650; increase in membership was 846,969.

GROWTH OF BUILDING AND LOAN ASSOCIATIONS.

| Year. | No. of Associations. | Total Membership. | Total Assets. | Annual Ave. Due Each Member. | Year. | No. of Associations. | Total Membership. | Total Assets. | Annual Ave. Due Each Member. |
|---|---|---|---|---|---|---|---|---|---|
| 1893.. | 5,598 | 1,349,437 | $473,137,454 | $350.62 | 1908.. | 5,599 | 1,920,257 | $784,175,753 | $408.37 |
| 1895.. | 5,770 | 1,545,129 | 579,627,765 | 375.13 | 1909.. | 5,713 | 2,016,651 | 856,332,719 | 424.63 |
| 1896.. | 5,776 | 1,610,300 | 598,388,695 | 371.60 | 1910.. | 5,869 | 2,169,893 | 931,867,175 | 429.45 |
| 1897.. | 5,872 | 1,642,179 | 601,130,037 | 366.05 | 1911.. | 6,099 | 2,332,829 | 1,030,687,031 | 441.81 |
| 1898.. | 5,576 | 1,617,837 | 600,135,739 | 370.95 | 1912.. | 6,273 | 2,516,936 | 1,137,600,648 | 451.98 |
| 1899.. | 5,485 | 1,512,685 | 581,866,170 | 384.65 | 1913.. | 6,429 | 2,836,433 | 1,248,479,139 | 440.16 |
| 1900.. | 5,356 | 1,495,136 | 571,366,628 | 382.15 | 1914.. | 6,616 | 3,103,935 | 1,357,707,900 | 437.41 |
| 1901.. | 5,302 | 1,539,593 | 565,387,966 | 367.22 | 1915.. | 6,806 | 3,334,899 | 1,484,205,875 | 445.05 |
| 1902.. | 5,299 | 1,530,707 | 577,228,014 | 377.09 | 1916.. | 7,072 | 3,568,432 | 1,598,628,136 | 447.98 |
| 1903.. | 5,308 | 1,566,700 | 579,566,112 | 369.92 | 1917.. | 7,269 | 3,838,612 | 1,769,142,175 | 460.37 |
| 1904.. | 5,265 | 1,631,046 | 600,342,386 | 368.07 | 1918.. | 7,484 | 4,011,401 | 1,898,344,346 | 473.23 |
| 1905.. | 5,264 | 1,642,127 | 629,344,257 | 383.25 | 1919.. | 7,788 | 4,289,323 | 2,126,620,390 | 495.80 |
| 1906.. | 5,316 | 1,699,714 | 673,129,198 | 399.94 | 1920.. | 8,633 | 4,962,919 | 2,519,914,971 | 507.75 |
| 1907.. | 5,424 | 1,839,119 | 731,508,446 | 397.74 | 1921.. | 9,255 | 5,809,888 | 2,890,764,621 | 497.56 |

## AMONG THE BOOKS OF 1922.

(By E. W. Osborn.)

It may occur to some future historian of America to write of 1922 as the year of the Literary Deluge. Certainly there has been in the months just past a flow of books calculated to distract the reviewers and conceivably to bewilder the readers of the nation. The flood was due to a degree, undoubtedly, to troubles in the printing and binding trades which caused the holding back of many books announced for the preceding season. The effects were visible too of the stemming of the tides of publication during the war years.

Fiction easily and naturally cuts the far larger figure on the book lists of 1922. The writing of a novel, once a good deal of a feat, has become a thing commonplace. An added wonder of the world is the number of people who can tell a story in writing at least readably well. In this field the year brought forth numerous notable books, but none that fairly may be said to loom like a Woolworth structure in type.

An interesting feature of the year's literary record is the number of books of earlier seasons which linger in the current reading lists. This is shown not alone in the tables of best sellers quoted herewith. It appears in the continued call for such works as "Ambassador Morgenthau's Story," the demand for which has received fresh stimulation within a recent period by the publication of its author's new book, "All in a Lifetime." These two volumes furnish pages of American history and character which it is well for any student of our national system and its workings upon the world and the individual to have in hand.

### RICH OUTPUT OF BIOGRAPHY.

In biography and autobiography the publication seasons of 1922 have been rich. Some presentations besides the Morgenthau work have been "My Memories of Eighty Years," by Chauncey M. Depew; "Hugo Münsterberg: His Life and Work," by the great psychologist's daughter Margaret; "E. H. Harriman," by George Kennan; "The Life of Clara Barton," by William E. Barton; "My Boyhood," by John Burroughs; "Prime Ministers and Presidents," by Charles H. Sherrill; "The Life of Elizabeth Cady Stanton," by Harriot Stanton Blatch and Theodore Stanton; "Letters of James Gibbons Huneker," edited by Josephine Huneker; "The Life of Sir William Harcourt," by A. G. Gardiner; "Madame de Staël: Her Trials and Triumphs," by Lieut. Col. A. C. P. Haggard; "William Dean Howells," by Delmar Gross Cooke; "The Story of a Varied Life," by W. S. Rainsford; "My Life and Work," by Henry Ford; "My Experiences at Scotland Yard," by Sir Basil Thomson; "Rossetti and His Circle," by Max Beerbohm; "George Washington," by William Roscoe Thayer; "The Real Lincoln," by Jesse W. Weik; "Glimpses of Authors," by Caroline Ticknor; "The Wandering Years," by Katherine Tynan, an autobiographical story covering the Irish revolution; "David Lubin: A Study in Practical Idealism," by Olivia Rossetti Agresti; "Gambetta and the Foundation of the Third Republic," by Harold Stannard; "The Maturity of James Whitcomb Riley," by Marcus Dickey; "From Seven to Seventy," the autobiography of Edward Simmons, the American artist; "Memories of a Hostess," a chronicle of eminent friendships, from the diaries of the late Mrs. James T. Fields; "Jefferson Davis: His Life and Personality," by Morris Shaft; "The Home Life of Swinton," by Clara Watts Dunton; "Pasteur and His Work," by Dr. L. Descour; and Lives of Westinghouse; of Ik Marvel, by Henry G. Prout and Waldo H. Dunn; and "Life of Cardinal Gibbons," by Allen Sinclair Will.

Demanding rather special attention in the line of biography are the two volumes of the letters of Franklin K. Lane, with their marvels of self-revelation; "Mr. Lloyd George," by E. T. Raymond; "The Life and Letters of Walter H. Page," by Burton J. Hendrick; and "Woodrow Wilson and World Settlement," a voluminous work, including many documents of vital importance, prepared by Ray Stannard Baker.

Hailed as biography out of the ordinary, also, is the study of Napoleon III., called "The Second Empire," by Philip Guedalla. And closely allied to biography were such books of the year as "Pomp of Power," a book by an unnamed author on "inside" men of the late critical hour; "Painted Windows," by the "Gentleman with a Duster," who wrote "The Mirrors of Downing Street," and who is said to be Harold Begbie; and "Eminent Europeans," the just-published work of Eugene S. Bagger.

Books of specialized interest referring to matters and people of the stage and the concert room include "The Print of My Remembrance," by Augustus Thomas; "My Years on the Stage," by John Drew; Pierre V. R. Key's life of Caruso, memory records of Calvé and Tetrazzini, and the gossipy "My Life and Some Letters" of Mrs. Pat Campbell.

As the publication year drew toward a close, there appeared from the tireless pen of H. G. Wells a volume of 450-odd pages called "A Short History of the World," thought profitable to read as a sort of introduction to that "Outline of History" which maintains a persistent place among serious best-sellers. Incidentally, it may be noted that the year past has brought a four-volume "Outline of Science," edited by Prof. J. Arthur Thomson, to pay tribute to the titular popularity of the "Outline" idea.

### ON QUESTIONS OF THE DAY.

Lothrop Stoddard's "The Revolt Against Civilization," pointing out the "menace of the underman," has become one of the bitterly discussed books of the year, its fame supplementing that of the same author's "The Rising Tide of Color." Other books of 1922 dealing with crises of the times include "The Crisis in the Churches," by Rev. Dr. Leighton Parks; "Railroads and Government," by Frank Hatch Dixon; "Europe—Whither Bound?" by Stephen Graham; "Senescence: the Last Half of Life," by G. Stanley Hall; "New Churches for Old," by John Haynes Holmes; "Neighbors Henceforth," by Owen Wister; "International Relations," by the late Lord Bryce; "Washington and the Riddle of Peace," reflections upon the Disarmament Conference by H. G. Wells; "America Faces the Future," by Durant Drake; "The New Constitutions of Europe," by Howard Lee McBain and Lindsay Rogers; "The Threefold Commonwealth," by Rudolph Steiner; "The New Idealism," by May Sinclair; "Industry and Human Welfare," by William L. Chenery; "Socialism and the Average Man," by William H. Doughty, Jr.; these and books uncounted, impossible to list here, on the problems of Russia, Asia, Europe in general, the League of Nations. If it were possible to settle the troubles of this old earth by the making of many books, the job would be already at a stage calling for a date of celebration.

As this far from complete summary of the year in letters is being compiled there appear the four volumes of John Buchan's "The History of the Great War," constituting the most elaborate work in its line which has as yet come from the presses anywhere.

Useful books on our Government and the judiciary, new to readers of 1922, include "The Supreme Court in United States History," by Charles Warren; "The Constitution of the United States: Its Sources and Its Application," by Thomas James Norton, and "International Law: Chiefly as Interpreted and Applied by the United States," by Charles Cheney Hyde; "Our Republic," by S. E. Forman.

A catalogue of the year's travel books would read something like a gazetteer of the known world. The earth has been covered literally from pole to pole, and has been girdled at every degree of latitude. Illustrating the extremes of research, there are Stefansson's "Northward Course of Empire" and H. G. Ponting's "The Great White South." Frederick O'Brien has added gratefully to the number of his charming books of the South Seas.

The poetic event of the year was the publication in America, December 1, of the "Last Poems" of A. E. Housman, a volume following more than a quarter of a century after that immortal creation in verse, "The Shropshire Lad." The English edition was a few weeks earlier than the American, and those readers gloated justifiably who were able to get copies. In this country the offerings by poets well known and hitherto unknown were generous in number and hopeful in quality. What they proved principally was that the poetic spirit is abroad with us and that the foundation of another magazine of verse, Caprice, was not without a reason in rhyme.

Scientific books of 1922 were enough to form a large circulating library by themselves. It is encouraging to note the number of them which were devoted to a popularizing on lines of accuracy and sanity of various brands of science. Evidently the day is pretty well past of the mystery in laboratory or observation tower. Psychoanalysis, a pseudo-science, became during the year a fertile feeder to writers given to the exploitation of novel themes. Close upon its prints followed the Coué system of healing as a breeder of letters, with books by its original practitioner and his quickly developed interpreters.

The year's output of books on sports has been marked chiefly by the volumed counsels of the vaunted champions of tennis and golf. Of treatises

on indoor games the balance inclined heavily toward further illumination of means and methods in auction bridge. There will be no excuse for us hereafter if we do not as a nation speak of these things by the book.

## FICTION'S HIGH LIGHTS.

Coming at last to the year's fiction, which, as we have said, ranks numerically first, we pause an instant to remark with pride upon the continued appearance on best-seller lists of the novel "Maria Chapdelaine." To that offering of a preceding season, the book crop of 1922 brought only one equal in point of pure literary beauty, Walter de la Mare's "Memoirs of a Midget"—although the "Abbe Pierre" of Jay William Hudson drew near to the quality of these two masterpieces.

On points alone, "Main Street" retains a place in the best-seller ranks as the year's calculations end. Really, Mr. Lewis's first great success has been succeeded by his second, the speeding "Babbitt." The new book is generally conceded to be far better and stronger than the other. It is true too that whereas A. S. M. Hutchinson's "If Winter Comes" appears at the top of the Bookman's list, it is really his "This Freedom" which holds the major attention of American readers as 1923 swings into line.

However, it is not with best-sellers in special that we have to do here but with the fiction in general of a season which was fiction's own as judged by the array of solid bindings. And here we find our own bewilderments. Having other work to do even thus early in a new year, we cannot go into the business of a wholesale cataloguing of last year's novels. Two books of the spring seem to us best to have represented two of the extremes in American fiction writing of the times. These books are Mrs. Wharton's "The Glimpses of the Moon," and F. Scott Fitzgerald's "The Beautiful and the Damned." About Henry Sidnor Harrison's "Saint Teresa" we might write with more evident reservation, although we liked that too after getting over the first shock of having a saint beat a man up and almost stab him to death at her own fireside. We disposed of that matter finally as one of the reactions upon Mr. Harrison's creative spirit of a late ruthless war. However, we are getting off our appointed track in writing like this. We are here on the present occasion not to review the novels of the year in a technical sense but merely to permit them—a few of them—to march past.

To the thing in hand, therefore, and let us see what we can recall of stories the late reading of which does not, in memory, suggest the misspent moments of a year now dead. Without trouble we bring to mind "Broken Barriers," another of Meredith Nicholson's telling tales of American life. This book stood high on the passing list. Along the parade with it we catch on the march such books of all fictional sorts as Jackson Gregory's "The Everlasting Whisper," a California tale of the whirlwind quality; "Sleeping Fires," not one of Gertrude Atherton's best; "The Van Roon," by J. C. Snaith; "The Covered Wagon," a tale of pioneer America, by Emerson Hough; "Adrienne Toner," the story of an unfortunate Anglo-American wedding, by Anne Douglas Sedgwick; "Bennett Malin," Elsie Singmaster's latest story of life in a distinctive American circle; "Indelible," a first novel by Elliott H. Paul; "The Head of the House of Coombe," companion to "Robin," by Mrs. Frances Hodgson Burnett; "Lucretia Lombard," by Kathleen Norris; "Gentle Julia," by Booth Tarkington; "Merton of the Movies," by Harry Leon Wilson; "One Man in His Time," by Ellen Glasgow; "Joanna Godden," by Sheila Kaye-Smith; "Barbara Justice," by Diana Patrick; "Lilia Chenoworth," by Lee Wilson Dodd; "Simon Called Peter," by Robert Keable; "Linda Lee, Inc.," by Louis Joseph Vance; "Big Peter," a British melodrama, by Archibald Marshall; "Dancers in the Dark," a runner-up to "The Beautiful and the Damned," by Dorothy Speare; "Mr. Prohack," Arnold Bennett's story showing how sudden riches need not mean disaster; "Crome Yellow," by Aldous Huxley; "The Kingfisher," by Phyllis Bottome; "Birthright," by T. S. Stribling; "Way of Revelation," by Wilfrid Ewart; "Oh, Susanna!" a novel of seafaring, by Meade Minnegerode; "The Secret Places of the Heart," by H. G. Wells; "Life and Death of Harriet Frean," by May Sinclair; "The Rustle of Silk," by Cosmo Hamilton; "The Great Prince Shan," by E. Phillips Oppenheim; "Intrusion," by Beatrice Kean Seymour; "Playing With Soul," by the Countess de Chambrun; "The Tale of Triona," by W. J. Locke; "Pippin," by Archibald Marshall; "Spinster of This Parish," by W. B. Maxwell; "Cappy Ricks Retires," by Peter B. Kyne; "The Cathedral," by Hugh Walpole; "The Three Lovers," by Frank Swinnerton; "The Judge," by Rebecca West; "The Just Steward," by Richard Dehan; "December Love," by Robert Hichens; "Spellbinders," by Margaret Culkin Banning; "On Tiptoe," by Stewart Edward White; "The Mother of All Living," by Robert Keable; "The Red Knight," by Francis Brett Young; "Valley Waters," by Charles D. Stewart; "The Driver," by Garet Garrett; "Fielding Sargent," by Elsa Barker; "Black Pawl," by Ben Ames Williams; "Command," by William McFee; "Certain People of Importance," by Kathleen Norris; "Babel," by John Cournos; "Heartbeat," by Stacy Aumonier; "Captain Blood," by Rafael Sabatini; "Peregrine's Progress," by Jeffery Farnol; "The Man Who Lived in a Shoe," by Henry James Forman; "The Evil Shepherd," by E. Phillips Oppenheim; "A Vagrant Tune," by Bryan T. Holland; "Captain Sazarac," by Charles Tenney Jackson; "In the Days of Poor Richard," by Irving Bacheller; "A More Honorable Man," by Arthur Somers Roche; "Anne Severn and the Fieldings," by May Sinclair; "Old Crow," by Alice Brown; "The Red Tremaynes," by Eden Phillpotts; "Escape," by Jeffery E. Jeffery; "One of Ours," by Willa Cather; "The Room," by C. B. Stern; "Tutor's Lane," by Wilmarth Lewis; "The Love Story of Aliette Brunton," by Gilbert Frankau; "The Wind Bloweth," by Donn Byrne; "Fool's Hill," by Leona Dalrymple; "Her Unwelcome Husband," by W. L. George; "Flowing Gold," by Rex Beach; "The Vehement Flame," by Margaret Deland; "Martin Pippin in the Apple Orchard," by Eleanor Farjeon; "Judith of the Godless Valley," by Honoré Willsie; "Rough-Hewn," by Dorothy Canfield; "1492," by Mary Johnston; "Joseph Greer and His Daughter," by Henry Kitchell Webster; "Still Life" and "The Things We Are," by John Middleton Murray; "The Breaking Point," by Mary Roberts Rinehart; "One Thing Is Certain," by Sophie Kerr.

Glancing over the year's fiction in the large, we become aware of an inclination to break away from novels of the "Moon-Calf" type. A healthful sign, this, as we look at things. Ben Hecht's "Gargoyles" appears also to belong to an order doomed to the discard. Work fulfilling none of the promise of his "Erik Dorn." Mystery stories, persistently dear to the hearts of the general readers, came forth in multitude in 1922. The success of "Captain Sazarac" and "Captain Blood" indicated a renewed interest in good and ruddy tales of piracy.

The year past revealed a still further advance in the movement to establish books of the play firmly in the lists of current literature. Two good results are quite possible from this movement. Knowledge of the dramatic way of telling a story may be extended usefully among the readers of the land; writers of plays may be moved to practise a greater clarity and precision of style. To make a hit at once in the library and on the stage would seem to be an object worth working for.

We have neglected to mention in this review the books of humor which came from the presses of last year. There were lots of them. Most of the lot held laughter for a moment. We recall no classic of comicality among them. Absent from our reckoning too are the innumerable handbooks of trades and professions, and the multiplied guides to such novelty outfits as those of the radio system. To give place and title to these and to the whole run of publications for this and that would require the pages upon pages of a cumulative index. If we knew of any subject which had not its share in the literature of 1922, we should feature it gladly in fullface print.

## THE BEST SELLERS OF 1922.

The final table of best-selling books in the American trade, in 1922, has been prepared by the Bookman, now under the editorship of John Farrar, from month-to-month reports made to the magazine. The list, comprising ten titles each in fiction and in general literature, is as follows:

### FICTION.

"If Winter Comes," by A. S. M. Hutchinson.
"Helen of the Old House," by Harold Bell Wright.
"Her Father's Daughter," by Gene Stratton-Porter.
"The Last Man," by Zane Grey.
"Brass," by Charles G. Norris.
"Head of the House of Coombe," by Frances Hodgson Burnett.
"Main Street," by Sinclair Lewis.
"Gentle Julia," by Booth Tarkington.
"Marie Chapdelaine," by Louis Hemon.
"Robin," by Frances Hodgson Burnett.

### GENERAL.

"Outline of History," by H. G. Wells.
"Queen Victoria," by Lytton Strachey.
"The Mirrors of Washington," Anonymous.
"The Americanization of Edward Bok," by Edward Bok.
"Story of Mankind," by Hendrik Van Loon.

"The Mirrors of Downing Street," Anonymous.
"The Mind in the Making," by James Harvey Robinson.
"Woodrow Wilson as I Know Him," by Joseph P. Tumulty.
"Painted Windows," Anonymous.
"Outwitting Our Nerves," by Jackson and Salisbury.

Not all the books here named are of last year's publication. Some of them have been carried over from the preceding season. Nor, if the lists were to be revised in accord with the returns merely of the last quarter of 1922, would they stand as given herewith. Reading times change and best-sellers change with them. It may be added that during the year these novels also made brief appearances among the best sellers: "Pride of Palomar," by Peter B. Kyne; "This Freedom," by A. S. M. Hutchinson; "The Breaking Point," by Mary Roberts Rinehart; "The Country Beyond," by J. O. Curwood; "The Brimming Cup," by Dorothy Canfield; "Three Soldiers," by John Dos Passos; "The Girls," by Edna Ferber; "Saint Teresa," by H. S. Harrison; "Cytherea," by Joseph Hergesheimer; "The Vehement Flame," by Margaret Deland; "Alice Adams," by Booth Tarkington; "Glimpses of the Moon," by Edith Wharton; "Certain People of Importance," by Kathleen Norris and "Babbitt," by Sinclair Lewis. Also brief appearances on the general list were made by "Margot Asquith," "The Outline of Science" and "The Conquest of Fear."

## ART OUTLOOK OF THE YEAR.

By Henry Tyrrell.

AMERICA is absorbing as never before the historic art treasures of the world. At the same time the practical development of native arts and crafts in all directions goes forward to meet and remould tradition, in the light of new accessions from abroad. New York, as metropolis and entreport of the country, becomes more a. more each year the modern centre, in all that term implies, for present and future artistic activity.

From every quarter of the globe the heirlooms of antique art are being shipped by dealers to enrich our museums and private galleries, which latter already are conceded to surpass in resources, if not in actual accumulations, the famous individual collections of the Old World. And, as instanced notably by the great Morgan collections, these privately gathered riches of art gravitate eventually to the public museums.

Meanwhile, aided by the ever-increasing volume of press and other pictorial publicity, this varied pageant of art passes before the eyes of millions—artists, amateurs, students, commercial designers, merchants, salespeople and laymen in general, at once raising the standard of taste and supplying the means to gratify it. Art and industry join hands. The result of this association is a dawning period of progress and cultural development along modern democratic lines, in which every individual plays either an active or a passive part, and the master artists of the future are born.

To the celebrated art collection of Joseph E. Widener at Lynnewood Hall, Philadelphia, have been added during the past year three of the major works of Rembrandt—namely, the two famous portraits of a man and a woman from the imperial Russian collection of Prince Youssupoff, at a reputed valuation of $750,000; and the third (final) version of the "Descent from the Cross," the Dutch master's greatest religious painting, at a price stated, not unplausibly, to be $500,000. This gives thirteen prime Rembrandts to the Widener collection, which already contained "The Mill," one of the Magisterial landscape paintings of the world; "The Circumcision," from the English collection of Lord Spencer of Althorpe; "St. Paul," from the Lord Wimbourne collection; the superb "Saskia," and Rembrandt's own self-portrait, from the Rothschild collection.

This Rembrandt aggregation represents the high standard maintained throughout all the historic schools represented at Lynnewood Hall, which so eminent an authority as Dr. Wilhelm R. Valentiner has called "an absolutely new type of art collections, developed in America by our private collectors—a type which undoubtedly foreshadows the great collections of the future." That is to say, a comparatively small number of works of art, but each individual piece of the very highest order in its kind, all chosen for liking as well as for quality, therefore harmonious, and arranged in settings that not only give them beautiful display but enhance their aesthetic and educational value by significant groupings and contrasts.

The opportunities now afforded for forming such a collection are quite unprecedented, as Europe cannot compete with America when heirlooms and masterpieces get into the market. The bankrupt Old World is parting with treasures once held as "priceless," and it is only the New World that has the ultimate price.

Gainsborough's "Blue Boy" ($640,000) and Sir Joshua Reynolds's "Mrs. Siddons as the Tragic Muse," from the Duke of Westminster's Grosvenor House collection, and Raeburn's "Sir Walter Scott" ($45,000) from the Burdett-Coutts sale at Christie's, are three more English pictures which have joined the innumerable caravan of European art setting toward America. The "Blue Boy" now gives added distinction to the private galleries of Henry E. Huntington, at his California residence.

These are war-time and post-war prices, but they have set a standard which is not likely to recede, and which undoubtedly has a stimulating effect on the valuation of assured American classics. Stuart, for example, has mounted as high as $75 000, while Homer, Inness and Fuller have sold latterly at from $40,000 to $50,000, and perhaps a dozen contemporaneous Americans might be named who regularly fetch from $15,000 to $30,000, which compares favorably with the French Barbizon and modern impressionist painters.

The Carnegie Institute of Pittsburgh, which holds its 22d annual exhibition in April, has its advisory committees in Paris and London. This international salon is a fixture of first-class importance. The Carnegie routine events rank with those of the Metropolitan and Brooklyn Museums, the National Academy, New York, the Pennsylvania Academy, Philadelphia, the Corcoran Gallery, Washington, and the Chicago Art Institute.

The special art collections, classes and lecture courses at the principal universities, such as Harvard, Yale, Columbia, Cornell, and Princeton, are significant developments of the last decade. The Metropolitan Museum, with an average popular attendance of over 1,100,000 annually, has a wide system of extension work, as well as continuous free lecture courses, from October to May, for members, students, industrial designers, salespeople, children, and the public generally. The still wider scope of the Brooklyn Institute and Museum, embracing music, drama and the sciences, also apportions in its schedules a liberal allowance to the arts.

The New York University, in co-operation with the Art-in-Trades Club, offers this year a novel and progressive course in interior decoration, illustrated with special loan exhibitions, and drawing upon the Metropolitan Museum's rich resources in the way of furniture, textiles, silverware, and all the decorative arts and crafts.

The Art Centre of New York, occupying its own commodious building and exhibition galleries, and now in its second year of prosperous existence, consists of a mutually co-operative organization of seven societies, as follows: American Institute of Graphic Arts, Art Alliance of America, New York Society of Craftsmen, Pictorial Photographers of America, Society of Illustrators, Art Directors Club, and the Stowaways. Its purpose is to advance the native decorative crafts and the industrial and graphic arts by bringing together all sorts and conditions of art workers for profitable publicity leading to the direct contact of art producers and art buyers.

The New York art season at full tide, with its average of 200 public art shows of various kinds simultaneously, is a spectacle not to be matched anywhere else in the world, unless possibly in Paris.

The ultimate meaning and moral of all this activity is the application of art to business, in which America bids fair to lead the world. With its inherent grandeur of architecture in commercial and public buildings, the liberal art patronage of some of its leading merchants, and the slow but unmistakable movement toward civic beautification, New York is marked for the nation's centre of art.

And withal, the great West—Middle, North and South—is in some ways outdoing the East. Take, for instance, the attendance of 58,473 persons in the first fortnight of the recent annual exhibition at the Art Institute of Chicago. All through the country there is direct and tangible evidence of the growth of art interest in the many exhibitions and sales of paintings, particularly American paintings, at the provincial museums and commercial galleries.

When the people who work find out for themselves that art is not a special privilege for the few, and that it pays to give thought to quality and embellishment even in the humblest everyday articles of utility and trade, the artistic future of the Nation is assured.

## MUSIC AND OPERA IN 1921-22.

By Deems Taylor.

A few figures will probably give the best idea of the enormous—one might say appalling—quantity of music that is heard in New York in a given year. Roughly speaking, the musical season of 1921-22 began on Sunday, Sept. 28, 1921, and ended on Sunday, May 21, 1922. During that period there were announced in the columns of The World just 997 musical events (this figure includes only such as took place on Manhattan Island; there were probably 200 additional in Brooklyn and the Bronx). Of these, twenty-three were ballet performances, 167 were orchestral concerts, 241 were operatic performances, and 567 were concerts and recitals. These were all public performances for which an admission was charged. If one included free concerts and recitals of a more or less private nature, one could safely raise the total figure to 1,200 or 1,500.

It is therefore obviously impossible in a survey such as this to give more than the briefest summary of the more important happenings of the 1921-22 season.

### OPERA.

First, both in actual number of separate presentations and in public interest, comes grand opera. Four opera companies were heard in New York last season, and there were only a few weeks when one or another of them was not giving performances.

The San Carlo Opera Company, under the management of Fortuno Gallo, played a four weeks' engagement at the Manhattan Opera House, beginning Sept. 26, 1921. The company is primarily a travelling one, without extravagant pretensions, but it gave creditable performances of the standard Italian repertoire at popular prices.

The Metropolitan Opera House opened its doors on Nov. 14 with Verdi's "La Traviata," Amelita Galli-Curci, the Italian coloratura soprano, singing the title role, and incidentally making her debut as a member of the Metropolitan Opera Company. The death of Enrico Caruso had deprived the Metropolitan of its greatest star, and there was considerable curiosity, and some misgiving, as to how the management would repair the loss.

Two of the Metropolitan's new singers, however, soon answered the question. Maria Jeritza, the Viennese soprano, who made her first appearance in Korngold's opera, "Die Tote Stadt," sprang into instant favor, made a sensational success in "Tosca," and was thereafter firmly established as a popular idol. Feodor Chaliapin, the great Russian basso, made an almost equally profound impression, although he appeared in only one role throughout the season, the name part in Moussorgsky's "Boris Godunoff."

The company gave 221 performances, of which 166 took place at the Metropolitan Opera House and ten at the Brooklyn Academy of Music, the remainder being given in Philadelphia, Pa., and Atlanta, Ga. Thirty-seven operas were presented, including four novelties and three revivals. The novelties were Erich Korngold's "Die Tote Stadt," in German, Edouard Lalo's "Le Roi d'Ys" and N. Rimsky-Korsakoff's "Snyegurochka," in French, and Mozart's "Cosi Fan Tutte," in Italian. The last two were the most interesting. The revivals, none of which was of great musical importance, were Massenet's "La Navarraise," in French, and Verdi's "Ernani" and Catalani's "Loreley," in Italian.

The new productions were generally well mounted and sung. Especially notable were Joseph Urban's scenery for "Ernani," "Le Roi d'Ys," and "Cosi Fan Tutte," and Boris Anisfeld's gorgeous settings for "Snyegurochka." Louis Hasselmans, an excellent French conductor, formerly with the Chicago Opera Company, joined the company for the second half of the season, replacing Albert Wolff, who resigned to become the head of the Opera Comique in Paris.

Titta Ruffo, the Italian baritone, made his first appearance as a member of the Metropolitan, and achieved fair success. Considerable discussion was aroused by the announcement that Geraldine Farrar, the American soprano, was to leave the company at the end of the season. Many of her admirers felt that she was being forced out, but it is probable that financial reasons played a large part in her failure to sign a new contract.

The Chicago Opera Company, under Mary Garden's direction, played a season of five weeks at the Manhattan Opera House, opening on Jan. 23, 1922, with Saint-Saens's "Samson et Dalilah." The company gave excellent performances of an extensive repertoire, including Debussy's "Pelleas et Melisande," Strauss's "Salome," and John Alden Carpenter's ballet-pantomime, "The Birthday of the Infanta." On Feb. 14 the Chicago Company gave the first New York performance of Serge Prokofieff's "The Love for Three Oranges," an opera with a fantastic and amusing libretto, but which proved rather a disappointment musically. Boris Anisfeld's colorful settings were noteworthy.

Lucien Muratore, the great French tenor, was stricken with appendicitis immediately after his first New York appearance, and did not return to the company until Feb. 23, when he appeared with Miss Garden in Fevrier's "Monna Vanna." The season as a whole was not a profitable one, and this fact, coupled with the impending sale of the Manhattan Opera House to a fraternal organization, caused the directors of the Chicago Company to announce that the current season would be their last in New York for several years.

Early in May, 1922, the Russian Grand Opera Company, an organization that had been touring the Orient, gave a season of four weeks at the New Amsterdam Theatre. The personnel and scenic equipment of the company were mediocre, but the performances gave New York operagoers a chance to hear several Russian operas that had never before been presented here, notably Dargomijsky's "Roussalka," Rimsky-Korsakoff's "The Tsar's Bride," and Chaikovsky's "Cherevichky."

### THE ORCHESTRAS.

The orchestral season was an exceptionally heavy one. The National Symphony Orchestra, founded two years previously, was merged with the Philharmonic, the latter giving 75 subscription concerts under four conductors—Josef Stransky, Willem Mengelberg, Artur Bodanzky, and Henry Hadley. The New York Symphony Orchestra, under Walter Damrosch, with Albert Coates, as guest conductor, gave 50 concerts; the Boston Symphony, under Pierre Monteux, and the Philadelphia Orchestra, under Leopold Stokowsky, gave ten New York concerts each.

The Harvard University Orchestra, a student organization, and the Cleveland Orchestra, under Nikolai Sokoloff, each gave a concert in Carnegie Hall; Pablo Casals, the cellist, conducted the New York Symphony Orchestra in two concerts, and Willem van Hoogstraten, a young Dutch conductor of exceptional ability, twice conducted the Philharmonic. He was later chosen as one of the conductors of the Stadium concerts given during the summer of 1922.

Richard Strauss, the famous German composer, visited America for the first time since 1905, and conducted the Philadelphia and Philharmonic Orchestras in ten concerts at Carnegie Hall, the Metropolitan Opera House, and the Hippodrome. The programs of these concerts were largely made up of Strauss's own orchestral works. The Society of the Friends of Music, directed by Artur Bodanzky, likewise gave ten concerts with an orchestra recruited from the players at the Metropolitan Opera House.

There were several notable performances, the most interesting of all being a concert given on Feb. 28 for the benefit of the American Academy at Rome, at which an orchestra of 300 players, made up of members of the New York Symphony, Philadelphia, and Philharmonic organizations, played an extensive program under the direction of four different conductors. The Philharmonic, under Willem Mengelberg's direction, gave five consecutive performances of Gustav Mahler's Third Symphony.

Thirty-six new works were played during the season, the most interesting being Karol Szymanowski's second symphony and Charles M. Loeffler's settings of three Irish poems (Boston Symphony), Ravel's "La Valse" (Philharmonic), Vaughan-Williams's Fantasy on a Theme by Thomas Tallis (New York Symphony) and Arnold Schoenberg's Five Orchestral Pieces (Philadelphia). Vincent d'Indy, the French composer, twice conducted the New York Symphony Orchestra in performances of

his new symphonic poem, "On the Shores of the Seas."

## SINGERS AND PLAYERS.

The recital season was marked by the return of several famous singers and by the appearance of several interesting new ones. The vocal event of the year, probably, was the reappearance of Emma Calvé, the French contralto, in her 57th year, who gave several recitals and concerts with tremendous success, her great voice being still in almost perfect condition. Edmond Clément, the French tenor, and Elena Gerhardt, the German Lieder singer, were also heard for the first time in several years.

Among the notable new singers were Edith Bennet, Maria Ivogun and Clare Dux, sopranos; Amy Ellerman, contralto; George Meader and Vladimir Rosing, tenors; John Barclay, baritone. Nina Koshetz and Feodor Chaliapin, both Russians, had been heard in New York before, but were virtually newcomers, and were notably successful in concert. Other well known singers who gave New York recitals last season were Eva Gautier, Sophie Braslau, Marguerite d'Alvarez, Ernestine Schumann-Heink, Reinald Werrenrath, Emilio de Gogorza and John McCormack. Mr. McCormack was taken seriously ill with septic sore throat in the spring and was obliged to cancel all his later engagements. For a time it was feared that he had lost his voice, but he recovered completely.

Many new violinists appeared, among them Bronislaw Huberman (his first New York visit since his appearance twenty-five years ago as a boy prodigy), Ferenc Vecsey, Emil Telmanyi, Miron Poliakin and Erna Rubenstein. The last-named, a girl of sixteen, made the most notable début of the season, appearing several times with orchestras, and giving three successful New York recitals. Most of the players whose fame is already established were heard during the season, notably Jascha Heifetz, who returned from a world tour, Erika Morini, Paul Kochanski, and Fritz Kreisler.

Four new pianists of the first rank loomed upon the musical horizon. These were Elly Ney, Artur Schnabel, Alexander Siloti and Myra Hess. The last named, an English woman, was possibly the most successful. Alfredo Casella, the Italian modernist composer, also gave several pinao recitals, and Serge Prokofieff, composer of "The Love for Three Oranges," played twice at Aeolian Hall. Other recitals included those by Harold Bauer, Ernest Schelling, Josef Hofmann, Sergei Rachmaninoff, Ossip Gabrilowitsch, Wilhelm Bachaus, Ignaz Friedman, Percy Grainger and Leo Ornstein.

A new cellist, Felix Salmond, an Englishman, made his New York début last season, with immediate success. He seems to deserve the adjective "great." No other new cellists of exceptional worth were discovered, but there was fine playing by several of the established artists, particularly Pablo Casals, Hans Kindler and Cornelius Van Vleet.

## OTHER MUSIC.

In the field of chamber music the Flonzaley, the Letz and the London Quartets gave their usual series of concerts, with a successful début by the Chicago String Quartet. Other concerts were given by the New York Chamber Music Society and the Chamber Music Art Society, two organizations that combine stringed and wind instruments.

There was considerable good choral music. The Oratorio Society, vastly improved in quality under its new conductor, Albert Stoessel, gave a good "a cappella" concert and an excellent performance of Bach's St. Matthew Passion music. The Schola Cantorum, under Kurt Schindler, performed Bach's B minor mass and gave an interesting concert of Italian music that included first American performances of Pizzetti's Lament and Malipero's St. Francis of Assisi. The Schumann Club, directed by Percy Rector Stephens, gave two farewell concerts and disbanded, after eight seasons. A fine concert of unaccompanied music was given by the St. Olaf Choir of Northfield, Minn., in the Metropolitan Opera House on January 17. The magnificent Mendelssohn Choir of Toronto gave concerts in Carnegie Hall on April 4 and 5, 1922, the first a program of unaccompanied music, the second offering, with the Philharmonic Orchestra, the first New York performance of Vaughan-Williams's Sea symphony.

There were several other organizations that cannot be strictly classed as either vocal or instrumental. Among them are the Beethoven Society, with a volunteer membership of famous artists, which gave a series of concerts; the Society of the Friends of Music, which produced choral as well as orchestral works, and the International Composers' Guild, which gave a valuable series of concerts of modern and ultra-modern music at the Greenwich Village Theatre.

## FIRST NIGHTS OF PLAYS IN NEW YORK IN 1922.

The first nights of plays produced in New York City from Jan. 1 to Dec. 1, 1922, were as follows:

"Rosa Machree," "He Who Gets Slapped," Jan. 9; "The Blue Kitten," Jan. 13; "Elsie Janis and Her Gang," Fritz Leiber in Shakespearian plays, Jan. 16; "Aglavaine and Solysette," Jan. 20; "The National Anthem," Jan. 23; "The Deluge," Jan. 27; Lambs' Public Gambol, Jan. 29; "The Voice From the Minaret," Jan. 30; "The Czarina," Jan. 31.

"Pins and Needles," "The Nest," Feb. 1; "The Pigeon," Feb. 2; "Chauve Souris," Feb. 3; "The Blushing Bride," "The Law Breaker," "Thank U," and Frank Fay's Fables, Feb. 6; "The Cat and the Canary," Feb. 7; "Fedora," Feb. 10; "Desert Sands," "Montmartre," Feb. 13; "Mme. Pierre," Feb. 15; "The French Doll," "To the Ladies," Feb. 20; "The Rubicon," "For Goodness Sake," Feb. 21; "Mrs. Warren's Profession," Feb. 22; "Bavu," Feb. 25; "Your Woman and Mine," Feb. 27.

"Gulbor," March. 1; "The First Man," March 4; "Back to Methuselah," "Broken Branches," "Madeline of the Movies," and "Up the Ladder," March 6; "The Rose of Stamboul," March 7; "The Hairy Ape," March 9; "The Hotel Mouse," "The First Fifty Years," March 13; "The Truth About Blayds," March 14; Ruth Draper's Recitals, beginning March 19; "Voltaire," and brief return of "Liliom," March 20; "The Hindu," March 21; "Candida," "Just Because," March 22.

"The Green Ring," "Taboo" (special matinees), April 4; "Letty Pepper," April 10; "Make It Snappy," April 13; De Wolf Hopper's Comedians, April 15; "The Goldfish," "Ladybug," April 17; "Salut du Monde," April 22; "The Shadow," "The Charlatan," "Creditors," April 24; "The Night Call," "La Rafale" (French), April 25, "The Bronx Express," April 26; "Chains of Dew," April 27; "An Actress," April 30.

"Partners Again," "What the Public Wants," and "Le Retour," May 1; "The Red Geranium," "The Advertising of Kate," "Go Easy, Mabel," "La Belle Aventure," May 8; "Billeted" (revival), May 9; "Fanny Hawthorne," May 11; "Kempy," May 15; "The Rotters," "Salome," May 22; "Able's Irish Rose," "Makers of Light," May 23; "The Drums of Jeopardy," "Red Pepper," May 29; "Heads I Win," May 30.

"The Pinch Hitter," June 1; "Ziegfeld Follies," "The Rivals," June 5; "The House of Lorrimer," June 6; "Pin Wheel Revue," June 15; "Strut Miss Lizzie," June 19; "Morn to Midnight," June 26.

"Spice of 1922," July 6; "Sue Dear," July 10; "Plantation Revue," July 17; "Ginger Box Revue," July 31.

"Whispering Wires," Aug. 7; "Shore Leave," Aug. 8; "The Monster," Aug. 9; "Lights Out," "Lonely Wives," Aug. 14; "Manhattan," Aug. 15; "The Woman Who Laughed," Aug. 16; "Fools Errant," "Tons of Money," Aug. 21; "The Old Soak," "Daffy Dill," Aug. 22; "A Serpent's Tooth," Aug. 24; "Scandals," "The Gingham Girl," Aug. 28; "I Will if You Will," "The Torch Bearers," Aug. 29; "So This Is London," Aug. 30; "Her Temporary Husband," Aug. 31.

"Molly Darling," Sept. 1; "Better Times," Sept. 2; "Hunky Dory," "Sally, Irene and Mary," "The Endless Chain," Sept. 4; "The Plot Thickens," Sept. 5; "Wild Oats Lane," Sept. 6; "Dreams for Sale," Sept. 11; "Greenwich Village Follies," "Why Men Leave Home," Sept. 12; "The Awful Truth," Sept. 18; "Orange Blossoms," "It's A Boy," Sept. 19; "Banco," "The Passing Show," Sept. 20; "East of Suez," Sept. 21; "The Exciters," Sept. 22; "La Tendresse," "Spite Corner," "On The Stairs," Sept. 25; "Rose Bernd," Sept. 26; "Loyalties," Sept. 27; "Thin Ice," Sept. 30.

"Malvaloca," "The Yankee Princess," "The Lady in Ermine," Oct. 2; "Dolly Jordan," "That Day," Oct. 3; "Revue Russe," Oct. 5; "The Evergreen Lady," Oct. 7; "R. U. R.," Oct. 9; "Queen o' Hearts," "The Faithful Heart," Oct. 10; "Swifty," Oct. 16; "To Love," Oct. 17; "The Fool," "Music Box Revue," Oct. 23; "The Last Warning," Oct. 24; "The World We Live In," "Persons Unknown," Oct. 25; "Springtime of Youth," Oct. 26; "Six Characters in Search of an Author," Oct. 30.

"Forty-niners," "Up She Goes," Nov. 6; "Rain," Nov. 7; "Little Nellie Kelly," "The Adventuress" (French special performances), "Merton of the Movies," Nov. 13; "The Love Child," "The Romantic Age," "Virtue?" Nov. 14; "Hamlet," Nov. 16; "The Texas Nightingale," "The Lucky One," "Comedie Francaise," Nov. 20; "The Bootleggers," "Liza," Nov. 27; "The Bunch and Judy," Nov. 28.

## AMERICAN RELIEF AID FOR RUSSIAN FAMINE VICTIMS.

Prepared for The World Almanac by the American Relief Administration, Herbert Hoover, *Chairman*, 42 Broadway, New York City.

The American Relief Administration, a private charitable organization, has, since 1919, carried on child-feeding or general relief work in twenty-three European countries, the most extensive operations having been in the following: Austria, Armenia, Czechoslovakia, Constantinople, Free City of Danzig, Finland, Hungary, Jugo-Slavia, Esthonia, Lithuania, Latvia, Northern France, Poland, Roumania, and Russia, and with the American Friends Service Committee in Germany. In Austria, Czechoslovakia and Poland, the American Relief Administration turned over its relief work to organizations in these countries subsidized by their Governments. Prior to June, 1922, the American Relief Administration had withdrawn its work from all the other countries excepting Russia and Turkey.

During the early summer of 1921, reports began to appear in the press of a severe drought in the great grain producing region of Russia along the Volga River. By the first of July it was obvious that this region was threatened with one of the worst famines in history.

During July, Maxim Gorky, in behalf of the Russian people and with the approval of the Soviet Government, appealed to the world for aid. The American Relief Administration, through its Chairman, Herbert Hoover, answered this appeal and offered its service and that of co-operating organizations to combat the famine, with the proviso that Americans held as prisoners in Russia should be released. On Aug. 20, 1921, an agreement between the American Relief Administration and Soviet Russia was signed at Riga, with practically the same stipulations that had been agreed to by the Governments of the countries in which other American Relief Administration missions have operated.

The Soviet Government agreed to bear all costs of discharging, storage, handling, and transportation within Russia, and from the ports in countries adjacent to Russia through which relief supplies were to be imported, as well as all local costs of administration, preparation and distribution. On its part the American Relief Administration, in accordance with its fundamental policy, agreed to distribute relief without regard to race, religion or social or political status and to permit none of its personnel to engage in commercial or political activity.

### EXTENT OF THE FAMINE.

The first areas affected by the drought comprised the provinces along the Volga and Kama Rivers in Eastern European Russia: Astrakhan, Tzaritzin, the Kirghiz Republic, German Communes, Saratov, Simbirsk, the Tartar Republic, of which Kazan is the capital, the Mahri and Chuvash oblasts, Ufa, Orenburg and the Bashkir Republic. The effects of a similar drought in the southern Ukraine were not greatly felt until the spring of 1922, when the famine region was extended to include Odessa, Nikolayevsk, Ekaterinoslav, Zaporosh, Donetz, and the Crimea. As a natural result of the food shortage throughout Russia, a number of larger cities, particularly Petrograd and Moscow, were affected.

Subsequently, in the summer of 1922 it was found necessary to extend the relief work on a smaller scale into the provinces of Perm, Viatka, Votskaya, Nijni-Novgorod, and Penza.

Headquarters of the American Relief Administration were established in Moscow in September, 1921, and feeding was immediately started on an initial program of 1,000,000 children, which was reached on the first of January, 1922, and extended until on Aug. 1, 1922, the American Relief Administration was feeding approximately 10,500,000 destitute individuals in the famine areas along the Volga River, in the Ukraine and Crimea, and in the cities of Petrograd and Moscow. Of this number 4,200,000 were children.

### AT A COST OF $60,000,000.

The total resources of the American Relief Administration for Russian relief have amounted to approximately $60,000,000. These resources have been derived as follows:

The Congress of the United States, on Dec. 24, 1921, authorized the use of $20,000,000 still remaining with the United States Grain Corporation for the purchase of corn, seed grain and preserved milk for Russian relief; it also authorized the use of $4,000,000 worth of surplus United States Army medical supplies. The Soviet Government gave the American Relief Administration $11,433,000 for the purchase of seed; the American Red Cross allocated $3,600,000 toward the American Relief Administration medical program; the American Jewish Joint Distribution Committee donated approximately $5,000,000 for general relief. The balance has been contributed by co-operating organizations or directly from the American public.

Between Jan. 1 and Aug. 1, 1922, the American Relief Administration shipped into Russia a total of over 750,000 tons of American food, seed, medical supplies and clothing.

In addition to its relief program the American Relief Administration undertook the largest single medical relief program that has ever been carried out. This program included the rehabilitation of hospitals and ambulatories throughout the famine regions with medicines and equipment, the sanitation of towns and cities and the inoculation against typhoid, paratyphoid, smallpox and cholera, of hundreds of thousands of persons.

To enable persons in other countries to send food to their relatives and friends in Russia, the American Relief Administration established a food remittance system whereby any one might send the sum of $10, or multiples thereof, to the New York, London or European offices of the American Relief Administration for which a standard package of scientifically selected foodstuffs was delivered to the designated beneficiary anywhere in Russia. Up to Nov. 1, 1922, over 440,000 persons had purchased food remittances to the total value of over $9,400,000.

Because the lack of clothing is almost as acute as the lack of food, the American Relief Administration in October, 1922, set up a clothing remittance system similar to the food remittance plan. For $20 a clothing package is delivered in Russia.

According to the official figures of the Soviet Government the Russian harvest of 1922 was sufficient, if efficiently and evenly distributed, to feed the adult population. There are, however, still a great number of orphans and refugees who are in need. It is estimated that the total number of 3,000,000 children will be in need of food during the winter and spring 1922-23. The American Relief Administration has sufficient resources to care for 2,000,000 of these children.

In addition to its Russian program, the American Relief Administration, with specially donated funds, has given extensive relief to Russian refugees in Constantinople and to intellectuals in Poland and Austria.

### APPRECIATION FROM RUSSIA.

Maxim Gorky wrote Herbert Hoover this letter, thanking America for the past year's work of the American Relief Administration in Russia:

"BERLIN, July 30, 1922.

"Prof. Geron Davis informs me that you kindly consented to send individual packages to scientists and men of letters in Moscow and Petrograd. Needless to say your generous assistance is worthy of the greatest praise. Nevertheless, permit me to express my feelings of gratitude to all citizens of the United States of America and complete satisfaction with the humanitarian work of the American Relief Administration, of which you are Chairman. In the past year you have saved from death three and one-half million children, five and one-half million adults, fifteen thousand students, and have now added two hundred or more Russians of the learned professions. I am informed that this charity cost America fifty-nine million dollars, figures which are sufficiently eloquent.

"In all the history of human suffering I know of nothing more trying to the souls of men than the events through which the Russian people are passing, and in the history of practical humanitarianism I know of no accomplishment which in terms of magnitude and generosity can be compared to the relief that you have actually accomplished. It seems to me very important that such great generosity developed during these past years of universal cruelty—cruelty which is ruining Europe, following as it does the terrible war which shook the foundations of European culture. It is not only the physical help which is valuable but the spiritual succor to the minds of mankind which are tormented by the events of the past years and sick, due to cruelty and hate.

"The generosity of the American people resuscitates the dream of fraternity among peoples at a time when humanity greatly needs charity and compassion. Your help will be inscribed in history as a unique, gigantic accomplishment worthy of the greatest glory and will long remain in the memory of millions of Russian children whom you saved from death. I believe that the recollection of American self-sacrifice in saving children will make these same children better, more generous men and women. Permit me, with all my heart, esteemed Mr. Hoover, to wish you and your assistants continued good health and stout hearts."

## THE AMERICAN RED CROSS.

(Contributed by the Organization.)

THE American Red Cross operates under its charter by act of Congress of Jan. 5, 1905, "to furnish volunteer aid to the sick and wounded, or armies in time of war in accordance with the conventions of Geneva; to act in matters of voluntary relief and in accord with the military and naval authorities as a medium of communication between the American people and their army and navy; to continue and carry on a system of national and international relief in time of peace and to apply the same in mitigating the suffering caused by pestilence, famine, fire, floods and other great national calamities, and to devise and carry on measures for preventing the same."

Warren G. Harding is President of the American Red Cross and John Barton Payne is Chairman of the Central Committee, the governing body composed of eighteen persons, six of whom represent the Federal Government. National Headquarters is located at Washington, D. C., and from it the activities of 3,627 chapters are directed through six divisional headquarters. From National Headquarters also relief operations in foreign countries are directed.

The annual report of the American Red Cross is audited by the War Department and transmitted to Congress through that department. The report for the last fiscal year shows that 2,679 Red Cross chapters were assisting disabled World War veterans and their families, in addition to which the National Organization maintained 604 Red Cross workers in Government hospitals to assist Veterans' Bureau patients. Members of the army and navy were served by the Red Cross at 272 posts and stations.

During the year the Red Cross administered emergency relief and assisted in the rehabilitation of victims in seventy-two disasters. Public Health nurses were maintained by 1,036 chapters; health centres by 286; other health activities by 620; first aid classes by 272; life-saving classes by 324; home hygiene and care of the sick classes by 523; nutrition work by 205. Volunteers gave a variety of services; production was carried on in 1,302 chapters, while by 742 chapters Red Cross home service was extended to assist the civilian population. The following shows the expenditures by the national organization (exclusive of chapters) of the Red Cross during the fiscal year ended June 30, 1922, and budget for the fiscal year ending June 30, 1923:

| | Expenditures Fiscal Year 1921-1922. | Budget Fiscal Year 1922-1923. |
|---|---|---|
| Assistance to disabled ex-service men and women | $2,665,132.06 | $3,030,692.90 |
| Service and assistance to 3,600 Red Cross Chapters and their branches | 1,818,450.39 | 1,293,240.80 |
| Disaster relief | 911,222.60 | 750,000.00 |
| Hospital and other services to the regular army and navy | 360,618.26 | 306,300.00 |
| Assist'nce to oth. organizat'ns co-operat'g in wk. related to Red Cross activities | 163,527.85 | 200,000.00 |
| Other activities in the United States | 246,254.76 | 130,406.99 |
| Med. & hospital supplies for dist. by American Relief Adm. in Russia | 1,182,185.96 | 1,834,044.83 |
| Completion child health programme in Europe | 1,990,890.02 | 641,314.10 |
| Completion and liquidation of general relief operations abroad | 2,124,371.84 | 810,718.15 |
| Assistance to League of Red Cross Societies | 350,000.00 | 200,000.00 |
| Management | 654,193.95 | 493,154.70 |
| Total | $12,475,847.69 | $9,739,872.47 |

American National Red Cross expenditures abroad on account of the World War, July 1, 1917, to June 30, 1922:

| | | | | | |
|---|---|---|---|---|---|
| France | $141,536,000 | Balkans | $12,595,000 | Vienna, Budapest | $5,069,000 |
| Belgium | 4,472,000 | Palestine & Nr. East. | 9,538,000 | Siberia | 21,602,000 |
| Italy | 23,654,000 | Poland | 17,258,000 | Other foreign | 21,142,000 |
| Great Britain | 13,553,000 | Czecho-Slovakia | 875,000 | | |
| Switzerland | 1,388,000 | Russia & Baltic States | 13,087,000 | Total | $285,769,000 |

From April 1, 1914, to July 1, 1917, the period before the United States entered the war, the expenditures abroad were $3,337,000.

Revenues of National Headquarters during the fiscal year ending June 30, 1922, were $4,906,385.11, or $7,569,462.58 less than expenditures. There having been at the beginning of the fiscal year a balance of $33,507,769.93, there was on June 30, 1922, a balance of $25,938,307.35. There having been budgeted for the fiscal year ending June 30, 1923, $9,739,872.47 and $12,617,204.90 set aside for continuing certain specified activities, there remained June 30, 1922, unallotted funds totalling $3,581,229.98, in addition to which there were total endowments and a general reserve totalling $7,713,262.58. The foregoing figures do not include chapter revenues and expenditures.

The membership of the American Red Cross at the end of the last fiscal year was 4,000,000.

## NEAR EAST RELIEF.

Near East Relief operates under its charter by act of Congress of Aug. 6, 1919, "to provide relief and to assist in the repatriation, rehabilitation, and re-establishment of suffering and dependent people of the Near East and adjacent areas; to provide for the care of orphans and widows and to promote the social, economic and industrial welfare of those who have been rendered destitute, or dependent directly or indirectly, by the vicissitudes of war, the cruelties of men, or other causes beyond their control." Its field of operation is Constantinople, and the adjoining territory in European Turkey, Thrace, Anatolia, Armenia, Cilicia, Kurdistan, Syria, Palestine, Mesopotamia, Persia and Transcaucasia, including Russian Armenia and Georgia. The administrative centres abroad are at Constantinople, Beirut, Tiflis and Bagdad. Annual report is made to Congress.

The organization is indorsed by President Harding and Congress; by the National Information Bureau; by the churches, Protestant, Catholic and Jewish; by civic, commercial, industrial, fraternal, educational and social organizations; by American and foreign officials in Europe, Turkey and other countries of the Near East.

The Central headquarters of Near East Relief are at 151 Fifth Ave., New York City. In every state of the Union there is a branch office, and most of the larger states have a State Director. European headquarters are at Geneva.

The officers of Near East Relief are: James L. Barton, Chairman; John H. Finley, Vice Chairman; Charles V. Vickrey, General Secretary; Cleveland H. Dodge, Treasurer; and Frank L. Polk, General Counsel. The Executive Committee are: Edwin M. Bulkley, Chairman; James L. Barton, Cleveland H. Dodge, Abram I. Elkus, Harold A. Hatch, William B. Millar, Henry Morgenthau, George A. Plimpton, Walter George Smith, Charles V. Vickrey, and Stanley White.

This organization succeeded the Armenian and Syrian Relief Committee originally established in 1915 following an appeal for American relief to victims of massacres coming from Henry Morgenthau, then United States Ambassador to Turkey.

Near East relief has saved at least 1,000,000 women and children from starvation. Approximately 300 American workers compose its present overseas staff, with hundreds of native helpers. It maintains 38 hospitals and 59 clinics; 88,401 patients were recorded in the last monthly report. It supports 124 orphanages; 64,107 children are wholly dependent; 50,000 others partially dependent. In addition, Near East Relief has a constructive program of training for self-support—industries of various types adapted to the vocational training of men, women and children being conducted at most relief stations, and in connection with the orphanages. At Rodosto 5,000 refugees were established on farm lands; agricultural development of 16,000 acres organized in the Caucasus. The total value of Near East Relief operations to date approximates $73,000,000.

The Auditor's Report, covering the period ending Dec. 31, 1921, as submitted in the report made to

Congress, shows that up to then the net cash relief contributions had been $51,361,805; that relief payments had been made amounting $49,290,499; that relief appropriations had been made in addition of $2,507,574, to be cared for by the incoming contributions.

In addition the Near East Relief received flour previous to 1921 through the United States Relief Administration valued at $12,800,000, and it values the buildings, land, transportation, equipment, service, food and other supplies contributed in the Near East at $5,000,000. Cost and other supplies received since this report to Congress was printed bring the amount up to the $73,000,000 mentioned above.

When the Smyrna disaster occurred Near East Relief food and supplies accumulated for regular orphanage work were rushed from Constantinople warehouses to the scene, and personnel conducted evacuation service, feeding, medical and personal service stations at the centres sought by fleeing refugees before and after the fire. Later, under the direction of President Harding's Co-ordinating Committee, Will H. Hays, Chairman; Archibald B. Roosevelt, Executive Secretary, the work was carried on to meet the appalling emergency which rapidly spread through Eastern Thrace to Greece.

In appointing this committee, which consists of the Governors of the several States and over 100 citizens of prominence throughout the United States, President Harding in his telegram to each, said: "More than a half-million suffering human beings, the majority women and children, are dependent on the benevolence of America. The Red Cross and Near East Relief committees, working in harmony and supported by all benevolent organizations, are responding to the call. The Co-ordinating Committee is helping develop the money raising campaign and bringing into concerted action all the forces possible."

## SHEPPARD-TOWNER MATERNITY ACT.

The Sheppard-Towner Act "for the promotion of the welfare and hygiene of maternity and infancy and for other purposes," passed by the Senate by a vote of 63 to 7, and by the House by a vote of 279 to 39, was signed by the President and became a law on Nov. 23, 1921.

The act provided for the current fiscal year (1922) $10,000 for each State accepting the provisions of the act, and an additional sum of $1,000,000. Of this additional amount, not more than $50,000 was to be used for Federal administration, and the remainder was to be apportioned to the States and granted, if matched dollar for dollar by State appropriations, $5,000 to each State, the remainder to be apportioned on the basis of population.

After the fiscal year 1921-22, the authorized annual expenditure is $5,000 unmatched to each State and to be matched dollar for dollar, an additional $5,000 plus a prorated amount of the remaining $710,000 of the additional $1,000,000, after a maximum of $50,000 has been deducted for Federal administration.

The Federal board was changed from a Board Advisory to the Children's Bureau to the Federal Board of Maternity and Infant Hygiene, composed of the chief of the Children's Bureau, the Surgeon General of the U. S. Public Health Service, and the Commissioner of Education. The board is given authority to approve or disapprove the plans submitted by the State, and to withhold further certification of the Federal funds to a State if the money is not properly expended.

Local administration in the States is in the Child Hygiene or Child Welfare Division of the State agency of health, or, where such a division does not exist, the agency designated by the State.

The board has laid down no plan of work which a State must follow, nor has it made approval of plans contingent on complying with certain conditions, each plan being considered on its merits.

The bill was the direct outgrowth of the series of investigations on maternal and infant mortality made by the Federal Children's Bureau during the nine years of its existence. These investigations, besides dealing with the social, economic, industrial and civic conditions surrounding mothers and infants, reveal a morbidity and a mortality which, authorities agree, are to a great extent preventable.

In 1915 the infant mortality rate in the United States birth registration area was 100 per thousand births and the maternal mortality rate 6.1. In 1920 the infant mortality rate had fallen to 85.8, but the maternal death rate was 8. The total number of maternal deaths in the death registration area in 1920 was 16,776.

The States that are not in the birth registration area are: Alabama, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Illinois, Iowa, Louisiana, Missouri, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Tennessee, Texas and West Virginia.

Up to date 42 States have accepted the terms of the act—all except Maine, Massachusetts, Rhode Island, New York, Louisiana, and Washington. Twelve of these acceptances (New Hampshire, Delaware, New Jersey, Maryland, Virginia, South Carolina, Georgia, Kentucky, Mississippi, Minnesota Oregon and New Mexico) are by State Legislatures and the remaining 30 by Governors pending the next regular session of the Legislature.

The New York Legislature, though refusing to accept the act on the ground of paternalism, increased by $130,000 its previous child hygiene appropriation of $30,000 and created a division of maternity and infancy.

Payments have been made up to Oct. 30, 1922, to 41 States from 1922 funds, and to 38 States from 1923 funds. Of the 41 States that have received payments from 1922 funds, 22 matched their full allotment, 5 matched part of their allotment, and 10 accepted the $5,000 granted outright without matching. Of the 38 States that have received payments from 1923 funds, 13 matched their full allotment, 15 matched part of their allotment, and 10 accepted the $5,000 granted outright without matching.

The maximum amounts available to the States for the fiscal year ending June 30, 1922, were: Granted by the Federal Government if matched by the State, apportionment based on population, $237,500; to it is added a grant outright of $5,000 to each State, $240,000; grand total $477,500.

The maximum amounts available to the States for the fiscal year ending June 30, 1923, are:

| STATE. | Apportioned on basis of population. | Granted if matched. Total (if matched)* | Grand Total†. |
|---|---|---|---|
| | | *Cents omitted* | |
| Total | $710,000 | $950,000 | $1,190,000 |
| Alabama | 15,836 | 20,836 | 25,836 |
| Arizona | 2,253 | 7,253 | 12,253 |
| Arkansas | 11,817 | 16,817 | 21,817 |
| California | 23,112 | 28,112 | 33,112 |
| Colorado | 6,337 | 11,337 | 16,337 |
| Connecticut | 9,311 | 14,311 | 19,311 |
| Delaware | 1,504 | 6,504 | 11,504 |
| Florida | 6,531 | 11,531 | 16,531 |
| Georgia | 19,530 | 24,530 | 29,530 |
| Idaho | 2,912 | 7,912 | 12,912 |
| Illinois | 43,739 | 48,739 | 53,739 |
| Indiana | 19,763 | 24,763 | 29,763 |
| Iowa | 16,213 | 21,213 | 26,213 |
| Kansas | 11,932 | 16,932 | 21,932 |
| Kentucky | 16,298 | 21,298 | 26,298 |
| Louisiana | 12,129 | 17,129 | 22,129 |
| Maine | 5,179 | 10,179 | 15,179 |
| Maryland | 9,777 | 14,777 | 19,777 |
| Massachusetts | 25,981 | 30,981 | 35,981 |
| Michigan | 24,741 | 29,741 | 34,741 |
| Minnesota | 16,099 | 21,099 | 26,099 |
| Mississippi | 12,076 | 17,076 | 22,076 |
| Missouri | 22,958 | 27,958 | 32,958 |
| Montana | 3,701 | 8,701 | 13,701 |
| Nebraska | 8,743 | 13,743 | 18,743 |
| Nevada | 522 | 5,522 | 10,522 |
| New Hampshire | 2,988 | 7,988 | 12,988 |
| New Jersey | 21,284 | 26,284 | 31,284 |
| New Mexico | 2,430 | 7,430 | 12,430 |
| New York | 70,041 | 75,041 | 80,041 |
| North Carolina | 17,259 | 22,259 | 27,259 |
| North Dakota | 4,362 | 9,362 | 14,362 |
| Ohio | 38,843 | 43,843 | 48,843 |
| Oklahoma | 13,679 | 18,679 | 23,679 |
| Oregon | 5,283 | 10,283 | 15,283 |
| Pennsylvania | 58,810 | 63,810 | 68,810 |
| Rhode Island | 4,076 | 9,076 | 14,076 |
| South Carolina | 11,355 | 16,355 | 21,355 |
| South Dakota | 4,293 | 9,293 | 14,293 |
| Tennessee | 15,767 | 20,767 | 25,767 |
| Texas | 31,450 | 36,450 | 41,450 |
| Utah | 3,030 | 8,030 | 13,030 |
| Vermont | 2,376 | 7,376 | 12,376 |
| Virginia | 15,574 | 20,574 | 25,574 |
| Washington | 9,149 | 14,149 | 19,149 |
| West Virginia | 9,871 | 14,871 | 19,871 |
| Wisconsin | 17,751 | 22,751 | 27,751 |
| Wyoming | 1,311 | 6,311 | 11,311 |

*Includes $240,000 granted if matched ($5,000 to each State).

†Includes $240,000 granted outright ($5,000 to each State) in addition to amounts granted if matched.

The State of Massachusetts, by order of the Legislature, attacked the constitutionality of the law in a petition to the Supreme Court on Sept. 8, 1922.

## IRISH FREE STATE.

The Anglo-Irish Treaty which is the first step toward the establishment of the Irish Free State was signed at London by the plenipotentiaries of Dail Eireann and the British Cabinet early on the morning of Dec. 6, 1921. (See the WORLD ALMANAC for 1922 for the full text of the treaty.) It was ratified in principle by the British Parliament ten days later and was subsequently converted into an act (the Irish Free State Agreement Act), passing its final reading on March 31, 1922, and receiving the royal assent on the same day.

After a prolonged debate in the Chamber of Deputies (Dail Eireann) it was ratified, Jan. 7, 1922, on behalf of the Irish Republican Government, by a vote of 64 to 57. In this debate Arthur Griffith, chief of the delegation that had helped frame the compact, took no part, leaving the matter of its defense entirely in the hands of Michael Collins whose ability as a parliamentarian was until then scarcely known. He managed to secure its ratification on the plea that the treaty was not a final, terminating agreement but a first measure toward peace and to be entirely superseded by another document—the Constitution.

"It gives Ireland," he declared, "not that ultimate freedom that all nations hope for, but freedom to achieve that end."

The opposition to the treaty was led by President Eamon De Valera, who characterized it as a "surrender of sovereign rights in return for a vague promise." He made several unsuccessful attempts to have the treaty placed on the table in order that he might introduce a new motion for a substitute agreement which was referred to in the debates as "Document No. 2." The treaty was passed, however, without alteration and two days later, Jan. 9, De Valera resigned as President of the republic. A motion to re-elect him, introduced in the Chamber immediately on receipt of his resignation, failed of acceptance by two votes.

On Jan. 10, 1922, Arthur Griffith, the founder of Sinn Fein, and Vice President since 1919, was elected President to succeed De Valera, receiving the support of a large portion of "De Valera's minority," in consequence of his having pledged to "carry on the republic" as a government separate and distinct from the Provisional Free State Government as provided for in the treaty.

Griffith chose as his Cabinet: Michael Collins, Minister of Finance; George Gavan Duffy, Minister for Foreign Affairs; Eamon Duggan, Minister for Home Affairs; William Cosgrave, Minister for Local Government; Kevin O'Higgins, Minister for Economic Affairs; Richard Mulcahy, Minister for Defense; Ernest Blythe, Minister for Trade and Commerce; Michael Hayes, Minister for Education; Joseph McGrath, Minister of Labor; and J. J. Walsh, Postmaster General.

Exercising his prerogatives as President, Griffith appointed Michael Collins as Chairman of the Provisional Government which was to take over the management of the British regime in Ireland. Thus appointed, Collins convoked the Parliament for Southern Ireland which had been provided in the Government of Ireland Act (Westminster) of 1920 but which had never sat owing to the refusal of the Irish to recognize Britain's right to create it. The membership of this Parliament corresponded to that of Dail Eireann with the exception that two Unionist members, elected to represent Trinity College, Dublin, were included also. It convened on Jan. 14, "De Valera's minority" abstaining, and ratified in its turn the Anglo-Irish Treaty. The vote taken was unanimously in favor of ratification.

Two days later, then (Jan. 16) Michael Collins with his staff of assistants accepted the "surrender" of Dublin Castle. A slight hitch in the ceremonies was caused by Collins's refusal to take the oath of Privy Councillor to His Majesty, George V., but administrative powers were handed over on his affirming that he intended to do his utmost to put the treaty into effect and would take the oath after a popular election on the question of the treaty should have released him of his oath to the republic. This irregularity was set right by the Lord Lieutenant's explaining that Collins was "governing by courtesy" and as his own deputy, not the King's. Finally, on Jan. 19, the Post Office was handed over to Irish control.

In the meanwhile, on Jan. 12, a general amnesty was granted by royal warrant to all prisoners held on charges of having participated in the Irish uprising. More than a thousand were involved, all of whom were released within a few hours of the issuance of the warrant. On Jan. 13, the first detachment of "Black and Tans" was withdrawn from Ireland and three days later the first contingent of military.

On Jan. 15, De Valera, as President of the military and political organization of Sinn Fein, convoked the Executive Council and succeeded in putting through his demand that the Ard Fheis (Supreme Assembly) meet on Feb. 7 to discuss the split that had occurred in the party as a result of the divergent attitudes taken with reference to the treaty.

### NEGOTIATIONS OVER THE BOUNDARY.

The Craig-Collins pact was entered into on Jan. 21, following an accidental meeting on a railroad train between Michael Collins and Sir James Craig, Premier of the Belfast Parliament. In this it was agreed: (1) That the Boundary Commission provided for in the treaty to re-arrange the line of demarcation between the North and the South should be altered so as to be made up of one representative for each of the two Parliaments; (2) that the boycott of Ulster in the South should be discontinued, in return for which the Northern Government should protect Catholics as against pogroms and unfair discrimination in industry; (3) that both Governments should unite to facilitate the settlement of the railroad strike that had been threatening for several months; (4) that both Governments should endeavor to find a more suitable federal agency for dealing with problems affecting all Ireland than is provided by the Council of Ireland, the constitution of which was included in the Government of Ireland Act of 1920; (5) that a further meeting should be held to discuss the question of an amnesty to be granted to political prisoners taken since the truce of July 11, 1921, and not, therefore, released under the general amnesty of Jan. 12.

At a second meeting between Craig and Collins in Dublin on Feb. 2, Collins demanded that Counties Tyrone and Fermanagh which were over 60 per cent. Sinn Fein be ceded to the Free State along with large portions of other counties and the City of Derry. Craig declared that the North was prepared to submit to the Boundary Commission only questions dealing with the "rectification in detail" of the boundary which was to remain substantially where it was. The conference broke down and Craig went straightforth to London where he was received by the Prime Minister on Feb. 3.

Two days after this, Collins was in London with Duggan and Griffith, both signatories of the treaty, to bear witness to guarantees made by the British Premier as to the interpretation to be put upon the words of the compact regarding the function of the Boundary Commission. Lloyd George admitted the contention of the Free State delegation. He also admitted having guaranteed before the peace negotiations were opened in July, 1921, that he would protect the territorial integrity of the North as it then was, or being forced to an agreement, that he would not consent to the further restriction of the Northern Parliament's jurisdiction without first consulting Belfast. He justified his breach of this promise by saying that a moment had arrived when the Irish delegation was prepared to sign the treaty and he could not morally take a chance on deferring the acceptance of the pact several days with the expectancy that that moment would ever again arrive. New plans were then formulated, Craig agreeing that a national policy and constitution be settled by the Parliamentary representatives of all Ireland. His agreement, however, was conditioned on an early election in the South and the return to Parliament of a substantial majority of Free Staters.

The meeting of the Ard Fheis which had been called for Feb. 7 was postponed to Feb. 21 owing to the inability of Collins and Griffith to leave the London conference before that time. On the second day of its sitting, Feb. 22, a treaty of peace was arranged between the Free State advocates and the Republicans, and the Sinn Fein party thus kept together. It was agreed that the general election when it was held was to be on the issue not of the treaty but of the Constitution, which was to be prepared beforehand, and that in no event was an election to be held before the expiration of three months. The agreement reached with Craig a few days before at London was thus held in abeyance.

The campaigning for the election had begun before the settlement of its date. The attack on the treaty was begun by De Valera in Cork on Sunday, Feb. 19. His chief argument was that by taking an oath of allegiance to the British Crown the Irish Deputies would in effect make British subjects of the entire Irish nation. Collins replied to this on the opening of the Free State campaign at Dublin on March 5, declaring that the Free State was a "stepping-stone to a republic" and that the oath would be binding only during the stepping-stone period. Labor entered the campaign on a nationalization-of-public-utilities platform. It re-

fused to take a stand on the treaty, promising to sit with the Government in Dail Eireann in event of its defeat and as a Republican opposition in the Parliament of South Ireland in event of its popular acceptance.

Dail Eireann, which adjourned after making Griffith President, met again on Feb. 28. A motion to rescind ts previous acceptance of the treaty was introduced by De Valera and defeated. A motion then was put forward to make a new register of voters, the last registration having taken place before the outbreak of the World War. This motion was referred to the President, Griffith, who declared that a new register could not be made in time for the general election, which was set for May 22. The practical reason given by De Valera for wanting the voting lists revised was that nearly half of the Republican Army were under twenty-nine years of age and thus deprived of the franchise.

## SPLIT IN THE FORCES.

Following the appointment of several brigades of the Irish Republican Army to do duty under the direction of the Provisional Free State Government, a split in the force became evident that extended to the smallest command. Men who were opposed to the treaty gradually segregated themselves from the others, who, they claimed, were being used for political purposes. In the South extremely few brigades were willing to accept the commands of their superiors in the Provisional Government and brigades from the West and East were sent into the areas of the Southern commands to take over on behalf of the Provisional Government the barracks that had been vacated by the British military and the "Black and Tans." This process led during the first week in March to a concentration of forces of both Republican and Free State troops in the city of Limerick and the posting of a proclamation by the Republican commander complaining against the Defense Minister's bringing the army into politics until after the election. For a while it appeared as though civil war would then and there break out but the crisis was averted by the Free State's withdrawing from Munster all but Munster brigades and leaving to the Republicans their portion of the barracks there.

On St. Patrick's Day, March 17, a new crisis was very nearly brought about by De Valera's "marching through blood" speech. This amounted to an attack on the "stepping-stone" argument by showing that ultimately the change from Free State to republic would have to be an unconstitutional one and one therefore that would necessitate the shedding of blood. But instead of shedding the blood of Britishers, he said, the Irish people of that future generation would have to fight against Irishmen sworn to uphold the Free State. Thus, he concluded, "the march to the republic would be through the blood of Irishmen."

On the same day President Griffith, by a Presidential proclamation, banned the Army Council Convention which had been called for March 26 to discuss ways and means of dealing with political partisanship among members of the General Staff. Attendance at the convention was declared punishable by court martial. When, on March 26, the convention met, therefore, the political split in the army organization was rendered irremediable. The work of the convention consisted in repudiating the authority of Dail Eireann for having ratified the treaty and in setting up an alleged military dictatorship of the republic until the formation of a new Dail. Henceforth the troops of the dictatorship refused obedience to the General Staff and became known as "irregulars."

On March 25, the night before the "outlawed" army convention, a body of Republican soldiers of the Belfast City Brigade raided the Orange Hall in Dublin and threw the place open as a shelter for the Catholic refugees from the North. The Craig-Collins pact had been repudiated in the North and consistent efforts were made to drive the Catholic population from their homes in Belfast. In attacks made on Catholic districts, 85 persons were killed and over 280 wounded during the month of February alone. In March the numbers had increased and several hundred Catholic families had sought refuge in the Free State. Of the persons killed, about one-sixth were Protestants, some of them casual passers-by, but most of them members of lynching parties. Two days after the seizure of the Orange Hall the Masonic Hall was also taken over for the same purpose and penniless refugees who could not be accommodated in the two "barracks" were billeted out on Unionist families of Dublin who by family ties or associations were connected with the Carsonites of the North.

On March 30 a treaty of peace was signed at London by Michael Collins on the one hand and Sir James Craig on the other. The import of this was that it provided for the representation of Catholics on the police force of Belfast and for a special court of two Judges, one Catholic and one Protestant, to try, without jury, persons charged with lynching. Previously, no jury could be found to convict on a charge of crime against Catholics. The treaty was broken, however, before any of these reforms could be put into effect. An effort on the part of the irregular forces in the South to re-establish the Ulster boycott, which had been removed by the original Craig-Collins pact of January 21, was pointed to by Craig as an indication of bad faith.

## CIVIL WAR.

The irregulars celebrated the anniversary of the uprising of 1916 by seizing the Four Courts on April 14. This was occupied as the general headquarters of the irregular forces and hastily fortified. Efforts were made to secure its evacuation, and when it appeared that the Free State would employ regular troops to force out the men under Rory O'Connor and Liam Mellows, the Archbishop of Dublin interceded. Successive peace conferences were held. Labor called a strike in protest against a possible outbreak of civil war, and on April 24 not a single stroke of work was done throughout Ireland. The Archbishop's peace conference finally broke down on April 29, and on May Day additional irregular troops entered the city and occupied the Ballast House, the Kildare Street Club, and the Sunlight House. These, with the Four Courts, form the four best strategic points in Dublin. In the meanwhile the irregulars throughout the country had been running up bills for supplies. These they paid after having engineered a series of raids on local branches of the Bank of Ireland and taking off whatever cash happened to be handy. They left in return sight drafts of the Provisional Government for the amounts taken.

Civil war broke out in Munster on May 3. The following day, however, a truce was signed covering four days and a "Committee of Ten," five Free Staters and five Republicans, were appointed by Dail Eireann "to explore every possibility of agreement between the two sections of the army." Two days later the Ballast House was evacuated. This, however, was a political move to pacify labor, which was being gradually estranged from the Republican viewpoint by irregular tactics resulting in the throwing of men out of work. The truce was extended day by day until on May 20 the Collins-De Valera pact was signed. In accordance with this, the general election, which had in the meanwhile been postponed to June 16, was to be held; a National Coalition panel representing both parties was to be put forward; the number of candidates of each division of Sinn Fein was to equal its representation in the extant Dail; that any other interest was free to contest the election against the National Coalition Party; that after the election the President's Cabinet was to include four Republican Ministers and five Free Staters. The initial consequence of the pact was that the election was not to be fought on the issue of the treaty or Constitution which was to be put into effect on the Government's own authority and without committing the nation during the five years of the Government's life. After that the question of Free State or republic was to be decided by the people.

The British Cabinet was frank in its demand for an explanation of this pact. It suspected the pact of being an open violation of the treaty. Collins, however, was able to show that without it there could be no hope for an election before the legal lapse of the treaty.

On June 5 the Coalition agreement was unanimously accepted by Dail Eireann and De Valera managed to secure for it the support of the irregular army commanders, O'Connor and Mellows. Over the irregulars, it appears, De Valera never had any authority and their repudiation of the Dail's authority in March did not apparently receive his support.

Since the acceptance of the treaty in January a committee of experts in political science had been gathering frequently under the headship of Darrel Figgis to frame a Constitution. This was completed and on June 7 was brought to London and submitted "informally and confidentially" to the British Cabinet. The imprimatur of this body was secured and the text of the Constitution was made public. Two days later the polling took place. Of the Coalition candidates put forward, 88 were returned. Labor secured 15 seats. But individuals who had run as independent candidates on pro-treaty platforms defeated 15 of the anti-treaty candidates of the Coalition panel. The number of Free Staters in the new Dail was increased to 70 as against 33 Republicans. In view of this fact the election was interpreted as indicating the popular acceptance of the treaty.

Six days after the Irish election had taken place and before the returns had been completed, the

assassination occurred in London of Field Marshal Sir Henry Wilson, military dictator of Northern Ireland. The assassination was attributed to Sinn Fein, though it was subsequently proved at the trial of the assassinators that they had never belonged to any branch of the I. R. A. A serious threat to declare the treaty violated and send back the British armed forces into Ireland was made by the Cabinet and Collins, to defend the position of the Provisional Free State Government, opened a general campaign against the irregular forces by attacking the Four Courts on June 28.

Collins was severely criticised for not convoking Dail Eireann before he had started civil war. His use of arms against the Four Courts was also objected to, it having been supposed that if at any time occasion arose to drive the irregulars out, a cordon could be thrown about the place and prevent the garrison's receiving its food supply.

By July 5, all men of military age were drafted into the regular forces and ordered mobilized. Two days thereafter, Cathal Brugha, commander of the irregulars, in occupation of the Gresham Hotel, died of wounds he had received in the fighting. With the fall of the Four Courts after an artillery siege of five days, Rory O'Connor and Liam Mellows were taken prisoner and sent to Mountjoy Prison. Waterford was bombarded on July 20 and taken the following day, a few hours after Limerick had fallen. The movement on Cork began on Aug. 10 and the city was taken without a fight on Aug. 11.

The day after the capture of Cork, Arthur Griffith died in Dublin and ten days after his chief had succumbed Michael Collins was killed in action near Cork (Aug. 22).

The transatlantic cables were cut by irregulars outside of Cork on Aug. 29.

The Provisional Free State Government, left without a head, was embarrassed next by a strike of postal employees who refused to accept a cut in wages which they considered disproportionate to the lowering of living costs. The strike continued from Sept. 7 to 30. It was met finally by the Government's agreeing to graduate the cut over a period of a year.

### THE PRESENT GOVERNMENT.

On Sept. 9 Dail Eireann met and elected William Cosgrave President. Then resolving itself into the Parliament for Southern Ireland it elected the same man Chairman of the Provisional Free State Government. Since that date the distinction between the two positions and between the two assemblies has been lost. Cosgrave appointed as his Cabinet: Ernest Blythe, Minister for Local Government; Desmond Fitzgerald, Minister for Foreign Affairs; P. J. Hogan, Minister of Agriculture; Joseph McGrath, Minister for Trade and Commerce; Richard Mulcahy, Minister of Defense; J. J. Walsh, Postmaster General; Eoin MacNeill, Minister of Education, and Kevin O'Higgins, Minister for Home Affairs. The portfolios of Labor and Economic Affairs were given to the Minister for Trade and Commerce.

Throughout July, August, September and part of October, civil war continued to be waged without respite. On Oct. 10 the Bishops and Archbishops took cognizance of this in a pastoral letter which declared all members of the irregular forces excommunicated from the Roman Catholic Church, subject only to appeal to the Holy See at Rome.

On Oct. 14 several excerpts from correspondence of De Valera and other irregular leaders, all of which had been intercepted by the Provisional Government, were published in a "White Paper." These prove generally that De Valera had no control over the irregular army council and was not therefore personally responsible for the acts of the irregulars up at least to the date of the intercepted letters.

On Oct. 25 Dail Eireann unanimously adopted the Constitution that had been presented to the people before the June election.

Owing to the change of Ministry and dissolution of Parliament in London, the Irish Constitution Bill was not brought before Parliament until Nov. 24. It was, however, promptly passed by the House of Commons and sent to the Lords, who passed it on Dec. 5.

### NOW A COMMONWEALTH.

King George signed the proclamation constituting the Irish Free State on Dec. 6; Timothy M. Healy was sworn in as Governor General, and the Free State came legally into operation at 5 P. M., when the Dail convened as the Chambers of Deputies of the Irish Free State Parliament and the Irish flag of green, white and orange replaced the British Union Jack over the Viceregal Lodge.

Prof. Hayes was re-elected as Speaker and William Cosgrave President of the Dail Cabinet, was elected without opposition President of the new Executive Council. President Cosgrave that night announced his list of thirty nominations for the Senate; the more prominent of them were: the Earl of Granard, the Earl of Wicklow, the Earl of Kerry, the Marquis of Headfort, Baron Glenavy, the Earl of Mayo, the Earl of Dunraven, Gen. Sir Bryan Mahon, Sir Horace Plunkett, Sir Thomas Edmonds, Martin Fitzgerald of the Freeman's Journal, Henry Guinness, a governor of the Bank of Ireland; Dr. George Sigerson, professor of biology, University of Dublin; William Butler Yeats, poet; the Dowager Countess of Desart and Mrs. Wyse Power.

On the following day Deputy Sean Hales was shot and killed and Deputy Speaker Pat. O'Maille wounded on their way to Parliament. In retaliation four Republican leaders were executed the next morning at Mountjoy Prison, the official report saying: "as reprisal for the assassination and as a solemn warning to those associated with them who are engaged in an assassination conspiracy against the Irish peoples' representatives." These men were Rory O'Connor, Liam Mellowes, the two leaders of the Four Courts seige in the summer, Joseph McKelvey and Richard Barrett.

Previously Erskine Childers, perhaps the ablest of De Valera's lieutenants, who had been captured on Nov. 10, had been tried for the unlawful possession of a revolver, found guilty and after prolonged legal struggle was executed on Nov. 24. This followed the execution of four other irregulars on a similar charge a few days before.

Deputy Miss Mary McSwiney, who after her arrest carried on a hunger strike in Mountjoy Prison was released after the 24th day, on Nov. 27.

The Irish budget was submitted to the Dail Eireann on Oct. 6. It provided for expenditures for the fiscal year ending March 31, amounting to £37,700,586, which was equal to the total of the British revenue from the taxation of Ireland in 1920. The cost of the army was estimated at £7,245,000. As compensation for property that had been destroyed £10,000,000 was allowed; for education £4,000,000; for pensions, £1,800,000 and Post Office, £2,750,000.

Both Houses of the Ulster Parliament at Belfast voted unanimously on Dec. 7 to "contract out" of the Irish Free State.

## NEW PRESIDENT OF POLAND ASSASSINATED.

Gabriel Narutowicz, who was elected President of Poland by the National Assembly in Warsaw on Dec. 9, 1922, and who had taken over the supreme authority from Marshal Pilsudski on the 14th, was assassinated on Dec. 16, while visiting an art exhibition in Warsaw.

When the election took place a pitched battle followed his unexpected choice, in which four were killed and over 100 injured. The opposition came mainly from the Nationalists representing the purely Polish population who asserted that he was elected by the votes of the Jews, Ukrainians, Germans and Russians, receiving only 186 Polish votes while 227 Polish votes were cast for Count Zamoyski

Maciej Rataj, newly elected Speaker of the House is to act as President pending a new election by the National Assembly.

### NEW PRESIDENT OF URUGUAY.

Jose Serrato, nominee of the Colorado Party, was elected President of Uruguay for the four year term beginning March 1, 1923, on Nov. 26, by a majority of 6,000 in a total vote of 238,000.

## DEATHS AND INJURIES FROM ACCIDENTS IN THE UNITED STATES.

Estimates as to the number of deaths from accidents in the United States in 1922 range from 75,000 to 95,000; and estimates as to the total of injuries by accidents vary from 2,000,000 to 12,000,000. There is no way of finding out the actual number either of deaths or of accidents. The United States Census Bureau's figures as to the deaths and causes thereof cover only the so-called registration area, which excludes many of the States. Even in the registration area, the figures are not complete, inasmuch as many death certificates give only the final, not the contributory, cause of death. The estimates of casualty and insurance companies are based, likewise, on official death certificates, and are open to the same objection. Industrial corporations and workmen's compensation boards get a little closer to the facts, but only as to industrial injuries and deaths.

## RISE OF THE FASCISTI TO POWER IN ITALY.

By a swift, almost bloodless revolution, the Fascisti, headed by Benito Mussolini, seized the Italian Government on Oct. 30, 1922, ousting the Government headed by Premier Facta. The coup d'etat followed the Congress of the Fascisti at Naples the week previous, when Mussolini on Oct. 26 declared:

"I take a solemn oath that either the Government of the country must be given peacefully to the Fascisti, or we will take it by force."

Having seized the Government, Premier Mussolini, who took the portfolio of Foreign Affairs, declared in the Italian Senate on Nov. 27, 1922: "People forget that liberty is a duty and not a right. I am not afraid of words. Therefore I proclaim myself the Prince of Reaction. But I will not follow an anti-proletariat policy; I will not oppress the proletariat, but will elevate them materially and spiritually—not because their number entitles them to special rights. No great nation can be created when workmen are obliged to suffer from a low standard of living."

There was much excitement all over Italy, especially in the ranks of the monarchists, who believed that Mussolini and his Fascisti intended to set aside the House of Savoy, then declare a republic. Mussolini, however, appeared before the King and later upon the balcony of the Quirinal, calling for cheers for the royal family, declaring that he and his followers wanted merely the reins of governmental authority to gain their ends for the good of Italy and had no purpose to upset the existing forms of government. He pledged his loyalty to the Crown, calling upon his followers to repeat his pledge.

His general outline of policy included the transfer of the Government railways, telephones, telegraphs, tobacco factories and other unprofitable governmental monopolies to private hands, and thus lift the enormous load of direct and indirect taxation from the people—which averaged one-fifth of their total income—enabling the practically bankrupt National Treasury to balance its budget.

The Chamber of Deputies on November 25, by a vote of 225 to 90 gave the Mussolini Government full powers for bureaucratic and fiscal reforms until Dec. 31, 1923. The Senate vote two days later was unanimous.

The municipal elections in Milan, which had been one of the centers of the strongest opposition to the Fascisti, were held on December 12; they resulted in the Fascisti winning by a majority of 21,567 over all others, the vote standing: National Bloc (Fascisti), 87,363; Socialists, 45,254; Maximalists, 17,259; Communists, 2,288.

Premier Mussolini made up his Cabinet thus:

Premier, Minister of the Interior and Foreign Affairs, Benito Mussolini.

Minister of War, Gen. Armando Diaz (Monarchist, but no party affiliation).

Minister of Marine, Vice-Admiral Thaon di Revel (Monarchist, but no party affiliation).

Minister of Treasury, Prof. Luigi Einaudi (Nationalist).

Minister of Industry, Theophile Rossi (Nationalist).

Minister of Finance, Signor di Stefani (Fascista).

Minister of Colonies, Luigi Fedorzoni (Nationalist).

Minister Liberated Regions, Signor Giuriati (Fascista).

Minister of Justice, Aldo Oviglio Quirnal.

Minister of Education, Signor Gentilo (Democrat).

Minister of Agriculture, Luigi Capitanio (Fascista).

Minister of Public Works, Signor Carnazza (Nationalist).

Minister of Posts and Telegraphs, Signor di Cesara (Nationalist).

Minister of Social Welfare, Stefano Cavazzoni (Catholic).

Once the leader of the Italian Socialists, now the avowed enemy of everything that smacks of socialism in its red forms—syndicalism, sovietism, or communism—Benito Mussolini is the idol of the Italian working and middle classes, and as Premier has gripped Italy with a power that has hitherto been unknown in any Cabinet of modern times. Mussolini is almost six feet in height, with eyes slightly protuberant, but steady, with a firm, square jaw, and rigidly set lips. He is a veteran of the World War, and received more than 100 wounds. He is known as a "revolutionary socialist to the core." Yet his present "Fascisti movement" is one of extreme patriotism and imperialism, and its present purpose is the destruction of all forms of "red" socialism.

Fascista is an Italian word meaning a member of the "Fascio," which means a bundle of sticks. The word drew its origin from the old Roman lictors, the bodyguards of the ancient Roman Consuls, who carried an axe with the handle surrounded by a bundle of sticks (fasces).

The emblem of the Fascisti in Italy is the black shirt, usually of silk, and a stout cane, although the military branch of the organization carry arms, principally revolvers. Khaki trousers of the military type usually complete the costume. (fasces.)

Mussolini, before the fatal days of August, 1914, was in constant collision with the Italian authorities. He led the Socialist outbreak before the war that required 300,000 troops to put down. But no sooner had the two Kaisers loosed their "dogs of war" than Mussolini's inherent, instinctive sense of right asserted itself. Mussolini was then editor of one of the powerful Socialist organs of Italy, the Milanese Avanti, or Forward. Pacifists in the Socialist party did their best to keep Italy from entering the struggle against German imperialism, and when Mussolini discovered their determination not to "see the light," he severed his connection with the Avanti and started an opposition paper, the Popolo d'Italia, with the avowed purpose of preaching intervention. He remained with this newspaper until his class was called to the colors, and he left for the front in August, 1915. There was nothing of the theorist in the man—he was eminently practical, and after the collapse of Russia and the introduction of Bolshevism, Mussolini's paper thundered daily against the "Red Terror" that threatened for a time to lay strong hands upon the newly annexed provinces of Italy.

Three years ago, Italian workers, urged on by these conquered Slavs, under the influence of Bolshevism, were seizing factories and turning Italy into a second Russia (in 1919). In those days a man with a white collar who appeared on the streets in north Italian towns was almost certain to be set upon and badly beaten by communistic workmen.

Mussolini's action was swift. Ex-soldiers, out of jobs and looking for excitement, formed Mussolini's weapon. He organized, in January, 1919, a mere handful of these men, and swooped down upon the great industrial cities in defiance of the lax governmental authorities, and challenged the Communists to combat. Incidents like that at Bologna developed, where the Fascisti took entire charge of the city's industry for weeks.

The Fascisti adopted a system of swooping down suddenly upon towns and villages where communistic trouble was fermenting, and spread themselves all over it, flourishing clubs, revolvers and chanting their battle cry against Bolshevism.

After four months of guerilla warfare, the Socialists and the Fascisti signed a truce, substituting a "court of last resort, whose judgment shall be final." This agreement was entered into on Aug. 15, 1921. It was kept with more or less friction until the seizure of the Facta Government.

In the meanwhile, the numbers and power of the Fascisti grew amazingly, and at present he has more than 2,000,000 followers. At the Naples Congress, in October, 1922, the organization had grown to the following porportions: 600,000 in the political group not under military discipline; 800,000 drawn from trade unions, which until recently had been socialistic, and 350,000 active combatants, armed, drilled and kept in a state of rigid military discipline, organized on the model of the legions of Rome. Signor Dino Grandi, a member of the Italian Parliament and Secretary of the Fascisti group in that body, puts their strength thus:

"We have 800,000 workingmen in our ranks, organized into National Trade Unions according to their respective trades. We enroll 400,000 rural laborers, 55,000 sailors and longsboremen, 50,000 clerks, 200,000 factory operatives, 55,000 railway and tramway servants, 10,000 factory and post office employees, and 20,000 workers in other lines."

In addition, the Fascisti have associated with themselves the Nationalists, an organization which takes no part whatever in active fighting, but which comprises farmers and others in entire sympathy with the Fascisti movement.

The Fascisti, and the masses of Italy, were opposed to the system of elections giving proportional representation in the Chamber of Deputies as set up as a compromise three years before by Premier Nitti. The Socialist Deputies were too much in power in governmental affairs, according to the Fascisti, in their war upon the organization. The calling of the Fascisti Congress in October, 1922, was to find means of ousting this system.

Following Mussolini's success in Italy, the movement, or rather similar organizations are springing up all over Europe and threaten to engulf the Governments of Central Europe particularly. The menace is particularly strong in Bavaria, where there is a Fascista army of 60,000. There are also strong organizations active in Hungary, the Austrian Tyrol, Czechoslovakia, and the beginning of organizations in Mexico.

# Big Problems of 1922-1923.

## FOREIGN DEBTS OWED TO THE UNITED STATES.

Secretary of the Treasury Andrew W. Mellon, in his annual report to Congress, made public Dec. 6, 1922, in regard to the inter-Allied debts due the United States Government said:

"The obligations of various foreign governments held by the Treasury on November 15, 1922, aggregated **$10,045,282,026.60**, principal amount, and may be classified as follows:

"(1) **$9,386,311,178.10** representing loans made by the Secretary of the Treasury, with the approval of the President, under the Liberty bond acts.

"(2) **$574,876,884.95** received from the Secretary of War and the Secretary of the Navy on account of sales of surplus war material under the act of July 9, 1918.

"(3) **$84,093,963.55** received from the American Relief Administration on account of relief supplies furnished under the act of Feb. 25, 1919.

"In addition to the above, the United States Grain Corporation, the entire stock of which is owned by this Government, holds obligations of various foreign governments amounting to **$56,858,802.49**. It is expected that these obligations, which were acquired by the Grain Corporation on account of sales of flour for relief purposes under the act of March 30, 1920, will also be turned over to the Treasury Department for custody upon the completion of the pending liquidation of that corporation. Notes of the Polish Government amounting to about **$24,000,000** are also held by the War Department and the United States Shipping Board. It is understood that these obligations were received on account of sales of surplus war material by the former and transportation services by the latter, and that the amounts may be subject to further adjustment.

"The balance of the credit which was granted to the Czechoslovak Republic to assist that Government in the repatriation of its troops from Siberia was $6,072,834.36 at the beginning of the fiscal year 1922. The movement of these troops was carried out by the War Department and the Shipping Board, and on May 29, 1922, the Czechoslovak Republic used $717,834.36 out of this credit to reimburse the Shipping Board for its services. The balance to the credit of that republic is now $5,355,000, and whatever may remain after all payments to the War Department have been completed will be withdrawn.

"It is not contemplated that any further advances will be made by the Treasury against the credits in favor of Greece.

"The following statement shows the amount of advances which have been repaid up to Nov. 15, 1922 (cents omitted):

| COUNTRY. | To Nov. 16, 1921. | Nov. 16, 1921, to Nov. 15, 1922. | Total. |
|---|---|---|---|
| Belgium | $1,522,901 | $440,552 | $1,963,454 |
| Cuba | 1,425,000 | 834,500 | 2,259,500 |
| France | 46,714,861 | 17,357,868 | 64,072,720 |
| Great Britain | 110,681,641 | 30,500,000 | 141,181,641 |
| Roumania | 1,794,180 | ..... | 1,794,180 |
| Serbia | 605,326 | 48,564 | 653,890 |
| Total | $162,743,911 | $49,181,485 | $211,925,397 |

"The $30,500,000 repaid by the British Government during the past year was on account of the obligations of that Government given for purchases of silver under the Pittman Act.

"The repayments made by the Governments of Belgium and Serbia and substantially all of those made by France during the past year represent the unused balances of advances made by the Treasury to those Governments and turned over by them to the Commission for Relief in Belgium and to the American Relief Commission to be expended for relief purposes. These unused balances were returned to the Treasury to be applied as payments on account of the principal of the obligations of the respective Governments.

### NO REPAYMENTS OF PRINCIPAL.

"No repayments of principal have been made on any of the obligations acquired under the acts of July 9, 1918, Feb. 25, 1919, or March 30, 1920.

"The following table shows the amount of interest paid on foreign obligations acquired by the Treasury under the Liberty bond acts (cents omitted):

| COUNTRY. | To Nov. 15, 1921. | Nov. 16, 1921, to Nov. 15, 1922. | Total. |
|---|---|---|---|
| Belgium | $10,907,281 | ..... | $10,907,281 |
| Cuba | 1,442,922 | $416,810 | 1,859,733 |
| Czechoslovakia | 304,178 | ..... | 304,178 |
| France | 129,570,376 | ..... | 129,570,376 |
| Great Britain | 247,844,685 | 103,312,500 | 351,657,185 |
| Greece | 1,159,153 | ..... | 1,159,153 |
| Italy | 57,598,852 | ..... | 57,598,852 |
| Liberia | 861 | ..... | 861 |
| Roumania | 263,313 | ..... | 263,313 |
| Russia | 4,872,811 | 2,612,744 | 7,485,555 |
| Serbia | 636,059 | ..... | 636,059 |
| Total | $454,600,495 | $106,842,054 | $561,442,550 |

"Great Britain's interest payments during the past year were made as follows (cents omitted):

| DATE OF PAYMENT. | Interest on obligations given for Pittman silver advances. | Interest on other obligations. | Total. |
|---|---|---|---|
| Apr. 15, 1922 | $1,372,500 | ..... | $1,372,500 |
| May 15, 1922 | 915,000 | ..... | 915,000 |
| Oct. 16, 1922 | 915,000 | $50,000,000 | 50,915,000 |
| Nov. 15, 1922 | 610,000 | 50,000,000 | 50,610,000 |
| Total | $3,812,500 | $100,000,000 | $103,812,500 |

"On page 58 of the Annual Report of the Secretary of the Treasury for the fiscal year 1920 reference was made to two special funds arising out of the liquidation of certain property of the Russian Government and held for Russia by the Secretary of the Treasury, aggregating $2,143,601.07. On Aug. 3, 1922, these funds were applied (1) to cancel the unpaid balance of the interest, amounting to $1,808,506, which became due on Russian obligations, May 15, 1918; and (2) as part payment of the unpaid balance of the interest due November 15, 1918. Most of the funds which the Treasury has received in payment of interest on Russian obligations represent the proceeds of liquidation of the financial affairs of the Russian Government in this country.

"The following statement shows the amount of interest paid by each foreign government on obligations acquired under the act of July 9, 1918, on account of sales of surplus war material (cents omitted):

| COUNTRY. | To Nov. 15, 1921. | Nov. 16, 1921, to Nov. 15, 1922. | Total. |
|---|---|---|---|
| Belgium | $2,79,,351 | $1,379,429 | $4,176,780 |
| France | 20,038,719 | 20,859,564 | 40,898,283 |
| Latvia | 126,266 | ..... | 126,266 |
| Poland | 1,290,620 | ..... | 1,290,620 |
| Russia | 10,179 | 40,580 | 50,760 |
| Total | $24,263,137 | $22,279,573 | $46,542,711 |

"The only interest payment received to date on foreign obligations acquired under the act of Feb. 25, 1919, was one of $181,017.17 on Russian obligations, which was paid on Aug. 5, 1922.

"The Treasury understands that no interest has been paid on the obligations held by the United States Grain Corporation, acquired under the act of March 30, 1920."

The Secretary of the Treasury quotes in full his statement of August 24, called out by the Lord Balfour note sent out by the British Government August 1, regarding the status of the obligations of foreign governments held by the United States, and particularly the origin of the indebtedness of the British Government to the United States. In part he said:

"A number of inquiries have been received, as a result of statements recently published, with respect to the exact status of the obligations of foreign governments held by the United States. Especial attention has been directed to the origin of the indebtedness of the British Government, amounting to about **$4,135,000,000**. It has been said that

this liability was not incurred for the British Government, but for the other allies, and that the United States, in making the original arrangements, had insisted in substance that though the other allies were to use the money borrowed, it was only on British security that the United States was prepared to lend it. It is apparent from the inquiries which have reached the Treasury Department that it is supposed that this, in substance, is the explanation of the existing indebtedness of Great Britain.

"In answer to these inquiries it should be said that the obligations of foreign governments, in question, had their origin almost entirely in purchases made in the United States, and the advances by the United States Government were for the purpose of covering payments for these purchases by the Allies.

"The statement that the United States Government virtually insisted upon a guaranty by the British Government of amounts advanced to the other allies is evidently based upon a misapprehension. Instead of insisting upon a guaranty, or any transaction of that nature, the United States Government took the position that it would make advances to each Government to cover the purchases made by that Government and would not require any Government to give obligations for advances made to cover the purchases of any other Government. Thus, the advances to the British Government, evidenced by its obligations, were made to cover its own purchases, and advances were made to the other allies to cover their purchases. . . .

"The respective borrowing nations each gave their own obligations for the money advanced by the United States and that no guaranty of the obligations of one borrowing nation was asked from any other nation."

## OBLIGATIONS OF FOREIGN GOVERNMENTS HELD BY UNITED STATES.

The total obligations of foreign governments held by the United States, together with the interest accrued and remaining unpaid thereon as of the last interest period prior to or ending with Nov. 15, 1922, is shown in this table from the report of the Secretary of the Treasury, submitted to Congress. The table is the recapitulation of the four tables below which show how the several obligations were incurred (cents omitted):

| COUNTRY. | Principal. | Interest. | Total indebtedness. |
|---|---|---|---|
| Armenia | $11,959,917 | $1,677,256 | $13,637,174 |
| Austria | 24,055,708 | 2,886,685 | 26,942,394 |
| Belgium | 377,123,745 | (a) 60,073,383 | 437,197,129 |
| Cuba | 7,740,500 | (b) | 7,740,500 |
| Czechoslovakia | 91,887,668 | 14,404,536 | 106,292,205 |
| Esthonia | 13,999,145 | 2,089,625 | 16,088,771 |
| Finland | 8,281,926 | 1,012,436 | 9,294,362 |
| France | 3,340,746,215 | 503,386,035 | 3,844,132,250 |
| Great Britain | (c) 4,135,818,358 | (d) 611,044,201 | 4,746,862,560 |
| Greece | 15,000,000 | 750,000 | 15,750,000 |
| Hungary | 1,685,835 | 202,300 | 1,888,135 |
| Italy | 1,648,034,050 | 284,681,434 | 1,932,715,485 |
| Latvia | 5,132,287 | 643,576 | 5,775,864 |
| Liberia | 26,000 | 3,518 | 29,518 |
| Lithuania | 4,981,628 | 747,244 | 5,728,872 |
| Nicaragua | 170,585 | (a) | 170,585 |
| Poland | 135,662,867 | 17,618,809 | 153,281,676 |
| Roumania | 36,128,494 | 5,864,104 | 41,992,599 |
| Russia | 192,601,297 | 39,712,670 | 232,313,968 |
| Serbia | 51,104,595 | 7,994,087 | 59,098,683 |
| Total | $10,102,140,829 | $1,554,791,908 | $11,656,932,737 |

**Obligations acquired under Liberty Bond acts:**

| COUNTRY. | Principal. | Interest due Nov. 15, 1922. |
|---|---|---|
| Belgium | $347,251,012 | $60,073,383 |
| Cuba | 7,740,500 | (b) |
| Czechoslovakia | 61,974,041 | 10,136,141 |
| France | 2,933,405,070 | 503,386,035 |
| Great Britain | (c) 4,135,818,358 | (d) 611,044,201 |
| Greece | 15,000,000 | 750,000 |
| Italy | 1,648,034,050 | 284,681,434 |
| Liberia | 26,000 | 3,518 |
| Roumania | 23,205,819 | 3,925,703 |
| Russia | 187,729,750 | 39,214,326 |
| Serbia | 26,126,574 | 4,611,738 |
| Total | $9,386,311,178 | $1,517,826,483 |

**Obligations acquired from sales of surplus war material (act of July 9, 1918):**

| COUNTRY. | Principal. | Interest. |
|---|---|---|
| Belgium | 29,872,732 | (a) (b) |
| Czechoslovakia | 20,612,300 | $2,959,392 |
| Esthonia | 12,213,377 | 1,832,006 |
| France | 407,341,145 | (b) |
| Latvia | 2,521,869 | 252,014 |
| Lithuania | 4,159,491 | 623,923 |
| Nicaragua | 170,585 | (a) |
| Poland | 59,678,604 | 7,042,817 |
| Roumania | 12,922,657 | 1,938,401 |
| Russia | 406,082 | 10,152 |
| Serbia | 24,978,020 | 3,382,349 |
| Total | $574,876,884 | $18,041,057 |

**Obligations acquired by American Relief Administration on account of relief (act of Feb. 25, 1919):**

| COUNTRY. | Principal. | Interest. |
|---|---|---|
| Armenia | $8,028,412 | $1,204,261 |
| Czechoslovakia | 6,428,089 | 964,213 |
| Esthonia | 1,785,767 | 257,618 |
| Finland | 8,281,926 | 1,012,436 |
| Latvia | 2,610,417 | 391,562 |
| Lithuania | 822,136 | 123,320 |
| Roumania | 51,671,749 | 7,750,762 |
| Russia | 4,465,465 | 488,192 |
| Total | $84,093,963 | $12,192,368 |

**Obligations held by United States Grain Corporation on account of sales of flour (act of March 30, 1920):**

| COUNTRY. | Principal. | Interest. |
|---|---|---|
| Armenia | $3,931,505 | $472,995 |
| Austria | 24,055,708 | 2,886,685 |
| Czechoslovakia | 2,873,238 | 344,788 |
| Hungary | 1,685,835 | 202,300 |
| Poland | 24,312,514 | 2,825,229 |
| Total | $56,858,802 | $6,731,998 |

(a) No interest due on Nicaragua notes until maturity, as is also the case of certain Belgian obligations aggregating $2,284,151.40.

(b) Interest has been paid as it became due.

(c) Includes $61,000,000 of British obligations which were given for Pittman silver advances and for which an agreement for payment has been made.

(d) Great Britain paid $50,000,000 on Oct. 16, 1922, and $50,000,000 on Nov. 15, 1922, on account of interest on other than Pittman silver obligations.

## AMERICAN BANKERS KEENLY INTERESTED.

The question of the Allied debts was the major topic of discussion at the 48th Annual Convention of the American Bankers' Association which opened with 12,000 delegates, in New York, on Oct. 3, 1922. Thomas W. Lamont, of J. P. Morgan & Co., in welcoming the delegates that day, said, "Over a year ago the British realized that the Germans could, or would, never pay anything like the reparations total fixed in the Versailles Treaty. Later, the Belgian Government became similarly convinced, and now, in France, as I have talked there with many classes of representative Frenchmen, there has come to be the same recognition of the fact that Germany cannot pay the huge totals set forth.

"The French Government, however, has not unnaturally taken the position that it could make no official acknowledgment of such a general fact until such time as a possible settlement was offered. The French thesis is that if Germany cannot pay

what she has promised to pay, let her come forward and state just why she cannot, and what and when she can pay; when they receive such a proposition they will be prepared to act.

"Let us by investigation determine what, if any, of these debts are in any way uncollectable, and so should be written off in order to 'quit fooling ourselves.' Let us decide what others of these debtors are good in part, but must be given ample time to pay in—far longer, perhaps, than 25 years. Emphatically, let us figure to see whether the payment of these debts (which inevitably must mean a great increase in our import and a heavy decrease in our export trade) is going to prove an asset or a liability for American business."

Thomas B. McAdams, of Richmond, President of the association, made the Allied debts the subject of his address, pointing out that the United States must co-operate wholeheartedly in ending international chaos, and declared that permanent prosperity for the United States can come if this country uses her "resources in brain and money to help to bring about a practical solution of the chaotic situation now threatening to destroy the economic life of Europe." He declared "the Allied nations must throw aside unnecessary prejudices and reach an agreement as to modifying reparation payments which will fairly care for the needs of France and at the same time not utterly demoralize the industrial life of Germany."

Essentials, in his opinion, were the further reduction of armaments, the balancing of the French budget, realization by France of the unlikelihood of new German military aggression and the preparation by all countries of a readjustment of reparations and interallied debt, "upon a basis which fully recognizes the rights of the creditor and which will relieve the immediate burden of the debtor countries."

### M'KENNA'S CONCLUSIONS.

The chief address of the convention was made on Oct. 4 by Reginald McKenna, formerly Chancellor of the British Exchequer and now Chairman of the London Joint City & Midland Bank, Ltd., of London, which was devoted to the same subject, speaking, he emphasized, solely from the standpoint of a banker, and with nothing to do with politics. He said in part:

"In their report to the Reparation Commission the Bankers' Committee which sat early this summer in Paris laid stress upon the need to resume normal trade conditions between countries and to stabilize exchanges, and they came to the conclusion that neither of these aims could be accomplished without a definite settlement of the reparation and other international debts. There will be general agreement that there is no matter of more deep concern to the world's trade at the present time than reparation payments and international debts.

"The inevitable conclusion is that these international debts are far too great for the capacity of any of the debtor countries except England. She alone in her accumulated foreign investments has adequate resources with which to discharge her liability to the United States. Of the others, France has the greatest resources, but they are, I believe, quite insufficient to meet her obligations. The whole subject requires a rational reconsideration by the creditors, who must keep steadily in view immediate effect of the payment of these debts of the general trade of the world.

"England has the ability to pay, and, I can unhesitatingly assert her determination to honor her bond in full. I believe I am justified in asking you to treat England's debt to the United States as certain to be provided for, and, if this be conceded, we shall be free to consider the question of the remaining international debts, as one in which America and England are equally concerned and in which both have the same interest as creditors. . . .

"To sum up: The conclusion to which I am driven is that Germany can only pay now whatever she may have in foreign balances together with such amount as she can realize by the sale of her remaining foreign securities; that this payment is only possible if all other demands are postponed for a definite period long enough to insure the stabilization of the mark; and that future demands at the expiration of this period must be limited to the annual amount of Germany's exportable surplus at that time.

"Further, that England has the capacity to pay to the United States interest and sinking fund on her debt; but that the other debtors are none of them in a position to meet more than a small part of their external liabilities, and in the existing conditions of Europe a definite postponement of any payment by them is desirable in the interest of all the parties. The actual amount which the other debtors could ultimately pay should, as in the case of Germany, be ascertained by inquiry into their exportable surplus at a full and frank conference between creditors and debtors.

"I have strictly confined myself to a consideration of the economic aspect of reparations and international debts, how they are payable, the general capacity of a debtor country to pay, and the effect of payment. If I have become convinced that an attempt to enforce payment beyond the debtor's ability is injurious to the international trade of the whole world, lowers wages, reduces profits and is a direct cause of unemployment, the conclusion is founded solely on economic grounds and is uninfluenced by any political considerations or any regard to the moral obligations of the debtors."

### RESOLUTION OF THE CONVENTION.

The convention adopted this resolution:

"We call attention again to the seriousness of the foreign situation, especially of Europe, which is affecting detrimentally our own conditions and preventing even those industries in our country which are not dependent upon foreign trade from recovering fully from the depression which otherwise would be rapidly disappearing.

"There is no possibility of a healthy and normal situation in this country until the nations with whom we trade are able to pay us for what they import. As this can be done in the main only by the means of exports to us, we trust that the President will not hesitate to make use of the power granted him by the new tariff law to make such adjustments in the schedules as may be necessary from time to time for a restoration of our international commerce.

"We believe that the time has come for the Government of our country to formulate the principles on which it will be able to co-operate with other nations to bring about the needed rehabilitation of European countries and peace in the world.

"To this end we urge the Administration to consider the advisability of promptly making its representative upon the Reparation Commission an official of that body; we also recommend to Congress that there be granted to the Debt Funding Commission such further powers as will enable it to negotiate more effectively with the foreign nations now debtors of the United States."

### WORLD WAR FOREIGN DEBT COMMISSION.

The World War Foreign Debt Commission was created by the act of Feb. 9, 1922, authorized to refund or convert, and to extend the time of payment of the principal or the interest, of any obligation of any foreign Government now held by the United States of America, or any obligation of any foreign Government hereafter received by the United States of America (including obligations held by the United States Grain Corporation, the War Department, the Navy Department, or the American Relief Administration), arising out of the World War, into bonds or other obligations of such foreign Government in substitution for the bonds or other obligations of such Government now or hereafter held by the United States of America, in such form and of such terms, conditions, date or dates of maturity, and rate or rates of interest, and with such security, if any, as shall be deemed for the best interests of the United States of America. The commission cannot extend the time of maturity of such bonds beyond June 15, 1947, or fix the rate of interest at less than 4½ per cent. per annum; nor can it exchange the bonds or other obligations of any foreign Government for those of any other foreign Government, or cancel any part of such indebtedness except through payment thereof.

The Secretary of the Treasury is chairman of the commission and the President appointed on Feb. 21, 1922, Charles E. Hughes, Secretary of State; Herbert C. Hoover, Secretary of Commerce; Reed Smoot, United States Senator; and Theodore E. Burton, member of the House of Representatives, as the other members.

The commission organized April 18, 1922, and by resolution requested the Secretary of State to inform each of the Governments whose obligations, arising out of the World War, are held by the United States that the commission desires to receive any proposals or representations which the said Government may wish to make for the settlement or refunding of its obligations under the provisions of the act.

The Secretary of State so instructed the diplomatic representatives of this Government at the capitals of each of the foreign Governments indebted to the United States, with the exception of Armenia, Austria, Cuba, Greece, Liberia, Nicaragua, and Russia. This action was not taken in respect to the Governments above named, says the Secretary, for the following reasons:

"Armenia, Greece, and Russia: In none of these countries is there a Government recognized by the United States.

"Austria: Congress passed on April 6, 1922, a joint resolution giving the Secretary of the Treasury special authority to deal with the Austrian debt.

"Cuba: Interest and instalments of principal are

being regularly paid and no refunding is required.

"Liberia: An act authorizing a new loan, from the proceeds of which the existing loan will be repaid in full, has already been passed by the House of Representatives pursuant to request of the Department of State, and is now pending before the Senate.

"Nicaragua: This debt is regarded as already in funded form.

"In response to the invitation of this Government the following countries have designated representatives to negotiate with the commission: Belgium, Czechoslovakia, Finland, France, Great Britain, Hungary, Poland, Roumania, and Serbia."

In July, 1922, the French Government sent a special mission, headed by M. Jean V. Parmentier, director of the movement of funds of the French Treasury, to the United States, to discuss with the commission the French debt to this Government. M. Parmentier placed in the hands of the commission certain data relating to the financial and economic situation of France. He explained that the French Government did not consider it possible at the present time to enter into any definite engagements for a funding or settlement of its debt and desired to postpone for an indefinite period consideration of this matter, until the financial situation of France should become more clear, particularly as to reparation receipts from Germany. The commission's position on the subject was explained to M. Parmentier, and especially its desire that a funding of the French debt should take place in the near future. On Aug. 17, 1922, M. Parmentier informed the chairman of the commission that he had been keeping his Government informed of the progress made in the negotiations and that he had received a cable instructing him to return for a full discussion with his Government of the situation as it had developed.

### BRITISH VIEW OF THE DEBTS.

Lord Balfour in the British Government note of August 1, said:

"Speaking in general terms, the war debts, exclusive of interest, due to Great Britain at the present moment amount in the aggregate to about £3,400,000,000, of which Germany owes £1,450,000,000; Russia, £650,000,000, and our allies £1,300,000,000. On the other hand, Great Britain owes the United States about a quarter of this sum, say £850,000,000, at par of exchange, together with interest accrued since 1919."

An authoritative British Government statement carried by the Associated Press on August 25, said, in part:

"It is true that with the exception of the sum of about $140,000,000 which was lent to the British Government to be immediately re-lent to Russia for the purpose of Russian dollar expenditures in United States, the whole proceeds of the United States Government's advances to Great Britain were applied toward meeting Great Britain's expenditures in the United States.

"Answering a question in the House of Commons, Oct. 20, 1921, the Chancellor of the Exchequer said: 'I think the simplest method of expressing the position is to say that after the entry of the United States into the war this country borrowed from the United States Government $4,277,000,000 (£876,000,000 at par), and that during the period in which the country was borrowing from the United States Government the British Government advanced to its Allies £879,000,000. If we had not had to meet any calls for assistance from our Allies it would have been unnecessary for us to ask the United States Government's assistance.'"

### FRANCE LISTS WAR DEBTS.

In connection with the notification to the French Government that the American Debt Refunding Commission has been organized, the following balance sheet of French war debts in gold francs has been made public in Paris on May 3:

**Debtor.**

| | *Gold Francs.* |
|---|---|
| To the United States | 13,750,000,000 |
| To Great Britain | 12,500,000,000 |
| Total | 26,250,000,000 |

**Creditor.**

| | |
|---|---|
| From Italy | 1,000,000,000 |
| From Russia | 4,000,000,000 |
| From Belgium | 2,250,000,000 |
| From Jugo-Slavia | 500,000,000 |
| Other Allies, including Roumania | 1,250,000,000 |
| Total | 9,000,000,000 |
| Reparations due from Germany | 68,000,000,000. |
| Grand total | 77,000,000,000 |

The statement continued: "It is not pretended that the whole 68,000,000,000 due in reparations ought to be included in the war debt balance sheet, but it is held that at least 25,000,000,000 gold francs already spent by France for the account of Germany in the reconstruction work of Northern France ought to be so included. This would bring the credit side of the sheet to 34,000,000,000 gold francs, showing a balance in favor of France of 8,000,000,000 gold francs."

### BUDGETS AND LAND ARMAMENTS.

President Harding transmitted to the Senate on Dec. 12, 1922, the following figures prepared by the Department of State giving the totals of the budgets of twelve European states for 1922, and the allotments therein for land armaments; the figures are given in dollars calculated at the present rate of exchange:

| Countries. | Total. Budget. | For Land Armament. |
|---|---|---|
| | *Dollars.* | *Dollars.* |
| Austria | 5,039,228 | 69,423 |
| Belgium | 490,000,000 | 44,210,400 |
| Czechoslovakia | 602,300,000 | 98,523,600 |
| Finland | 55,042,800 | 7,741,800 |
| France | 2,508,905,700 | 243,588,600 |
| Great Britain | 4,213,300,000 | 288,449,000 |
| Greece | 47,558,000 | 29,988,000 |
| Hungary | 11,374,600 | 1,530,000 |
| Italy | 921,300,000 | 93,424,800 |
| Poland | 33,982 | 8,740 |
| Roumania | 63,289,600 | 7,173,400 |
| Serbia | 81,341,000 | 18,473,000 |

## CENTRAL AMERICAN STATES' CONFERENCE.

A conference of the five Central American states and the United States opened in Washington on Dec. 4, 1922. The invitation was extended by Secretary of State Hughes. In his opening address he told the conference that the United States had "no ambition to gratify at your expense, no policy which runs contrary to your national aspirations and no purpose save to promote the interests of peace and to assist you in such manner as you may welcome and solve your problems to your own proper advantage."

The agenda of the conference as set forth in the invitation was:

First, the signing of a treaty binding the five states to make effective and to extend the treaty signed in Washington on Dec. 20, 1907, for the promotion of friendly relations and co-operation among the five nations.

Second, adoption of measures in line with the limitation of armament worked out at the Washington conference to limit the military burdens of the five states and to set an example to the rest of the world, and in particular to the nations of this hemisphere.

Third, formulation of plans for the setting up of a tribunal of inquiry to adjust points or controversies which may arise in regard to the purpose of the treaties and which cannot be settled through diplomatic channels.

The invitation was the outgrowth of a meeting of the Presidents of Nicaragua, Honduras and Salvador on the U. S. S. Tacoma in Fonseca Bay, Aug. 20, 1922, for the discussion of measures for more peaceful relations between the countries and to discourage revolutionary activities. The treaty signed that day did not receive the assent of the Presidents of Guatemala and Costa Rica, although both countries reasserted their adherence to the treaty of 1907. The delegates to the conference were:

**Costa Rica:** Dr. Octavio Beeche, Minister of Costa Rica in the United States; Sr. Jose Andres Coronado, Minister of Foreign Affairs.

**Guatemala:** Sr. Francisco Sanchez Latour, Minister of Guatemala in the United States; Sr. Marcial Prem, Counsellor of the Legation in Washington.

**Honduras:** Dr. Alberto Ucles, former Minister of Foreign Affairs; Dr. Salvador Cordova, former Consul in New York; Sr. Raul Toledo Lopez, former Charge d'Affaires of Honduras in France.

**Nicaragua:** Sr. Emiliano Chamorro, Minister of Nicaragua in the United States; Sr. Adolfo Cardenas, Minister of Finance; Dr. Maximo H. Zepeda, former Minister of Foreign Affairs.

**Salvador:** Sr. Dr. Francisco Martinez Suarez, President of the Supreme Court of Justice; Sr. Don J. Gustavo Guerrero, Minister to Spain and Italy.

**United States:** Charles Evans Hughes, Secretary of State; Sumner Welles, American Commissioner in the Dominican Republic.

**Secretariat General:** Jordan Herbert Stabler, Secretary General; Cord Meyer, Secretary; Gustave Pabst Jr., Assistant Secretary; Jose Padin, Official Interpreter.

## NATIONAL WEALTH.

In June, 1920, in a paper read before the Bankers' Institute, London, Edgar Crammond estimated the national wealth of chief countries as follows: United States, $350,000,000,000 to $400,000,000,000; United Kingdom, $120,000,000,000; France, $92,500,000,000; Germany, $83,000,000,000; Italy, $35,500,000,000; Belgium, $12,000,000,000; Japan, $23,500,000,000.

United Kingdom—The national or capital wealth of the British Empire was estimated officially, in 1917, in Parliament, by a Crown Minister, at $130,000,000,000, divided as follows: United Kingdom, $80,000,000,000; Canada, $10,000,000,000; Australia, $6,000,000,000; New Zealand, $1,500,000,000; South Africa, $3,000,000,000; India and Ceylon, $18,000,000,000.

National wealth of other nations—Argentina (1916), $13,865,000,000; Denmark (1900), $2,000,000,000; Germany (1908), $83,000,000,000; Russia in Europe, $60,000,000,000; Austria-Hungary, $55,000,000,000; Turkey, Bulgaria, $4,000,000,000.

Japan, $43,000,000,000.

The total, or national, wealth of the United States was estimated at $300,000,000,000 on Feb. 1, 1921 ($2,800 per capita), by the Government Loan Organization.

United States National wealth in previous years: (1850), $7,135,780,000; (1860), $16,159,616,000; (1870), $30,068,518,000; (1880), $43,642,000,000; (1890), $65,037,091,000; (1895), $77,000,000,000; (1900), $88,517,306,775.

## GERMANY'S REPARATION PAYMENTS.

Andrew McFadyean, General Secretary of the Reparation Commission established under the Treaty of Versailles, issued for the Commission on Oct. 3, 1922, a "Statement of Germany's Obligations" under the heading of Reparations, etc., as of April 30, 1922. The tables, the principal ones, are presented herewith—were issued to give the economic public information as to Germany's payments under Part VIII. of that treaty, and the distribution of such payments between the Allied Powers. Emphasis was laid upon the fact that many of the figures are still entirely provisional, but it is expected that they will prove to be close approximations when definite determinations have been reached. Moreover, the figures of receipts and distribution do not always agree, as in the delivery of merchant shipping, owing to a divergence in the method of valuing the ships.

The first charge on Germany's payment was the cost of occupation as from the armistice, only the balance being available for reparation. These costs amounted to 2,131,904,000 gold marks (exclusive of the cost of the American Army which amounted to 1,010,614,000 gold marks), and in the event the sums actually received from Germany attributable to the costs of occupation were barely sufficient to meet this first charge. These costs were:

*COSTS OF THE ARMIES OF OCCUPATION.*

| | Gross Costs Thousands of Gold Marks | Paper Mark Receipts | Net Cost Thous'ds of Gold Marks |
|---|---|---|---|
| *At April 30, 1921:* | | | |
| Great Britain.... | 991,097 | 89,638 | 901,459 |
| France..... | 1,275,588 | 232,839 | 1,042,749 |
| Italy..... | 10,052 | ..... | 10,052 |
| Belgium..... | 194,599 | 16,955 | 117,644 |
| Total..... | 2,471,336 | 339,432 | 2,131,904 |
| *From May 1, 1921, to April 30, 1922:* | | | |
| Great Britain.... | 24,006 | 13,219 | 10,787 |
| France..... | 224,472 | 60,312 | 164,160 |
| Belgium..... | 41,138 | 5,494 | 35,644 |
| Total per year. | 289,616 | 79,025 | 210,591 |
| Grand Total to April 30, 1922 | 2,760,952 | 418,457 | 2,342,495 |

NOTE—The net cost of the American Army of Occupation at April 30, 1921, was 1,010,614,000 gold marks; for the year May 1, 1921, to April 30, 1922, it was 56,160,000 gold marks; grand total to April 30, 1922, 1,066,774,000. Therefore the grand total net cost of all the armies of occupation was 3,409,269,000 gold marks.

Costs incurred in the period up to April 30, 1921, are charged against liquid assets received between Nov. 11, 1918, and April 30, 1921; and in the following fiscal year are charged against deliveries in kind.

"On April 28, 1921," to quote the language of Secretary McFadyean, "the Commission notified the German Government of its finding that the total damage for which Germany was responsible amounted to 132 milliard gold marks; on May 5, 1921, the Commission notified the Schedule of Payments prescribing the time and manner for securing and discharging the entire obligation of Germany for reparation under Articles 231, 232 and 233 of the Treaty, the total obligation of Germany at this date being 132 milliards of gold marks, less '(*a*) The amount already paid on account of Reparation, (*b*) sums which may from time to time be credited to Germany in respect of State properties in ceded territories, etc., and (*c*) any sums received from other enemy or ex-enemy Powers in respect of which the Commission may decide that credit be given to Germany, plus the amount of the Belgian debt to the Allies, the amounts of these deductions and additions to be determined later by the Commission.'

"The Schedule prescribed the payment of a fixed annuity of two milliard gold marks and a variable annuity equivalent to 26% of the value of German exports. Further, the Schedule specifically provided for the payment within twenty-five days of one milliard of gold marks to represent the two first quarterly instalments of the fixed annuity.

"The third period opens with the request dated Dec. 14, 1921, from the German Government for a partial postponement of the payments prescribed by the Schedule. While considering this request the Commission, by a decision taken on Jan. 13, 1922, at Cannes, granted a provisional postponement of the Schedule instalments due on Jan. 15 and Feb. 15, replacing them by payments every ten days of 31 million gold marks, the first payment falling on Jan. 18.

"On March 21, the Commission granted Germany a partial moratorium for her schedule obligations for the year 1922, and decided that she should pay in that year 720 million gold marks in cash and effect deliveries in kind to the value of 1,450 million gold marks in cash, the obligations postponed being carried forward to the years following. This partial moratorium was provisional in the first instance, but subsequently confirmed on May 31, 1922, a date which falls outside the period covered by the accounts now published.

"At the same time a further accounting complication was introduced owing to the decision taken, at the wish of the Allied Governments concerned, as expressed in the Financial Agreement of March 11, 1922, that the costs of the Armies of Occupation as from May 1, 1921, should be repaid to each of the creditor Powers in so far as not already covered by the requisition of paper marks by the armies, out of the deliveries in kind actually received by them under the Schedule of Payments from May 1 to Dec. 31, 1921, and out of the deliveries for 1922 as arranged for that year by the moratorium of March 21, 1922. The effect is to produce retroactively a deficit in German reparation payments even before the period for which a partial moratorium was demanded."

The arrangement of March 11, 1922, between the Governments of Belgium, France, Great Britain, Italy and Japan, referred to above, provided that the payments made to the Armies of Occupation be fixed at the following annual amounts:

Belgian francs.....102,000,000
Pounds sterling.....2,000,000
French francs.....460,000,000

These figures are fixed on the basis of the following effective strength:

Belgian Army.....19,300 men
British Army.....15,000 men
French Army.....90,400 men

The payments were calculated on the basis of a

total amount of 220,000,000 gold marks. Out of this amount a sum of 10,950,000 gold marks was in the first place allocated in respect of the British Army, representing a special allowance of 2 gold marks per man per day, to cover its higher cost. The remainder, or 209,050,000 gold marks, was divided in proportion to the number of effectives in question. The conversion of the sums in gold marks so arrived at into national currencies was made at the mean rate of exchange for December, 1921.

The distribution of liquid assets received between Nov. 11, 1918 and April 30, 1922, as carried on the pre-May 1, 1921, account and shown in the accompanying table "Statement of Germany's Deliveries and Payments" was as follows:

*A. CASH AND SECURITIES.*

| | Gold Marks. |
|---|---|
| *Payment by French Government for:* | |
| Germany's proportion of the State Bank of Morocco | 643,000 |
| Telephone account prior to Aug., 1914 | 10,000 |
| *Payment by Denmark for:* | |
| Property acquired in Schleswig | 63,000,000 |
| Proportion of German Imperial and State debts assumed | 2,000,000 |
| *Money retrieved from ships sunk at Scapa Flow* | 4,000 |
| *Receipts from remitted sales of converted war material* | 43,140,000 |
| *Receipts on account of deliveries in kind* | |
| From Luxemburg for coal | 17,520,000 |
| From misc. sales of dyestuffs | 5,525,000 |
| *Realized proceeds of collections in Rhine customs zone* | 3,324,000 |
| *Interest Earned on Investments* | 3,102,000 |
| *Loss in Exchange* | 345,000 |
| Sums advanced from schedule of payments account (financial agreement of March 11, 1922) | 640,000,000 |
| Total receipts in cash | 778,268,000 |

NOTE.—Of this amount 637,599,000 gold marks went to Great Britain (including 500,000,000 g. m. of the "sums advanced"), and 140,307,000 g. m. went to France (including 140,000,000 g. m. of the "sums advanced"); the 345,000 g. m. loss on exchange and 17,000 g. m. of miscellaneous sales of dyes remain undistributed.

*B. DELIVERIES IN KIND.*

| | | |
|---|---|---|
| *Ships:* | | |
| Allotted to Powers | | 659,867,000 |
| To Great Britain | 204,334,000 | |
| To France | 51,153,000 | |
| To Italy | 2,036,000 | |
| To Japan | 6,200,000 | |
| To Greece | 5,318,000 | |
| To Roumania | 128,000 | |
| Difference between Germany's credit and Powers' debits | 390,701,000 | |
| *Rotterdam Docks* (to France) | | 325,000 |
| *Livestock (a)* | | 7,535,000 |
| To France | 4,568,000 | |
| To Italy | 772,000 | |
| To Belgium | 2,195,000 | |
| *Livestock (b)* | | 83,364,000 |
| To France | 53,045,000 | |
| To Belgium | 30,319,000 | |
| *Miscellaneous (a)* | | 8,430,000 |
| To France | 3,097,000 | |
| To Italy | 8,000 | |
| To Belgium | 5,325,000 | |
| *Reconstruction Material* | | 1,068,000 |
| To France | 641,000 | |
| To Italy | 18,000 | |
| To Belgium | 409,000 | |
| *Coal, Coke and Lignite* | | 423,365,000 |
| To France | 324,979,000 | |
| To Italy | 54,589,000 | |
| To Belgium | 43,792,000 | |
| Luxemburg (to pay) | 5,000 | |
| *By-Products of Coal* | | 8,014,000 |
| To France | 8,014,000 | |
| *Dyestuffs* | | 32,476,000 |
| To Great Britain | 8,499,000 | |
| To France | 9,251,000 | |
| To Italy | 2,124,000 | |
| To Japan | 2,630,000 | |
| To Belgium | 2,949,000 | |
| To Jugo-Slavia | 23,000 | |
| *Pharmaceutical Products* | | 3,053,000 |
| To France | 193,000 | |
| To Italy | 2,125,000 | |
| To Japan | 135,000 | |
| To Belgium | 541,000 | |
| To Jugo-Slavia | 59,000 | |
| *Louvain Library* | | 522,000 |
| To Belgium | 522,000 | |
| *Total Deliveries in Kind* | | *1,228,019,000* |
| To Great Britain | *212,833,000* | |
| To France | *455,263,000* | |
| To Italy | *68,672,000* | |
| To Japan | *8,965,000* | |
| To Belgium | *86,052,000* | |
| To Greece | *5,318,000* | |
| To Roumania | *12,000* | |
| To Jugo-Slavia | *32,000* | |
| Undistributed | *390,706,000* | |

*C. ARMISTICE DELIVERIES.*

| | |
|---|---|
| *Total Armistice Deliveries* | 1,183,226,000 |
| To Great Britain | 84,413,000 |
| To France | 527,433,000 |
| To Italy | 15,306,000 |
| To Belgium | 470,622,000 |
| To Poland | 14,705,000 |
| To Roumania | 1,408,000 |
| To Czechoslovakia | 6,848,000 |
| Undistributed | 59,491,000 |

*D. OTHER LIQUID ASSETS.*

| | |
|---|---|
| *Submarine Cables* | 49,000,000 |
| Undistributed | 49,000,000 |

*GRAND TOTAL OF LIQUID ASSETS.*

| | |
|---|---|
| *Grand Total, Liquid Assets Received* | *3,238,513,000* |
| *Distributed—* | |
| To Great Britain | *934,845,000* |
| To France | *1,123,003,000* |
| To Italy | *83,978,000* |
| To Japan | *8,965,000* |
| To Belgium | *556,674,000* |
| To Greece | *5,318,000* |
| To Poland | *14,705,000* |
| To Roumania | *4,536,000* |
| To Jugo-Slavia | *82,000* |
| To Czechoslovakia | *6,848,000* |
| Undistributed | *499,559,000* |

The distribution on capital account of cessions, being state property in ceded territories and other capital items (E.), was as follows:

| | Gold Marks. | Gold Marks. |
|---|---|---|
| *Coal mines in Saar Basin* | | 400,000,000 |
| Debited to France in 1922 | 300,000,000 | |
| Undistributed | 100,000,000 | |
| *German school in French concession, Shanghai* | | 2,042,000 |
| To France | 2,042,000 | |
| *Property in British concession Shameen* | | 538,000 |
| To Great Britain | 538,000 | |
| *Property in Kiaochow* | | 59,000,000 |
| To Japan | 59,000,000 | |
| *Property acquired by concessionary states* | | 2,017,665,000 |
| To Czechoslovakia | 5,540,000 | |
| Dantzig (undistributed) | 300,000,000 | |
| To Poland | 1,712,025,000 | |
| *Portion of German Imperial State loans assumed by concessionary states* | | 25,097,000 |
| By Belgium (Moresnet, Eupen and Malmedy) | 635,000 | |
| By Czechoslovakia | 391,000 | |
| Dantzig (undistributed) | 5,514,000 | |
| By Poland (Posen, etc., ceded) | 18,557,000 | |
| Total state properties | | *2,504,342,000* |

No figures have been furnished covering property and Imperial State loans in Memel and in the territory now Poland's in the plebiscite area.

Supplemental to the table "Statement of Germany's deliveries and payments on Pre-1st May, 1921, account," printed herewith, is the following table of *"Summary of Credits to Germany for Cash Payments and Deliveries in Kind on Account of Schedules of Payments and Army Costs, May 1, 1921-April 30, 1922."*

| | Gold Marks. |
|---|---|
| *A. Cash and securities* | *1,313,660,496* |
| Art. 5 of Schedule of Payments | 1,000,000,000 |
| Variable annuity instalment of Nov. 15, 1921 | 13,014,991 |
| Cash payments, Jan.-Apr., 1922 | 300,645,505 |
| *B. Deliveries in kind* | *560,475,417* |
| Proceeds of Reparation Recovery Act | 72,263,442 |
| Miscellaneous deliveries | 44,193,285 |
| Ships (376,533 tons) | 43,889,767 |
| Inland water craft | 21,071,825 |
| Livestock | 51,592,016 |
| Reconstruction material and misc | 21,101,716 |
| Coal, coke, lignite (16,050,165 tons) | 275,398,643 |
| Coke by-products—benzol, etc. (67,282 tons) | 11,690,454 |
| Dyestuffs | 10,006,782 |
| Pharmaceutical products | 8,451,212 |
| Louvain library | 816,276 |
| *C. Armistice deliveries in kind* | *3,678,816* |
| GRAND TOTAL | *1,877,814,749* |

The distribution of these items among the powers shows some divergence in figures because some deliveries in kind are carried as cash payments, etc. Of the cash, 640,000,000 gold marks was transferred

to the account for army costs; and a credit of 868,000 gold marks appears in favor of Great Britain, and another of 2,147,000 in favor of France, representing gains in exchange. To Belgium went 669,647,000 gold marks; and 33,016,000 were undistributed. Of the ships, the distribution was: Great Britain, 42,542,000 g. m.; France, 768,000; Italy, 490,000; Japan, 9,000; Greece, 81,000. Of inland navigation boats, tugs, etc., the distribution was: France, 14,318,000 g. m.; Belgium, 345,000; and Czechoslovakia, 6,409,000. Of the livestock, the distribution was: France, 27,867,000 g. m.; Italy, 5,046,000; Belgium, 6,828,000; S. H. S. State, 11,851,000. Of the reconstruction material and agricultural machinery and seeds, the distribution was: France, 5,229,000 g. m.; Italy, 2,335,000; Belgium, 12,307,000. Of the coal, the distribution was: France, 156,676,000 g. m.; Italy, 56,128,000; Belgium, 39,416,000. All the by-products of coke went to France. Of the dyestuffs, the distribution was: Great Britain, 1,212,000 g. m.; France, 1,630,000; Italy, 2,752,000; Belgium, 2,608,000; Greece, 197,000; and "sold to the United States Textile Alliance (but not yet paid in cash)," 139,000.

## STATEMENT OF GERMANY'S DELIVERIES AND PAYMENTS UPON PRE-1ST MAY, 1921, ACCOUNT.

(Between 11th November, 1918 and 30th April, 1920.)

| No. | Articles or Treaty Annexes. | Nature of Deliveries or Payments. | Quantity. | Value in Gold Marks. |
|---|---|---|---|---|
| *A.* | | A. Receipts in Cash on German Account. | | |
| 1. | | *Payment by French Government for.* | | |
| 2. | Art. 145. | (*a*) Germany's proportion of the capital of State Bank of Morocco | Shares 2,200 | 643,000 |
| | Art. 248. | (*b*) Telephone account prior August, 1914 | | 10,000 |
| 3. | | *Payment by Denmark for:* | | |
| | Art. 256. | (*a*) Property acquired in Schleswig | | 63,000,000 |
| | Art. 109-114-254. | (*b*) Proportion of German Imperial and State Debts assumed | | 2,000,000 |
| 4. | Art. 248. | *Money retrieved from ships sunk at Scapa Flow* | | 4,000 |
| 5. | Art. 169. | *Rec'pts from Remit'd Sales of Conv't'd War Mat'l* | | |
| | | (*a*) Up to 30th April, 1921 | | 17,595,000 |
| | | (*b*) Since 1st May, 1921 | | 25,545,000 |
| 6. | Art. 248. | *Proceeds of Collections in Rhine Customs Zone* | | 3,324,000 |
| | | Total Receipts in Cash | | 112,121,000 |
| *B.* | | B. Deliveries in Kind. | | |
| 1. | Annex III. | *Ships* | | *659,867,000* |
| 2. | Art. 357. | *Rotterdam Docks* | | 325,000 |
| 3. | Annex IV. | *Livestock* (a) | Head 12,165 | 7,535,000 |
| | *Idem.* | *Livestock* (b) | Head 328,512 | 83,364,000 |
| 4. | *Idem.* | *Miscellaneous Deliveries* | | 8,430,000 |
| 5. | *Idem.* | *Reconstruction Material* | | 1,068,000 |
| 6. | Annex V. | *Coal, Coke and Lignite:* | | |
| | | (*a*) Taken in charge by Allies at Posts of Control | M. T. 21,287,709 | *423,360,000* |
| | | (*b*) Delivered to Luxemburg | M. T. 1,037,142 | 17,525,000 |
| 7. | *Idem.* | *By-Products of Coal:* | | |
| | *Idem.* | Benzol | Tons 7,511 | *2,606,000* |
| | *Idem.* | Sulphate of Ammonia | Tons 29,846 | *5,408,000* |
| 8. | Annex VI. | *Dyestuffs* | Kgs. 14,887,146 | 38,001,000 |
| 9. | *Idem.* | *Pharmaceutical Products* | Kgs. 267,934 | 3,053,000 |
| 10. | Art. 247. | *Louvain Library* | | 522,000 |
| | | Total Deliveries in Kind | | 1,251,064,000 |
| *C.* | Art. 250, | C. Armistice Deliveries. | | |
| 1. | Armist. Conv., Art. III. and VIII., and Armist. Conv., 16-1-19. | | | |
| | | Total Armistice Deliveries | | *1,183,226,000* |
| *D.* | | D. Other Liquid Assets. | | |
| 1. | Part VIII. Art. 244. Annex VII. | *Submarine Cables* | | *49,000,000* |
| | | Total Other Liquid Assets | | *49,000,000* |
| *E.* | | E. State Property in Ceded Territories (and other Capital Items). | | |
| 1. | Art. 45-50. | *Coal Mines situated in Saar Basin* | | *400,000,000* |
| 2. | Art. 134. | *German School in French Conces'n at Shanghai* | | *2,042,000* |
| 3. | *Idem.* | *Property in British Concession at Shameen* | | *638,000* |
| 4. | Art. 156. | *Property in Kiaochow* | | 59,000,000 |
| 5. | Art. 256. | *Property acquired by Cessionary states* | | |
| | Art. 256. | (*a*) Czechoslovakia | | *5,640,000* |
| | *Idem.* | (*b*) Memel | | |
| | *Idem.* | (*c*) Free City of Danzig | | *300,000,000* |
| | *Idem.* | (*d*) Poland (1) Ceded Area | | *1,712,025,000* |
| | | (2) Plebiscite Area | | |
| 6. | Art. 254. | *Portion of German Imperial State Loans assumed by Cessionary States:* | | |
| | Art. 32-39. | (*a*) Belgium in respect of Moresnet, Eupen and Malmedy | | *655,000* |
| | Art. 86. | (*b*) By Czechoslovakia in respect of Silesia | | *391,000* |
| | Art. 99. | (*c*) Memel | | |
| | Art. 108. | (*d*) Free City of Danzig | | *5,514,000* |
| | Art. 92. | (*e*) Poland in respect of Posen, Eastern Prussia, Allenstein and Upper Silesia: | | |
| | | (1) Territory in Ceded Area | | *18,557,000* |
| | | (2) Territory in Plebiscite Area | | |
| | | Total State Properties | | *2,504,342,000* |
| | | Grand Total of Parts A, B, C, D & E | | 5,099,753,000 |

POSITION UNDER ARTICLE 235 (G. M. 20 MILLIARDS) AS AT 30TH APRIL, 1921.
(Brought up to 30th April, 1922.)

| | Gold Marks. | Gold Marks. |
|---|---|---|
| A.—Estimated Value of Deliveries to 30th April, 1921 | | 5,100,000,000 |
| *Deduct:* | | |
| Provisional valuat'n of State Prop'ties not become liquid at 1st May, 1921 | | 2,504,000,000 |
| Approximate Total of Available Assets | | 2,596,000,000 |
| *Add:* | | |
| B.—Additional Items Ranking Against Article 235: | | |
| *I. Gold Deliveries and other payments made for Food and Raw Materials (German figure)* 3,834,746,000 | | |
| *II. Saar Coal production delivered to order of France Prior to date of actual cession (German figure)* 1,029,000 | Say 3,836,000,000 | |
| *III. Currency furnished to Armies of Occupation up to 30th April, 1921* | 485,000,000 | |
| *IV. Goods and services (including Billeting, Use of Barracks, Roadmaking, etc.), furnished to Armies of Occupation to 30th Nov., 1920 (German fig).* | 600,000,000 | |
| *V. Expenses claimed by Germany on account of various Inter-Allied Commissions to 30th November, 1920 (German figure)* | 40,000,000 | 4,961,000,000 |
| C.—Aggregate at 30th April, 1921 | | 7,557,000,000 |

Note—The above aggregate is contingent inter alia upon the settlement of the following questions: Section A.—Abandoned Material; Fixed Railway Material; Prices for Coal and Cattle Deliveries; Section B.—Foodstuffs and Raw Materials Account; Items creditable re Costs of Armies (Billeting, etc.), Allowance for Expenses of Plebiscites and Commissions.

SUMMARY OF BALANCES (PROVISIONAL) ON POWERS' ACCOUNTS, APRIL 30, 1922.
*Based on entries brought definitely or provisionally to account.*
1.—ON PRE-1ST MAY, 1921, ACCOUNT. (In thousands of gold marks.)

| | Coal Advances and Army Costs to 30th April, 1921. | Deliveries in Kind Under An'exes and Armistice to 30th April, 1921. | Powers Balances Before Debiting State Properties in Ceded Territories and Cash Transactions Since 1st May, 1921. | Debit for Cash Transactions Since 1st May, 1921. | Balances at 30th April, 1922, Before Debiting Cessions of State Property, Etc. | Cessions of State Properties in Ceded Territories to be Debited Definitely or Provisionally. | Combined Balances on Pre-1st May, 1921, Accounts. |
|---|---|---|---|---|---|---|---|
| | *Gold Marks. Credit Items.* | *Gold Marks. Debit Items.* | *Gold Marks. Balances:* | *Gold Marks.* | *Gold Marks.* | | *Gold Marks.* |
| Great Britain | 995,330 | 297,246 | Cr. 698,084 | 637,599 | Cr. 60,485 | Shameen Concession 538 | Cr. 59,947 |
| France | 1,281,518 | 982,696 | Cr. 298,822 | 140,307 | Cr. 158,515 | Shanghai 2,042 | Cr. *156,473* |
| Italy | 39,104 | 83,978 | Dr. 44,874 | | Dr. 44,874 | | Dr. 44,874 |
| Japan | | 8,965 | Dr. 8,965 | | Dr. 8,965 | Kiaochow 59,000 | Dr. 67,965 |
| Belgium | 208,169 | 556,674 | Dr. 348,505 | | Dr. 348,505 | Eupen Malmedy.. 635 | Dr. 349,140 |
| Greece | | 5,318 | Dr. 5,318 | | Dr. 5,318 | | Dr. 5,318 |
| Poland | | 14,705 | Dr. 14,705 | | Dr. 14,705 | State Property and Loans *1,780,582* | Dr. *1,745,287* |
| Roumania | | 4,536 | Dr. 4,536 | | Dr. 4,536 | | Dr. 4,536 |
| Serb, Croat, Slovene State | | 82 | Dr. 82 | | Dr. 82 | | Dr. 82 |
| Czechoslovak | | 6,848 | Dr. 6,848 | | Dr. 6,848 | State Property and Loans *6,031* | Dr. *12,879* |
| Undistributed & in suspense* | | 905 | | | | | |

* Property *not distributed* and Suspense Items not debited to Powers at 30th April, 1922: *G.M. in Thous.*

| | |
|---|---|
| Armistice Deliveries | 59,000 |
| Submarine Cables | 49,000 |
| Acquisitions by Free City of Danzig | 305,500 |
| Saar: Provisional difference between Credit to Germany and Debit to France | 100,000 |
| Ships: Difference between Credit to Germany and Debit to Powers | 390,700 |
| Exchange loss | 400 |
| | 904,600 |

SUMMARY OF BALANCES (PROVISIONAL) ON POWERS' ACCOUNT, APRIL 30, 1922.
*Based on entries brought definitely or provisionally to account.*
2.—ON POST-1ST MAY, 1921, ACCOUNT. (In thousands of gold marks.)

| | Army Costs, 1st May, 1921, to 30th April, 1922. | Deliveries in Kind and Reparation Recovery Act. | Balances Before Debiting or Crediting Cash Transactions. | Cash Entries. | Balances at 30th April, 1922. |
|---|---|---|---|---|---|
| | *Gold Marks.* | *Gold Marks.* | *Gold Marks.* | | *Gold Marks.* |
| United States of America | 56,160 | | Cr. 56,160 | | Cr. 56,160 |
| Great Britain | 10,787 | 116,018 | Dr. 105,231 | Exch. Gain on Gtd. Sterling Cr.. 868 | Dr. 104,363 |
| France (incl. G. M. 300 millions for Saar Mines) | 164,160 | 519,927 | Dr. 355,767 | Exch. Gain on Gtd. Francs Cr... 2,147 | Dr. 353,620 |
| Italy | | 73,250 | Dr. 73,250 | | Dr. 73,250 |
| Japan | | 12 | Dr. 12 | | Dr. 12 |
| Belgium | 35,639 | 65,049 | Dr. 29,410 | Cash under Decision of 29th July, 1921 Dr. 669,647 | Dr. 699,057 |
| Greece | | 1,528 | Dr. 1,528 | | Dr. 1,528 |
| Poland | | | | | |
| Roumania | | 5,608 | Dr. 5,608 | | Dr. 5,608 |
| Serb, Croat, Slovene State | | 51,567 | Dr. 51,567 | | Dr. 51,567 |
| Czechoslovakia | | 6,409 | Dr. 6,409 | | Dr. 6,409 |
| Undistributed* | | 38 | | | |

| | G.M.in Thous. |
|---|---|
| * (1) Assets *not distributed* to Powers at 30th April, 1922: | |
| Cash and Securities | 33,000 |
| Due by Luxemburg for coal | 4,700 |
| Due by Textile Alliance for dyestuffs | 100 |
| | 37,800 |

PARTIAL MORATORIUM OBLIGATION, 1922.
(Payments and deliveries credited to 30th April, 1922.)

| 1. CASH PAYMENTS. | | Gold Marks. |
|---|---|---|
| (a) *Sums paid prior to 21st March, 1922, date of Notification of Partial Moratorium* | | 282,454,540 |
| (b) *Sums paid subsequently to 21st March and before 1st May, 1922* | | 18,190,964 |
| (c) *Other credits:* | | |
| Sale of deliveries in kind 1st November, 1921, to 30th April, 1922, treated as cash: | | |
| Coal | 10,783,828 | |
| Dyestuffs | 816,515 | 11,600,343 |
| Total cash payments to 30th April, 1922 | | 312,245,848 |

2. DELIVERIES IN KIND.

*Deliveries in Kind on Reparation Account 1st January, 1922, to 30th April, 1922 (including Reparation Recovery Act Receipts).*

| DELIVERED TO: | FRANCE. | THE OTHER ALLIED POWERS | |
|---|---|---|---|
| January, 1922 | 16,297,294 | 32,067,864 | |
| February | 10,402,072 | 19,069,905 | |
| March | 16,159,509 | 33,613,535 | |
| April | 19,109,462 | 50,250,952 | |
| Total Deliveries in Kind to 30th April, 1922 | 61,968,339 | 135,002,258 | 196,970,597 |
| Grand total | | | 509,216,446 |
| Balance due in Kind | | | 1,253,029,402 |
| Balance due in Cash | | | 407,754,151 |
| Total obligation | | | 2,170,000,000 |

It was announced in Washington on Sept. 27, that Secretary Hughes had worked out a plan whereby the United States would receive its share of German dyes, to be credited on the American bill against Germany for the cost of its Army of Occupation. The Reparation Commission approved this plan. Annual deliveries will probably not exceed $3,000,000.

## INTERNATIONAL BANKERS ON GERMAN LOAN.

The International Committee of Bankers which was invited by the Reparation Commission to Paris following the Genoa Conference to consider the conditions under which an external loan could be raised by Germany deliberated the matter from May 24 to June 10, 1922, found the flotation of such loan not feasible at that time, but stated emphatically that, given favorable conditions, substantial loans could be successfully floated in all the main markets of the world.

Germany and Belgium came to an agreement on Sept. 19, whereby the latter received German treasury bonds indorsed by the Reichsbank for reparation payments to Belgium, to the amount of 270,000,000 gold marks, due Feb. 15, and June 15, 1923.

An attempt at a practical solution of the Franco-German reparation problem was made early in September by the Marquis de Lubersac and Hugo Stinnes for furnishing millions of francs in building material. This, however, was cancelled about Oct. 20, because of the collapse of the German mark.

The Reparation Commission visited Germany in November, but no concrete results were accomplished. A further conference at Brussels was under discussion, but not settled by the first of December.

Germany on Nov. 14, delivered a note to the Reparation Commission, outlining her plan for a loan of 1,000,000,000 gold marks, half to be supplied by the Reichsbank, the rest from outside, for the rehabilitation of the mark, with a request for a three or four year moratorium. Germany would undertake, a Berlin despatch said, to increase production by prolonging working hours and to effect savings in administration by reducing the number of officials.

The meeting of the four Premiers of the Allied powers in London, December 9-11, failed to reach an agreement on a ground for the conference planned to be held on reparations in Brussels before the next German payment is due, which is January 15. They unanimously found unsatisfactory the plan submitted by the German Chancellor which asked for a two-year moratorium. Premier Poincare insisted that France wanted a "protective guarantee" that Germany will meet her obligations, which was interpreted as a definite instance that France would occupy the Ruhr.

## AMERICAN-GERMAN CLAIMS COMMISSION.

The personnel of the American-German Claims Commission appointed by the two Governments under the agreement signed in Berlin, Aug. 10, 1922, is as follows:

William R. Day, former Justice of the United States Supreme Court, umpire of the commission.

Edwin B. Parker of Texas, American member.

Robert C. Morris of New York, agent of the Government of the United States.

Marshall Morgan, assistant to the American agent.

Dr. Wilhelm Kiesselbach, German member.

Karl von Lewinski, agent of the Government of Germany.

Henry B. Morrow and O. O. Klep, joint secretaries of the commission.

The first work of the commission will be the settlement of claims of the American Government and nationals against Germany for war losses. German claims involving property seized here by the Alien Property Custodian will be held in abeyance. It is estimated the Commissioners will have the disposal of claims for about $800,000,000 or $900,000,000.

## THE GERMAN MARK COLLAPSE.

The United States Department of Commerce, in its Commerce Reports for Nov. 20, 1922, set forth the grave situation in industry, commerce and finance in Germany emphasized in the October (1922) mark collapse which has revived and intensified the effects of previous violent declines. Its article is based on cable reports from the United States Commercial Attache, Charles E. Herring, in Berlin and in part follows:

The new mark collapse from 1,815 to the dollar on October 1 to 8,392 on November 7, together with the expectation of a further decline, has resulted in Germany in renewed popular apprehension, greater uncertainty in all business, increased price confusion, panic buying of goods, and all other incidents of previous drops in the mark. The beginning of the decline of October 12 is generally attributed to the Cabinet crisis in England; since then basic factors which make even a further mark collapse inevitable have been in operation.

These basic factors bringing about currency depreciation may be listed as follows: The continuing adverse balance of payments, as aggravated by reparation payments; the complete loss of confidence abroad in any mark recovery, with the resulting refusal to purchase and the unloading of previous holdings; the invoicing of 60 per cent. or more of German exports in high-exchange currency

thus greatly diminishing the legitimate commercial demand for mark exchange; anticipatory purchase of foreign exchange by German industry and, of less importance, speculation by individuals; and lastly, although this is an effect rather than a cause, continued inflation.

The theory that internal speculation in foreign values is largely responsible for the recent collapse of the mark seems somewhat invalidated by the violent depreciation since the passage of the law providing for the control of foreign-exchange transactions. This measure was in fact not so much a practical expedient as a gesture to quiet public apprehension over the new mark depreciation; it was aimed chiefly at the prevention of smaller private speculation and has no effect on legitimate purchase of foreign exchange by industry which must obviously cover raw-material purchases when contracts are made. This law, which went into effect about the middle of October, is largely inoperative at present but has caused much protest from trade and industry.

## NOTE CIRCULATION AND FLOATING DEBT.

The German note circulation at the end of October amounted to 469,000,000,000 Reichsbank notes and 14,000,000,000 Government Loan Office notes. The Reichsbank circulation advanced during the month from 316,000,000,000, but the amount of the loan office notes was practically unchanged. The rate of inflation increases month by month, the additional circulation having been in round numbers 12,000,000,000 in March, 17,000,000,000 in June, 20,000,000,000 in July, 48,000,000,000 in August, 78,000,000,000 in September, and 153,000,000,000 in October.

The floating debt of the German Government was given as 721,000,000,000 marks on Oct. 31, 1922, of which 604,000,000,000 consisted of discounted treasury bills. Of these discounted bills the money market had absorbed only 127,000,000,000, leaving an excessive amount in the Reichsbank.

Private discounts at the Reichsbank amounted to 101,000,000,000 marks on October 31, of which 25,000,000,000 had been added during the last week in the month. On September 30 the private discount figure was 50,000,000,000 marks; on August 31, 21,000,000,000; on July 31, 8,000,000,000.

The Finance Ministry reports the revenue of the German Government from April to September first six months of fiscal year) as 343,000,000,000 marks, 218,000,000,000 of this being derived from the floating debt and 123,000,000,000 marks from taxation, but the forced loan receipts came to only 2,450,000,000 marks.

## GOLD VALUATION OF GERMAN INDUSTRY.

The stock market has experienced a strong bull movement. The extent of turnover and the work involved have made necessary the closing of the exchange for two days a week. Nevertheless, the market level has not reacted in proportion to the fall of the currency.

The Frankfurter Zeitung stock index on November 3 stood at 318,145, compared with 98,880 on October 6. Domestic loans went from 1,345 to 2,133 during the period, and foreign loans from 46,115 to 77,660. The remarkable appreciation of securities is to be attributed in part to the discouraging effect of the recent anti-speculation measures on small investors who formerly speculated in foreign currencies.

The gold value of the share capitalization of German industry, estimated last July by the Berliner Tageblatt at 6,800,000,000 marks (against 31,000,000,000 at the end of 1913), is considered to be undoubtedly less now than in July.

## CAPITAL SHORTAGE.

The various difficulties due to the shortage of capital are becoming more pronounced. Conditions tend to bring about the elimination of smaller concerns which are unable to obtain adequate bank credit to meet the new price levels or to proportionately increase their capitalization. This elimination takes the form of absorption by large corporations rather than of bankruptcies. The larger concerns are forced to draw upon their foreign high-exchange reserves. Actual currency is also still scarce; municipal and other corporations are issuing emergency currency.

The Frankfurter Zeitung gives October capital increases as 3,798,900,000 marks, largely in the metals and machinery industries, mines and smelters, public utilities, and banks. New incorporations amounted to 1,078,600,000 marks, chiefly in metals, machinery, foodstuffs, and banks. The capital increases in September were 3,748,400,000 marks, and the new incorporations came to 905,700,000; capital absorption apparently is lagging far behind currency depreciation and price levels. During October, six corporations issued 2,309,500,000 marks in fixed interest securities, as against 3,283,200,000 marks by twenty-one corporations in September.

## WHOLESALE PRICE INCREASES IMPORTANT.

Coal prices were increased on November 1 by approximately 60 per cent., and textile raw materials are advancing so rapidly as to affect both the cotton and woolen textile industries severely. Inland potash prices effective November 3 showed an advance over those of October 1 of about 250 per cent., while pig-iron prices jumped four times during the month.

The Frankfurter Zeitung wholesale price index for 98 commodities showed an increase from 43,223 at the end of September to 94,492 at the end of October, a much closer response to currency depreciation than is noted in retail indexes.

All domestic trade is now on a shifting price basis. Although internal payments in foreign currencies are prohibited except in special cases, yet the practice of calculating on a dollar basis is increasing. In export trade probably 60 per cent. of the transactions are in high-exchange currencies.

The labor market was probably less favorable during October than it had been in September (although official unemployment figures do not reflect this), but the slump in production predicted some time ago has not yet set in. Part-time employment is on the increase, but the eventual industrial crisis is apparently not yet imminent; all proposals to introduce part-time work must be approved by a Government commission, which refuses such applications in a large number of cases.

The weekly changes in the prices of iron and steel and certain other standard goods and the very frequent wage changes (often weekly) are resulting in many negotiations and much paper work and, of course, bring about great economic waste. Likewise the Government control of foreign trade and other activities, together with the shifting basis of all economic life, results in enormous unproductive employment among the "white collar" class; production costs are increased, and the effect of the lower gold value of wages is partially nullified.

Labor unions report that 52,349 of their membership were unemployed on October 1; this is 0.8 per cent., against an unemployment of 0.7 per cent. in September.

## WAGES AND LABOR TROUBLES.

Strikes and other labor troubles were less noticeable in October than in the preceding month; wage demands were being settled by arbitration or agreement. Apparently employers are making an effort to readjust wage distributions among skilled and unskilled workers.

The response of retail prices to the new currency depreciation is fortunately greatly retarded, and the danger of food riots is thus minimized. Dr. Kuczynski's minimum living-expense index for Berlin showed a 98 per cent. increase for the second half of October. Dr. Kuczynski estimated the minimum weekly living cost for a family of four in Berlin to be 6,136 marks during the first half of October and 8,871 during the second half. Effective on November 13 the price of rationed bread was set at 112 marks for a 1,000-gram loaf.

The average weekly wage paid in Berlin during the second half of October, 5,200 to 6,000 marks, indicates that wages are not keeping pace with the greatly advancing living costs. This condition is reported difficult for Germany as a whole.

The internal purchasing power of the mark, an average gold value for October, was estimated by Kuczynski at $0.001, while the foreign exchange value (based on an average mark-to-dollar rate of 3,308) was given as $0.0003. During the second half of the month the averages above were $0.0008 and $0.00028, respectively.

## TRANSPORTATION AND COMMUNICATIONS.

On November 15 an increase of 100 per cent. in postal rates went into effect; the Ministry of Posts reports that since the last increase there has been a considerable diminution in the use of the mails. On November 1 an increase of 50 per cent. in railway freight rates and 100 per cent. in passenger fares went into effect and further advances are announced for December 1.

During the month of October, nine ships, aggregating 46,400 tons were launched. Fourteen ships aggregating 86,800 tons were completed and one ship of 8,300 tons was bought. Imports for September were 4,830,000 metric tons and exports were 1,590,000 metric tons.

## THE GENOA CONFERENCE OF THE POWERS.

The Genoa Conference assembled on April 10, 1922, at the Royal Palace of St. George at Genoa, with delegates from thirty-four states, convened to find a remedy for the economical ills of Europe. Lloyd George, Prime Minister of Great Britain, had proposed this meeting to M. Briand, Premier of France, and later at Boulogne, on February 25, had renewed the proposal to M. Poincare. To him he had given the assurance that if Germany and Russia were invited the questions of reparations and the terms of the Versailles Treaty should not be made subject to revision and the Russian pre-war debt should not be brought into question.

The official list of nations represented was as follows:

Albania, Australia (Sir Joseph Cook, head of delegation), Austria, Belgium (Premier Theunis, head), Bulgaria, Canada (Sir Charles Gordon, head), Czechoslovakia (Premier Edouard Benes, head), Denmark, Esthonia, Finland, France (Louis Barthou, head), Germany (Chancellor Wirth, head, and Dr. Rathenau), Great Britain (Premier Lloyd George, head), Greece (Premier Gounaris, head), Holland, Hungary, Ireland, Italy (Premier Facta, head), Jugo-Slavia, Latvia, Lithuania, Luxemburg, New Zealand, Norway, Poland, Roumania (Premier Bratanio, head), Russia (Foreign Minister George Chicherin, head), San Marino, Union of South Africa, Spain, Sweden, Switzerland, Japan (Viscount Ishii, President of the Council of the League of Nations, head).

Richard Washburn Child, the American Ambassador to Rome, was present as an unofficial observer, the Washington Government having declined to participate. Great Britain brought a delegation of 128 members, France, 80, Germany, 80; in all the official attendance amounted to 1,500, and 400 newspaper correspondents crowded the gallery.

Lloyd George in his opening address said: "The world is one economic unit. For that reason I regret that the great American Republic is not represented here. However, much that has happened and is happening in Europe makes Americans cautious in interfering in our affairs. But if we can set these things right at this conference, I feel sure America will not merely come in, but come in gladly."

He made a plea for real peace, a careful study of currency and the question of exchanges, and the investigation of transport and credit. He emphasized four essential conditions to intercourse between nations; that contracts should not be repudiated; that no country can wage war on the institutions of another; that one nation shall not engage in aggressive operations against the territory of another; and that the nationals of one country shall be entitled to impartial justice from the courts of another.

As the spokesmen of the several delegations responded Viscount Ishii explained that Japan wished to co-operate because that country was suffering from the loss of European markets and the instability of exchange. The Russian Foreign Minister, George Chicherin, after saying "Russia has not come here to do propaganda, but to co-operate in the economic reconstruction of the world," introduced the question of disarmament. Russia, he said, was willing to reduce her army provided that other nations reduce theirs, and promise to let Russia alone. France, through M. Barthou, protested saying it had been agreed there should be no discussion of disarmament at Genoa.

The practical work of the conference was given over to three commissions—Finance, Commercial, and Transportation. A sub-committee of the first, composed of the leaders of the great powers, including Germany and Russia and four representatives from the remaining states, those selected being: Switzerland, Sweden, Poland and Roumania, had the bulk of the work to do.

An attempt was made by Italy to raise the question of the inter-allied debts, but it was ruled out by the Chairman on the ground that no decision could be reached without the participation and consent of the United States.

### TERMS FOR RUSSIA.

The Allied experts brought forward specific proposals relating to Russia, which stated bluntly that if Russia expects to resume her relations with the outside world that Cheka, or kindred bodies, sitting in secret and meting out arbitrary punishment to further the Soviets political needs, must be abolished and Russia must set up a public judicial authority with professional judges independent of the Soviet. All law to be applied must be published, must be equal for all persons and non-retroactive. Foreigners must be protected against arbitrary arrests and invasion of their homes. There must be right of appeal. The execution of judgments must be guaranteed, especially commercial contracts and arbitration awards, even when made in foreign countries, must be enforced. The Soviet Government must accept responsibility for the debts of the Imperial Russian Government and the provisional Government and accept a considerable number of other financial liabilities.

The Soviet delegates were amazed and said the demands respecting the rights of personal property and protection for foreigners contemplated changes in the Soviet Government which would virtually wipe out Communism and impair Soviet sovereignty at home.

Lloyd George, after waiting several days, invited the leaders of France, Belgium and Italy and the two leaders of the Soviet delegation for a preliminary conference at his villa at Quarto. There the Russians, as against a claim of all other countries, totalling 65,000,000,000 gold francs, opposed a Russian claim totalling 300,000,000,000 gold francs (subsequently scaled down to $125,000,000,000) to cover all Russia's counter-claims for her costs in waging war on the allied side before the revolution and for the subsequent damage done by the anti-Soviet Generals Kolchak, Denikin and Wrangel, who had received moral and material support from the Allies. Finally, the Russian leaders offered to settle on a basis of 200,000,000,000 gold francs, provided they were given a considerable loan for economic reconstruction. At the close of two days of discussion the British Premier told M. Chicherin that the Russians must abandon their fantastic indemnity claims and must comply with the following conditions:

Recognize the pre-war debt of Russia; recognize the responsibility of the Russian Government for the sums borrowed by Russia from the Allies during the war; and recognize the liability of the Soviet Government for property owned by foreigners, which the Soviet had nationalized. After they had accepted his conditions Lloyd George said the Allies would entertain the question of damage done by the anti-Soviet Generals.

Russia was notified by Sir Robert Horne that the Allied experts had estimated the Soviet debt for foreign-owned property destroyed or seized at 6,000,000,000 gold francs and asked if they were ready to recognize this obligation. Rakovsky, the Ukrainian Premier, one of the delegation, replied that they were, but only on condition that the Allies recognize the Russian counter-claims, totalling 30,000,000,000 gold francs and demanded that the Allies make Russia a preliminary payment of 2,000,000,000 gold francs on account. Discussion ended.

### THE RUSSO-GERMAN TREATY.

Lloyd George and his associates were staggered when the Germans announced on April 17, that on the previous day, Easter Sunday, Dr. Walter Rathenau, the German Foreign Minister, had concluded a treaty with M. Chicherin at Rapallo. The salient features of this treaty were:

Mutual renunciation of war expenses, war damages and civil damages; legal questions arising from the war, including disposition of merchant ships to be settled on a basis of reciprocity; expenses for war prisoners mutually annulled; Germany renounces all claims of her nationals, resulting from application of Soviet laws on condition that "the Soviet Government shall not satisfy similar claims made by any third state;" consular and diplomatic relations to be immediately resumed; the rights of nationals and the regulation of commercial relations to be mutually based on the "most favored nation" principle; and mutual economic assistance.

The Allied delegates were absolutely surprised and amazed, and the French especially furious, and reproached Germany bitterly in formal notes signed by ten nations, holding that such an agreement secretly concluded while the conference was in session was a violation of the conditions to which Germany pledged itself on entering the conference, and that the act destroyed the spirit of mutual confidence. The German envoys denied that secrecy had been intentional and the Russians said it was but the final result of earlier negotiations.

Two alternatives were presented to Germany: that she either denounce the treaty, or withdraw from further discussions on Russia. The delegates

chose the latter course, and asserted that they desired to co-operate fully with the work of the conference. The French went further and called on the Germans to state categorically that the treaty contained no secret clauses, for rumor was persistent that the compact embodied a secret military alliance. (Official denial of such a compact was later made by Russia.) They also held that Germany was alienating just claims to assets that would be applicable to reparation payments under the Versailles Treaty.

In continuing their relations with the Russian delegation the Allied powers put forth three demands: First, a refusal to admit any liability regarding the claims advanced by the Soviet Government; second, willingness was expressed, in view of the serious economic condition of Russia to write down the war debts owing by Russia by a percentage to be determined later; and the countries would be prepared to consider postponement of payments of interest and also some remission of interest; third, it must be definitely agreed that there can be no allowance made to the Soviet Government against (a) either debts and financial obligations due to foreign nationals, or (b) the right of such nationals regarding the return of their property and compensation for damage or loss.

### THE RUSSIAN REPLY.

The Russian delegation formally expressed a willingness to accept the first and second conditions and the first half of the third. For the rest they said the Russian Government would be ready "to restore to their former owners the use of property, nationalized or reserved, under the reservation, that in the event of that being impossible satisfaction shall be given to the legitimate claims of the former owners either by mutual agreement or by arrangements to be worked out at the conference." The delegation insisted on the necessity for a loan and the equal necessity for the recognition of the Soviet Government as a fundamental condition.

On this basis discussions went on until the Russians insisted that the cash loan and credit must pass through their hands. They were told that it would not be possible to give them a large cash loan, as the European nations had little cash available and because they did not admit the wisdom of turning cash over to the Soviet to use for reconstruction according to its own discretion. The British experts outlined a plan for a credit system by which supplies and machinery would be placed in Russia for specific purposes. The Russians protested, declaring that Moscow should have full discretion without Allied supervision or control, and declared that the British scheme would threaten the Communistic basis of their Government.

Russia then brought forward a set of completely new demands, insisting on a considerable cash loan, the cancellation of interest arrears on the pre-war debts and a moratorium of thirty years on those debts. They also declared that restitution of foreign-owned property was contrary to their policy of nationalization, yet they contended that Russia had the right to possess property in foreign countries because these countries were under a bourgeois regime. These new demands made the previous reply valueless. The commission decided further discussion was impossible, and referred the new situation to the heads of the Allied delegation.

A week's exchange of views resulted in agreement on three main issues: recognition by the Soviet of Russia's pre-war debts; restitution of private-owned foreign property and the acceptance of an international consortium to establish credit and develop enterprise in Russia. In connection with this, thirteen countries announced that they were ready to subscribe £20,000,000 capital to the consortium for the renewal of business in Europe, and especially in Russia. Great Britain, France, Italy and Germany were each to subscribe £4,000,000.

The final version of this note to be sent to Russia was drafted on May 1. On the morning of that day M. Jaspar blocked the decision by declaring that Belgians owned property in Russia worth nearly a billion dollars and that Belgium wanted this property restored outright. France backed up Belgium's claims and the note was finally transmitted to the Russian delegation, bearing the approval of all the powers except Belgium and France.

Lloyd George's project for a ten-year agreement "of non-aggression," after much discussion, proved abortive.

The Russian delegation sought definite instructions from Moscow and the Soviet Government refused its assent to the return of foreign property outright and emphasized its insistence on a foreign loan.

The Genoa Conference adjourned practically without results on May 19 after extending an invitation to the United States to join the Allied powers and Russia in a further conference on Russian affairs at The Hague on June 15.

Secretary Hughes, on May 15, sent a reply to the invitation saying that the United States Government could not join in the conference.

M. Chicherin and M. Rakovsky remained at Genoa and completed negotiations for a commercial treaty with Italy, which was signed on May 24.

### THE HAGUE CONFERENCE ON RUSSIAN AFFAIRS.

An attempt to reach a preliminary understanding was made by the British and French Governments. In considering the view put forward at Genoa by the Belgians, and accepted by the French, that the Russian Government had no right at all to nationalize foreign property, and was bound in all cases to restore it intact to its original owner, the British Government sent a note to the French Government saying: "Every state has a right compulsorily to acquire private property, whatsoever its nature, on payment of just compensation. . . . Whether the Russian Government makes restitution of private property alienated from its owners or pays compensation for it is a matter solely for the Russian Government. His Majesty's Government . . . entirely agree, however, that compensation shall be real, not shadowy."

The French Cabinet thereupon decided on June 13 to send a delegation, or "mission of inquiry," to The Hague, taking the position that the discussions should be removed from politics and be of a purely technical character. Charles Benoist was made head of the delegation. The English delegation was headed by Edward Hilton Young, Financial Secretary to the Treasury, and Sir Philip Lloyd-Graeme, Director of Overseas Trade; Baron Romano Avezzeno headed the Italian and M. Cartier the Belgian. The other nations represented were: Austria, Bulgaria, Denmark, Spain, Esthonia, Finland, Greece, Hungary, Japan, Latvia, Lithuania, Luxemburg, Norway, Holland, Poland, Portugal, Roumania, Serbia, Sweden, Switzerland and Czechoslovakia. The Russian delegation was composed of Maxim Litvinov, Leonid Krassin, M. Krestinsky and M. Sokolnikov. The United States was represented by Louis Sussdorf as an observer.

The conference met on June 15 at the Peace Palace and formed three sub-committees: Private property, Debts, and Credits. The Russians arrived on June 25, insistent that the question of credits must first be settled and then, and then only, would the Russians be ready to take up the other issues. The non-Russian powers were insistent on considering first the restoration of property. They declared that confidence was necessary, that credits must largely proceed from the financial and industrial interests which had been doing business with Russia before the revolution, and that these interests could not and would not move unless and until Russia had at least recognized its past obligations in relation to confiscated property and state debts.

M. Litvinov made it clear at the outset that the Russian Government would accept no absolute and general liability to restore particular undertakings to their original owners and that it could admit no vested rights. The Russians handed in a long list of properties which Soviet Russia was prepared to lease, giving priority to previous owners. This list showed that less than 25 per cent. of the foreign enterprises in Russia were included and that the Government apparently proposed to retain whole industries, notably the textile industry.

M. Krassin added that restitution by itself meant nothing, for the factory owner would be powerless to work his property unless he was able to make terms with the Soviet Government or its local organizations with regard to labor, food, fuel, supplies of raw material, transport, taxation, etc.

M. Litvinov explained that the Soviet Government, while unable to give freehold property rights, would grant leases of factories, mines, etc., on concession terms for as long even as ninety years, and that the property and personnel employed by the concessionaire would be absolutely immune from arbitrary confiscation, and that he would be free to buy and sell as he pleased, would be granted all possible facilities for supplies and be secured from crippling increases of taxation by an agreement in advance for a period of years, the Soviet Government preferring an arrangement for an agreed share in the output or profits. The question of compensation where the property was not restored was raised, but the inability of the Russians to satisfy either the French or the British conception of what was reasonable with regard to restitution made a deadlock inevitable.

To a request of the non-Russian representatives, M. Sokolnikov presented figures concerning the Soviet budget, size and basis of currency circulation,

etc., which will be found printed in this Almanac on pages 636-42 in the article on Russia.

To the sub-commission on credits the Russians presented an elaborate program asking for credits extending over a period of three years to a total of 3,224,000,000 gold rubles—a total of $1,612,000,000—made up of the following items: For transport, 1,050,000,000 gold rubles; Agriculture, 924,000,000; Industries, 750,000,000; Miscellaneous Commercial Credits, 300,000,000; Bank Credits, 200,000,000. These Litvinov said represented Russia's minimum necessities and should be granted as a direct credit to the Moscow Government and had nothing to do with the other credits in question, which were to facilitate private trade with Russia under Government guarantee. In other words, the Russian delegates asked that this money should be furnished or guaranteed by foreign Governments to the Soviet Government, who would have the spending of it and the responsibility of repaying it. To the non-Russian delegates business on these terms was impossible even if the amount had been available. The discussion came to an abrupt end.

At the plenary session, held later, Litvinov abandoned his demand for credits and proposed that if the several delegations would put a similar proposition to their respective Governments, the Russian delegation would at once refer to its Government the question whether it was prepared, on the assumption that no credits could be given:

1. To acknowledge the debts due by the Russian Government or its predecessors to foreign nationals, and

2. To agree to give effective compensation to foreigners for property previously owned by them which has been nationalized by the Russian Government, provided the terms of payment of the debts and terms of compensation, whether in the form of concessions or otherwise, were left to be agreed between the Russian Government and the persons concerned in the course of two years.

The non-Russian Commission stated its opinion that though the basis of an agreement could not be found within the terms of this declaration, its acceptance and its loyal execution by the Russian Government would contribute to the re-establishment of the confidence which was necessary for the reconstruction of Russia and under which further negotiations could be carried on. The conference passed another resolution by which the Governments undertook not to support their nationals in negotiating for property which had originally belonged to other foreigners but had not been restored, and then the conference ended.

## THE LEAGUE OF NATIONS IN 1922.

The Third Assembly of the League of Nations met in Geneva September 4 and adjourned on September 30 to meet again on Sept. 3, 1923. Its most notable work was the plan for the rehabilitation of Austria. This problem the Allied powers had turned over to the League when the situation seemed to be almost beyond remedy. The plan was worked out in three weeks by the powers concerned, sitting about a common council table, the leading statesmen being the Earl of Balfour, of Great Britain; Dr. Eduard Benes of Czechoslovakia and Mgr. Ignatz Seipel, the Austrian Chancellor. They were assisted by the Economic and Financial Committee of the League and concluded a five-power treaty, guaranteeing the independence and political integrity of Austria; the internal difficulties were met by a program of economy and reform to be executed under a League of Nations High Commissioner. (The details of this work will be found in the following article on the reconstruction of Austria.)

The assembly adopted unanimously the principle of a reduction of armaments, based upon a treaty of mutual guaranty against attack to be worked out in detail durng the coming year.

Reparations and inter-Allied debts were discussed, the European neutral nations pointing out that they are as vitally concerned in the prompt and sane solution of these questions as the directly interested powers. It was felt that it was possible that if an agreement is not soon reached the Allied powers may turn the whole question over to the League of Nations and make a fresh start on new lines.

Arthur Sweetser of New York, who is a member of the secretariat, points out: "Beyond question nearly all the leaders of world thought and action came to Geneva for the four weeks and left a distinct impression that the League had grown from an organization interested in many of the smaller, but perhaps subordinate, problems of international life into an organization capable of handling far greater problems than had yet come before it. . . . It shows that the League, having tested and proved its ability, was now moving out onto a broader platform."

Discussion of the situation in the Near East was in progress when the Allied negotiators in Paris came to an agreement and the Assembly stood aside.

Hungary, the third of the ex-enemy powers, was admitted to membership September 18, leaving outside only Germany and Turkey, the latter already promised the support of the Allied powers for membership. The roster now included fifty-two nations. Next year Turkey will probably be in, if the present international problems are solved; Germany will enter as soon as her problems permit and it is expected that Ireland will join now that the Free State has been set up.

An important change was made in the membership of the council. In Paris it was planned that the great powers should dominate that body with five members and that all the other powers should be entitled to only four. The United States did not take the place reserved for it, so the proportion became four and four. The great powers themselves provided for the entrance into the council of two small powers, so that the proportion to-day stands four great powers and six lesser powers. These six non-permanent members now are: Brazil, Spain, Uruguay, Belgium, Sweden and China, in order of the number of votes.

The fifty-two members of the League of Nations and amount assessed on each for the expenses of the League are as follows:

| *States.* | Units | Gold Francs. | United States Dollars. |
|---|---|---|---|
| Albania | 1 | 27,196 | 5,247 |
| Argentine Republic | | | |
| Australia | 26 | 707,109 | 136,439 |
| Austria | 1 | 27,196 | 5,247 |
| Belgium | 15 | 407,947 | 78,714 |
| Bolivia | 5 | 135,982 | 26,238 |
| Brazil | 35 | 951,877 | 183,668 |
| British Empire | 95 | 2,583,668 | 498,527 |
| Bulgaria | 7 | 190,375 | 36,733 |
| Canada | 35 | 951,877 | 183,668 |
| Chile | 15 | 407,947 | 78,714 |
| China | 65 | 1,767,773 | 341,097 |
| Colombia | 7 | 190,375 | 36,733 |
| Costa Rica | 1 | 27,196 | 5,247 |
| Cuba | 9 | 244,768 | 47,228 |
| Czechoslovakia | 35 | 951,877 | 183,668 |
| Denmark | 12 | 326,358 | 62,971 |
| Esthonia | 3 | 81,589 | 15,742 |
| Finland | 10 | 271,965 | 52,476 |
| France | 78 | 2,121,329 | 409,317 |
| Greece | 10 | 271,965 | 52,476 |
| Guatemala | 1 | 27,196 | 5,247 |
| Haiti | 2 | 54,393 | 10,495 |
| Honduras | 1 | 27,196 | 5,247 |
| Hungary | 4 | 108,786 | 20,990 |
| India | 65 | 1,767,773 | 341,097 |
| Italy | 61 | 1,658,987 | 320,107 |
| Japan | 73 | 1,985,345 | 383,079 |
| Latvia | 3 | 81,589 | 15,742 |
| Liberia | 1 | 27,196 | 5,247 |
| Lithuania | 4 | 108,786 | 20,990 |
| Luxemburg | 1 | 27,196 | 5,247 |
| Netherlands | 20 | 543,930 | 104,953 |
| New Zealand | 10 | 271,965 | 52,476 |
| Nicaragua | 1 | 27,196 | 5,247 |
| Norway | 11 | 299,161 | 57,724 |
| Panama | 1 | 27,196 | 5,247 |
| Paraguay | 1 | 27,196 | 5,247 |
| Persia | 6 | 163,179 | 31,485 |
| Peru | 10 | 271,965 | 52,476 |
| Poland | 25 | 679,912 | 131,191 |
| Portugal | 10 | 271,965 | 52,476 |
| Roumania | 31 | 843,091 | 162,677 |
| Salvador | 1 | 27,196 | 5,247 |
| Serb-Croat-Slovene State | 26 | 707,109 | 136,439 |
| Siam | 10 | 271,965 | 52,476 |
| South Africa | 15 | 407,947 | 78,714 |
| Spain | 40 | 1,087,860 | 209,906 |
| Sweden | 18 | 489,537 | 94,457 |
| Switzerland | 15 | 407,947 | 78,714 |
| Uruguay | 7 | 190,375 | 36,733 |
| Venezuela | 5 | 135,982 | 26,238 |
| Total | 944 | 25,673,507 | 4,953,789 |

The budget of the League of Nations for 1923 shows these expenditures, balancing an income derived from a pro rata assessment on the member nations:

The South American states played a large part in the Assembly; a Chilian, M. Agustin, serving as President, and Brazil and Uruguay received places on the council, and on the last day they agreed at an informal meeting to do what they could at the forthcoming pan-American conference at Santiago on March 20, 1923, to effect a liaison between that organization and the League.

The officers of the assembly were: President, M. Agustin Edwards of Chile; Vice Presidents, Lord Balfour, Great Britain; M. Hanotaux, France; M. Teixeira Gomes, Portugal; M. Branting, Sweden; Count de Gimeno, Spain; M. de Nintitch, Serb-Croat-Slovene state.

The assembly committees and chairmen were as follows:

Legal and constitutional questions, M. Scialoja (Italy).

Technical organizations (economy and finance, health, and communications and transit), M. Chadzko (Poland).

Reduction of armaments, M. Torriente y Peraza (Cuba).

Budget and finance, M. Herluf Zahle (Denmark).

Social and general questions (opium, refugees, traffic in women and girls, etc.), Mr. William F. Fielding (Canada).

Political (admission of Hungary), the Jonkheer J. Loudon (Netherlands).

**Expenditures.**

| | Gold Francs. |
|---|---|
| *Secretariat and spectal organizations*: | |
| Sessions of the assembly and council | 700,000 |
| General services of the Secretariat | 6,784,945 |
| Special organizations of the League | 5,722,825 |
| Refund of expenses (Vilna plebiscite) | 422,260 |
| Profit and loss on exchange | 200,000 |
| Buildings, permanent equipment | 1,263,016 |
| Working capital | 500,000 |
| *Other organizations*: | |
| Permanent Court of International Justice | 1,880,000 |
| International labor organization | 8,200,426 |
| Total | 25,673,508 |

The work of the assembly done under its own initiative had to do with the development of solutions for the opium traffic, white slavery and the protection of minorities in which international complications arise. The administrative part of this work is in the hands of the International Health Organization of the League of Nations. This committee is composed of these experts from thirteen countries and three international societies:

Prof. Medsen, State Serum Institute, Denmark; Sir George Buchanan, Senior Medical Officer, Ministry of Health, England; Dr. S. Josephine Baker, Child Hygiene, United States; Dr. Leon Bernard, Professor of Hygiene, University of Paris, France; Dr. A. Calmette, Pasteur Institute, Algeria; Dr. F. Carozzi, Industrial Hygiene Section, International Labor Office; Dr. H. Carriere, Director of Federal Health Department, Switzerland; Dr. Carlos Chagas, Director of Federal Health Department, Brazil; Sir Havelock Charles, President of the Medical Board for India; Dr. W. Chodzko, Director of Federal Health Department, Poland; Dr. A. Lutratio, Director of Federal Health Department, Italy; Dr. M. Miyajima, Kitasato Institute, Tokio, Japan; Dr. A. Pilido, President Royal Council, Public Health of Spain; Dr. O. Velghe, Director General, Health Department, Belgium; Dr. Santoliquido, representing the League of Red Cross Societies; and Dr. L. Eajchmann, Director Health Section, League of Nations, Geneva.

Ten Government laboratories or institutes are co-operating with the organization in the study of disease and epidemics and industrial hygiene. The State Institute of Denmark is the central laboratory and in co-operation are Austria, Belgium, France, Great Britain, Italy, Japan, Poland, Russia and the United States. The gift of the Rockefeller Foundation, available since October, 1922, will result in a very great acceleration of the work.

Mr. Sweetser also notes: "The curious spectacle presented itself at this third assembly of more American visitors, more American journalists and more general American interest than was the case with any other nationality, yet the United States played no part."

The American Government, however, made its first official appearance in a League of Nations on December 8, when Dr. M. Dorset of the International Labor Bureau spoke on the question of anthrax and wool. The official said he was officially representing the United States as observer.

Americans in the Secretariat of the League of Nations are: librarian, Florence Wilson; establishment officer, Howard R. Huston; associate director of information, Arthur Sweetser; assistant in administrative commissions section, Huntington Gilchrist; director research division, international labor organization, Dr. Royal Meeker; Judge, Permanent Court of International Justice, John Bassett Moore.

Americans on the committees are: Health, Dr. S. Josephine Baker, Dr. G. W. McCoy and Edgar Sydenstricker; Social Questions, Miss Grace Abbott; Opium, Mrs. Hamilton Wright; Intellectual Co-operation, Prof. R. E. Millekan and Prof. Alice Hamilton of Harvard University; Investigation of Anthrax, Dr. G. Dorset of the United States Bureau of Animal Industry.

## RECONSTRUCTION OF AUSTRIA.

The plan for the reconstruction of Austria as worked out during the summer and early fall of 1922 by Chancellor Mgr. Ignatz Seipel of Austria and the Committee of the League of Nations was put before Parliament for action early in November. Commerce Reports, published by the United States Department of Commerce, in its issue of Nov. 20, 1922, presents this summary based on cable reports of November 9 from Trade Commissioner Upson and Consul Foster of Vienna:

The plan provides for economies which will reduce administration expenses to one-third through the discontinuance of unessential functions. War plants and possibly the mines are to be disposed of, administrative procedure is to be simplified, and the Government personnel reduced. The financial operations of the new plan are to be centralized in the bank of issue. Federal departments are to be reduced to eight; the number of courts will be less and the legal procedure greatly simplified. Federal advances to provinces and municipalities are to be reduced and within three years discontinued.

By adjustment of important duties customs receipts will be doubled, probably yielding $16,000,000; they will then be gradually increased to yield $20,000,000 within two years. The most important foodstuffs and raw materials will remain for the present on the free list. Export duties are to be imposed on many articles. Tobacco and salt prices are to be increased, and taxes are to be levied on the consumption of electricity and gas. There will be a new turnover tax for personal services, with the exception of personal services rendered in connection with foreign trade. A yearly capital levy will also be made on natural persons, and fees charged for transportation will likewise be taxed. The railways, post, telegraph, telephone, and other Government enterprises are to be made independent, and the organizations are to be conducted along business principles so far as consistent with the public interest.

### BANK OF ISSUE AND NEW LOAN.

The recommendations of the League do not make the bank of emission the keystone of Austria's rehabilitation but give it rather a minor place in the general scheme of reconstruction. The capital is to be 30,000,000 gold crowns instead of 100,000,000 Swiss francs, as formerly announced. (The value of the gold crown is $.2026.) The Government's subscription to the capital stock is to be set aside in favor of purely private subscriptions, so that in fact the bank will be a private enterprise which will act as the fiscal agent of the Austrian Government. It will differ from other European Government banks in this, that it will have complete autonomy, being entirely free from control or interference from the Austrian Government.

The prospects for the passage of the above laws are favorable. In the mean time a law has been passed authorizing a loan for 130,000,000 gold crowns, of which the Austrian banks will subscribe 30,000,000 crowns underwrite 20,000,000 crowns, and with the help of the League of Nations expect to place the remainder abroad. The security for this loan comprises the proceeds from the customs and the tobacco monopoly, the proceeds from the French loan amounting to 47,000,000 francs and the Italian loan of 68,000,000 lire, and the amount of 15,000,000 gold crowns obtained from the liquidation of the Austro-Hungarian Bank. The loan is intended to cover the deficit for the remainder of 1922 and note printing.

### THREE TRILLION CROWNS IN NOTES.

The total circulation of notes in Austria, including demand certificates, at the end of October amounted to 2,973,000,000,000 crowns, as compared with 2,021,000,000,000 crowns at the end of September. Treasury certificates held by the bank amounted to 1,384,000,000,000 crowns, as compared

with 1,000,000,000,000 crowns for the previous month, while commercial discounts advanced to 876,000,000,000 from 735,000,000,000 crowns in September.

During October the highest rate of exchange for the dollar on New York was 74,300 crowns, and the lowest 73,725 crowns; the closing quotation for the month was 73,900. The New York cable rate for 1 crown on September 30 was $0.000014 and remained the same on October 30; on November 9 it was $0.000013.

Austrian factories are working on old orders; everywhere they are cutting down on operation and some expect to close entirely.

UNEMPLOYMENT INCREASES.

Unemployment has greatly increased, and at the end of October 59,000 were reported unemployed in the Vienna district, including 14,000 metal workers; other districts also reported increases. Unemployment in Vienna at the end of September amounted to 45,000.

The cost of living indicated by the Government index figure of 10,332 on October 14 (based on 1 for July, 1914) shows a decrease from 11,306 on September 14. This September figure was made up from the following detail figures on a similar basis: Food, 13,531; clothing, 19,159; rent, 33; and heat and light, 12,658.

The Volkswirt cost of living index at the end of October was 21,352 (based on 100, January, 1921) as compared with 20,552 on October 1, thus showing a slight increase (about 4 per cent.) in the cost of living in Austria during the month. A loaf of bread at the end of October cost 6,660 crowns, as compared with 6,330 crowns for September. Industrial bread supplements were discontinued on October 15.

The total imports of Austria for the first six months of 1922 amounted to 3,630,000 metric tons, as compared with 3,730,000 metric tons during the first half of 1921, according to Consul Foster, at Vienna. Exports for the first six months of 1922 amounted to 930,000 metric tons, as compared with 700,000 metric tons during the first half of 1921. Total imports for the first six months of this year are valued at 792,000,000 gold crowns, and total exports at 489,000,000 gold crowns.

Postal rates were doubled on November 1.

The reconstruction programme became operative on Nov. 15.

## JAPANESE DENIED NATURALIZATION.

Japanese are not eligible for naturalization in the United States is the substance of a decision handed down by the United States Supreme Court in Washington on Nov. 13, 1922, the opinion being delivered by Mr. Justice Sutherland.

In its finding the court disposed of two cases, one brought from Hawaii by Tako Ozawa against the United States, and the other brought by Takuji Yamashita and Charles Hio Koko against the Secretary of State of Washington.

In the latter case both Japanese had been naturalized by a court of the State of Washington, but were refused incorporation as a real estate firm on the ground that their naturalization had been illegal.

The lower Federal Courts denied naturalization in both cases, but the Ninth Circuit Court of Appeals in considering the Ozawa case suspended its decision and asked the Supreme Court for instructions as to whether Japanese are eligible for citizenship under the naturalization laws.

The question largely turned upon whether Section 2169 of the revised statutes restricting naturalization to "free white persons" and those of African descent was still in force.

The court stated that the questions before it were:

"(1) Is the nauralization act of June 29, 1906, limited by the provisions of section 2169 of the Revised Statutes of the United States?

"(2) If so limited, is the appellant eligible for naturalization under that section?"

The court answered the first of these questions in the affirmative, and then in discussing the phrase "free white persons," as it appears in the statute said:

"Undoubtedly the word 'free' was originally used in recognition of the fact that slavery then existed and that some white persons occupied that status. The word, however, has long since ceased to have any practical significance and may now be disregarded.

"Manifestly, the test afforded by the mere color of the skin of each individual is impracticable as that differs greatly among persons of the same race, even among Anglo-Saxons, ranging by imperceptible gradations from the fair blond to the swarthy brunette, the latter being darker than many of the lighter hued persons of the brown or yellow races. Hence, to adopt the color test alone would result in a confused overlapping of races and a gradual merging of one into the other, without any practical line of separation.

"The Federal and State courts, in an almost unbroken line, have held that the words 'white person' were meant to indicate only a person of what is popularly known as the Caucasian race. With the conclusion reached in these several decisions we see no reason to differ.

"Moreover, that conclusion has become so well established by judicial and executive concurrence and legislative acquiescence that we should not at this late day feel at liberty to disturb it, in the absence of reasons far more cogent than any that have been suggested.

"The effect of the conclusion that the words 'white person' means a Caucasian is not to establish a sharp line of demarcation between those who are entitled and those who are not entitled to naturalization, but rather a zone of more or less debatable ground outside of which, upon the one hand, are those clearly eligible, and outside of which, upon the other hand, are those clearly ineligible for citizenship. Individual cases falling within this zone must be determined as they arise from time to time by what this court has called, in another connection, 'the gradual process of judicial inclusion and exclusion.'

"The appellant in the case now under consideration, however, is clearly of a race which is not Caucasian, and therefore belongs entirely outside the zone on the negative side. A large number of the Federal and State courts have so decided and we find no reported case definitely to the contrary. These decisions are sustained by numerous scientific authorities, which we do not deem it necessary to review. We think these decisions are right and so hold."

The legal attack of Tako Ozawa, Japanese salesman for a large wholesale firm in Honolulu, to gain American citizenship was launched in the Hawaiian courts in 1914, and was brought to the Supreme Court in 1917.

Among other contentions Ozawa advanced the claim that he is "white," and in an effort to prove his point he traced the history of the Japanese nation for several thousand years, back to the Ainu tribe. He included in his argument the assertion that Solicitor James M. Beck had expressed the belief that this particular portion of the Japanese race has the distinct mark of the Caucasian.

Ozawa is well educated and speaks excellent English. He came to Hawaii while a young man. One of his points was that he had taken special care to educate his children in the American public schools of the Territory and to familiarize them with American customs and ideals in order that they might become loyal American citizens. He asserted that his children had not been taught the Japanese language and that nothing that pertained to Japan had been permitted to enter their education or religion.

In arguing both cases George W. Wickersham, acting for the Japanese, pointed out that the important issue to be settled was whether the section of the old laws limiting naturalization to "free white persons" and persons of African descent was abrogated by the immigration and naturalization law of 1906, which contained no such limitations.

Counsel for the Government in the Ozawa case and for the State of Washington in the other case argued that the limiting section was still in force and that, therefore, Japanese were not eligible for naturalization.

## M. CLEMENCEAU'S VISIT AND SPEECHES.

Georges Clemenceau, Premier of France during the latter years of the war and the making of peace (Nov. 14, 1917 to Jan. 18, 1920), arrived in New York on the French liner Paris on Nov. 18, 1922. He was met at Quarantine by a committee from the Council of Foreign Relations, Ambassador Jusserand, Robert Woods Bliss of the State Department, representing President Harding personally, Frank L. Polk, George W. Wickersham, Otto H. Kahn, Bernard M. Baruch, and Col. E. M. House. Landed by the city steamer Macon at the Battery, his drive up Broadway was an ovation. At the City Hall he was formally welcomed by Acting Mayor Murray Hulbert. In course of his response M. Clemenceau said:

"One morning I was in my private house bordering on the sea when I received bad news from America. I heard bad names. We were called imperialists and militarists. I think that is horrid and I thought I had better go and tell them how things happened to pass and to show them that their judgment was not sane and not right.

"One day a British newspaper arrived. It contained criticism from a man of very high standing, calling America bad names. Before I thought I had better go and scold America. At that moment I decided I had better go to America and defend her. That is the reason why I am here.

"Nobody can ascribe any personal aim to my act in visiting this country. My life is over. But it does seem to me that I can do you some service in letting you know how we Europeans judge the American people. It is necessary because in the world at this time there is a crisis which hasn't existed before. How it will end nobody knows. . . . I will ask for great freedom of thought and great freedom of speech. I must be allowed to speak as a freeman to freemen who are not afraid of anything."

On Sunday M. Clemenceau laid a wreath on the grave of Theodore Roosevelt at Oyster Bay. On Monday, the 20th, he was the guest at a luncheon at the Ritz-Carlton Hotel given by Ralph Pulitzer, head of The New York World, and made a speech to the attending editors and newspaper men. He spoke with frankness because he was speaking to his "brothers in journalism," as he phrased it.

He imposed the seal of confidence upon the speech, but this he later lifted. In part he said:

"When you find an old people like the French who have suffered for the work of liberation of Europe, and when you come to think that in this last war out of 8,000,000 mobilized we lost 5,500,000 mutilated, killed and wounded, think of the large amount of goodness, courage, power of hope, righteousness and human strength in all its best. Children returning to their own villages finding nothing. Not alone their houses but the City Halls and churches just a stick with the name of the village that was. Well, if they make some mistakes in the work of reparation, tell them that they are mistaken but don't give them the feeling that after being in the war we will let them lay.

### CAN'T BE BOTH NOBLE AND MEAN.

"There is one thing that you do not know; that is, when word came that "America is coming" they did not know what America was. If I could take you to my country now you could see for yourself the peasant. When you ask him what America is you will see that he cries at mention of America.

"If you do a noble thing one day you cannot do a mean thing the next.

"If you knew your power to-day as you seemed to have known at that time—the great crisis the end of which no one can foresee! It is very easy to see that we are in a crisis, and if you do not choose carefully the means, and if you do not unite your parties—well, the time has come, I thought, when American people ought to think about their responsibility.

"Well, the time has come for you to make up your mind. I am not going to tell you what to do, how to do it, when to do it, but I am going to tell you that the black clouds are on the horizon far away, for all the civilized world.

"I do not come for pity nor for protection of my health. I bring health with me. I feel, having lived in the situation which is coming soon, sooner than you think, and I come to wake you up. Not to do any worrying or on account of any economic question. I do not come for money. My principle is every honest debt must be honestly paid.

"My friends, think of it, you left us in a lurch, and in a lurch we are. I come to warn you because I know what you mean at the bottom of your hearts. I do not want to ask a decision. I want you to decide as you think best for America, because I know what is best for America is best for Europe and the world. Do not forget the responsibility which you have toward the civilized world. We have our share of it.

"I come to awaken certain feelings in your hearts, and if that is done I am willing to leave the rest to your conscience. I am sure in the end it will be right.

"You have the minds, you have the wills which make the greatest men. You have done too much to do too little, and I want us to live together to the end."

### FRANCE'S SUFFERING.

On Tuesday night M. Clemenceau addressed an audience that filled every seat of the Metropolitan Opera House and paid a notable tribute to Ignace Paderewski, former Premier of Poland, who was in a box. In that speech after saying "we are not people who deny our debts," he went on: "Now, let us see—90 per cent. of the laymen, 90 per cent. of cotton, 90 per cent. of steel, and so on, all our products—and out of 8,500,000 soldiers mobilized, we lost 5,500,000. Don't you think that is a figure —5,500,000 killed and wounded and 500,000 coming back from German prisons dying with hunger and consumption. We are the ones that have suffered most, cruelly suffered. . . . The Germans have devastated our lands, nevertheless, what has happened? In three years there has been taken from Germany 50 per cent. of their debts toward us under the pressure of England."

Later on he said, "Do you know that they are manufacturing cannon by the hundreds? . . . I tell you plainly, as I told Lloyd George before the war, they are preparing war again. Don't you see what is going on? Don't you read the papers? Why, haven't you heard of the treaty between the Turks, the Germans and the Russians? Now, I say that Gens. Ludendorff and Hindenburg are preparing war, civil war, to crush the German democracy if they can.

"Now, have you made up your minds? No sacrifice is demanded or exacted from you except to assert that you want to keep among the people of this world the great place you have twice taken. If you take it, then you will see a great emotion among the people, liberty—liberation. If you don't, the prospect is dark and dreary."

M. Clemenceau addressed the members of the Chamber of Commerce at a luncheon Wednesday, then stressing the necessity of reparations, saying, "The Germans have made so much havoc that they cannot pay the bill," and emphasizing France's need for guarantees for her security; for he, now beginning his eighty-second year, has seen two German invasions of France.

The United States Senate had several debates over M. Clemenceau's speeches which were received with great interest throughout Europe also. The British Government, notwithstanding his generous praise of the British soldier, etc., protested formally against his phrase, "England got a guarantee by letting the German fleet sink in Scapa Flow."

### GERMAN DENIALS.

Chancellor William Cuno of the German Republic, when interrogated in Berlin by a New York Herald correspondent, declined to make any comment upon or to permit his Cabinet associates to discuss M. Clemenceau's New York speech, on the ground that its full text had not yet been received there, and that, moreover, it voiced merely the views of a private French citizen. The Foreign Office, however, authorized the Herald to say that the German Government stamps his allegations about secret and illegal manufacture of war material as absolute invention, and that it feels that the existence of the Turko-Russo-German treaty to which he referred has been denied so often that further denial is unnecessary.

In the absence from Berlin of Gen. Nollett, chief of the Interallied Control Commission, one of the Allied Generals attached to the commission gave the Herald correspondent this statement:

"Unless every officer, without exception, in the French, Belgian, and British groups is deceived it is absolutely untrue that there is a single instance of war material being made in Germany. That is not only unlikely but ridiculous. We have men in every establishment in the country where arms—either cannon or military rifles—could be made; even supervision of the conversion of old arms plants to peace uses. It is true a limited number of sporting arms are made. Nobody can draw a line between sporting and military arms so far as being dangerous is concerned, but it is well known that the sporting rifles produced are not fit and not numerous enough for war. Moreover, there is not a pound of powder being made in Germany, except

for mine blasting, which again is obviously useless in war."

### HOW HIS TRIP WAS PLANNED.

John W. Davis, former Ambassador to Great Britain and President of the Council on Foreign Relations, on November 23 made clear certain facts concerning M. Clemenceau's visit to America in these words:

"Ever since the Peace Conference M. Clemenceau has frequently expressed a hope to visit the United States. Last summer he sent word to his friend, Col. E. M. House, that he would like to come this fall and make half a dozen speeches. Col. House thereupon suggested to the Council on Foreign Relations, an organization which includes men of all political parties, formed to foster discussion of America's foreign relations, but engaged in promoting no propaganda as to the form those relations should take, that it would be highly appropriate for M. Clemenceau to speak in New York under the auspices of the council. The council was very glad to embrace the suggestion and cabled an invitation to M. Clemenceau, which was accepted. It was also very glad to engage an auditorium in which M. Clemenceau could speak, and to invite its members and friends to give a courteous hearing to his message.

"During the remainder of M. Clemenceau's tour he is in charge in Boston of a citizens' committee, of which F. L. Higginson, Jr., is Chairman; at Chicago, Brig.-Gen. Dawes has charge of his arrangements, and he will speak there under the auspices of the Council on Foreign Relations of that city. He goes to St. Louis at the invitation of the city, extended by its Mayor. At Washington he will be the guest of Henry White and will speak before the International Chautauqua Association, of which President Harding is the Honorary President. At Philadelphia arrangements are being made by Edward Bok, and he will speak at the Academy of Music Forum.

"In advance of his coming M. Clemenceau stipulated that he should pay all his own expenses. Being a man of modest income, he is said to be earning these expenses through writing newspaper articles. He also stipulated that the proceeds from any of his meetings at which there should be a charge for admission should be distributed to some Franco-American charitable enterprise to be named by him."

### ANSWERED FROM AMERICAN HEARTS.

M. Clemenceau added to that program an address to American army officers at the War College in Washington and went from Philadelphia to Chicago where on Monday, December 11, he spoke to the American Farm Bureau Federation. In Washington he was entertained at lunch by President Harding, and called on former President Wilson. In St. Louis he was the guest of Joseph Pulitzer Jr., and in Chicago of Mrs. Potter Palmer. Everywhere he was tireless in visiting the shrines of American history and points of interest that had an especial appeal to him. He found time to write six articles for The World in addition.

The proceeds of his "lectures," as he called them, and they were all to crowded houses, he gave to the American Field Service Fund for Fellowships in French and American Universities, organized and directed by Congressman A. Piatt Andrew of Massachusetts; "in memory of my student days in America," he said.

Returning to New York on December 12 he was the guest of the American Committee for Devastated France at their banquet at Hotel Pennsylvania and made his last speech, saying: "I came to appeal to the American mind and the answer came from American hearts."

He sailed for France on the French liner Paris on December 13.

## PRESIDENT HARDING ON FOREIGN RELATIONS.

President Harding spoke on the foreign relations of the United States. This is his annual message to Congress on Dec. 8:

"I bring you no apprehension of war. The world is abhorrent of it, and our own relations are not only free from every threatening cloud but we have contributed our large influence toward making armed conflict less likely.

"Those who assume that we played our part in the World War and later took ourselves aloof and apart unmindful of world obligations give scant credit to the helpful part we assumed in international relationship.

"Whether all nations signatory ratify all the treaties growing out of the Washington Conference on Limitation of Armament or some withhold approval, the underlying policy of limiting naval armament has the sanction of the larger naval powers, and naval competition is suspended. Of course, unanimous ratification is much to be desired.

"The four-power pact which abolishes every probability of war on the Pacific has brought new confidence in a maintained peace, and I can well believe it might be made a model for like assurances wherever in the world any common interests are concerned.

"We have had expressed the hostility of the American people to a super-government or to any commitment where either a council or an assembly of leagued powers may chart our course. Treaties of armed alliance can have no likelihood of American sanction, but we believe in respecting the rights of nations, in the value of conference and consultation, in the effectiveness of leaders of nations looking each other in the face before resorting to the arbitrament of arms.

"It has been our fortune both to preach and promote international understanding. The influence of the United States in bringing near the settlement of an ancient dispute between South American nations is added proof of the glow of peace in ample understanding.

"In Washington to-day are met the delegates of the Central American nations, gathered at the table of international understanding, to stabilize their republics and remove every vestige of disagreement. They are met here by our invitation not in our aloofness, and they accept our hospitality because they have faith in our unselfishness and believe in our helpfulness.

"I would like the Congress and the people of the Nation to believe that in a firm and considerate way we are insistent on American rights wherever they may be questioned and deny no rights of others in the assertion of our own. Moreover, we are cognizant of the world's struggles for full readjustment and rehabilitation, and we have shirked no duty which comes of sympathy, or fraternity, or highest fellowship among nations."

## PERMANENT COURT OF INTERNATIONAL JUSTICE.

The project drafted by the Advisory Committee of Jurists at The Hague, in the summer of 1920 for a Permanent Court of International Justice was adopted by the Assembly of the League of Nations, modified in some important parts, notably in the matter of obligatory jurisdiction, on Dec. 13, 1920. The eleven regular or titular judges, as they are called, and the four deputy judges were elected on Sept. 14 and 15, 1921. The election was made by the independent, separate and concurrent votes of the Council of the League, in which body the great powers form a majority, and the Assembly of the League in which the small powers have an overwhelming preponderance. At the suggestion of Elihu Root, of the Advisory Committee, upon failure of the Council and Assembly to agree, a committee of three was appointed from each body which produced an agreement. The judges elected by this method are as follows:

**Rafael Altamira y Crevea** (b. 1866) of Spain, Senator, Professor of the Faculty of Law of the University of Madrid.

**Dionisio Anzilotti** (b. 1869) of Italy, Under Secretary General of the League of Nations, Professor of International Law at the University of Rome, Co-Editor of the Revista di Diritto Internazionale, Member of the Permanent Court of Arbitration at The Hague, Member of the Institute of International Law.

**Ruy Barbosa** (b. 1849) of Brazil, Senator, Former Minister of Finance and Vice President, Founder Member of the American Institute of International Law.

**Antonio Sanchez de Bustamante y Sirven** (b. 1865) of Cuba, Senator, Professor of International Law and Dean of the Faculty of Law at the University of Havana, Member of the Institute of International Law, Founder Member of the American Institute of International Law, Member of the Permanent Court of Arbitration at The Hague.

**Robert Bannatyne, Viscount Finlay** (b. 1842) of Great Britain, Former Attorney General, Former Lord Chancellor, Member of Parliament, Member of the Permanent Court of Arbitration at The Hague.

**Bernard, C. J. Loder** (b. 1849) of the Netherlands, Member of the Court of Cassation, Associate of the Institute of International Law.

**Yorozu Oda** (b. 1868) of Japan, Professor of International Law and Rector of the University of Kioto.

**Charles Andre Weiss** (b. 1858) of France, Professor of International Law at the University of Paris, Legal Adviser to the Ministry for Foreign Affairs, Member of the Institute of International

Law, Member of the Permanent Court of Arbitration at The Hague.

**John Bassett Moore (b. 1860) of the United States,** Former Counselor of the Department of State, Professor of International Law at Columbia University, Member of the Institute of International Law, Member of the Permanent Court of Arbitration at The Hague.

**Didrik Galtrup Gjedde Nyholm** (b. 1858) of Denmark, Honorary Counselor of State, Vice President of the Internationxl Mixed Tribunal at Cairo, Member of the Permanent Court of Arbitration at The Hague.

**Max Huber** (b. 1874) of Switzerland, Professor of International Law at the University of Zurich, Associate of the Institute of International Law.

The Deputy Judges are:

**Dumitriu Negulescu** (b. 1876) of Roumania, Professor at the University of Bucharest.

**Wang Chung Hui** (b. 1882) of China, Former Minister for Foreign Affairs and Minister of Justice.

**Mikhailo Jovanovitch** of the Serb-Croat-Slovene State, Former Minister of Justice, President of the Supreme Court at Belgrade.

**Frederick Valdemar Nikolai Beichmann** (b. 1859) of Norway, President of the Court of Appeals at Drontheim, Member of the Institute of International Law, Member of the Permanent Court of Arbitration at The Hague.

Each Judge is to serve nine years and may be re-elected. The ordinary Judge receives a salary varying from $6,030 to $14,070, in accordancc with the length of the session.

The members of the court, upon the invitation of the Secretary General of the League of Nations, met at The Hague Feb. 15, 1922, and elected as President Mr. Bernard C. J. Loder; as Vice President, Mr. Andre Weiss, and appointed Mr. Ake Hammarskjold as Registrar.

The court met for its first annual session on June 15, 1922. Three cases calling for interpretations of the Treaty of Versailles, all having to do with labor problems, were heard, and three advisory opinions handed down.

Secretary Hughes, in a speech in Boston October 30, declared that the Washington Government would give its formal support to the International Court, as soon as suitable arrangements could be made for American participation in the election of Judges.

According to the League Covenant, all disputes between members of the League must be submitted either to arbitration or to inquiry of the League Council. According to the statute of the court (Art. 36) the jurisdiction of the court "comprises all cases which the parties refer to it." The following cases are recognized as being generally suited for arbitration: (1) The interpretation of a treaty; (2) any question of international law; (3) the existence of any fact which, if established would constitute a breach of any international obligation; (4) the extent and nature of the reparation to be made for any such breach. There is no provision in the covenant that compels members of the League to submit disputes of the above nature to arbitration.

## ANNUAL PRICE OF SILVER IN LONDON.

(By the Director of the Mint. Value of a fine ounce at average quotation.)

| Calendar | Lowest. | Highest. | Average | Value. | Ratio | Calendar | Lowest. | Highest. | Average | Value. | Ratio |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Pence.* | *Pence.* | *Pence.* | *Dollars.* | | | *Pence.* | *Pence.* | *Pence.* | *Dollars.* | |
| 1850 | 59 1-2 | 61 1-2 | 61 1-16 | 1.316 | 15.70 | 1913 | 26 7-16 | 29 3-8 | 27 9-16 | .60458 | 34.19 |
| 1860 | 61 1-4 | 62 3-8 | 61 11-16 | 1.352 | 15.29 | 1914 | 22 1-8 | 27 1-4 | 25 1-4 | .55312 | 37.37 |
| 1870 | 60 1-4 | 60 3-4 | 60 9-16 | 1.328 | 15.57 | 1915 | 22 5-16 | 27 1-4 | 23 5-8 | .51892 | 39.84 |
| 1880 | 51 1-2 | 52 13-16 | 52 1-4 | 1.14507 | 18.05 | 1916 | 26 11-16 | 35 13-16 | 31 3-8 | .68647 | 30.11 |
| 1890 | 43 5-8 | 54 5-8 | 47 3-4 | 1.04634 | 19.75 | 1917 | 35 11-16 | 55 | 40 13-16 | .89525 | 23.09 |
| 1900 | 27 | 30 1-4 | 28 5-16 | .62007 | 33.33 | 1918 | 42 1-2 | 49 1-2 | 47 17-32 | 1.04171 | 21.00 |
| 1910 | 23 3-16 | 26 | 24 21-32 | .54077 | 38.22 | 1919 | 47 3-4 | 79 1-8 | 57 1-32 | 1.25047 | 18.44 |
| 1911 | 23 11-16 | 26 1-8 | 24 19-32 | .53928 | 38.33 | 1920 | 38 7-8 | 89 1-2 | 61 13-32 | 1.34649 | 20.27 |
| 1912 | 25 1-8 | 29 11-16 | 28 1-16 | .61470 | 33.62 | 1921 | 30 5-8 | 43 3-8 | 36 23-32 | .80522 | 32.75 |

## NUMBER OF AUTOMOBILES IN USE IN UNITED STATES, 1922.

(Data compiled by Automotive Industries.)

| State. | No. | State. | No. | State. | No. |
|---|---|---|---|---|---|
| Alabama | 82,343 | Maine | 77,527 | Oklahoma | 221,300 |
| Arizona | 35,049 | Maryland | 140,572 | Oregon | 118,325 |
| Arkansas | 67,446 | Massachusetts | 360,732 | Pennsylvania | 689,589 |
| California | 673,330 | Michigan | 477,037 | Rhode Island | 54,957 |
| Colorado | 145 739 | Minnesota | 328,700 | South Carolina | 90,546 |
| Connecticut | 137,526 | Mississippi | 65,139 | South Dakota | 119,274 |
| Delaware | 21,413 | Missouri | 346,437 | Tennessee | 117,025 |
| Dist. of Columbia | 71,645 | Montana | 58,785 | Texas | 467,616 |
| Florida | 97,837 | Nebraska | 238,704 | Utah | 47,523 |
| Georgia | 131,842 | Nevada | 10,819 | Vermont | 36,965 |
| Idaho | 51,294 | New Hampshire | 42,039 | Virginia | 141,000 |
| Illinois | 670,434 | New Jersey | 272,994 | Washington | 185,359 |
| Indiana | 400,342 | New Mexico | 24,703 | West Virginia | 93,894 |
| Iowa | 460,528 | New York | 812,031 | Wisconsin | 341,841 |
| Kansas | 291,309 | North Carolina | 148,684 | Wyoming | 26,619 |
| Kentucky | 126,371 | North Dakota | 92,644 | | |
| Louisiana | 80,500 | Ohio | 720,632 | Total | 10,505,660 |

Registrations in 1921 totalled 10,448,632, according to the National Automobile Chamber of Commerce.

PRODUCTION OF MOTOR VEHICLES IN THE U. S. (WHOLESALE VALUES).

| Year. | Passenger Cars. | | Year. | Passenger Cars. | | Year. | Passenger Cars. | |
|---|---|---|---|---|---|---|---|---|
| | No. | Value. | | No. | Value. | | No. | Value. |
| 1899 | 3,700 | $4,750,000 | 1912 | 356,000 | $335,000,000 | 1917 | 1,740,792 | $1,053,505,781 |
| 1904 | 21,281 | 23,634,367 | 1913 | 461,500 | 399,902,000 | 1918 | 926,388 | 801,937,925 |
| 1909 | 127,731 | 159,918,506 | 1914 | 543,679 | 413,859,379 | 1919 | 1,586,787 | 1,399,282,995 |
| 1910 | 181,000 | 213,000,000 | 1915 | 818,618 | 565,978,950 | 1920 | 1,883,158 | 1,809,175,963 |
| 1911 | 199,319 | 240,770,000 | 1916 | 1,493,617 | 797,469,353 | 1921 | 1,514,000 | 1,093,918,000 |
| Year. | Motor Trucks. | | Year. | Motor Trucks. | | Year. | Motor Trucks. | |
| | No. | Value. | | No. | Value. | | No. | Value. |
| 1904 | 411 | $946,947 | 1913 | 23,500 | $44,000,000 | 1918 | 227,250 | $434,168,992 |
| 1909 | 3,255 | 5,230,023 | 1914 | 25,375 | 45,098,464 | 1919 | 305,142 | 408,311,585 |
| 1903-10. | 10,374 | 20,485,500 | 1915 | 74,000 | 125,800,000 | 1920 | 322,039 | 423,756,715 |
| 1911 | 10,655 | 22,292,321 | 1916 | 90,000 | 157,500,000 | 1921 | 154,550 | 166,082,000 |
| 1912 | 22,000 | 43,000,000 | 1917 | 128,157 | 220,982,668 | | | |

Motorcycles in use (1921), 207,930; motor buses, 10,000.

Motor vehicle license revenues in the U. S. (1921), $122,478,654. Foregoing is total of State licenses; to which are to be added $117,322,000 in Federal excise taxes, $90,000,000 in State taxes, and $11,000,000 in municipal license fees—total, $340,800,654.

## VETO OF THE SOLDIERS' BONUS BILL.

The Soldiers' Bonus Bill (or "adjusted compensation" bill) was passed by the House on March 23, 1922, by a vote of 333 to 70; and by the Senate on Aug. 31 by a vote of 47 to 22. It was sent to conference the following day. The House agreed to the conference report without a record vote; the Senate agreed by a vote of 36 to 17.

The bill was vetoed by the President on Sept. 19. The House on Sept. 20 passed the bill over the President's veto by a vote of 258 (Reps. 188, Dems. 69, Soc. 1) to 54 (Reps. 35, Dems. 19), absent and not paired, 43. The Senate on Sept. 20 failed to pass the bill over the President's veto—a two-thirds vote being necessary—by a vote of 44 (Reps. 27, Dems. 17) to 28 (Reps. 21, Dems. 7), absent and not paired, 3. The bill therefore failed to become a law.

President Harding's veto message in part follows:

"With the avowed purpose of the bill to give expression of a nation's defense in the world war, I am in accord, but to its provisions I do not subscribe. The United States never will cease to be grateful; it cannot and never will cease giving expression to that gratitude.

"In legislating for what is called adjusted compensation, Congress fails, first of all, to provide the revenue from which the bestowal is to be paid. Moreover, it establishes the very dangerous precedent of creating a Treasury covenant to pay which puts a burden, variously estimated between four and five billions, upon the American people, not to discharge an obligation, which the Government always must pay, but to bestow a bonus which the soldiers themselves, while serving in the World War, did not expect.

"It is not to be denied that the nation has certain very binding obligations to those of its defenders who made real sacrifices in the World War and who left the armies injured, disabled or diseased, so that they could not resume their places in the normal activities of life. These obligations are being gladly and generously met.

### $25,000,000,000 TOTAL FOR DISABLED.

"In the current fiscal year we are expending $510,000,000 on hospitalization and care of sick and wounded, on compensations and vocational training for the disabled and for insurance. The figures do not include the more than $35,000,000 in process of expenditure on hospital construction. The estimates for the year to follow are approximately $470,000,000, and the figures may need to be made larger. Though the peak in hospitalization may have passed, there is a growth in domicilization and the discharge in full of our obligations to the deceased, disabled or dependent, who have a right to the Government's aid with insurance—liability added—which will probably reach a total sum in excess of $25,000,000,000.

"More than 99,000 veterans are now enrolled in some of the 445 different courses in vocational training. Fifty-four thousand of them are in schools or colleges, more than 38,000 are in industrial establishments and a few more than 6,000 are being trained in schools operated by the veterans' bureau.

"Approximately 19,000 have completed their courses and have employment in all cases where they desire it, and 53,000 have deferred for the present time their acceptance of training. The number eligible under the law may reach close to 400,000, and facilities will continue to be afforded, unmindful of the necessary cost, until every obligation is fulfilled.

"Two hundred and seventy-six thousand patients have been hospitalized, more than a quarter of a million discharged and 25,678 patients are in our hospitals to-day.

"Four hundred and sixteen thousand awards of compensation have been made on account of death or disability and $480,000,000 has been paid to disabled men or their dependent relatives. One hundred and seventy-five thousand disabled ex-service men are now receiving compensation, along with medical or hospital care where needed, and a quarter of a million checks go out monthly in distributing the $8,000,000 payment of indisputable obligations.

"When the bill was under consideration in the House I expressed the conviction that any grant of bonus ought to provide the means of paying it, and I was unable to suggest any plan other than that of a general sales tax. Such a plan was unacceptable to the Congress, and the bill has been enacted without even a suggested means of meeting the cost. Indeed, the cost is not definitely known, either for the immediate future or in the ultimate settlement.

"The Treasury estimates, based on what seems the most likely exercise of the options, figure the direct cost at approximately $145,000,000 for 1923, $225,000,000 for 1924, $114,000,000 for 1925, $312,000,000 for 1926, make a total of $796,000,000 for the first four years of its operation, and a total cost in excess of $4,000,000,000.

"No estimate of the large indirect cost ever had been made. The certificate plan sets up no reserve against the ultimate liability. The plan avoids any considerable direct outlay by the Government during the earlier years of the bill's proposed operations, but the loans on the certificates would be floated on the credit of the Nation.

### DANGEROUS ABUSE OF PUBLIC CREDIT.

"This is borrowing on the Nation's credit just as truly as though the loans were made by direct Government borrowing, and involves a dangerous abuse of public credit. Moreover, the certificate plan of payment is little less than certified inability of the Government to pay, and invites a practice on sacrificial barter which I cannot sanction.

"The financial problems of the Government are too little heeded until we are face to face with a great emergency. The diminishing income of the Government, due to the receding tides of business and attending incomes, has been overlooked momentarily, but cannot be long ignored. The latest budget figures for the current fiscal year show an estimated deficit of more than $650,000,000 and a further deficit for the year succeeding, even after counting upon all interest collections on foreign indebtedness which the Government is likely to receive.

"To add to our pledges to pay, except as necessity compels, must seem no less than governmental folly. Inevitably it means increased taxation, which Congress was unwilling to levy for the purposes of this bill, and will turn us from the course toward economy so essential to promote the activities which contribute to common welfare."

## WAR BONUSES AND BOUNTIES IN THE UNITED STATES.

*War of the Revolution.*

By resolution of Congress Sept. 16, 1776, it was provided that grants of land should be given to men and officers serving during the war as follows, in acres:

Colonels, 500; lieutenant colonels, 450; majors, 400; captains, 300; lieutenants, 200; ensigns, 150; noncommissioned officers and privates, 100.

By resolution of Congress June 22, 1779: It was provided that a gratuity be paid to those who enlisted prior to Jan. 23, 1779, of $100.

By resolution of Aug. 24, 1780, it was provided that seven years' half pay should be given to officers continuing in service to the end of the war.

*War of 1812.*

Act of Congress, 1812: Noncommissioned officers and men upon discharge to be given a bounty and 160 acres of land. By act of Dec. 10, 1814: Men thereafter enlisted to receive 320 acres of land.

*Mexican War.*

Men serving through Mexican War entitled to warrants for 160 acres of land with option of bonus of $100.

*Civil War.*

Men entitled to receive patents for 160 acres of land. Various bounties paid for enlistment and service during war by Federal Government ranging from $150 to $400. Amount paid in bounties by Federal Government, $405,021,000.

In addition, the various States paid bounties as follows:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Me. | $7,837,643.97 | N. J. | $23,868,966.62 | Ky. | $692,577.00 | Iowa | $1,615,171.20 |
| N. H. | 9,636,313.00 | Pa. | 43,154,986.92 | Ohio | 23,557,373.00 | Minn. | 2,000,464.00 |
| Vt. | 4,528,774.88 | Del. | 1,136,599.06 | Ind. | 9,664,855.00 | Mo. | 1,282,148.55 |
| Mass. | 22,965,550.36 | Md. | 6,271,992.00 | Ill. | 17,296,205.00 | Kan. | 57,407.00 |
| R. I. | 820,768.60 | D. of C. | 134,010.00 | Mich. | 9,664,855.00 | | |
| Conn. | 6,887,554.27 | W. Va. | 864,737.00 | Wis. | 5,885,356.19 | Total | $286,731,256.09 |
| N. Y. | 86,629,228.15 | | | | | | |

## PRESIDENT HARDING'S SHIP SUBSIDY MESSAGE.

President Harding, on Nov. 21, 1922, appeared before Congress at the opening of its fourth session and addressed them regarding pending ship subsidy liquidation in part as follows:

Members of the Congress: Late last February I reported to you relative to the American merchant marine and recommended legislation which the executive branch of the Government deemed essential to promote our merchant marine and with it our national welfare. Other problems were pressing and other questions pending, and for one reason or another, which need not be recited, the suggested legislation has not progressed beyond a favorable recommendation by the House committee. The committee has given the question a full and painstaking inquiry and study, and I hope that its favorable report speedily will be given the force of law.

We are not now dealing with a policy founded on theory; we have a problem which is one of grim actuality. We are facing insistent conditions, out of which will come either additional and staggering Government losses and national impotence on the seas, or else the unfurling of the flag on a great American merchant marine commensurate with our commercial importance, to serve as carrier of our cargoes in peace and meet the necessities of our defense in war.

There is no thought here and now to magnify the relation of a merchant marine to our national defense. It is enough to recall that we entered the World War almost wholly dependent on our allies for transportation by sea. We expended approximately three billions feverishly, extravagantly, wastefully, and impractically. Out of our eagerness to make up for the omissions of peace and to meet the war emergency we builded and otherwise acquired the vast merchant fleet which the Government owns to-day.

### TO RELIEVE TREASURY OF DRAIN.

In the simplest way I can say it, our immediate problem is not to build and support a merchant shipping, which I hold to be one of the highest and most worthy aspirations of any great people; our problem is to deal with what we now possess. Our problem is to relieve the public Treasury of the drain it is already meeting. Let us omit particulars about the frenzied wartime building. Possibly we did fully as well as could have been done in the anxious circumstances. Let us pass for the moment the vital relationship between a merchant marine and a commercially aspiring nation.

Aye, let us suppose for a moment the absurdity that with one $3,000,000,000 experience and with the incalculable costs in lives and treasure which may be chargeable to our inability promptly to apply our potency—which God forefend happening again!—let us momentarily ignore all of these and turn to note the mere business problem, the practical question of dollars and cents with which we are confronted.

### TONNAGE LEFT AFTER WAR.

The war construction and the later completion of war contracts, where completion was believed to be the greater economy to the public Treasury, left us approximately 13,200,000 gross tonnage in ships. The figures are nearer 12,500,000 tons now, owing to the scrapping of the wooden fleet. More than half of this tonnage is Government owned, and approximately 2,250,000 tons are under Government operation in one form or another.

The net loss to the United States Treasury—sums actually taken therefrom in this Government operation—averaged approximately $16,000,000 per month during the year prior to the assumption of responsibility by the present Administration. A constant warfare on this loss of public funds and the draft to service of capable business management and experienced operating directors have resulted in applied efficiency and enforced economies. It is very gratifying to report the diminution of the losses to $4,000,000 per month, or a total of $50,000,000 a year; but it is intolerable that the Government should continue a policy from which so enormous a Treasury loss is the inevitable outcome. This loss, moreover, attends operation of less than a third of the Government-owned fleet.

It is not, therefore, a question of adding new Treasury burdens to maintain our shipping; we are paying these burdens now. It is not a question of contracting an outlay to support our merchant shipping, because we are paying already. I am not asking your authorization of a new and added draft on the public Treasury; I am appealing for a program to diminish the burden we are already bearing.

But I have not properly portrayed all the current losses to the public Treasury. We are wearing out our ships without any provision for replacement. We are having these losses through deterioration now and are charging nothing against our capital account. But the losses are there, and regrettably larger under Government operation than under private control. Only a few years of continued losses on capital account will make these losses through depreciation alone to exceed the fifty millions a year now drawn to cover losses in operation.

### FLEET WORTH ONLY FRACTION OF COST.

The gloomy picture of losses does not end even there. Notwithstanding the known war cost of three billions of dollars for the present tonnage, I will not venture to appraise its cash value to-day. It may as well be confessed now as at some later time that in the mad rush to build, in establishing shipyards wherever men would organize to expend Government money, when we made shipbuilders overnight quite without regard to previous occupations or pursuits, we builded poorly, often very poorly.

Moreover, we constructed without any formulated program for a merchant marine. The war emergency impelled, and the cry was for ships, any kind of ships. The error is recalled in regret rather than criticism. The point is that our fleet, costing approximately $3,000,000,000, is worth only a fraction of that cost to-day. Whatever that fraction may be, the truth remains that we have no market in which to sell the ships under our present policy, and a program of surrender and sacrifice and the liquidation which is inevitable unless the pending legislation is sanctioned, will cost scores of millions more.

This problem cannot longer be ignored, its attempted solution cannot longer be postponed. The failure of Congress to act decisively will be no less disastrous than adverse action. Three courses of action are possible, and the choice among them is no longer to be avoided.

The first is constructive—enact the pending bill, under which I firmly believe an American merchant marine, privately owned and privately operated, but serving all the people and always available to the Government in any emergency, may be established and maintained.

The second is obstructive—continue Government operations and attending Government losses, and discourage private enterprise by Government competition under which losses are met by the public Treasury, and witness the continued loss and deterioration until the colossal failure ends in sheer exhaustion.

The third is destructive—involving the sacrifice of our ships abroad or the scrapping of them at home, the surrender of our aspirations, and the confession of our impotence to the world in general, and our humiliation before the competing world in particular.

I know full well the hostility in the popular mind to the word "subsidy." It is stressed by the opposition and associated with "special privilege" by those who are unfailing advocates of Government aid. "Aid" would be a fairer term than "subsidy," in defining what we are seeking to do for our merchant marine, and the interests are those of all the people, even though the aid goes to the few who serve.

### ANALYSIS OF THE BILL.

I challenge every insinuation of favored interests and the enrichment of the special few at the expense of the public Treasury. I am, first of all, appealing to save the Treasury. Perhaps the unlimited bestowal of Government aid might justify the apprehension of special favoring, but the pending bill, the first ever proposed which carries such a provision, automatically guards against enrichment or perpetuated bestowal.

**It provides that shipping lines receiving Government aid must have their actual investment and their operating expenses audited by the Government, that Government aid will only be paid until the shipping enterprise earns 10 per cent. on actual capital employed, and immediately that when more than 10 per cent. earning is reached half of the excess earnings must be applied to the repayment of the Government aid which has been previously advanced.**

Thus the possible earnings are limited to a very reasonable amount if capital is to be risked and

management is to be attracted. If success attends, as we hope it will, the Government outlay is returned, the inspiration of opportunity to earn remains, and American transportation by sea is established.

It should be kept in mind that the approximate sum of $5,000,000 annually paid for the transport of ocean mails is no new expenditure. It should be kept in mind that the loan fund to encourage building is not new; it is the law already, enacted by the essentially unanimous vote of Congress. It is only included in the pending bill in order to amend so as to assure the exaction of a minimum interest rate by the Government, whereas the existing law leaves the grant of building loans subject to any whim of favoritism.

DIRECT AID.

It should be kept in mind, also, that there are assured limitations of the Government aid proposed. The direct aid, with ocean carrying maintained at our present participation, will not reach $20,000,000 a year, and the maximum direct aid, if our shipping is so promoted that we carry one-half our deep-seas commerce, will not exceed $30,000,000 annually. At the very maximum of outlay we should be saving $20,000,000 of our present annual operating loss.

If the maximum is ever reached, the establishment of our merchant marine will have been definitely recorded and the Government-owned fleet fortunately liquidated.

PROVISIONS OF THE SHIP SUBSIDY BILL.

"A bill to amend and supplement the Merchant Marine Act, 1920, and for other purposes," commonly referred to as the Ship Subsidy Bill, was introduced in the House of Representatives Nov. 20, 1922, by Mr. Greene of Massachusetts, upon President Harding's call for an extra session to consider it. It may be summarized prior to any amendment as follows:

Authorizes the United States Shipping Board to sell to citizens Government owned ships at public or private sale (if by the latter, only on approval of five of the seven members of the board, with inclusion of reasons in board minutes), terms and conditions to be prescribed by the board, and payment to be completed in 15 years, payments annually to cover depreciation, and interest on unpaid balance to be not less than 4 per cent. Insurance to be carried by purchaser payable to board.

Provides for creation of the "United States Shipping Board Construction Loan Fund" of $125,000,000, out of which the board may loan funds for as long as 15 years at 2 per cent. interest "to its persons, citizens of the United States: (1) In the construction by them in private shipyards of the United States of vessels of the best and most efficient type. . . .; (2) in the equipping . . . of vessels already built with . . . machinery and commercial appliances," the loans to be limited in amount to two-thirds the construction or equipment cost.

Repeals laws of 1891 providing for mail carrying and authorizes the Postmaster General "to contract for the carrying of the mails over such lines at such price as may be agreed upon by the board and the Postmaster General," contracts to be made wherever practicable with American lines.

Allows American vessel owners certain extra exemptions from income tax laws, the deduction allowable to be determined on a ratio of ship operation. Permits an owner to deduct profits of the sale of a ship to another citizen provided that the proceeds are reinvested in shipping. Also allows deduction for depreciation.

Doubles tonnage duties and taxes except for sailing vessels of less than 1,000 gross tons and other vessels of less than 1,500 gross tons.

Prescribes that "as nearly as practicable one-half of the total number of immigrants admitted to the United States in any fiscal year" shall be transported in American ships, under regulation, to be promulgated by the Commissioner General of Immigration and approved by the Secretary of State.

Establishes the "Merchant Marine Fund," into which are to be paid all tonnage duties and taxes, 10 per cent. of the amount of all customs duties and "all excess earnings paid by the owner of any vessel." Out of this fund the board is authorized to pay subsidies (on ten-year contracts) based on gross tonnage of vessels, nautical miles sailed and speed, ranging in effect from one-half of one per cent. per gross ton per 100 nautical miles to 2 1-10th cents (this being for vessels doing 23 knots or over). Vessels of less than 5,000 but more than 1,500 gross tons to be rated as of 5,000 gross tons. Vessels to be eligible must be over 1,500 gross tons and must carry crews at least two-thirds citizens. The board may double the subsidy if it deems necessary.

Provides for discontinuance of army and navy transport service and diversion of this privilege to private lines under ten-year contracts negotiated by the Secretaries of the Army and Navy. Also provides that all Government officials, legislative, judicial, diplomatic, etc., must travel by American lines if their passage is paid by the Government.

The bill after amendment passed the House on Nov. 29 by a vote of 208 (Reps. 204; Dems. 4) to 184 (Dems. 114; Reps. 69; Soc. 1).

## THE UNITED STATES SHIPPING BOARD.

*GENERAL ADMINISTRATION.*

(As of September 1, 1922.)

*Chairman*—A. D. Lasker; *Vice Chairman*—T. V. O'Connor; *Commissioners*—George E. Chamberlain, Frederick I. Thompson, E. C. Plummer, Rear Admiral William S. Benson, and Meyer Lissner.

*Assistant to the Chairman*—Ralph V. Sollitt; *Secretary*—Clifford W. Smith; *Assistant Secretary*—Carl P. Kremer; *Chief Clerk*—M. J. Pierce; *Disbursing Officer*—T. L. Clear; *General Counsel*—Sanford H. E. Freund and Chauncey G. Parker.

*CLAIMS COMMISSION.*

*Chairman*—Walter D. Meals; A. W. Teele, Captain R. M. Watt, F. W. Wood and Homer L. Ferguson; *Secretary*—O. P. M. Brown.

*EMERGENCY FLEET CORPORATION.*

*President*—J. B. Smull; *Vice President and General Manager*—W. J. Love; *Vice President*—J. E. Sheedy; *Secretary*—Clifford W. Smith; *Assistant Secretary*—Carl P. Kremer; *Director of Finance*—J. W. McIntosh; *Assistants*—Clarence F. Buck and P. Sinclair; *Treasurer*—T. L. Clear; *Director of Sales*—Sidney Henry; *General Counsel*—Sanford H. E. Freund and Chauncey G. Parker.

THE WORLD ALMANAC presents official figures and facts compiled by the United States Shipping Board giving, as completely as possible, a business sheet of the board, as of Sept. 1, 1922, together with this official statement of the board's policy:

"The general policy of all provisions of the Shipping Act, 1916, and of the Merchant Marine Act, 1920, contemplates sales of vessels to citizens, to the exclusion of foreigners, except when the board regards particular vessels proposed to be sold to foreigners of unimportance to the American Merchant Marine. This policy is expressly set forth in Secs. 5 and 7 of the Merchant Marine Act."

The Bureau of Research of the U. S. Shipping Board discloses that 52 per cent. of total cargo tonnage handled in United States ports in the fiscal year ending June 30, 1922, moved under the American flag, when 37,312 vessels in water-borne foreign commerce, aggregating 80,231,000 long tons, entered and cleared American ports, 49 per cent. of the vessels being of American registry. Relative efficiency was indicated by the American average of 2.62 deadweight tons per cargo ton carried, the foreign average being 2.74.

(The United States is now second among the merchant fleets of the world. United States Department of Commerce statistics gave this country, as of June 30, 1914, sea-going tonnage of 1,837,000, against Great Britain, 18,877,000; Germany, 5,098,000; France, 1,918,000; Japan, 1,642,000; total, the world, 42,514,000; and as of June 30, 1921, the United States, 12,314,000; Great Britain, 19,288,000; France, 3,045,000; Japan, 3,063,000; Germany, 654,000; total, the world, 54,158,000; and as of June 30, 1922, the United States, 12,506,000; Great Britain, 19,053,000; France, 3,303,000; Japan, 3,325,000; Germany, 1,783,000; total, the world, 56,802,000.

The Department of Commerce also gave figures showing that gross tons of shipping building on June 30, 1922, was, the United States, 150,623; Great Britain, 1,919,504; France, 243,290; Japan, 115,512; Germany, estimated, 500,000; total, the world, 3,325,430.—*Ed. Almanac.*)

VESSELS OWNED.

The approximate deadweight tonnage and number of vessels owned by the U. S. Shipping Board Emergency Fleet Corporation in November, 1918:

| CLASS. | No. | D. W. Tons. |
|---|---|---|
| Steel vessels | 424 | 2,434,982 |
| Wood vessels | 101 | 371,675 |
| Ex-German vessels | 78 | 523,097 |
| Total | 603 | 3,329,754 |

The total number of vessels owned as of June 30, 1921:

| Class. | No. | Approximate D. W. Tons. |
|---|---|---|
| Steel | 1,524 | 10,549,800 |
| Other than steel | 314 | 1,123,326 |
| Uncompleted wood hulls | 142 | 471,050 |
| Total vessels | 1,980 | 12,144,176 |

The ships were: Steel cargo, 1,225; passenger, or passenger and cargo, 42; transports, 5; refrigerators, 13; tankers, 81; tugs, 30; wood cargo, 237; concrete, 9; composite, 11; uncompleted wood tug hulls, 4; total, 1,657.

The total number owned as of Sept. 1, 1922, was:

| Class. | No. | Approximate D. W. Tons. |
|---|---|---|
| Steel | 1,396 | 10,651,766 |
| Other than steel | 257 | 922,650 |
| Uncompleted wood tug hulls | 4 | ..... |
| Total vessels | 1,657 | 11,574,416 |

## APPROPRIATIONS AND ALLOTMENTS.

Appropriations and allotments received from inception to June 30, 1921, were (cents omitted):

*United States Shipping Board.*

| | |
|---|---|
| Permanent fund (Act of Sept. 7, 1916) to purchase capital of Emergency Fleet Corporation | $50,000,000 |
| Salaries and expenses, 1917 (Act of Sept. 7, 1916) | 100,000 |
| Salaries and expenses, 1918 (Act of June 12, 1917) | 342,000 |
| Investigation of foreign discrimination against vessels and shippers of the United States (Act of June 12, 1917) | 175,000 |
| Increase of compensation (Act of June 12, 1917) | 4,634 |
| Salaries and expenses, 1919 (Act of July 1, 1918) | 842,500 |
| Salaries and expenses, 1920 (Act of July 19, 1919) | 772,986 |
| Salaries and expenses, 1921 (Act of June 5, 1920) | 442,500 |
| Salaries and expenses, 1921 (Act of June 16, 1921) | 3,633 |
| Total appropriated for U. S. Shipping Board | $52,683,753 |

*United States Shipping Board Emergency Fleet Corporation.*

| | | |
|---|---|---|
| Emergency Shipping Fund: Act of June 15, 1917 | $405,000,000 | |
| Ditto, Oct. 6, 1917 | 635,000,000 | |
| Ditto, July 1, 1918 | 1,806,701,000 | |
| Ditto, July 11, 1919 | 500,000 | |
| Ditto, July 19, 1919 | 356,000,000 | |
| Ditto, June 16, 1921 | 36,852,000 | |
| Total for Emergency Fleet Corporation | $3,240,053,000 | $3,240,053,000 |
| Total appropriated | | $3,292,735,753 |
| Money otherwise provided was: Allotments by the President of the United States to the U. S. Shipping Board—National Security and Defense Fund in 1918—(Act of April 17, 1917) | $27,011,683 | |
| Same fund in 1919 | 2,500,743 | |
| Total otherwise provided | $29,512,426 | 29,512,426 |
| Total appropriated and otherwise provided | | $3,322,249,179 |
| Returned to Treasury unexpended | $4,725,110 | |
| Transferred to War Department, under Executive order | 3,860,000 | 8,585,110 |
| Net amount received from appropriations and allotments | | $3,313,664,069 |

*Appropriation received from July 1, 1921, to Sept. 1, 1922:*

| | |
|---|---|
| U. S. Shipping Board, salaries and expenses, 1922 (Act of March 4, 1922) | $460,316 |
| Ditto, 1923 (Act of June 12, 1922) | 459,000 |
| Total for Shipping Board | $919,316 |
| *Appropriations:* | |
| Emergency Fleet Corporation, Emergency Shipping Fund, Deficiency Act, June 16, 1921 | $25,000,000 |
| Deficiency Act, Aug. 24, 1921 | 48,500,000 |
| Emergency Shipping Fund, Act of June 12, 1922 | 50,000,000 |
| Claims, Act of June 12, 1922 | 50,000,000 |
| | $173,500,000 |
| Total appropriation received from July 1, 1921, to Sept. 1, 1922, Shipping Board and Fleet Corporation | $174,419,316 |
| *Less:* Unwithdrawn balances of appropriations in U. S. Treasury | 85,498,351 |
| Net amount of appropriations used | $88,920,965 |

*Managers (and/or) operators of U. S. Shipping Board vessels as of Sept. 1, 1922:*

Fifty-four steamship companies, of which twenty-seven were in New York.

*Trade Route Services in which the U. S. Shipping Board vessels were operating as of Sept. 15, 1922:*

To the United Kingdom from North Atlantic, South Atlantic and Gulf U. S. ports.
To Bordeaux/Hamburg range from same.
To Scandinavia and the Baltic Sea ports from North Atlantic U. S. ports.
To Spanish Atlantic and Portuguese ports from South Atlantic and Gulf U. S. ports.
To Spanish Mediterranean ports from South Atlantic and Gulf U. S. ports.
To French Mediterranean, west coast of Italy and the Adriatic Sea ports from North and South Atlantic and Gulf U. S. ports.
To British India from North Atlantic U. S. ports.
To Australia and New Zealand from North Atlantic and Pacific U. S. ports.
To the Orient from North Atlantic, Gulf and Pacific U. S. ports.
To the Dutch East Indies and east and west coasts of Africa from North Atlantic U. S. ports.
To South American east coast from North Atlantic Gulf and Pacific U. S. ports.
To South American east coast from North Atlantic and Pacific U. S. ports.
To the West Indies and Caribbean Sea ports from North Atlantic and Gulf U. S. ports.

*Number, type, kind and tonnage of ships being operated which are controlled by the U. S. Shipping Board as of Aug. 31, 1922:*

*Steel Vessels—Temporarily Inactive:*

| | No | D. W. T. |
|---|---|---|
| Cargo, repairing or awaiting repairs | 11 | 89,010 |
| Passenger and cargo, ditto | 1 | 13,075 |
| Cargo, in port, awaiting tieup | 7 | 36,082 |
| Cargo, awaiting loading date | 6 | 46,995 |
| Cargo, delayed account of pier congestion | 1 | 7,825 |
| Total temporarily inactive | 26 | 193,947 |

*Steel Vessels—Inactive:*

| | No. | D. W. T. |
|---|---|---|
| Cargo, tied up | 871 | 5,519,952 |
| Passenger and cargo, tied up | 13 | 135,101 |
| " " (assigned) | 3 | 33,337 |
| Cargo, tied up, but assigned | 7 | 65,936 |
| Cargo, awaiting assignment | 10 | 74,663 |
| Tankers, tied up | 65 | 605,614 |
| Tankers, awaiting assignment | 1 | 9,799 |
| Cargo, delayed, ship sales | 3 | 18,830 |
| Passenger and cargo, reconditioning | 1 | 15,000 |
| Cargo, custody of Shipping Board as mortgagee | 3 | 23,283 |
| Tugs, tied up | 18 | ..... |
| Cargo, contract unfinished | 1 | 9,400 |
| Total inactive | 996 | 6,510,915 |

*Steel Vessels—Active:*

| | No. | D. W. T. |
|---|---|---|
| Cargo in specified service U. S. to foreign ports | 287 | 2,410,525 |
| Passenger and cargo ditto | 24 | 297,744 |
| Cargo, U. S. coastwise | 4 | 16,716 |
| Cargo, between foreign ports | 13 | 82,305 |
| Passenger and cargo between foreign ports | 3 | 11,395 |
| Cargo, intercoastal | 4 | 31,315 |
| Tankers to foreign ports | 10 | 92,012 |
| Cargo, at sea, assigned for tieup | 8 | 60,056 |
| Tankers, at sea, assigned for tieup | 4 | 27,795 |
| Cargo, army service | 2 | 19,802 |
| Cargo, U. S. Public Health Service | 1 | 8,800 |
| Cargo, chartered to independent companies | 15 | 58,750 |
| Tankers, chartered to independent companies | 2 | 15,665 |
| Tugs | 12 | ..... |
| Total active | 389 | 3,133,780 |

*Concrete Vessels:*

| | | |
|---|---|---|
| Cargo and tankers, tied up | 9 | 54,861 |

*Wood and Composite Vessels:*

| | No. | D. W. T. |
|---|---|---|
| Cargo, tied up | 236 | 869,441 |
| Barge, tied up | 1 | 3,500 |
| Tugs, active, 10; tied up, 2 | 12 | ..... |
| Total wood and composite | 249 | 872,941 |
| Total, operating dept | 1,670 | 10,773,294 |

*Inactive Vessels, type and port of lay-up, as of Aug. 31, 1922:*

Total cargo ships inactive, 882, of 5,620,881 deadweight tonnage; 17 cargo and passenger, of 183,438 tonnage; 13 refrigerator ships, of 91,183 tons; 66 tankers, of 615,413 tons; 18 tugs.

The U. S. Shipping Board on Aug. 31, 1922, owned 236 wooden vessels, built as a part of the war programme. Of these, 226 were sold at auction on Sept. 12, 1922, for $750,000.

**The Foreign Commerce** of the U. S. Shipping Board for the fiscal year ending June 30, 1922, was:
Exports, 6,634,381 tons of cargo.
Imports, 4,313,913 tons of cargo.

## OTHER INTERESTS.

**Docks and Wharves.** The U. S. Shipping Board owns and operates the Hoboken Terminal, bought on Executive order by former President Wilson for $7,146,583 from the North German Lloyd Dock Co., 6 piers, and the Hamburg American Line Terminal and Navigation Co., 3 piers, to be held for the original owners.

**Drydocks.** The U. S. Shipping Board owns drydocks with tonnage capacity as follows: Perth Amboy, N. J., 10,000; Lord Drydock Corporation, New York Harbor, 10,000; two stored at Mill Basin, Brooklyn, 10,000 tons each; 1 stored at Tiverton, R. I., 10,000; 1 steel dock stored at Mill Basin, Brooklyn, 6,000; Bruce Drydock, Pensacola, Fla., 5,000.

**Bunker Stations.** The U. S. Shipping Board owns bunker stations at Honolulu, T. H., of 110,000 bbls. capacity; Manila, P. I., 165,000 bbls.; St. Thomas, Virgin Islands, 220,000 bbls.; Mobile, Ala., 110,000 bbls.; Norfolk, Va., 1,100,000 bbls.

**Vessels Sold.** The U. S. Shipping Board had sold up to June 30, 1922, 473 vessels, of a total deadweight tonnage of 2,126,379 for a total price of $268,881,711. The board said: "The amount these sales will yield cannot be computed at present (Sept. 15, 1922). Many of the purchasers failed to keep their contracts. Others have applications for readjustments. Most of the sales were at the very high prices prevailing in 1919 and 1920, ranging in many cases as high as $180 per deadweight ton, whereas the prevailing price for similar tonnage in 1922 has been less than one-third that rate. This depreciation accounts for many of the defaults by purchasers."

**Housing.** The U. S. Shipping Board has several war housing projects not yet disposed of, aggregating about 400 acres on which there are about 1,100 buildings, structures and land having cost about $12,000,000.

## LIFE INSURANCE IN FORCE IN THE UNITED STATES.

(Compiled by Frederick L. Hoffman, Newark, N. J.)

| YEAR (Calendar). | No. of Ordinary Policies | Amount. | No. of Industrial Policies. | Amount. | Total No of Policies. | Amount. |
|---|---|---|---|---|---|---|
| | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| 1850 | 29,407 | 68,614,189 | ..... | ..... | 29,407 | 68,614,189 |
| 1860 | 60,000 | 180,000,000 | ..... | ..... | 60,000 | 180,000,000 |
| 1870 | 839,226 | 2,262,847,000 | ..... | ..... | 839,226 | 2,262,847,000 |
| 1880 | 685,531 | 1,581,841,706 | 236,674 | 20,533,469 | 922,205 | 1,602,375,175 |
| 1890 | 1,319,561 | 3,620,057,439 | 3,882,914 | 428,789,342 | 5,202,475 | 4,048,846,787 |
| 1898 | 2,419,850 | 5,714,964,251 | 8,798,512 | 1,110,078,702 | 11,218,362 | 6,825,042,953 |
| 1899 | 2,820,950 | 6,481,154,483 | 10,052,833 | 1,293,329,995 | 12,873,783 | 7,774,484,478 |
| 1900 | 3,176,051 | 7,093,152,380 | 11,219,296 | 1,468,928,342 | 14,395,347 | 8,562,080,722 |
| 1901 | 3,693,702 | 7,952,989,395 | 12,337,019 | 1,640,827,454 | 16,030,721 | 9,593,816,849 |
| 1902 | 4,160,088 | 8,701,587,912 | 13,448,147 | 1,806,894,473 | 17,608,235 | 10,508,482,385 |
| 1903 | 4,694,021 | 9,593,008,148 | 14,606,635 | 1,978,241,009 | 19,300,656 | 11,571,249,157 |
| 1904 | 5,507,759 | 10,412,078,338 | 15,674,384 | 2,135,859,103 | 21,182,143 | 12,547,937,441 |
| 1905 | 5,621,417 | 11,054,255,524 | 16,872,583 | 2,309,754,235 | 22,494,000 | 13,364,009,759 |
| 1906 | 5,792,956 | 11,253,194,077 | 17,841,396 | 2,453,616,207 | 23,634,352 | 13,706,810,284 |
| 1907 | 5,945,780 | 11,486,518,261 | 18,849,357 | 2,577,896,941 | 24,795,137 | 14,064,415,202 |
| 1908 | 6,164,730 | 11,850,032,581 | 19,687,675 | 2,668,919,696 | 25,852,405 | 14,518,952,277 |
| 1909 | 6,534,983 | 12,513,125,180 | 21,552,344 | 2,967,596,031 | 28,087,327 | 15,480,721,211 |
| 1910 | 6,954,119 | 13,227,213,168 | 23,044,162 | 3,179,489,541 | 29,998,281 | 16,406,702,709 |
| 1911 | 7,693,263 | 14,578,989,903 | 24,708,499 | 3,423,790,536 | 32,401,762 | 18,002,780,439 |
| 1912 | 8,159,103 | 15,555,901,171 | 26,521,655 | 3,684,054,893 | 34,680,758 | 19,239,956,064 |
| 1913 | 8,774,638 | 16,587,378,943 | 28,674,303 | 3,933,219,429 | 37,448,941 | 20,520,598,372 |
| 1914 | 9,045,081 | 17,425,501,137 | 30,537,592 | 4,140,151,191 | 39,582,673 | 21,565,652,328 |
| 1915 | 9,890,264 | 18,349,285,339 | 32,623,419 | 4,394,051,492 | 42,513,683 | 22,743,336,831 |
| 1916 | 10,698,452 | 19,868,270,425 | 34,997,474 | 4,767,759,910 | 45,695,926 | 24,636,030,335 |
| 1917 | 11,581,701 | 21,965,594,232 | 37,468,776 | 5,151,096,538 | 49,050,477 | 27,116,690,770 |
| 1918 | 12,768,019 | 24,167,111,902 | 40,453,438 | 5,629,956,453 | 53,221,457 | 29,797,068,355 |
| 1919 | 14,460,828 | 29,274,557,871 | 43,861,894 | 6,239,996,056 | 53,322,722 | 35,514,553,927 |
| 1920 | 16,733,000 | 35,299,292,000 | 47,608,000 | 7,031,676,000 | 64,341,000 | 42,330,968,000 |
| 1921 | 17,663,000 | 36,378,538,000 | 54,097,000 | 8,006,120,000 | 71,760,000 | 44,384,658,000 |

Above table does not cover life policies in force in U. S. issued by foreign companies. The 1920 totals include group insurance contracts for $1,636,725,000.

## THE CONGRESSIONAL "FARM BLOCS."

(This article on the activities of so-called "Farm Blocs" was prepared for the WORLD ALMANAC by Gray Silver, Washington representative of the American Farm Bureau Federation.)

Members of the Senate Farm Bloc, when it was organized on May 9, 1921, in the Washington office of the American Farm Bureau Federation, were:

William S. Kenyon (Rep., Iowa), Chairman; John B. Kendrick (Dem., Wyo.); George W. Norris (Rep., Neb.); Frank M. Gooding (Rep., Idaho); Arthur Capper (Rep., Kan.); Ellison D. Smith (Dem., So. Car.); Duncan U. Fletcher (Dem., Fla.); Robert M. La Follette (Rep., Wis.); Morris Sheppard (Dem., Tex.); E. F. Ladd (Rep., No. Dak.); Joseph E. Ransdell (Dem., La.); J. Thomas Heflin, (Dem., Ala.). Senator Arthur Capper, Kansas, succeeded Senator Kenyon as Chairman when the latter resigned from the Senate to accept a Federal Judgeship in Iowa.

Members of the House Farm Bloc, when it was organized on May 16, 1921, in the Washington office of the American Farm Bureau Federation, were:

L. J. Dickinson (Rep., Ia.); Guy L. Shaw (Rep., Ill.); R. C. Patterson (Rep., Mo.); Robert E. Evans (Rep., Neb.); A. P. Nelson (Rep., Wis.); John C. Ketcham (Rep., Mich.); John D. Clarke (Rep., N. Y.); William Williamson (Rep., So. Dak.); Homer Hoch (Rep., Kan); Burton L. French (Rep., Idaho); Frank Clague (Rep., Minn.); James G. Strong (Rep., Kan.); Charles A. Christopherson (Rep., So. Dak.); C. B. Hudspeth (Dem., Tenn.); O. B. Burtness (Rep., No. Dak.); John H. Smithwick (Dem., Fla.); Edw. T. Taylor (Dem., Col.); John W. Summers (Rep., Wash.).

"There is no definite membership in the Farm Blocs, membership depending upon support or non-support of agricultural measures," says Gray Silver, Washington representative of the American Farm Bureau Federation. "The Farm Bloc in both Senate and House was organized, not for class legislation, but for sympathetic consideration of the economic problems facing agriculture. The Blocs wish to see agriculture take its place in a sound, aggressive, prosperous national programme, and to reap rewards on the basis of the vast investment of capital, labor and knowledge commensurate with the rewards of other national activities."

Actual legislation, which has been enacted at the request of the Senate Farm Bloc, is as follows:

H. R. 5676—An act for the regulation of grain trading.

H. R. 2373—An act to permit farmers to do co-operative marketing.

H. R. 6320—An act for the regulation of the packing industry by the Federal Government.

S. 1072—An act outlining Federal aid for road building and an appropriation for 1921-22.

S. 1811—An act authorizing the sale of Farm Loan bonds at 5½ per cent.

S. 1837—An act depositing an additional $25,000,000 to the credit of the Farm Loan fund, at an interest rate of 5½ per cent.

S. 1915—An act reviving the War Finance Board for one year, and appropriating $1,000,000,000 to be loaned to agriculture through this board.

S. 2263—An act providing for a farmer member of the Federal Reserve Board.

S 2775—An act (1922) extending the life of the War Finance Board for another year.

H. R. 9859—An act containing an appropriation for continuance of Federal aid for the road building programme for 1922-23.

H. R. 11,843—An act meeting the objection of the United States Supreme Court to the Future Trading Act of 1921 following the same lines on the regulation of grain trading except that it is based on the power of Congress to regulate inter state commerce.

In addition are a number of measures of local significance, such as the appropriation of $200,000 to repay the cotton States in their effort to eradicate the pink boll worm; $1,500,000 to drought sufferers in Montana and the Dakotas; extending reclamation laws to irrigation projects; extending the time for payment of construction charges on reclamation projects. Also the Farm Bloc in both Houses was behind the appropriation for the U. S. Department of Agriculture, and many special items received increased appropriation at the instance of the Bloc.

Actual legislation, which has been enacted at the request of the House Farm Bloc, is indicated by the foregoing, with these additional measures which, on Sept. 12, 1922, had not yet been acted on by the Senate:

H. R. 8066—A bill prohibiting the manufacture of filled milk.

H. R. 7102—A bill establishing standard containers for fruits, etc.

The farm bloc lost one Senator, Kellogg of Minnesota, in the election of November 7, but his successful opponent, Henrik Shipstead, is the only member of the Farmer-Labor Party to be elected to the Senate and is expected to act with the bloc in the 68th Congress. Four members of the farm bloc were re-elected: Ashurst of Arizona, Jones of New Mexico, La Follette of Wisconsin, and Swanson of Virginia. Six members of the farm bloc in the House were defeated: Gernerd of Pennsylvania, Evans of Nebraska, Brooks of Illinois, Rhodes of Missouri, Patterson of Missouri, and Shaw of Illinois. Twenty-two of their Representatives were re-elected. Grey Silver, after the election, telegraphed to J. R. Howard, President of the American Farm Bureau Federation: "We consider this (election) a full vindication of the American Farm Bureau Federation's legislative program as well as that of the bloc's and proof that the legislation is in line with public sentiment." He announced this program which the bloc will push for passage during the short session of Congress.

Farm credit legislation.

Legislation to raise the limit from $10,000 to $25,000 or remove the limit altogether on Federal Farm Land Bank co-operative loans.

The extension of the Farm Land Bank movement.

Legislation to provide a limit on the interest rate on loans to farmers.

Legislation to enable small banks to join the Federal Reserve System.

Support of the "truth in fabric" bills.

Standardization of fruit and vegetable containers.

The Anti-Filled Milk Bill.

A bill designed to prohibit the admission into the United States of certain adulterated grain and seeds unfit for seed purposes.

Much of this legislation is already before the various committees of the House and the Senate, and some of the bills already have passed in one House or the other.

### THE AMERICAN FARM BUREAU FEDERATION.

The American Farm Bureau Federation—a national organization—originated when, on March 11, 1911, a local bureau was organized in Broome County, New York, James Quinn, President.

The National Federation was organized in March, 1920, in Chicago, with these officers: James Riley Howard, President; S. L. Strivings, Vice-President; Gray Silver, Washington representative; J. W. Coverdale, Secretary; C. E. Gunnels, Secretary and Treasurer. Executive Committee—E. B. Cornwall, Vt.; E. F. Richardson, Mass.; H. E. Taylor, N. J.; Howard Leonard, Ill.; C. H. Gray, Mo.; O. E. Bradfute, O.; W. H. Walker, Cal.; W. G. Jamison, Col.; John T. Burton, Utah; Gray Silver, W. Va.; J. W. Morton, Ga.; and George Bishop, Okla.

The officiary as of Sept. 1, 1922, was: James Riley Howard, President; O. E. Bradfute, Vice-President; Gray Silver, Washington representative; J. W. Coverdale, Secretary; C. E. Gunnels, director of organization and treasurer; Executive Committee—H. C. McKenzie, N. Y.; E. F. Richardson, Mass.; H. E. Taylor, N. J.; Howard Leonard, Ill.; Ralph P. Snyder, Kan.; John G. Brown, Ind.; W. H. Walker, Cal.; C. S. Brown, Ariz.; John T. Burton, Utah; J. W. Morton, Ga.; one vacancy. Chicago headquarters office, Garland Building, 58 East Washington Street; Washington office, Munsey Building, 1329 E Street, northwest.

The American Farm Bureau Federation officially lists these as the co-operative organizations formed under the inspiration of the Federation:

**U. S. Grain Growers**, 58 East Washington St., Chicago; E. H. Cunningham, President; H. L. Keene, Vice-President; J. M. Mehle, Secretary; C. E. Gunnels, Treasurer.

**National Livestock Producers' Association**, 608 South Dearborn St., Chicago; John G. Brown, President; C. E. Collins, Vice-President; E. H. Cunningham, Secretary and Treasurer.

**Federated Fruit Growers**, 608 South Dearborn St., Chicago; James Nicol, President; J. S. Edwards, Vice-President; C. E. Durst, Secretary and Treasurer.

## THE MEAT PACKING INDUSTRY.

J. Ogden Armour, President of Armour & Co., placed before the Government on Nov 15, 1922, a proposal for the consolidation of Armour & Co. and Morris & Co., two of the "Big Five" Chicago meat packers. He also had a half-hour conference with President Harding.

Decision was reserved while careful study was made at the Department of Agriculture on the details of the plan and its probable effect on the industry and on the producing and consuming public.

Armour & Co. is now capitalized at $150,000,000, with assets in 1920 of $525,488,957, and has packing plants in South America and Australia as well as in the United States. Its sales exceeded a billion dollars in 1919, and were over $900,000,000 in 1920. Morris & Co. is capitalized at $40,000,000, with assets in 1920 of $116,843,021. The company has half a dozen packing plants in the United States and distributing stations here and in the more important cities of Europe and Cuba.

The immediate result of a merger, it is claimed, would be a general consolidation of the facilities of the two companies, particularly as to distributing agencies and rolling stock. Economies of operation are sought.

The following tables show the extent and growth of the meat packing industry in the United States. The data are official, and are taken from the Federal Census of Manufactures.

### SLAUGHTERING AND MEAT PACKING IN THE UNITED STATES.

The total number of animals slaughtered in wholesale slaughtering and meat packing establishments in 1919 was 73,256,127, and in 1914, 59,561,819, an increase of 13,694,308, or 23 per cent., in the five year period.

### MATERIALS—QUANTITY AND COST, 1919 AND 1914.

| | 1919. | 1914. | | 1919. | 1914. |
|---|---|---|---|---|---|
| Materials, total cost | $3,782,929,533 | $1,441,662,658 | Hogs—No. | 44,520,726 | 34,441,913 |
| | | | Cost | $1,757,279,014 | $597,097,518 |
| Animals slaught'd, cost | $3,056,387,778 | $1,199,642,235 | Goats, kids—No. | 23,915 | 8,117 |
| Beeves—No. | 10,818,511 | 7,149,042 | Cost | $144,068 | $29,345 |
| Cost | $1,055,739,469 | $490,108,203 | Poultry, cost | $1,787,936 | $2,178,144 |
| Calves—No. | 4,395,675 | 2,019,004 | Dressed meat purch'd, cost | $299,089,389 | $124,334,798 |
| Cost | $96,449,234 | $27,623,448 | All oth. materials, cost | $425,664,430 | $115,507,481 |
| Sheep, lambs—No. | 13,497,300 | 15,943,743 | | | |
| Cost | $146,775,993 | $84,783,721 | | | |

NOTE—In addition, 553,839 beeves, 387,692 calves, 269,128 sheep and lambs and goats and kids, and 2,290,539 hogs were slaughtered for others in 1919, and 377,937 beeves, 243,360 calves, 795,519 sheep and lambs and goats and kids, and 2,898,994 hogs in 1914.

The dressed meat purchased (for curing) was procured largely from slaughtering establishments, and is duplicated in the total value of products. This item includes meat purchased for curing and canning, animal fats for the manufacture of lard, lard compounds and substitutes, oleo oil and stearin.

The cost of "all other materials" includes containers, materials for the manufacture of containers, ice, materials for the manufacture of ice, curing materials, cottonseed oil, butter, whole milk, fuel, rent of power, mill supplies, and freight.

The table above and the note beneath do not include animals slaughtered on farms and ranges, which in 1919 totalled 1,904,581 cattle; 434,608 sheep and lambs, and goats and kids, and 16,800,230 hogs. The tables that follow relate, also, only to wholesale slaughtering and meat packing plants.

### PRINCIPAL STATES, RANKED BY VALUE OF PRODUCTS, 1919.

| STATE. | Wage Earners. | Value of Products. | STATE. | Wage Earners. | Value of Products. | STATE. | Wage Earners. | Value of Products. |
|---|---|---|---|---|---|---|---|---|
| | *No.* | *Dollars.* | | *No.* | *Dollars.* | | *No.* | *Dollars.* |
| U. S. | 160,996 | 4,246,291,000 | N. J. | 3,566 | 110,221,000 | R. I. | 264 | 6,807,000 |
| | | | Wis. | 3,218 | 102,182,000 | Ala. | 549 | 6,125,000 |
| Ill. | 54,179 | 1,284,103,000 | Cal. | 3,405 | 92 554,000 | Tenn. | 331 | 5,706,000 |
| Kan. | 17,805 | 427,663,000 | Mich. | 1,712 | 59,585,000 | Fla. | 348 | 5,316,000 |
| Neb. | 10,122 | 303,849,000 | Md. | 1,563 | 41,439,000 | D. of Col. | 203 | 5,012,000 |
| N. Y. | 6,646 | 256,038,000 | Col. | 1,848 | 41,008,000 | Del. | 117 | 3,285,000 |
| Mo. | 8,290 | 246,610,000 | Wash. | 1,222 | 34,389,000 | Nev. | 118 | 2,939,000 |
| Iowa. | 7,134 | 226,362,000 | W. Va. | 639 | 19,044,000 | Me. | 123 | 2,043,000 |
| Ohio. | 5,336 | 170,338,000 | Ore. | 772 | 15,868,000 | Idaho. | 89 | 1,791,000 |
| Minn. | 5,231 | 146,361,000 | Ky. | 450 | 12,954,000 | Ariz. | 57 | 1,406,000 |
| Ind. | 5,691 | 134,029,000 | Utah. | 446 | 11,124,000 | Ark. | 59 | 1,218,000 |
| Tex. | 5,072 | 125,192,000 | Ga. | 869 | 8,142,000 | La. | 248 | 849,000 |
| Pa. | 4,438 | 122,862,000 | Va. | 502 | 7,589,000 | N. C. | 45 | 457,000 |
| Mass. | 4,307 | 110,238,000 | Mont. | 210 | 6,859,000 | All other | 3,772 | 86,734,000 |

Figures as to number of wage earners show the average number.

### COST PER HEAD AND PER POUND.

The following statement gives the average cost on the hoof per animal and per pound of four classes for the last five censuses:

| CLASS. | AVERAGE LIVE COST PER HEAD. | | | | | CLASS. | AVERAGE LIVE COST PER POUND. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1919. | 1914. | 1909. | 1904. | 1899. | | 1919. | 1914. | 1909. | 1904. | 1899. |
| Beeves | $97.50 | $68.56 | $48.32 | $40.44 | $44.73 | Beeves | $0.107 | $0.069 | $0.047 | $0.039 | $0.042 |
| Calves | 21.94 | 13.68 | 9.99 | 8.08 | 8.21 | Calves | 0.128 | 0.082 | 0.059 | 0.048 | 0.058 |
| Sheep, lambs. | 10.87 | 5.32 | 4.89 | 4.08 | 4.05 | Sheep, lambs. | 0.139 | 0.067 | 0.061 | 0.047 | 0.048 |
| Hogs | 39 47 | 17.34 | 14.27 | 10.64 | 9.10 | Hogs | 0.180 | 0.082 | 0.071 | 0.050 | 0.042 |

### GROSS AND NET WEIGHTS OF ANIMALS SLAUGHTERED, 1919 AND 1914.

| CLASS. | 1919. | 1914. | CLASS. | 1919. | 1914. |
|---|---|---|---|---|---|
| BEEVES. | | | SHEEP AND LAMBS AND GOATS AND KIDS. | | |
| Number | 10,818,511 | 7,149,042 | Number | 13,521,215 | 15,951,860 |
| Weight on hoof, lbs. | 9,863,011,033 | 7,076,145,687 | Weight on hoof, lbs. | 1,056,530,820 | 1,259,595,728 |
| Ave. weight on hoof, lbs. | 912 | 990 | Ave. weight on hoof, lbs. | 78 | 79 |
| Weight, dressed, lbs. | 5,118,728,572 | 3,786,382,167 | Weight, dressed, lbs. | 500,610,006 | 629,723,014 |
| Ave. weight, dres'd, lbs | 473 | 530 | Ave. weight, dres'd, lbs. | 37 | 39 |
| CALVES. | | | HOGS. | | |
| Number | 4,395,675 | 2,019,004 | Number | 44,520,726 | 34,441,913 |
| Weight on hoof, lbs. | 752,372,181 | 337,565,316 | Weight on hoof, lbs. | 9,745,921,840 | 7,277,670,937 |
| Ave. weight on hoof, lbs. | 171 | 167 | Ave. weight on hoof, lbs. | 219 | 211 |
| Weight, dressed, lbs. | 457,469,662 | 206,311,127 | Weight, dressed, lbs | 7,358,910,897 | 5,476,236,776 |
| Ave. weight, dres'd, lbs. | 104 | 102 | Ave. weight, dres'd, lbs. | 165 | 159 |

PRODUCTS—QUANTITY AND VALUE, 1919 AND 1914.

| PRODUCT. | 1919. | 1914. |
|---|---|---|
| Total value | $4,246,290,614 | $1,651,965,424 |
| Fresh meat, value | $1,642,461,577 | $769,383,846 |
| Beef—Lbs. | 4,832,061,881 | 3,658,333,660 |
| Value | $846,794,386 | $421,296,794 |
| Veal—Lbs. | 422,978,820 | 194,698,880 |
| Value | $83,912,942 | $26,299,446 |
| Mutton, lamb—Lbs. | 500,360,124 | 629,232,690 |
| Value | $120,338,355 | $74,675,627 |
| Pork—Lbs. | 2,095,884,557 | 1,877,099,071 |
| Value | $532,669,835 | $226,535,734 |
| Edible offal, oth. fresh meat—Lbs. | 506,667,525 | 280,090,794 |
| Value | $56,129,725 | $17,647,510 |
| Poultry dres'd—Lbs. | 7,022,695 | 16,575,907 |
| Value | $2,616,334 | $2,928,735 |
| Cured meat, value | $1,245,949,819 | $408,000,916 |
| Beef, pickled & other cured—Lbs. | 129,960,004 | 91,571,753 |
| Value | $28,359,892 | $14,395,316 |
| Pork, pickled & other cured—Lbs. | 4,146,117,111 | 2,929,309,741 |
| Value | $1,217,589,927 | $393,605,600 |
| Canned goods—Lbs. | 305,955,406 | 160,798,955 |
| Value | $96,904,341 | $26,417,624 |
| Sausage: Canned—Lbs | 160,908,986 | 74,004,380 |
| Value | $27,965,155 | $9,815,669 |
| All other—Lbs. | 643,905,181 | 455,146,931 |
| Value | $145,622,246 | $58,349,853 |
| Meat pud'gs, scrapple, h'd cheese, etc.—Lbs | 43,182,235 | 42,339,926 |
| Value | $10,050,494 | $4,488,461 |
| Lard—Lbs. | 1,372,869,656 | 1,119,188,675 |
| Value | $415,817,212 | $120,414,007 |
| Lard comp'ds and substitutes—Lbs. | 521,121,914 | 396,397,950 |
| Value | $123,724,098 | $33,037,467 |
| Oleo oil—Gallons | 14,919,876 | 16,501,585 |
| Value | $31,212,708 | $11,925,832 |
| Other oils—Gallons | 6,720,822 | 6,715,497 |
| Value | $9,153,123 | $4,009,602 |
| Tallow—Lbs | 211,188,146 | 193,615,601 |
| Value | $28,591,346 | $12,371,206 |
| Oleo stock—Lbs. | 29,828,070 | 15,998,534 |
| Value | $7,684,719 | $1,361,550 |
| Grease—Lbs. | 107,276,780 | ..... |
| Value | $13,710,215 | ..... |
| Soap stock—Lbs. | 39,966,722 | 76,003,670 |
| Value | $2,989,878 | $3,742,747 |
| Stearin (lard, oleo, cottonseed oil)—Lbs. | 44,267,107 | 30,091,991 |
| Value | $3,999,349 | $2,752,421 |
| Oleomargarine—Lbs. | 123,538,860 | 60,387,881 |
| Value | $36,777,815 | $8,818,557 |
| Casings—Lbs. | 102,281,168 | 69,453,298 |
| Value | $16,779,655 | $9,077,593 |
| Hoofs, horns, horn tips, strips, etc.—Lbs. | 84,640,302 | 73,125,830 |
| Value | $2,180,600 | $944,634 |
| Fertilizers, fert'zer materials—Tons (short) | 382,132 | 294,388 |
| Value | $18,314,754 | $8,737,009 |
| Glue—Lbs. | 36,630,195 | 40,844,650 |
| Value | $4,489,774 | $3,088,764 |
| Hides and pelts: | | |
| Cattle—No. | 10,818,511 | 7,158,862 |
| Lbs. | 583,972,224 | 415,890,714 |
| Value | $185,020,306 | $69,958,593 |
| Calf—No. | 3,322,729 | 1,464,430 |
| Lbs. | 43,649,073 | 18,647,761 |
| Value | $24,613,930 | $8,512,610 |
| Sheep & lambs, goats and kids—No. | 12,188,071 | 15,916,618 |
| Value | $33,686,165 | $13,624,046 |
| All other skins—Lbs. | 2,214,258 | ..... |
| Value | $240,844 | $389,068 |
| Hair, hog & cattle—Lbs | 60,343,741 | ..... |
| Value | $4,059,096 | ..... |
| Wool—Lbs. | 29,901,176 | 26,432,358 |
| Value | $20,071,303 | $7,938,212 |
| All oth. products, incl. custom work, value | $89,220,092 | $59,775,137 |

Where there are no figures in the 1914 column, the items were not reported separately by the census takers and are not available.

## THE CASE OF SENATOR NEWBERRY OF MICHICAN.

In the State primary election in Michigan, held Aug. 27, 1918, Truman H. Newberry was nominated by the Republican Party for the United States Senate, defeating Henry Ford by 4,335 votes in a total of 438,452. There had been several other candidates for the nomination. During the campaign protests were made against the excessive use of money in Newberry's interests. The Newberry committee admitted the expenditure of over $178,000. Newberry's own report, under oath, to the United States Senate was: "I have taken no part in it (the campaign) whatever, and no contributions or expenditures were made with my knowledge and consent." His brother, John T. Newberry, contributed $94,000, and near relatives over $70,000 additional.

Mr. Newberry, on Nov. 5, 1918, was elected to the United States Senate, defeating Henry Ford, the Democratic candidate by 12,433 votes. Ford filed a notice of contest in the Senate Jan. 6, 1919. Newberry was sworn in as Senator, giving the Republicans a majority of one in the organization of the Senate. At the first session of the Sixty-sixth Congress, on May 20, 1919, notice of contest and petition for investigation by Henry Ford was again filed with the Senate and referred to the Committee on Privileges and Elections. Nothing was done until the following December, when the Senate voted to make a full investigation and recount the ballots.

In the mean time Newberry was indicted by the United States Grand Jury of the Western District of Michigan under the Federal Corrupt Practices Act. Pending the trial under the Michigan indictment the Spencer sub-committee of the Senate Committee on Elections took no action. The trial at Grand Rapids was concluded in March, 1920, and Newberry was convicted and sentenced to serve two years in the penitentiary and pay a fine of $10,000. The case was taken on appeal to the United States Supreme Court, which by a five to four decision, May 2, 1921, held that Congress had no power to pass a law regulating Senatorial primary elections and therefore the Corrupt Practices Act was unconstitutional. Charles Evans Hughes was Newberry's leading counsel.

The Spencer sub-committee then resumed hearings. Newberry did not appear to testify. Nearly three years after Henry Ford's first notice of contest the committee decided in Newberry's favor, after dividing on strictly partisan lines.

After a sharp debate the Senate adopted, on Jan. 12, 1922, the following resolution:

"1. That the contest of Henry Ford against Truman H. Newberry be, and it is hereby dismissed.

"2. That Truman H. Newberry is hereby declared to be a duly elected Senator from the State of Michigan for the term of six years, commencing on the fourth day of March, 1919, and is entitled to hold his seat in the Senate of the United States.

"3. That whether the amount expended in this (Michigan) primary was $195,000, as was fully reported or openly acknowledged, or whether there was some few thousand dollars in excess, the amount expended was in either case too large, much larger than ought to have been expended. The expenditure of such excessive sums in behalf of a candidate, either with or without his knowledge and consent, being contrary to sound public policy, harmful to the honor and dignity of the Senate and dangerous to the perpetuity of a free government, such excessive expenditures are hereby severely condemned and disapproved."

The Senators voted on the resolution as follows:

**For Seating Newberry, 46.**—*All Republicans*, Ball, Brandegee, Bursum, Calder, Cameron, Colt, Cummins, Curtis, Dillingham, Edge, Elkins, Ernst, Fernald, France, Frelinghuysen, Gooding, Hale, Harreld, Kellogg, Keyes, Lenroot, Lodge, McCormick, McCumber, McKinley, McLean, McNary, Nelson, New, Nicholson, Odie, Page, Pepper, Phipps, Poindexter, Shortridge, Smoot, Spencer, Stanfield, Sterling, Townsend, Wadsworth, Warren, Watson (Ind.), Weller, Willis.

**Against Seating Newberry, 41.**—*Republicans, 9*, Borah, Capper, Jones, (Wash.), Kenyon, (La.), Ladd, La Follette, Norbeck, Norris, Sutherland.

**Democrats, 32**—Ashurst, Broussard, Caraway, Culberson, Dial, Fletcher, Glass, Harris, Harrison, Heflin, Gerry, Hitchcock, Jones (N. M.), King, McKellar, Myers, Overman, Pittman, Pomerene, Ransdell, Robinson, Owen Sheppard, Shields, Simmons, Smith, Swanson, Trammell, Walsh (Mass.), Walsh (Mont.), Williams, Underwood.

Paired—Crow, du Pont and Moses, Republicans, for Newberry; with Kendrick Stanley and Reed, Democrats, against.

Absent and not voting—Newberry and Johnson, Republicans, and Watson (Ga.) Democrat.

## ENFORCEMENT OF THE PROHIBITION LAW.

President Harding in his annual message to Congress on Dec. 8, 1922, called for rigorous and literal enforcement of the Prohibition laws in these words:

"Let men who are rending the moral fibre of the Republic through easy contempt for the Prohibition law, because they think it restricts their personal liberty, remember that they set the example and breed a contempt for law which will ultimately destroy the Republic.

"Constitutional Prohibition has been adopted by the Nation. It is the supreme law of the land. In plain speaking there are conditions relating to its enforcement which savor of Nation-wide scandal. It is the most demoralizing factor in our public life.

"Most of the people assume that the adoption of the Eighteenth Amendment meant the elimination of the question from our politics. On the contrary, it has been so intensified as an issue that many voters are disposed to make all political decisions with reference to this single question.

"The day is unlikely to come when the Eighteenth Amendment will be repealed. The fact may as well be recognized and our course adapted accordingly. If the statutory provisions for its enforcement are contrary to deliberate public opinion, which I do not believe, the rigorous and literal enforcement will concentrate public attention on any requisite modification. Such a course conforms with the law and saves the humiliation of the Government and the humiliation of our people before the world, and challenges the destructive forces engaged in widespread violation, official corruption, and individual demoralization.

"The Eighteenth Amendment involves the concurrent authority of State and Federal Governments for the enforcement of the policy it defines. A certain lack of definiteness, through division of responsibility, is thus introduced. In order to bring about a full understanding of duties and responsibilities as thus distributed, I purpose to invite the Governors of the States and Territories, at an early opportunity, to a conference with the Federal executive authority. Out of the full and free considerations which will thus be possible, it is confidently believed will emerge a more adequate comprehension of the whole problem and definite policies of national and State co-operation in administering the laws."

### ATTORNEY GENERAL'S OPINION.

Attorney General Daugherty rendered on Oct. 6, 1922, a sweeping opinion that the sale or transportation of intoxicating beverages on all American ships, public and private, was prohibited, and that any foreign vessel entering an American port with liquor on board as cargo, or in stores, or even in a sealed case, was to be regarded as violating the Prohibition Enforcement Law and to be dealt with accordingly. The new ruling applied to all American vessels, even on the high seas, and to all foreign vessels within the three-mile limit of national territorial jurisdiction. This decision was understood to mean that a foreign vessel carrying intoxicating liquors leaving a foreign port for another foreign port would be violating the Volstead act if it stops en route at an American port. The opinion was confirmed by President Harding.

Foreign shipowners were much concerned over the opinion and counsel for the Cunard and Anchor Line steamships sought an injunction before United States District Judge Learned Hand on October 11 to restrain the Federal Government from seizing liquors carried as sea stores for use of passengers and crew on their vessels. Other foreign steamship lines later joined them in the suit. Judge Hand issued a temporary injunction on October 12, enjoining the local prohibition and customs authorities from molesting liquor on board the American steamers Finland and St. Paul, then in the port of New York.

The French Line announced on October 12 in Paris a decision to fight the ruling in the Supreme Court and that in the event of an adverse decision it would move to obtain an appeal to the Permanent International Court of Justice at The Hague. The French Line is compelled by French law to serve a wine ration to its crew of sailors and stokers. The financial loss to the French Line would be hundreds of thousands of francs monthly. On one trip in August, with 1,011 passengers aboard, the steamship Paris sold 1,260 bottles of champagne, 242 bottles of fine Burgundy and Bordeaux wines and 87 bottles of liquor. Besides this there was the ordinary red and white wine which was allotted to each passenger with the noon and evening meals.

A hearing was held on October 17 in which the attorney for the Cunard and Anchor Lines argued that intoxicating liquor, lawfully acquired and kept sealed as sea stores, is legal within the territorial waters of the United States, and that an act of commerce should not apply to the internal affairs of a foreign vessel touching these ports.

Judge Learned Hand on October 24 upheld the ruling of Attorney General Daugherty and dismissed the applications of the ten foreign and two American steamship lines, which had combined forces, for injunctions. He decided, however, that foreign ships would be allowed to enter port with liquor for their crews, if the supply is sufficient only for rations as required by laws of certain foreign nations. Ship owners must give bonds of $25,000 each to insure compliance with this provision. The case will be taken to the United States Supreme Court.

### CARRYING OUT THE RULING.

The ruling of Attorney General Daugherty became effective on October 21 at midnight. However, temporary suspension of the ruling as it applies to vessels of foreign countries plying to and from American harbors, was ordered by Secretary of Treasury Mellon on October 25, after a conference, following a meeting of the Cabinet, with the Attorney General and chief counsel Britt, of the Prohibition unit, at which was discussed the international aspect of the tangle and the responsibility that devolved on the Treasury Department to work out with the State Department means of safeguarding the country against foreign embarrassment.

On the day previous, the United States steamer President Adams came into New York harbor carrying five gallons of brandy in violation of the Volstead act. The captain claimed that the British Board of Trade officers at Tilbury had refused to give him his clearance papers until he shipped brandy to meet the British law requiring ships to carry at least one gallon of brandy for each 100 British steerage passengers.

President R. H. M. Robinson of the United American Lines announced on November 9 that the transatlantic steamers Resolute and Reliance of that line would be transferred from American to Panaman registry to escape the effects of the Daugherty ruling. He said that both steamers had been chartered for winter cruises and that more than fifty passengers, following the publication of the Attorney General's opinion, had cancelled their reservations on the Resolute alone. He continued, "because of the keen competition of cruises arranged for foreign steamers we believe the cruise of the Resolute and Reliance cannot be carried out successfully unless the passengers can be offered the same service and privileges as are offered on foreign ships. Therefore, in view of the large sums involved, and in fairness to our stockholders, we have completed arrangements to transfer the ships to a foreign flag."

International complications ensued, and on September 26, after a two-hour discussion in the Cabinet, Secretary of the Treasury Mellon communicated to the Prohibition Enforcement Division instructions not to go ahead with any general program of search and seizure beyond the internationally recognized three-mile limit; however, where vessels lying further out communicated with the shore by their own boats, or through their own crews, they might be taken, such intercourse being regarded as a landing in violation of the customs regulations. The Prohibition Commissioner was told that proper discretion should be exercised at all times to avoid any action that would bring international complications.

### NEW JERSEY'S RATIFICATION.

The 46th State to ratify the Prohibition Amendment (18th) to the Constitution of the United States was New Jersey, which did so on March 10, 1922.

### RELIEF SOUGHT BY PHYSICIANS.

The complaint was filed on November 20 in the Federal District Court of Southern New York in the equity test suit brought by Dr. Samuel W. Lambert which challenges the constitutionality of the National Prohibition Act, and the act supplemental thereto, and asks that Edward C. Yellowley, acting Federal Prohibition Director; David H. Blair, Commissioner of Internal Revenue, and Col. William Hayward, United States Attorney,

be enjoined from interfering with him in prescribing liquor to his patients. The restraining order is asked upon the ground that the quantities needed for the use of any one person in any period of ten days exceed the limits fixed by the Prohibition acts.

## PROSECUTIONS IN FEDERAL COURTS.

In the annual report of the Attorney General, made public Dec. 7, 1922, Mrs. Mabel Walker Willebrandt, Assistant Attorney General in charge of the divisions having supervision of the prosecution of suits brought by the Government in the various Federal Courts under the National Prohibition Act, said that during the fiscal year ending June 30, 1922, there was "a steady increase in cases coming to the courts, due probably to the increased efficiency of the officers charged with the enforcement of this law.

"The question confronting this department in 1921 relative to the immense storage charges accumulated all over the country by reason of quantities of liquor and vehicles seized and disposed of under the National Prohibition Act has been largely solved by a vigorous campaign on the part of the United States attorneys to libel and otherwise promptly dispose of this contraband material.

"Prosecutions under the National Prohibition Act in the United States District Courts were as follows:

| Fiscal Year 1921-22. | Civil. | Criminal. |
|---|---|---|
| Prosecutions commenced | 2,157 | 34,984 |
| Convictions | .... | 22,749 |
| Acquittals | .... | 1,195 |
| Quashed | .... | 1,250 |
| Dismissed | .... | 3,549 |
| Terminated | 1,537 | .... |
| Pending | 2,694 | 10,472 |

"The aggregate amount in fines and penalties imposed was $4,041,456.03 in civil cases. The aggregate amount in judgments obtained by the United States was $120,255.29. There are 10,472 criminal and 2,694 civil prosecutions pending at the close of the fiscal year.

"The above figures cover only cases arising under the National Prohibition Act. In addition a great many cases have arisen under the internal revenue laws and the customs statutes involving similar violations.

"Since the Eighteenth Amendment of the Constitution and Title II. of the National Prohibition Act became effective Jan. 16, 1920, rum-running vessels of American and foreign registry, carrying liquor from foreign ports to our shores, have swarmed along our seaboards, smuggling liquors into the United States in violation of our laws.

"Eighteen vessels of foreign registry and two of American registry with their cargoes of liquors have been seized."

A decision was handed down by the United States Supreme Court on Jan. 30, 1922, to the effect that the Volstead act does not permit an owner of intoxicating liquors to transport them from a bonded warehouse to residence for beverage purposes. A further decision, handed down May 15, 1922, was to the effect that the constitution of the Volstead Act prohibits the transportation of intoxicating liquors from a foreign country through a port of the United States to another foreign port.

## ENFORCEMENT OF THE LAW.

The Prohibition unit under the direction of the Commissioner of Internal Revenue was reorganized during the fiscal year. The number of employees in Washington increased from 503 to 596, and in the field from 1,818 to 2,881. The total payroll of the unit on June 30, 1922, was $6,045,073, an increase of $2,015,943. During the year a Prohibition patrol service (the "dry navy") was organized, consisting of six boats of the submarine chaser type, assigned at Atlantic ports. Five motor patrol boats, capable of making 33 miles per hour, were placed on the Great Lakes, to check liquor smuggling from Canada.

The Commissioner of Internal Revenue reported for the fiscal year ending June 30, 1922, the following:

| | |
|---|---|
| Distilleries seized | 8,318 |
| Stills seized | 10,994 |
| Fermenters seized | 81,640 |
| Spirits seized and destroyed, gals. | 127,819 |
| Spirits seized and not destroyed, gals. | 254,571 |
| Malt liquor seized, gals. | 4,187,626 |
| Mash seized, gals. | 4,052,214 |
| Automobiles seized | 1,886 |
| Boats and launches seized | 74 |
| Persons arrested | 42,223 |
| Property seized and destroyed | $2,507,982 |
| Property seized and not destroyed | $3,364,110 |
| Agents killed on duty | 9 |
| Agents injured on duty | 28 |
| Total disbursements by Federal Prohibition directors, salaries, travelling expenses, purchase of evidence, etc. | $4,883,092 |
| Total disbursements for enforcement of Prohibition Act | $6,543,904 |

## DETAIL OF WORK IN 1921.

Federal Prohibition Commissioner R. A. Haynes has issued this official summary covering the work of his bureau for the calendar year 1921:

Approximate cost of operation: Rent, $126,847.05; telephone, $17,409.05; supplies and equipment, $37,253.45; evidence and miscellaneous, $163,467.50; seizure and sale, $51,463.90; salaries, $3,501,209.61; travel, $1,396,443.51; office expenses, $980,429.40; estimated total, $6,274,523.47.

Estimated amount of assessments, involving 40,000 cases; penalties under Section 35, $50,000,000; $1,000 special tax, Section 1,001, Revenue Act, 1918, $500,000; taxes on spirits, wines, etc., $7,000,000; estimated total, $57,500,000.

Approximate amount of collections, $3,000,000.

Estimated seizures: Gallons of distilled spirits and wine, 950,000; estimated value of property seized during the year, not including property levied for payment of taxes, nor distillery apparatus or other property destroyed, $12,907,693.40.

Miscellaneous property was seized as follows: Automobiles, 600; boats, 40; wagons and carriages, 26; horses and mules, 45; aeroplanes, 1; motorcycles, 5; cash, $7,500; tracts of land, 10; stocks of merchandise, 7.

Number of Federal indictments, estimated, 30,000; pleas of guilty, 17,000; number of convictions, 21,000; number of acquittals, 950.

Wholesale drug companies must now have as a minimum a $25,000 drug stock, must be bona fide dealers, and sales of liquors must not exceed 10 per cent. of the amount of their gross sales as a drug concern.

Last year's importation was one-half of 1 per cent. of the total consumption of liquor in America the year before Prohibition.

Arrests for drunkenness decreased 60 per cent.

Liquor withdrawals reduced 50 per cent.

Another result: Official chemists report only 2 per cent. of all liquor seized and examined to-day is fit to drink.

Upward of 300 brewers investigated and charged with violations.

Some public officials indicted and some have gone to jail. Others on the way.

In fifty-nine cities, with a population of 30,000 or over, and a combined population of 20,000,000 (including New York, Chicago, and Philadelphia), official and estimated figures show a decrease in arrests for drunkenness from 316,842 in 1917 to 109,768, notwithstanding bad booze, temporary individual hard drinking, and a zeal to "jug" all intoxicated people.

## PROHIBITION IN CANADA.

Many popular votes have been taken on the general subject of Prohibition in the Dominion of Canada. To-day, of the nine Provinces of Canada, seven are dry. These are Ontario, Manitoba, Saskatchewan, Alberta, New Brunswick, Nova Scotia, and Prince Edward Island; two, Quebec and British Columbia, sell alcoholic liquors under new conditions indicated by such terms as "Government control," and "Government dispensaries." The Dominion of Newfoundland is also dry.

The annual budget for the Province of Quebec announced by Provincial Treasurer Jacob Nicol on November 15, for the year ending June, 1923, shows that the revenue from fines, duties and permits for the sale of liquor was over $4,000,000. He said the liquor commission had brought order out of chaos. In counties where the law applied it had opened stores, given licenses where deemed necessary, and impressed the general public with its sincerity and ability to carry on and have the law respected. The total surplus of the province above expected revenue amounted to $5,033,419.

Attorney General A. M. Manson reported to the Legislature of British Columbia on November 1 that the cities of the Province will receive for the last fiscal year $1,300,000 as their share of the profit from the sale of liquor by the Province. The report showed that 6,568 prescriptions for liquor were issued in the year as compared with 131,057 the year before the moderation act went into effect, when the Province was dry. The Province will issue no more licenses to exporters of liquor.

New Zealand, after an exciting campaign with "Pussyfoot" Johnson and other imported speakers from the United States and Australia, on the licensing referendum gave a majority in December of 16,138 in favor of continuance of licensing. In 1919 the majority against prohibition was 3.332.

## BETTER ENFORCEMENT OF THE LAW.

The American Bar Association at its annual meeting in San Francisco heard, on Aug. 10, 1922, and adopted the report of a special committee charged with considering a better enforcement of the law. The committee was composed of William B. Swaney, Chairman; Marcus Kavanagh, Charles S. Whitman, Wade B. Ellis, and Charles W. Farnham. Their report, in part, follows:

"The first difficulty which confronted us was a discouraging dearth of official information upon the criminal situation in the United States. No other great civilized country is so far behind on this important matter.

"First of all we urge the establishment, under the control of the Department of Justice at Washington, of a Federal Bureau of Records and Statistics to which criminal authorities in the several States must regularly report; that such reports, statistics, records, photographs, fingerprints, etc., shall be immediately available to officers charged with enforcement of the criminal law throughout the country. Without knowledge of the real situation it will be impossible thoroughly to diagnose or properly deal with the problems of crime which confront us.

"The population of Canada is about 9,000,000, that of Cook County, Illinois, about 3,000,000, and that of Chicago, 2,700,000. Notwithstanding this, we find that there were in 1921:

"In Joliet pentitentiary, *one* of the Illinois State prisons, 1,930 prisoners.

"In *all* Canada's penitentiaries, 1,930.

"In Chicago 4,785 burglaries.

"In Canada 2,270 burglaries.

"In Chicago 2,594 robberies.

"In Canada, robberies, including larceny from the person, 605.

"In Cook County 212 murders.

"In Canada 57 murders.

"It will not do to say that the Canadians are naturally more law-abiding than we, for the United States census of 1910 shows that when persons born in Canada settle in the United States they are even a little less law-abiding than the native white citizens of this country.

"Out of a Canadian born population of 1,196,070 in this country in 1910, 7,956 were in our prisons, and out of the natives of 17 foreign countries living here, Canadians ranked sixth in lawlessness.

"The natives of certain European countries which have the best record for law observance, when settled here, become the most lawless of all.

"As was stated to your committee, crime flourishes because criminals escape punishment, and criminals escape punishment because there are so many avenues of escape open. The prevalence of the abnormal volume of crime in our larger cities is the result of years of mollycoddling and sympathy by misinformed and ill-advised meddlers.

"In Canada the penalties imposed for crime are far more severe than our own. In fact, the theory there seems to involve protection to the public, with only a secondary concern for the criminal.

"The criminal situation in the United States, so far as crimes of violence are concerned, is worse than that in any other civilized country. Here there is less respect for law. While your committee cannot obtain the exact figures from all available sources of information, we estimate that there were more than 9,500 unlawful homicides last year in this country; that in 1920 there occurred not less than 9,000 such homicides, and that in no year during the past ten years did the number fall below 8,500. In other words, during the past ten years, no less than 85,000 of our citizens have perished by poison, by the pistol or the knife, or by some other unlawful and deadly instrument.

"Burglaries have increased in this country during the past ten years 1,200 per cent.

"Crime and lawlessness in the United States have been steadily on the increase and out of proportion to our growth, and there has been a steady and growing disrespect for law. In our opinion this is not a result of the war. We do not find the proportional increase in crime from 1916 to 1922 greater than from 1910 to 1916, and we have not been able to discover that crimes of violence have materially increased in France, England, or Canada during or since the war, although the effects of the war naturally must be more marked in those countries.

"It is our united opinion that the means provided in the United States for coping with crime and criminals are to-day neither adequate nor efficient, for example:

"First, we find that the parole and probation laws, as administered, very generally fail to accomplish the purposes for which the laws were designed and weaken the administration of criminal justice. We recommend that first offenders, and first offenders only, should be eligible for probation. We recommend that the indeterminate sentence laws should be modified so as to apply to first offenders only, and we believe, too, that neither probation nor parole should be permitted those convicted of homicide, burglary, rape or highway robbery.

"Second, we find that over 90 per cent. of the murders in this country are committed by the use of pistols. We find that the laws prohibiting the carrying of firearms or deadly weapons are ineffective—in fact, that they work to the benefit of the criminal rather than to the law-abiding citizen. The revolver serves no useful purpose in the community to-day. We recommend that the manufacture and sale of pistols, and of cartridges or ammunition designed to be used in them, shall be absolutely prohibited, save as such manufacture shall be necessary for governmental and official use under proper legal regulation and control.

"Third, we find the causes for delay in criminal cases so varied and the conditions so differing, that we hesitate to make specific recommendations. Certainly it is true that the criminals and not the public benefit by these delays. The Constitution provides: 'In all criminal prosecutions, the accused shall enjoy the right to a speedy trial.' As every one familiar with criminal prosecution knows, this is the kind of enjoyment that few charged with crime desire.

"Dilatory motions, such as motions to inspect the Grand Jury minutes, which the trial Judge may take under consideration almost indefinitely; motions for an order dismissing an indictment, from which, if granted, the prosecution in many of our States has no right to appeal; adjournments on account of other engagements of counsel, a privilege greatly abused in some jurisdictions, and many other causes for delay, all accrue to the benefit of the lawbreaker.

"We recommend that the State be given every right to appeal now enjoyed by a defendant—except from a verdict of not guilty, and we recommend that the prosecutor in a criminal trial shall have the right to call the attention of the jury to the fact that the defendant has failed to take the stand or has failed himself to contradict or deny the testimony offered by the prosecution.

"We recommend that the State be given the right to amend the indictment upon proper terms, in matters of form.

"We recommend that there should be but one appeal from a judgment of conviction in the trial court.

"We recommend that there be enacted legislation limiting the time during which Judges or courts may hold under advisement dilatory motions made in criminal trials; that at the expiration of such time, without action, such a motion shall be deemed to be denied.

"Fourth, we find that in some of the States the jury is the final judge both of the law and the facts. We believe that such a condition is absolutely subversive of a government of law and we recommend the repeal of such statutes.

"Fifth, we find in various jurisdictions glaring abuses in the matter of bail, both in the amount imposed and in the sufficiency of security offered.

"Sixth, we find that further legislation should be enacted by the Congress to punish and prevent lynching and mob violence.

"Seventh, we find that more stringent laws limiting and controlling immigration should be enacted and enforced.

"Eighth, we find that the bill now pending in the Congress, increasing the number of United States District Judges and conferring powers upon the Chief Justice and Senior Circuit Judges to have supervision over the work of the courts and see that the dockets are kept clear, should be enacted.

"Ninth, no meritorious case, whether civil or criminal, that is cognizable in the courts of the country, ought to be denied the services of an able, courageous and loyal advocate. And no man or woman, however humble, ought to be able to say in any American community that justice is too expensive for the poor. We therefore urge that in every community the members of this association volunteer to aid, without fee, the worthy poor who are being oppressed, defrauded or otherwise wronged, and who have not the means to employ counsel.

"Tenth, first offenders must be segregated from veteran criminals, for the jails throughout the land to-day are breeding-places for crime, and the young and thoughtless who may often be reclaimed, are taught by professional criminals to scorn the restraints of society; and in this connection we may well consider the extension of psychopathic laboratories established as adjuncts to the criminal courts."

## PRISONERS IN PENAL INSTITUTIONS, 1922 AND 1917.

The United States Department of Commerce announces that, according to returns received by the Bureau of the Census, the number of prisoners confined in Federal penitentiaries, State prisons, county jails, State and county chain or road gangs, city police stations, and other penal institutions on July 1, 1922, was 163,889, of which number 5,540 were reported for 3 Federal penitentiaries, 78,673 for 104 State prisons, 44,283 for 2,451 county penal institutions (principally jails), 12,717 for 296 chain or road gangs in certain Southern States, and 21,635 for 1,319 city institutions, while the remaining 1,041 were women committed by the courts to the care of other institutions (24 in number), mainly under the control of religious or charitable organizations.

Similar data were collected for July 1, 1917, but the total for that date does not include all prisoners in chain or road gangs, nor women committed by the courts to the care of institutions under the control of religious or charitable organizations. Excluding these from the figures for 1922, the comparable totals for the two years are: 1922, 151,172; 1917, 140,186.

These figures include prisoners awaiting trial and a few persons held as witnesses, as well as prisoners serving sentence. The returns were obtained in response to a circular of inquiry which the Bureau of the Census mailed to the various institutions, as a preliminary to the complete decennial census of prisoners which will be taken in 1923.

The number of prisoners in Federal penitentiaries increased from 3,018 on July 1, 1917, to 5,540 on July 1, 1922. During the same period the number of inmates of State prisons increased from 71,442 to 78,673, and of county jails, from 41,871 to 44,283, while persons confined in city penal institutions (including police stations) decreased in number from 23,855 to 21,635.

The data as to prisoners in Federal and State penal institutions are presumably complete and accurate for both 1922 and 1917. The combined total of persons in such institutions increased from 74,460 in 1917 to 84,213 in 1922, the rate of increase being 13.1 per cent.

The rate of increase in Federal prisoners was 83.6 per cent.; in State prisoners, 10.1 per cent. The ratio of Federal prisoners per 100,000 population increased from 3 in 1917 to 5.1 in 1922, and the corresponding ratio for State prisoners increased during the same period from 72.4 to 74.5.

No State prison is maintained in Delaware, and for Georgia the State figures, which include prisoners in chain or road gangs, are not comparable with those for other States. Of the remaining 46 States, 23 show increases in the ratio of State prisoners per 100,000 population, and 23 show decreases.

Of the 23 States in which the ratio increased, 19 show relatively low ratios for 1917, the average for the entire group of 23 States being 58.6 per 100,000; while of the 23 States in which the ratio decreased, 18 show relatively high ratios for 1917, the average for the entire group being 92.4 per 100,000. In other words, the ratio decreased in most of the States in which it was relatively high in 1917 and increased in most of the States in which it was relatively low in that year.

For example: Pennsylvania's low ratio of 41.6 in 1917 increased to 56.2 in 1922, while Indiana's high ratio of 118 in 1917 declined to 101.1 in 1922. The increases somewhat more than counterbalanced the decreases, however, and thereby raised the ratio for the United States from 72.4 in 1917 to 74.5 in 1922.

The tendency toward uniformity is further brought out by comparing the highest and lowest State ratios for each of the two years covered by the inquiry. In 1917 the highest three ratios were Nevada, 239.3; Florida, 177.6; Wyoming, 153.4. For 1922, however, the highest three ratios were perceptibly lower, namely: Nevada, 200.2; Wyoming, 165.3; Florida, 139.3. For 1917 the lowest three ratios were South Carolina, 19.2; Maine, 29.4; Nebraska, 29.9.

The lowest three ratios for 1922 are noticeably higher, namely: South Carolina, 29.5; New Hampshire, 32.9; North Dakota, 34.7.

The returns for counties and cities are not strictly comparable for the two years, for the reason that in each case a larger number of institutions is covered for 1922 than for 1917. The county returns covered 3,021 institutions (principally jails) for 1922, as against only 2,578 for 1917; while the city returns relate to 2,709 institutions (principally police stations) for 1922, as against only 2,351 for 1917.

Only a part of the prisoners in county and city institutions are actually serving sentence, the remainder being held in confinement awaiting trial, or, in a few cases, held as witnesses.

The only fair comparison between the county and city figures for the two years is that made with averages based on the total number of institutions for which reports were received (including those reporting no prisoners). For county institutions the average number of prisoners decreased from 16.2 in 1917 to 14.7 in 1922, and for city institutions it fell from 10.1 in the earlier year to 8 in the later.

The number of empty county jails and other county institutions decreased from 623, or 24.2 per cent. of the total for which reports were received in 1917, to 570, or 18.9 per cent. of the total, in 1922. On the other hand, the number of city institutions reporting no prisoners increased from 1,169, or 49.7 per cent. of the total in 1917, to 1,390, or 51.3 per cent. of the total in 1922.

The following tables show the distribution of prisoners by class of institutions and by States for 1922 and 1917:

INMATES OF PENAL INSTITUTIONS, BY CLASS OF INSTITUTION, FOR THE UNITED STATES, 1922 AND 1917.

| Class of Institution. | July 1, 1922. | | | | | | |
|---|---|---|---|---|---|---|---|
| | Institutions. | | | | Prisoners. | | |
| | | | Reporting. | | | | |
| | Total. | Not Reporting. | No Prisoners | Prisoners. | Total. | Male. | Female. |
| All Classes | 6,439 | 282 | 1,960 | 4,197 | 163,889 | 154,075 | 9,814 |
| Federal | 3 | ..... | ..... | 3 | 5,540 | 5,540 | ..... |
| State | 104 | ..... | ..... | 104 | 78,673 | 75,465 | 3,208 |
| County | 3,073 | 52 | 570 | 2,451 | 44,283 | 41,463 | 2,820 |
| Chain or road gangs | 296 | ..... | ..... | 296 | 12,717 | 12,222 | 495 |
| City | 2,939 | 230 | 1,390 | 1,319 | 21,635 | 19,385 | 2,250 |
| Other | 24 | ..... | ..... | 24 | 1,041 | ..... | 1,041 |

| Class of Institution. | July 1, 1917. | | | | |
|---|---|---|---|---|---|
| | Institutions. | | | | Number of Prisoners (Both Sexes). |
| | | | Reporting. | | |
| | Total. | Not Reporting. | No Prisoners | Prisoners. | |
| All Classes | 6,236 | 1,076 | 1,792 | 3,368 | 146,161 |
| Federal | 3 | ..... | ..... | 3 | 3,018 |
| State | 94 | ..... | ..... | 94 | 71,442 |
| County | 3,049 | 471 | 623 | 1,955 | 41,871 |
| Chain or road gangs | 134 | ..... | ..... | 134 | 5,975 |
| City | 2,956 | 605 | 1,169 | 1,182 | 23,855 |

INMATES OF FEDERAL PENITENTIARIES, AND STATE, COUNTY, AND CITY PENAL INSTITUTIONS,

| Institution or Division and State. | July 1, 1922. Institutions. Not Reporting. | Reporting. No Prisoners. | Reporting. Prisoners. | No. of Prisoners. | July 1, 1917. Institutions. Not Reporting. | Reporting. No Prisoners. | Reporting. Prisoners. | No. of Prisoners. | Pct. of Inc. or Dec(—) in Prisoners. |
|---|---|---|---|---|---|---|---|---|---|
| U. S., All Classes | 282 | 1,960 | 3,877 | 150,131 | 1,076 | 1,792 | 3,234 | 140,186 | 7.1 |
| FEDERAL PENITENTIARIES | | | | | | | | | |
| Total | ..... | ..... | 3 | 5,540 | ..... | ..... | 3 | 3,018 | 83.6 |
| Atlanta, Ga. | ..... | ..... | 1 | 2,334 | ..... | ..... | 1 | 1,228 | 90.1 |
| Leavenworth, Kan. | ..... | ..... | 1 | 2,671 | ..... | ..... | 1 | 1,564 | 70.8 |
| McNeil Island, Wash. | ..... | ..... | 1 | 535 | ..... | ..... | 1 | 226 | 136.7 |
| STATE, COUNTY, AND CITY INSTITUTIONS. | | | | | | | | | |
| Total | 282 | 1,960 | 3,874 | 144,591 | 1,076 | 1,792 | 3,231 | 137,168 | 5.4 |
| NEW ENGLAND: | 21 | 148 | 226 | 8,410 | 46 | 31 | 220 | 11,463 | —26.6 |
| Maine | 2 | 17 | 25 | 695 | 2 | 18 | 23 | 559 | 24.3 |
| New Hampshire | 2 | 14 | 29 | 451 | 6 | 14 | 25 | 725 | —37.8 |
| Vermont | 5 | 12 | 11 | 470 | 8 | 11 | 9 | 427 | 10.1 |
| Massachusetts | 10 | 76 | 110 | 4,447 | 24 | 66 | 111 | 6,438 | —30.9 |
| Rhode Island | 2 | 17 | 20 | 690 | 5 | 12 | 22 | 820 | —15.9 |
| Connecticut | ..... | 12 | 31 | 1,657 | 1 | 10 | 30 | 2,494 | —33.6 |
| MIDDLE ATLANTIC: | 44 | 352 | 527 | 29,847 | 136 | 300 | 500 | 31,417 | —5.0 |
| New York | 9 | 104 | 237 | 14,903 | 20 | 92 | 252 | 17,494 | —14.8 |
| New Jersey | 10 | 66 | 66 | 3,745 | 19 | 60 | 63 | 3,953 | —5.3 |
| Pennsylvania | 25 | 182 | 224 | 11,199 | 97 | 148 | 185 | 9,970 | 12.3 |
| EAST NORTH CENTRAL: | 52 | 351 | 664 | 29,300 | 136 | 299 | 646 | 28,060 | 4.4 |
| Ohio | 7 | 96 | 162 | 8,171 | 19 | 85 | 162 | 7,499 | 9.0 |
| Indiana | 10 | 56 | 97 | 3,850 | 32 | 34 | 97 | 4,518 | —14.8 |
| Illinois | 14 | 98 | 196 | 8,286 | 43 | 85 | 191 | 8,775 | —5.6 |
| Michigan | 10 | 49 | 110 | 6,292 | 19 | 41 | 109 | 4,569 | 37.7 |
| Wisconsin | 11 | 52 | 99 | 2,701 | 23 | 54 | 87 | 2,699 | 0.1 |
| WEST NORTH CENTRAL: | 25 | 374 | 546 | 13,825 | 140 | 350 | 443 | 12,876 | 7.4 |
| Minnesota | ..... | 57 | 91 | 2,566 | 9 | 49 | 89 | 3,232 | —20.6 |
| Iowa | 5 | 77 | 96 | 2,471 | 30 | 65 | 82 | 1,775 | 39.2 |
| Missouri | 9 | 67 | 112 | 3,958 | 38 | 55 | 87 | 4,505 | —12.1 |
| North Dakota | 2 | 26 | 37 | 413 | 7 | 28 | 30 | 378 | 9.3 |
| South Dakota | 2 | 24 | 50 | 549 | 14 | 34 | 28 | 437 | 25.6 |
| Nebraska | 1 | 56 | 70 | 1,329 | 13 | 67 | 45 | 749 | 77.4 |
| Kansas | 6 | 67 | 90 | 2,539 | 29 | 52 | 82 | 1,800 | 41.1 |
| SOUTH ATLANTIC: | 55 | 160 | 618 | 19,054 | 215 | 179 | 426 | 14,844 | 28.4 |
| Delaware | ..... | 3 | 4 | 371 | 2 | 1 | 4 | 575 | —35.5 |
| Maryland | ..... | 5 | 38 | 2,186 | 15 | 6 | 22 | 2,436 | —10.3 |
| District of Columbia | ..... | ..... | 15 | 961 | ..... | ..... | 15 | 848 | 13.3 |
| Virginia | 2 | 20 | 119 | 4,035 | 28 | 28 | 85 | 3,087 | 30.7 |
| West Virginia | 2 | 26 | 59 | 3,406 | 22 | 25 | 41 | 1,563 | 117.9 |
| North Carolina | 6 | 33 | 112 | 1,946 | 45 | 40 | 66 | 1,349 | 44.3 |
| South Carolina | 6 | 17 | 54 | 1,177 | 17 | 18 | 41 | 815 | 44.4 |
| Georgia | 33 | 40 | 146 | 2,227 | 69 | 41 | 103 | 1,445 | 54.1 |
| Florida | 6 | 16 | 71 | 2,745 | 17 | 20 | 49 | 2,726 | 0.7 |
| EAST SOUTH CENTRAL: | 22 | 122 | 401 | 13,506 | 147 | 121 | 277 | 11,513 | 17.3 |
| Kentucky | 10 | 30 | 131 | 3,824 | 47 | 42 | 82 | 2,885 | 32.5 |
| Tennessee | 6 | 46 | 94 | 3,052 | 52 | 37 | 57 | 2,562 | 19.1 |
| Alabama | 3 | 19 | 86 | 4,159 | 19 | 21 | 68 | 3,973 | 4.7 |
| Mississippi | 3 | 27 | 90 | 2,471 | 29 | 21 | 70 | 2,093 | 18.1 |
| WEST SOUTH CENTRAL: | 45 | 207 | 469 | 15,489 | 174 | 200 | 343 | 13,566 | 14.2 |
| Arkansas | 6 | 31 | 76 | 2,259 | 31 | 34 | 47 | 1,507 | 49.9 |
| Louisiana | 6 | 20 | 77 | 2,986 | 30 | 18 | 55 | 2,786 | 7.2 |
| Oklahoma | 10 | 32 | 98 | 3,456 | 32 | 20 | 86 | 2,859 | 20.9 |
| Texas | 23 | 124 | 218 | 6,788 | 81 | 128 | 155 | 6,414 | 5.8 |
| MOUNTAIN: | 9 | 139 | 247 | 5,425 | 48 | 113 | 220 | 5,680 | —4.5 |
| Montana | ..... | 21 | 50 | 744 | 4 | 13 | 46 | 1,426 | —47.8 |
| Idaho | 2 | 28 | 35 | 514 | 7 | 25 | 30 | 401 | 28.2 |
| Wyoming | ..... | 7 | 24 | 561 | 5 | 6 | 20 | 452 | 24.1 |
| Colorado | ..... | 37 | 53 | 1,611 | 14 | 29 | 47 | 1,167 | 38.0 |
| New Mexico | 5 | 8 | 29 | 628 | 9 | 7 | 24 | 653 | —3.8 |
| Arizona | 1 | 7 | 21 | 706 | 4 | 6 | 19 | 777 | —9.1 |
| Utah | 1 | 23 | 23 | 414 | 5 | 22 | 19 | 495 | —16.4 |
| Nevada | ..... | 8 | 12 | 247 | ..... | 5 | 15 | 309 | —20.1 |
| PACIFIC: | 9 | 107 | 176 | 9,735 | 34 | 99 | 156 | 7,749 | 25.6 |
| Washington | ..... | 23 | 53 | 2,080 | 8 | 26 | 42 | 1,616 | 28.7 |
| Oregon | 1 | 20 | 38 | 984 | 4 | 21 | 33 | 625 | 57.4 |
| California | 8 | 64 | 85 | 6,671 | 22 | 52 | 81 | 5,508 | 21.1 |

Total includes police stations, but not including chain or road gangs or institutions under control of charitable or religious organizations.

## INDUSTRIAL INSURANCE IN THE UNITED STATES.

| Year. | Premium Income. | Claim Payments. | Payments to Policyholders. | Reserve Increase (Over Previous Year) | Payments to Policyh'rs Plus Reserve Incr. |
|---|---|---|---|---|---|
| 1910 | $109,510,535 | $37,143,007 | $45,128,890 | $28,098,628 | $73,227,518 |
| 1911 | 116,904,962 | 39,090,490 | 49,002,707 | 81,910,106 | 80,912,813 |
| 1912 | 125,224,393 | 41,245,918 | 52,601,384 | 41,647,825 | 94,249,209 |
| 1913 | 133,767,046 | 44,542,306 | 57,442,253 | 46,049,835 | 103,492,088 |
| 1914 | 143,290,619 | 47,926,020 | 64,067,359 | 43,378,401 | 107,445,760 |
| 1915 | 154,293,399 | 49,107,021 | 66,492,581 | 51,897,197 | 118,389,778 |
| 1916 | 164,966,333 | 54,635,165 | 72,049,045 | 66,124,188 | 138,173,233 |
| 1917 | 178,980,442 | 59,161,651 | 77,660,796 | 65,523,922 | 143,184,718 |
| 1918 | 196,408,962 | 89,503,638 | 110,515,615 | 67,153,715 | 177,669,330 |
| 1919 | 225,097,027 | 67,054,013 | 88,598,561 | 92,306,786 | 180,905,347 |
| 1920 | 254,685,000 | 69,586,000 | 89,127,000 | 101,607,000 | 190,734,000 |
| 1921 | 283,148,000 | 69,173,000 | 95,180,000 | 121,826,000 | 217,006,000 |

## STATE LAWS RELATIVE TO FOREIGN CORPORATIONS.

THE WORLD ALMANAC presents a compilation of the laws of the States and Territories of the United States relating to the entrance into one of such jurisdictions of a corporation formed under the laws of another State, Territory or foreign country, with conditions precedent to transaction of business, liabilities for violation of requirements, and rate of license and privilege taxes imposed, with fees for the filing of the necessary papers and documents.

The utter dissimilarity of these State and Territory enactments rendered it impossible to present the matter in tabular form; and, in lieu thereof, each one is given in a separate paragraph.

ALABAMA—File with Secretary of State at Montgomery certified copy of articles of incorporation; fee, $10; penalty for failure, $1,000. Penalty $500 for doing business in State before designating places of business in State, and names and addresses of authorized agents, and paying charter fee 25 per cent. of actual capital employed in State up to $100; if not more than $1,000 so employed, 25 per cent. on $100, plus 5 per cent. on balance; if more than $1,000, 25 per cent. on $100, plus 5 per cent. on balance up to $1,000, plus one-tenth of 1 per cent. on excess over $1,000. When this charter fee is paid, file with State Auditor sworn statement setting forth legal name, State where incorporated, authorized capital stock, amount paid in, principal place of business, actual capital employed in State. Non-compliance denies access to courts, estops business, nullifies contracts. Procure from Secretary of State annual permit to do business, State Auditor to counter-sign; fee, $10. President or executive head and secretary of corporation files with a County Judge of Probate in the State statement of corporation's name, where organized, principal place of business in State, capital stock, capital actually employed in State. Judge may summon, and enforce payment of franchise tax as he finds, tax to be paid only in one county, on capital actually employed in State, less total loans in State secured by mortgage, 60 cents on each $1,000 actually so employed, payable to State Tax Commission, Montgomery, accompanied with sworn statement between Nov. 1 and Dec. 15, on blanks supplied by Commission, which may enforce payment of more than offered, if evidence justify. Appeals allowed to Circuit Court.

ALASKA—File with Secretary of Alaska at Juneau copy of articles of incorporation; fee, $25; if articles later be amended or supplemented, file statement thereof; fee, $10; file certificate of appointment of resident agent in Alaska, or revocation thereof; fee, $5; pay to Secretary of Alaska annual license, $15; penalty for failure, $2.50. Non-payment annual corporation tax for one year is prima facie evidence of insolvency; two years non-payment causes name of corporation to be stricken from Territory records. If re-instatement applied for, all taxes and penalties must be paid, plus $20. Corporation may withdraw from Alaska by paying all sums due; fee for withdrawal certificate, $5. Fee for certificate of dissolution of corporation, $5. Annual report to be filed with Secretary of Alaska; fee, $2.50. Copy articles of incorporation also to be filed in each district in which business is intended, giving total capital stock, amount paid in in money, amount paid in otherwise and in what; assets, character and cash value must be stated; liabilities, how secured and on what property. Agents must file written consent of responsibility with Secretary of Alaska. Death or removal of agent requires filing substitute designation within 60 days. Penalty for non-filing certificates mentioned is $25 for each day of neglect, voiding all contracts if other party so elects.

ARIZONA—File articles of incorporation with Corporation Commission at Phoenix; publish them six times in some newspaper in each county in which business is to be done, after which file affidavit of such publication with Commission; license fee to Commission, $15; obtain from Commission license permit; then in writing over sworn statement of President or other chief officer, attested by Secretary or by resolution of Board of Directors of corporation, appoint resident agent in each county in which business is to be done, agents to be actual, bona-fide residents of their counties for at least three years. Failure denies right to do business; every act by corporation to be void. Change of venue from State to Federal Court of suit instituted by corporation against a citizen of the State compels Corporation Commission to annul corporation's license. Three months' absence of agent from county appointed for, together with failure to appoint substitutes within four months, forfeits corporation's rights by such agent and voids contracts and all acts. Compliance with provisions gives all real and personal property rights enjoyed by citizens under Arizona laws.

ARKANSAS—Statement to be filed before June 1 showing name of corporation, under what laws organized, location of principal office, names and addresses of President, Secretary, Treasurer, members of Board of Directors, date of annual election of officers, amount of authorized capital stock, par value per share, capital stock subscribed, amount issued, amount paid up, market value of shares, nature of business, places of business in State, value of property owned and used in State; where situate; name and location of officers or agents in the State; value and where situate property owned and used outside of State; changes if any in any of these respects since former report. Report to be to State Tax Commission at Little Rock, which determines what proportion of corporation's capital stock is represented in State. Commission to certify to State Auditor, who in turn to State Treasurer, who collects franchise tax one-tenth of 1 per cent. annually on proportion of capital stock represented by property owned and used in State. Corporations with no capital stock or less than $10,000 employed in State pay annually $10. Tax Commission notifies by mail by July 1 amount of tax due. On payment of fees for filing statement first referred to, State Auditor gives certificate of compliance. Taxes due by Aug. 10. Tax-delinquent corporations to pay 25 per cent. additional as penalty. Taxes are first lien on corporation's property. Charter to be revoked if taxes not paid. Questions as to status of corporation arising, Tax Commission has full powers to enforce production of papers and witnesses. Recalcitrant witnesses fined $1,000 or six months imprisonment. Franchise tax being paid, Tax Commission issues 5-year permit subject to annual tax payments. Fees—Filing copy of articles of incorporation, $25 up to $10,000 authorized capital stock; for filing increase of capital stock, ditto; amounts of stock in either case being in excess of $10,000, fee is one-tenth of 1 per cent. on excess.

CALIFORNIA—File with Secretary of State at Sacramento copy articles of incorporation, copies of certificates of changes in capital stock or other amendments; affidavit by President or Secretary that no changes are contemplated prior to date business in State is to begin, affidavit to be filed not more than 15 days before; designate some person on whom legal processes may be served. Fees—For filing copy of articles, $75; license tax, $10 on authorized capital stock up to $10,000, increasing as capitalization increases, to a maximum of $1,000 tax if capital more than $10,000,000. Corporations for profit but with no capital stock pay annually $10. License tax is lien on property from Jan. 1. On Saturday preceding first Monday of March, non-payment of tax forfeits right to do business, attempt to continue causing fine not less than $250, or not less than 50 days imprisonment, contracts being void if made after that date. Reinstatement allowed on payment of tax for years suspended. Corporation may surrender rights in State by filing request therefor with Corporation Tax Exemption Board, Sacramento. False statements in these connections constitute perjury.

COLORADO—File with Secretary of State at Denver certified copy of articles of incorporation and all amendments thereto; fee, $30 for first $50,000, and 30 cents for each additional $1,000; file certified copy of corporation laws of State under which corporation was formed; filing fee, $5. Certificate of business purpose and of agent; fee, $5; affidavit by President and Secretary of capital stock, property and assets employed in Colorado, blank forms prescribed by State, whereupon certificate of authority issues; fee, $5. Total filing fee for corporation of $50,000 or less capital stock, $46. For increases of capital, fee is 30 cents per $1,000 of increase. File certified copies of amendments to articles of incorporation; filing fee, $5 for each amendment, excepting when name is changed, when fee is $25. Annual license tax due by May 1 in advance, $10 on capital employed in Colorado up to $100,000, and 10 cents for each additional $1,000. Penalty is 10 per cent. added for each six months of delinquency. File annual report by Jan. 1 with Secretary of State.

CONNECTICUT—File with Secretary of State at Hartford certified copy of charter or articles of incorporation, with statement, sworn by President, Treasurer and majority of Board of Directors, showing amount of authorized capital stock, amount paid in, and what amount, if any, paid in other than cash and in what. Also in sworn writing appoint Secretary of State attorney upon whom legal processes may be served. In case suit be instituted vs. the corporation, it pays 75 cents for each page of process filed, recoverable if corporation wins suit. Certificate of increase or reduction of capital stock to be filed within 30 days after such action. Annual report to be made by Feb. 15 or, Aug 15 giving name of corporation, post office address of each officer and director, amount of capital stock subscribed not paid for in full, amount due thereon, location of principal office in Connecticut. Each failure to comply involves forfeit of $25. Failure to file annual report for two successive years and pay forfeits therefor is prima facie evidence of loss of corporate rights in State, when corporate existence in State may be terminated by Secretary of State sending registered letter to corporation. Such termination not to affect action in courts necessary to close affairs or preserve rights of those who have dealt with corporation. Fraudulent statements and returns punishable by fine of $1,000. Fees—Filing annual reports, 75 cents each page; minimum, $2; certified copy charter, ditto; filing acceptance of Secretary of State as attorney, $50.

DELAWARE—File certified copy of articles of incorporation with Secretary of State at Dover, with names of agents in the State, and sworn statement of assets and liabilities; fee, $10; certificate of filing and copies thereof to be supplied by Secretary of State and agents, such certificates being prima facie evidence of corporation's right to do business in State, corporation to designate which agent may receive service in legal actions, agent to be resident of State. Death or removal of agent demands designation of substitute within 10 days. Violation of foregoing requirements punishable by fine imposed on corporation not less than $200 nor more than $500 for each offense, and on agents not less than $100 or more than $500. Annual reports to be filed by first Tuesday in January showing all facts as to location of agents, capital stock, names and addresses of officers and directors, and date of annual election of officers. Franchise tax is from $10 to $50 up to capital stock of $1,000,000, plus $25 on each additional $1,000,000.

DISTRICT OF COLUMBIA—No statutory provision regarding foreign corporations as distinct from domestic. They are not required to obtain special license or certificate of authority, "other than the license required of individuals and domestic corporations in certain classes of business." A foreign corporation cannot hold realty in the District, except as an incident of its regular business. Foreign corporation cannot maintain a suit in the District after its charter has been annulled by Governor of State where incorporated. No franchise license tax or fee. No annual reports required.

FLORIDA—File with Secretary of State at Tallahassee sworn copy of articles of incorporation; violation of this requirement punishable, but not affecting title to property held in State by the corporation. Secretary of State issues permit after filing of articles of incorporation, receiving therefor fee of $5. Fee for filing amendment of articles, $2. Court action prior to compliance therewith denied. No permit issued to corporation bearing name so nearly similar to that of one already existing under laws of Florida as to cause confusion.

GEORGIA—File with Comptroller-General annual report, register each agent on forms stipulated by Georgia law, file copy, sworn, of articles of incorporation, certified copy of resolution of Directors authorizing applying for admission. State official may judge as to whether character of business proposed is against interests of Georgia. Annual report to be filed by Nov. 1, showing name, when and where incorporated and by what authority, amount of capital stock, business of corporation, location of principal office; fee $1 first year, 50 cents annually thereafter. Certificate of authority of Secretary of State is valid for 20 years, subject to meeting annual requirements.

HAWAII—File with Treasurer of Territory at Honolulu certified copy charter or articles of incorporation, names of officers, certified copy of by-laws of corporation, name and business address of some person in Territory on whom legal process may be served; and bond with one or more sureties, approved by Hawaiian Treasurer, not less than $1,000 nor more than 10 per cent. of capital stock, if stock exceed $10,000; in no case bond to exceed $50,000, bond sureties to be answerable for judgments vs. corporation for payment of money; provided, Hawaiian Treasurer may excuse from giving bond if corporation's property in Hawaii seem sufficient to indemnify against all judgments. Breach of proviso entitles Hawaiian Treasurer to protect citizens injured thereby by court action in his own name vs. corporation. Before corporation open offices or do business in Hawaii it must obtain from Treasurer annual license; annual cost, $100. Penalty for failure to comply, 50 per cent. additional. Attempting to do business before compliance with foregoing is misdemeanor, agent being punishable by fine not less than $100 nor more than $500, or by imprisonment not more than six months, or by both fine and imprisonment. Corporation failing to comply is guilty of misdemeanor punishable by fine not less than $100 nor more than $500; is denied benefit of Territory laws, especially of statute of limitations in civil and criminal actions. Corporation operating for profit makes annual statement by July 1 "in such form as Treasurer, approved by Governor, may require," report not to be available for inspection by other than officers of Territory. Refusal to make report enforceable by courts on application by Treasurer of Territory; access to courts being denied so long as default continue. Fees—For filing certificate and bond, 20 cents for each $1,000 of capital stock; $35 minimum; certificate of increase or decrease of stock, ditto, minimum, $25. Annual license tax, $100.

IDAHO—File with County Recorder of county in which principal place of business is to be copy of articles of incorporation certified by Secretary of State of State in which the corporation was organized; copy of articles which have been filed with the County Recorder then to be filed with Idaho Secretary of State at Boise, certified by the Recorder. Fees—recording articles, 20 cents per folio of 100 words each; issuing certificate of incorporation, $3; filing with Secretary of State, from $10 to $100 up to $1,000,000 capital stock, $150 if more than $1,000,000; filing designation of agent, $2. Annual license tax, $25 to $325 up to $2,000,000 capital stock; $375 if more than $2,000,000. Statutory agent must be designated on whom legal processes may be served, agent to be substituted within 60 days if former agent die or be removed. Non-compliance denies access to courts, or holding real estate. Officers or agents attempting to make contracts while the corporation is in default in designating substitutes for deceased or removed agent are held jointly liable as principal contractors, and statute of limitations shall run in favor of the corporation only while the person upon whom service may be made is within the State. Compliance with requirements gives foreign corporation same rights, including that of eminent domain, as are enjoyed by domestic corporations.

ILLINOIS—Certificate of authority to be procured from Secretary of State before transacting business in State by filing with Secretary of State at Springfield sworn copy of articles of incorporation verified by proper officer in State or county in which organized; and statement by corporation's President and Secretary or other officer setting forth corporation's name, location of principal place of business, and of proposed principal place of business in Illinois, names of States in which it has been authorized to do business, character of business, itemized estimate of amount of tangible property to be employed in Illinois in first year after date on which Illinois license is issued, an estimate of amount of capital to be employed in Illinois and that to be employed elsewhere during such year, value of patent rights, licenses, franchises, trade-marks, secret processes, copyrights and good will, contracts, book accounts and notes, machinery and realty, stock in other corporations and securities, furniture and fixtures cash in bank, kinds and amount of other personalty; estimate of annual business to be transacted in Illinois; name and address of some person in Illinois as resident agent on whom legal processes may be served; names and addresses of officers and directors; and such other information touching property and business of corporation as Secretary of State may require. Such statement filed, Secretary of State issues certificate showing name of corporation and State where incorporated, business to be authorized in Illinois, amount of authorized capital stock, amount authorized to be used in business in Illinois, amount of fee paid,

address of corporation in Illinois and of agent for service of legal process, and duration for which license is issued. Amendments to articles of incorporation must be filed with Illinois Secretary of State. Foreign corporation cannot encumber property to injury of any citizen of Illinois who is a creditor. Failure to appoint legal service agent gives creditor right to file service on Illinois Secretary of State. Neglect of compliance with foregoing requirements denies access to courts. Fees and franchise taxes—Secretary of State collects initial fee of one-twentieth of 1 per cent. on amount of authorized capital stock, minimum being $20, and like sum for subsequent increase. Annual franchise tax 5 cents on each $100 of proportion of capital stock authorized by Illinois Secretary of State to be used in Illinois.

INDIANA—Apply to Secretary of State in statement, sworn by President and Secretary, of purpose in Indiana, proportion of business (based on business of previous year) to be done in Indiana; amount paid in on capital stock, what property and assets and value thereof to be used in Indiana, if any of capital stock has not been paid in, what disposition is to be made thereof; names of President, Secretary and Directors and their residences, address of principal offices in Indiana, and name and address of some agent or attorney in fact on whom legal service may be had; and file a copy of articles of incorporation. Secretary of State may demand additional information. Application must contain agreement not to procure change of venue, except by regular appeal, to any other court of any case begun by or against the corporation in Indiana, and not to begin suit in any United States Court against any citizen or resident of Indiana. Secretary of State issues certificate, prior to which no business may be done. Pay to Secretary of State (on proportion of capital stock used in Indiana) license tax of $25 on the first $10,000, and 1 per cent. additional on all in excess thereof; $1 for filing annual report. Failure to comply with foregoing causes fine of $1,000 to $10,000. No corporation will be admitted with name similar to that of one already admitted. Agents of corporation procure from corporation and file "with Circuit Court of county where they propose doing business," duly sworn copy of resolution of Board of Directors authorizing corporation to be sued as hereinbefore. Annual report by Jan. 31, sworn, giving name, capital stock, proportion of capital stock used in Indiana, value of property and assets issued in Indiana, character of business done, location of principal office, name of agent or attorney in fact, and names of President, Secretary and Directors and residences.

IOWA—File with Secretary of State at Des Moines certified copy of articles of incorporation attested by Secretary of State in which corporation was organized, accompanied by resolution of Board of Directors authorizing filing thereof, and designating some agent or officer in the State on whom service in legal processes may be made. With such attested copy must go application for permit to do business in Iowa, with pledge to obey provisions of Iowa's "Foreign Corporation" laws, and setting forth total authorized capital, total paid-up capital, total value of all assets, total value of money and other property corporation has in use in Iowa, total value of money and other property corporation purposes to use in Iowa during ensuing year, with certified copy of resolution by Board of Directors giving name and address of authorized agent. Secretary of State may investigate and fix fee to be paid. Permit finally issued costs corporation 10 cents per 100 words for filing aforementioned, plus $25 if capital stock be not more than $10,000, plus $1 additional for each $1,000 if in excess of $10,000. Whenever capital or property used in Iowa be increased, corporation must file with Secretary of State statement thereof, or may do so when making annual report to Iowa Secretary of State in July, fee for filing being $1 for each $1,000 of increase, with recording fee of 10 cents per 100 words. Violation of these requirements involves fine against corporation of $100, and $100 fine or 30 days imprisonment for officers or agents of corporation.

KANSAS—File application with State Charter Board at Topeka on blanks supplied by board, setting forth certified copy of articles of incorporation, principal place of business, principal place of business in Kansas, nature of business to be done, name and address of each officer, trustee and director, detailed statement of assets and liabilities sworn to by President and Secretary of corporation, and written consent of corporation "irrevocable" that actions vs. it in any County in Kansas may be initiated by service on Kansas Secretary of State and remain binding. Charter Board may investigate as to solvency, under "duces tecum" summoning powers, and judge as to certainty that business proposed in Kansas is agreeable with Kansas laws. Application when granted by board to be filed with Secretary of State, fee to be $25. Annual report to be filed with Secretary of State by March 31 showing as of Dec. 31 preceding "in such form as Secretary of State may prescribe," name and laws under which organized, location principal office, names and addresses of President, Secretary, Treasurer, and members of Board of Directors, date of annual electon of officers, amount of authorized capital stock with par value, amount of stock issued, amount of paid-up stock issued, nature of business in which corporation engages within and without Kansas, name and address of officers in Kansas and of agents, value of property owned and used in Kansas, where situate, and value and location of property owned and used outside of State, assets and liabilities, changes if any, since last annual report. On filing of such sworn report, Secretary of State determines what proportion of capital stock is represented by business of corporation in Kansas and collects as franchise tax annually minimum of $10 up to $10,000 capital stock, graduated up to $2,500 for more than $5,000,000 capital stock. Payment entitles to certificate of compliance. Penalty for failure to file report, $100, plus $5 a day so long as default continues. Charter to do business in Kansas may be forfeited for such failure. Court actions instituted by summons directed vs. Secretary of State acting as competent to accept service for the corporation. Secretary of State has power to investigate and determine alleged under-statement by corporation of its proportion of capital to be employed in Kansas or any other fact essential. Usual liability for false sworn statements, written or verbal, as perjurious.

KENTUCKY—File with Secretary of State at Frankfort statement on blanks supplied by that official showing principal place of business in State, agent thereat on whom service may be had; fee for filing, $1. This entitles to certificate of authority to enter State. Attempt to transact business prior to issuance of such certificate is misdemeanor, corporation "and any agent or employe of such corporation" shall be severally guilty of misdemeanor and fined not less than $100 nor more than $1,000 for each offense. Annual license tax, 50 cents on each $1,000 of property and business transacted in State, proportioned to whole capital stock, payable to State Tax Commission. Annual report to be made to commission by Feb. 1, showing name, State or Government under which organized, names and addresses of officers, and of agent or attorney in State on whom legal service may be had, amount of authorized capital stock, value and location of property owned and used in State, value and location of property owned and used outside of State, proportion of business transacted in and outside of State. Penalty for false statement as for perjury. Corporation wilfully violating or neglecting provisions hereinbefore mentioned fined $50 to $1,000, suspended from right to do business.

LOUISIANA—File with Secretary of State at Baton Rouge names and addresses of agents on whom legal processes may be served, and with Clerk of District Court in each parish in which corporation has established place of business, agent to be bona fide resident of parish to which he is designated. Also file with Secretary of State certified copy of articles of incorporation. Foregoing done, certificate is given by Secretary of State to do business. Failure involves misdemeanor, punishable by fine not less than $25 nor more than $500. Agent failing to pay fine is imprisoned not less than three days nor more than four months. Service in legal actions may be had on corporation's designated legal service agents "wherever found;" if agent be not found, then on any regularly employed person or agent in Florida. Change of venue in State courts at instance of corporation entities opposite party thereto, if plaintiff, to have cause tried in parish of corporation agent's residence or in parish in which cause arose. Annual report to be filed with Secretary of State between Jan. 1 and April 1 of receipts and disbursements of preceding year, salaries and wages paid, interest on bonds and other debts, dividends on stock, taxes of all kinds, materials and supplies used during preceding year, other expenses and number of officers and employes all kinds. Recording fees—negligible.

MAINE—File with Secretary of State at Augusta certified appointment of agent on whom legal service may be made, giving him power of attorney to act for corporation, his authority to continue so long as liability remains outstanding vs. corporation in the State, or until revoked in similar writing designating some other to act in same capacity. Also file with Secretary of State copy of articles of incorporation, certified under seal of State or county where incorporated, with copy of by-laws and name of corporation, location of principal place of business, names and addresses of officers and directors, date of annual meeting for election of officers, amount of capital stock authorized and issued, number and par value of shares, amount paid thereon to its treasurer. False statements subject to same laws re perjury as obtain in Maine. Secretary of State is judge as to admissibility of corporation to do business in Maine as to whether permitted by "laws of this State." Increases of capital stock must be certified to Secretary of State within 30 days thereafter. Annual license fee payable by March 1 to State Treasurer, $10. Changes made at annual meeting of corporation to be certified within three months thereof to Secretary of State. If no changes, fact must be certified to. Penalty for omission of foregoing is forfeit to State of not less than $5 nor more than $10 per day for 15 days after expiration of time for certifying, and not less than $10 nor more than $200 for each day thereafter during which omission continues.

MARYLAND—File with State Tax Commission at Baltimore certified copy of articles of incorporation, and certificate annually before March 1 giving names and addresses of officers and directors, principal places of business in Maryland and in State in which it was incorporated, amount of capital stock authorized and issued, number and par value of shares and amount paid thereon, names and addresses of shareholders and shares held by each, amount of capital employed in Maryland, name and address of resident agent for legal service, authority of agent to continue so long as liability remain outstanding or until substitute be named. Original papers to be accompanied by fee of $25 to State Tax Commission which issues certificate of permission. Failure to comply involves misdemeanor and fine of $200, non-access to courts, although not affecting contracts made with non-complying corporation. Annual franchise tax due before April 1, $25 for every $50,000 capital employed in Maryland, up to $500,000; one-fortieth of 1 per cent. in addition up to $5,000,000; $30 on each $1,000,000 above $5,000,000. Corporation's property is subject to taxation as other property under State laws. If business be abandoned in Maryland by corporation, suits may be filed against agent last designated for legal service.

MASSACHUSETTS—File power of attorney with Department of Corporations and Taxation at Boston appointing Commissioner of Corporations and Taxation attorney for service of legal processes, certificate of its charter, certified copy of its by-laws, blanks to be supplied by Commissioner; fee $50. Annual tax is 2½ per cent. of that portion earned in State, and $5 per $1,000 on value of that portion of capital stock employed in State. Annual report to be by April 10 to set forth all facts necessary to determination of foregoing with whatever Federal tax returns have been made. Penalty for failure to report is doubling of amounts due, plus $5 for each day of default. False returns involve penalty of not less than $500 nor more than $5,000. Examination of books and records by State officers to ascertain facts renders corporation liable to forfeit a sum "not greater than 2 per cent. upon par value of its capital stock as court may deem just."

MICHIGAN—File with the Secretary of State at Lansing certified copy of articles of incorporation and evidence that agent has been appointed to accept legal service, obtaining certificate of authority to do business; file also statement showing location of principal officers and place of business, location and principal place of business in Michigan and name and address of agent named, total value of property owned and used in corporation's business, stating separately tangible property, cash, credits, franchises, patents, trade-marks formulas and good will; also value and location of property owned and used in Michigan, and total business if any transacted in preceding year in Michigan, and other facts as Secretary of State may require. Secretary of State then determines amount of franchise fee to be paid, on basis of 35 mills on each dollar of paid-up capital and surplus, not however, to exceed $10,000, minimum being $50. Annual report to be made to Secretary of State in duplicate in July or August as of June 30 of state of business, showing amount of capital stock authorized, and that subscribed in cash and in property, value of property owned, names and addresses of officers and directors, credits owing to corporation; penalty for non-report, $100 plus $5 a day during default.

MINNESOTA—File with Secretary of State sworn copy of articles of incorporation, name of principal or agent in Minnesota, a statement, sworn, of proportion of capital stock represented by property in Minnesota; and pay $50 on first $50,000 plus $5 for each additional $10,000, on proportion of capital stock used in Minnesota. Secretary of State then issues certificate of authority, stating in certificate amount of capital stock and proportion used in Minnesota, certificate being valid for 30 years, subject to annual requirements being met. Failure to comply causes fine of $1,000. Authority of agent in Minnesota may be revoked by simple sworn writing, but revocation affects no action already pending.

MISSISSIPPI—File with Secretary of State copy of article of incorporation, certified by President and Secretary, pay tax and procure certificate of authority. There is no annual franchise or license tax, and no report is required. Fee for filing articles, $20 for $5,000 capital stock, up to $500 as stock increases. Fine of $100 for violating requirements.

MISSOURI—File with the Secretary of State at Jefferson City sworn copy of articles of incorporation under corporate seal, with statement showing nature of business proposed to be done in Missouri, location of principal office in Missouri, name and address of agent on whom legal service may be had, with affidavit of amount of capital stock represented by property located in Missouri; fee for permit to do business, $10. Permit may be for 50 years. If name of corporation be similar to one incorporated under Missouri laws, Secretary of State may refuse to issue permit. Penalty for violation, fine corporation $1,000 or more. Penalty for false affidavit punishable as felony by imprisonment not more than five years in penitentiary or in county jail not more than one year. Corporation must pay employees semi-monthly; discharged employes not paid wages under Missouri law remain on pay-roll until paid. Annual report required by July 1 showing Secretary of State amount of capital stock authorized, paid up, par value, actual value per share, cash value of all property in Missouri, indebtedness secured and unsecured on June 1 next preceding, surplus and undivided profits, and "clear market value of capital stock and surplus, including all property and assets." Secretary of State may call for special reports at any time as to financial status, refusal to comply being misdemeanor. Fee for registering with Secretary of State, $5 if registration is before July 1. Delay causes increase gradually to $35 if so late as December. Registration and compliance with all provisions entitles to certificate from Secretary of State. Rights are forfeited by cancellation by Secretary of State when provisions are not complied with. Refusal to submit records on demand involves usual punishment for recalcitrancy. Franchise tax due annually, one-twentieth of 1 per cent. of par value of proportion of stock and surplus employed in Missouri, interpreted under statute as proportion that all outstanding capital stock and surplus bears to all property and assets located within Missouri. State Tax Commission determines proportion to be taxed, but appeal is allowed to courts.

MONTANA—File with Secretary of State at Helena certified copy of articles of incorporation, attested by majority of Board of Directors, verified by President and Secretary of corporation under oath, showing name, location of principal office within and without State, names and residences of officers, trustees and directors, amount of capital stock, amount of capital invested in State, and consent to be sued in State courts, designating some person on whom service may be had. If articles be amended, file within 30 days after such action attested copy of amendments; ditto if capital stock be increased. Agent for legal service must file written sworn consent. Contracts are void prior to compliance with foregoing. By June 1 file annual report showing gross amount of business in Montana in preceding year, amount of money expended in Montana, net profits on Montana business. Every agent of corporation is guilty of misdemeanor if corporation has not complied with foregoing. Annual license fee, ½ per cent. on net income derived in preceding year from business in Montana, including interest on bonds, notes and other interest-bearing obligations, dividends on capital stock, and net earnings.

NEBRASKA—File with the Secretary of State at Lincoln and with Register of Deeds in County of principal place of business in Nebraska certified statement signed by officers of corporation showing principal place of business in State, name and address of agent on whom legal service may be had; appoint such agent; penalty for failure, $1,000 fine against corporation, and $1,000 fine or imprisonment in county jail not more than three months, or both, against every person representing corporation as responsible agent. Fee for filing such appointment of agent, $50. Annual sworn report by July 1 to be filed with Secretary of State, showing name, location of principal place of business, names and addresses of officers and directors, date of annual election of officers, amount of authorized capital stock, par value per share, amount subscribed, issued and paid up, nature of business, changes, if any, since last annual report. Franchise tax, $5 on $1,000 paid-up capital stock, graduated upwards to $2,000 for $25,000,000 capital stock; $2,500 if above that amount of stock. Penalty for violation, additional 15 per cent. of amount due. Default in provisions hereinbefore set forth annuls corporate rights in State. Withdrawal from State permissible by paying all due to State and filing notice with Secretary of State.

NEVADA—Within 30 days after election of officers or change of location of principal place of business in Nevada or change of agent in State file information thereof with Secretary of State at Carson City under corporate seal, giving names and addresses of officers and directors, date of annual election, character of business, location of principal office in Nevada, and name and address of agent on whom legal process may be served, such information aforesaid to be filed when original copy of articles of incorporation is filed. Penalty for failure, $100, and non-access to courts. Corporate rights in Nevada may be surrendered by payment of all due, and filing with Secretary of State statement thereof, and is allowed after withdrawal to permit fulfilment of all litigation which may have been begun against corporation. Foreign corporations doing mining business in Nevada may consolidate under rather liberal provisions. But failure to provide protection to creditors against removal of agent from jurisdiction involves penalty of $50 a day during default of compliance.

NEW HAMPSHIRE—Precedent to beginning business in the State, the corporation must appoint in sworn writing the Secretary of State at Concord its lawful attorney to accept legal service, said authority to continue so long as any liability remain against corporation in State. Penalty for non-compliance, $500 fine, validity of no contract with such corporation to be affected. Statement of articles of incorporation, amount of capital stock, nominal value, etc., to be filed with Secretary of State. False statements punishable by fine of $5,000, or imprisonment five years, or both. False maker of statement liable personally to any stockholder or person damaged by false statement. Annual sworn report by March 1 to Secretary of State on blanks supplied by him, fee $5, showing amount of authorized capital stock, par value of that issued, indebtedness to and from corporation, value of all property and assets as on preceding Jan. 1. False statement in connection therewith involves penalties as hereinbefore stated. Fee for recording, $10 up to $10,000 capital stock, graduated upwards to $250 for $1,000,000, plus $10 for each added $1,000 above $1,000,000. Franchise tax annually not less than $5 nor more than $100. Failure to pay for two years causes forfeiture of corporate rights in State. Reinstatement by payment of money due to State, with 10 per cent. interest.

NEW JERSEY—File with Commonwealth Department of State at Trenton certified copy of articles of incorporation, statement of authorized capital stock, amount issued, character of business, designate agent on whom legal process may be served, agent to be actual resident of State, (certain legal situations making it competent for service to be on Secretary of State at Trenton as attorney for corporation), compliance with foregoing entitling to certificate of authority to do business in New Jersey. File also list of officers and directors annually. Fees—For filing copy of articles, $10; officers, $1. Penalty for transacting business before certificate is issued by Secretary of State, $200 fine for each offense. Annual report to be filed with Secretary of State within 30 days after annual election of officers and directors, giving name, location of registered place of business in New Jersey, character of business, amount of authorized capital stock, and issued and outstanding, names and addresses of officers and directors, when term of each expires, and date of next annual election. Death or removal of authorized agent in State to be followed by substitute appointment, pending which legal service may be on Secretary of State as attorney for corporation. Failure to make annual report involves $200 forfeit to State. No franchise tax required.

NEW MEXICO—File with the State Corporation Commission at Santa Fe annual report by Sept. 1 sworn by proper accounting officer giving name, location of principal office and of principal office in New Mexico, with name of agent on whom process may be served, names and addresses of officers and directors, date of annual election, amounts of authorized, subscribed and issued capital stock and that paid up, nature of business both within and without State, value of property owned and used within and without State, total gross receipts derived from its property within and without State during last preceding fiscal year, changes if any since last annual report. Therefrom commission determines proportion of capital stock used in State, on which annual franchise tax is collected at rate of $10 for each $100,000 or fraction. Penalty for failure to pay is 5 per cent. added to amount due. Failure to report as required involves penalty of $1,000 fine. Franchise tax due by Nov. 30. Notice to appointed agent that money is due State is sufficient to bind corporation. Legal process against corporation is competent by leaving copy thereof at designated place of business of corporation or of agent thereof, or served in person on any officer or agent. Application for permission is to Secretary of State, with copy of articles of incorporation. Fee—$25, $5 for filing and $4.50 for certifying thereto.

NEW YORK—Procure from Secretary of State at Albany certificate of compliance with requirements, filing with that official sworn corporate statement under corporate seal showing nature of business, place in State where principal business is to be, designating some person on whom legal service may be had, his consent in sworn writing also to be filed. Proof to be submitted that statement filed is under authority of corporation, together with copy of articles of incorporation sworn to by an official, attested by a clerk of a court of record in State wherein corporation was formed. Fee for filing, $52. Papers then go to State Tax Commission. License tax is one-eighth of 1 per cent. on capital stock employed in New York, minimum being $10, payable to State Tax Commission at Albany, which has power to demand books and records. Corporation cannot maintain court action after 13 months from beginning business in New York, if license tax shall not have been paid.

NORTH CAROLINA—File with Secretary of State at Raleigh attested copy of articles of incorporation under corporate seal, and statement of amount of capital stock authorized and issued, location of principal place of business in State, the name of agent in charge, character of business and names and post office addresses of officers and directors; and pay annually to Secretary of State 20 cents for each $1,000 of authorized capital stock, minimum payment being $25, maximum, $250. Filing fee, $5. Corporation may withdraw from State by filing with Secretary of State attested statement thereof and paying fee of $5. Failure to comply with foregoing provisions forfeits to State $500 recoverable by Attorney General of State.

NORTH DAKOTA—File with Secretary of State at Bismarck attested appointment by corporation of that State officer and his successors as attorney on whom legal service may be had, to remain irrevocable so long as any liability stand against corporation in State. Failure to comply renders each officer, agent and stockholder personally liable for all obligations against and contracts with corporation. Fee for filing foregoing, $25. An annual report must be filed with Secretary of State by Aug. 1, showing location of principal place of business in State, names and addresses of officers, when terms of service expire, kind of business transacted, failure to file such report being prima facie evidence in State that corporation has gone out of business. Secretary of State notifies corporation of default, and unless within 90 days report be filed, corporation's rights in State are cancelled. Blanks therefor to be procured from Secretary of State. Corporation having complied with all provisions, for fee of $5, certificate of authority is issued, and annual franchise tax imposed, 50 cents for each $1,000 of capital actually invested in transaction of business in State, exemption of $10,000 capital being allowed.

OHIO—File with Secretary of State on blanks prescribed by him, statement by an officer, or managing agent in Ohio, showing number and par value of capital shares, name and location of corporation's offices in Ohio, value of property owned and used in Ohio, proportion of capital stock represented by property owned and used in Ohio, from which Secretary of State determines what proportion shall be taxed in Ohio, franchise tax being one-tenth of 1 per cent. upon such proportion; upon payment of which Secretary of State issues certificate of authority to do business. Increases of capital stock to be reported to same official within 30 days, tax being one-tenth of 1 per cent. on proportional share of increase. Certificate of authority then issues. Failure to comply denies access to courts and involves liability of especial attachment under Ohio laws as foreign corporation, forfeit of $1,000 per month during furtner default, and cancellation of business rights. Fee for issuing certificate of authority by Secretary of State is $15 for capital stock up to $100,000, gradually increasing to $50 for $1,000,000 or more. Transaction of business before complying with requirements involves fine of $10 to $500 or imprisonment 10 days to six months, or both.

OKLAHOMA—Within 60 days after applying for admission to do business in Oklahoma, file with Secretary of State at Oklahoma City written sworn declaration designating place in State where legal processes may be served on designated agents; copies of corporation charter and by-laws with amendments from time to time within 60 days after such changes; annual report by Jan. 31, sworn, showing residence and address of some officer or agent within State, amount of capital stock actually paid, names of President and Secretary and members of Board of Directors with respective places of residence and addresses. Fee for filing first statement required, minimum $15; if capital stock $100,000, $50; increasing up to $300 if stock be $1,000,000, plus $10 for each additional $1,000,000. For filing annual report, minimum fee, $10 up to $5,000 capital stock, increasing up to $150 if stock exceed $2,000,000. Penalty for failure, added $10 per day for 60 days after which transaction of business prohibited.

OREGON—File with Corporation Commissioner at Salem sworn written declaration of purposes in engaging in business, name of State or county in which incorporated, amount of capital stock, nature of business in which corporation's charter authorizes it to engage, location in Oregon of principal office, name of its attorney in fact on whom legal processes may be served, names and addresses of principal officers, directors and trustees, name and address of principal agent in Oregon, certified copy of charter or articles of incorporation, with certified statement "by Secretary of State, of State or Territory, or of United States Ambassador or Consul" if corporation be of a foreign country, that articles of incorporation are valid, pay to Commissioner $50 for filing and recording, with annual license fee of $20 due by Aug. 15. Compliance entitles to certificate of authority from Commissioner of Corporations.

PENNSYLVANIA—File with Secretary of Commonwealth at Harrisburg sworn appointment of that official and his successors as attorney on whom legal processes may be served, and statement showing title and purpose of corporation, principal place of business in State, post office address to which Commonwealth Secretary may forward by mail legal processes which may be desired to be served against corporation, and, if principal place of business be changed, notice to be given to Secretary of Commonwealth. Fee for filing power of attorney for legal processes, $10. Penalty for failure, fine of $1,000, imprisonment 30 days, or both. Annual license tax, $250. Admission to do business in State requires also filing with Secretary of Commonwealth statement sworn showing in amplitude character of capital stock authorized, *re* all classes of stock, actual value in cash of entire property, assets and good will without deduction of encumbrances, actual cash value with deductions, character and location anywhere of tangible property of all kinds, amount invested in Pennsylvania with detailed description of each item for past five years, with dividends and net income for same period. Capital stock annual report requires statement of aforesaid details in full such as would be made to corporation's Board of Directors. Access to courts denied by failure to comply.

PHILIPPINE ISLANDS—Obtain from Bureau of Commerce and Industry at Manila license; preliminary requirements: File statement showing name, purpose of corporation, location of principal office, capital stock, amount actually subscribed and paid in, net assets over debts, liabilities, obligations and claims outstanding, name of resident agent to accept service, application for permission to enter Islands, signed by managing agent and acknowledged, resolution of Board of Directors authorizing agent to apply, resolution of Directors authorizing President or Vice President to execute power of attorney in favor of agent, copy of articles of incorporation duly certified. License fee, $25 to $300 for capital stock from $50,000 to more than $2,000,000. If corporation be unable at first to file all papers required, Bureau of Commerce and Industry may issue provisional license until papers are available; provisional license revocable at any time for cause.

PORTO RICO—File with Secretary of the Island at San Juan certified copy of charter or articles of incorporation, and statement verified under oath by majority of Board of Directors showing name, principal office in Porto Rico and elsewhere, objects of business, amount of authorized capital stock, amount of capital stock actually paid in in money, amount paid in otherwise and in what, amount of assets and what, with cash value, itemized statement of liabilities, indebtedness, how secured and on what, names and addresses of all officers and directors and when term of each expires. At same time file with same Island official, under seal of corporation and over signatures of corporation's President, Vice President, or other acting head, and of Secretary, certifying that said corporation consents to be sued in Island courts and that processes may be served upon some designated person, resident of Island, such agent to reside at principal place of business on Island. These requirements are conditions precedent to beginning business there. Notices must be given in same form as aforesaid of changes of agent by death or removal. Agent must file sworn written consent to such legal responsibility. Penalty for failure to comply, fine not less than $25 for each day of default, personal representatives to be guilty of misdemeanor. Annual sworn report to be filed by March 15 with Secretary of Island showing legal name, principal place of business in Porto Rico, object of corporation, amount of receipts in items, expenditures, liabilities by items, names of directors or trustees and officers, their addresses, dates of election and date of expiration of terms of service, amount of authorized capital stock, amount paid in in money, amount paid in otherwise and in what, amount of assets, character, with cash value, amount of liabilities and if secured how and on what property, "true and exact balance sheet showing financial condition at end of fiscal year," with income. Failure to file or to make report satisfactory to Treasurer of Porto Rico involves fine of $50, contempt of court and revocation of license to do business, Secretary of Island having authority to extend 60 days time for making annual report. Copy of articles of incorporation attested also to be filed. Fees for filing, 15 cents for each $1,000 of authorized capital stock, fee to be not less than $25 nor more than $500; for recording articles of incorporation, 20 cents for each 100 words; for issuing certificate of registration, $3; for filing certificate of increase or decrease of capital stock, $5; annual license fee, $25, due by July 1.

RHODE ISLAND—Pay $25 fee, plus negligible fees not more than $5 each for papers filed, to Secretary of State at Providence; file sworn copy in English language of articles of incorporation and all amendments thereto, name, principal place of business in State, character of business, amount of authorized, issued and outstanding capital stock as to each class of stock, names and addresses of directors and officers, with dates when terms of service expire, date for next annual meeting of stockholders, written power appointing competent person upon whom legal processes may be served, changes therein to be notified. Annual report by Feb. 28, certified by some officer under corporate seal, giving name, location of principal place of business in State, character of business, amount of authorized, issued and outstanding capital stock as to each class of stock, names and addresses of each officer and director, name and residence of resident attorney, date for next annual stockholders' meeting. Penalty for non-reporting, $200. If corporation cease to do business in State, it may revoke power of attorney, revocation not to affect liability existing against corpo-

ration. Penalty for non-filing of copy of articles of incorporation, fine of not more than $2,000 against every officer or agent who transacts business in State, no contract with corporation to be affected by non-filing.

SOUTH CAROLINA—Report to State Tax Commission at Columbia during February name of corporation, location of principal place of business, names and addresses of officers and directors, date of annual meeting, amount of authorized capital stock and par value of shares, amount of capital stock subscribed, issued, outstanding and paid up, nature of business, changes if any since last report, and other facts as required by Tax Commission. Annual license fee, one mill on each dollar "paid to the capital stock of said corporation," minimum fee to be $5, due within 30 days of notice from State Treasurer. Corporation may not retire from business in South Carolina without filing notice thereof with Secretary of State; fee, $5 for filing.

SOUTH DAKOTA—Annual fee $2 for filing report, and tax of $1 on each $1,000 of capital employed in State in excess of $25,000. File with Secretary of State at Pierre sworn copy of articles of incorporation, names, location of principal places of business within and without State, names and addresses of officers, and of agent or manager in State, amount of capital stock paid in in money, property or services, nature of business transacted, proportion of capital stock represented by property in State and by business transacted therein, and statement that corporation appoints Secretary of State its agent on whom legal processes may be served irrevocable so long as liability stand against corporation within State, statement of where corporation was authorized to do business in State where incorporated and whether still so authorized. Fee for filing articles, $25 and $1 for each $1,000 employed within State. File annual report by March 1 as of preceding Dec. 31, showing name, location principal place of business within and without State, names and addresses of officers and agent in State, nature of business transacted during preceding year, amount of capital stock paid in in money, services of property, amount of all business transacted in preceding year, with true value of all property held; amount of business transacted in State and proportion of capital stock employed in State. Failure to comply involves $500 forfeit and revocation of permission to do business.

TENNESSEE—File with Secretary of State at Nashville certified copy of articles of incorporation; fee, $20. Annual tax on foreign corporation, $50 up to $50,000 capital stock, rising to $1,000 if less than $5,000,000, and $1,500 if more than $5,000,000, with privilege tax of one-tenth of 1 per cent. on authorized capital stock. Fee for filing annual report, $5 up to $25,000 capital stock, rising to $150 if capital stock $1,000,000 or more. Reports due by July 1 to be on blanks supplied by Secretary of State.

TEXAS—File with Secretary of State at Austin copy of articles of incorporation certified, and all amendments thereto, showing under which State laws incorporated, amount of capital stock authorized, subscribed, and paid in, home office of said corporation, nature of business desired to transact, principal place of business in Texas, name of manager or agent in charge, number, names and addresses of present Board of Directors, accompanied by anti-trust affidavit executed by proper officers of corporation. Secretary of State has power to require to limit extent and character of business permitted to be done within State agreeable with his interpretation of Texas statutory requirements. Franchise tax, due by March 15, based on annual report as of preceding Dec. 31, $1 for each $1,000 up to $100,000 of capital stock, plus 50 cents for each $1,000 excess capital stock up to $1,000,000, plus 25 cents for each $1,000 in excess of $1,000,000, tax to be on proportion of such capital stock employed in Texas, total gross volume of business done in Texas to be determined by Secretary of State.

UTAH—File with clerk of county in which principal place of business in Utah is to be sworn copy of articles of incorporation, by-laws, appointment of resident agent on whom legal process may be served, acceptance of Constitution of Utah; amendments to articles likewise to be filed. Statement to show resolution by Board of Directors, attested, authorizing to enter State to do business. Annual license tax, precedent to issuance of certificate of authority by Secretary of State, at Salt Lake City, $5 for up to $10,000 authorized capital stock, increasing to $250 if more than $4,000,000 authorized. County clerk's fees, $5 plus 30 cents per page; Secretary of State, 25 cents per $1,000 of authorized capital stock, with $3 for filing by-laws.

VERMONT—Register with Commissioner of Foreign Corporations at Montpelier, obtain from him certificate of authority to do business in State; fee, $10; annual fee for renewal, $5. Annual license tax, $10 for $50,000 or less capital stock, increased $5 for each additional $50,000 or fraction thereof, until $100 maximum tax is reached.

VIRGINIA—File with Secretary of Commonwealth at Richmond written power of attorney appointing him and successors attorney to accept service against corporation in legal processes; file certified copy of such power of attorney with same State official; maintain an office in State from which all claims against corporation will be paid; also appoint an agent competent to accept legal service; file with same State official two attested copies of articles of incorporation; file with Auditor of Public Accounts statement showing that fees have been paid; obtain from Auditor certificate of authority to transact business, Auditor to judge as to corporation's compliance with Virginia laws involved. If articles of incorporation be amended, two attested copies of amendment to be filed with State Corporation Commission. Fee for registration not more than $25, failure to pay which and to make annual report forfeits right to do business. Transacting business in State before complying with preliminary requirements involves fine against corporation from $10 to $1,000, each transaction being separate offense, agents of corporation being personally liable for fines imposed on corporation. Fee for entrance into State $30 if capital stock be $50,000, gradually increasing to $5,000 if capital stock be over $90,000,000.

WASHINGTON—File with Secretary of State at Olympia certified copy of original articles of incorporation under seal of Secretary of State or other authorized official; fee for filing, $25; certified copy of each amendment; filing fee, $10; power of attorney to show appointment of resident agent; fee, $5; annual license fee due by July 1, $15. For failure to pay license fee, name of corporation is stricken from State records, thereafter any other corporation to have right to use name of delinquent corporation in State of Washington, additional penalty imposed of $20 for each year name shall have been stricken from records. Rights may be restored on payment of all due to State, plus $100 penalty.

WEST VIRGINIA—File with Secretary of State at Charleston certified copy of articles of incorporation, attested by Secretary of State of State in which incorporated or by President of corporation; file similar copy with clerk of one of the counties in which corporation conducts business in West Virginia; file with Secretary of State acceptance of responsibility if admitted to State, appoint State Auditor attorney of record, whereupon Secretary of State will issue certificate of authority which corporation must file with County Clerk in county wherein certified copy of articles was filed. Minimum costs of these filings, $166. Annual report to be made to Secretary of State as to capitalization, property owned and used in State.

WISCONSIN—File with Secretary of State at Madison copy of articles of incorporation and amendments thereto certified by Secretary of State of State where incorporated; sworn statement showing name, location of principal place of business within and without the State, amount of capital stock paid in in money, property or services, with authorized capital stock, nature of business to be done, proportion of capital stock represented in State, appoint Secretary of State attorney on whom legal service may be had, statement of when corporation was authorized to do business in State where incorporated and whether now so authorized, that corporation will comply with laws of State; pay to Secretary of State fee of $25 and $1 for each $1,000 of capital stock exceeding $25,000 employed in State. Amendments to articles to be filed with Secretary of State within 30 days after filing in State wherein incorporated. Failure to comply with provisions forfeits license to do business. Annual report to be filed with Secretary of State by April 1 showing name, location of principal place of business, names and addresses of officers and of agent in State, nature of business transacted, amount of capital stock paid in, authorized and outstanding,

WYOMING—File with Secretary of State at Cheyenne certified copy of articles of incorporation, certified copy of corporation law under which corporation was organized, acceptance of Constitution of Wyoming, certificate of designation of principal office and agent in Wyoming, blank forms to be supplied by Secretary of State. Certified copy of articles and corporation law under which organized to be filed with County Clerk of county in which principal office is to be. Fees—$10 if capital stock be $10,000 or less, gradually increasing to $25 for $100,000 and 20 cents for each additional $1,000; other filing fees total about $15. File with Secretary of State sworn statement of actual value of net assets, authorized capital stock. No franchise tax imposed.

## LAW OF CONTRACTS.

(General Provisions of the Statutes.)

**A Contract is an agreement of two or more parties** by which reciprocal rights and obligations are created. One party acquires a right, enforceable at law, to some act or forbearance from the other, who is under a corresponding obligation to thus act or forbear.

Generally speaking, all contracts which are made between two competent parties, for a proper consideration, without fraud and for a lawful purpose, are enforceable at law.

**To the creation of a valid contract** there must be:

1. Precise agreement. The offer of one party must be met by an acceptance by the other, according to the terms offered.

2. There must be a consideration. Something of value must either be received by one party or given up by the other.

3. The parties must have capacity to contract. The contracts of insane persons are not binding upon them. Married women are now generally permitted to contract as though single, and bind their separate property. The contracts of an infant are generally not binding upon him unless ratified after attaining his majority. The contracts of an infant for "necessaries" may be enforced against him to the extent of the reasonable value of the goods furnished. It is incumbent upon one seeking to hold an infant to show that the goods furnished were in fact necessary.

4. The party's consent must not be the result of fraud or imposition, or it may be avoided by the party imposed upon.

5. The purpose of the parties must be lawful. Agreements to defraud others, to violate statutes, or whose aim is against public policy, such as to create monopolies or for the corrupt procurement of legislative or official action, are void, and cannot be enforced by any party thereto.

**Contracts in general are equally valid whether made orally or in writing,** with the exception of certain classes of contracts, which in most of the States are required to be attested by a note or memorandum in writing, signed by the party or his agent sought to be held liable. Some of the provisions which are adopted from the old **English Statute of Frauds** vary in some States, but the following contracts very generally are required to be attested by some writing:

Contracts by their terms not to be performed within a year from the making thereof.

A promise to answer for the debt, default, or miscarriage of another person.

Contracts made in consideration of marriage, except mutual promises to marry.

Promise of an executor or administrator to pay debts of deceased out of his own property.

Contracts for the creation of any interest or estate in land, with the exception of leases for a short term, generally one year.

Contracts for the sale of goods above a certain value, unless a portion of the price is paid or part of the goods delivered. The required value of the goods sold varies in different States from $30 to $200. In a number of the States no such provision exists.

In many of the States, declarations or conveyances of trust estates.

In many States, representations as to the character, credit, or responsibility of another person.

**Actual performance of the contract** is generally held to dispense with the necessity for a writing.

**If the damages liable to result from the breaking of a contract are uncertain** the parties may agree upon a sum to which either may be entitled as compensation for a breach, which will be upheld by the courts, but if the sum so fixed is not designed as a fair compensation to the party injured, but as a penalty to be inflicted, it will be disregarded.

**A party is generally excused for the failure to perform** what he has agreed only by the act of God or the public enemy, except in cases involving a personal element in the work to be performed, such as the rendition of services, when the death or sickness of the party contracting to perform them is a valid excuse.

## PROMISSORY NOTES AND CHECKS.

(A Brief Summary of Laws Relating Thereto.)

**Negotiable instruments,** the common forms of which are promissory notes, checks, or other bills of exchange, while having the same general requisites as other contracts, have certain distinct features. The purpose of the law is to facilitate as much as possible their free passing from hand to hand like currency. The assignment of an ordinary contract leaves the assignee in no different position for enforcing his rights than that of his assignor, but one who takes a negotiable instrument from a prior holder, without knowledge of any defences to it, before its maturity, and gives value for it, holds it free of any defences which might have been set up against his predecessors, except those defects that were inherent in the instrument itself.

**To be negotiable** an instrument must be in writing and signed by the maker (of a note) or drawer (of a bill or check).

**It must contain** an unconditional promise or order to pay a sum certain in money.

Must be payable on demand, or at a fixed future time.

Must be payable to order or to bearer.

In a bill of exchange (check) the party directed to pay must be reasonably certain.

Every negotiable instrument is presumed to have been issued for a valuable consideration, and want of consideration in the creation of the instrument is not a defence against a bona fide holder.

**An instrument is negotiated,** that is completely transferred, so as to vest title in the purchaser, if payable to bearer, or indorsed simply with the name of the last holder, by mere delivery, if payable to order by the indorsement of the party to whom it is payable and delivery.

One who transfers an instrument by indorsement warrants to every subsequent holder that the instrument is genuine, that he has title to it, and that if not paid by the party primarily liable at maturity, he will pay it upon receiving due notice of non-payment.

**To hold an indorser liable** the holder upon its non-payment at maturity must give prompt notice of such non-payment to the indorser and that the holder looks to the indorser for payment. Such notice should be sent within twenty-four hours.

**When an indorser is thus compelled to pay** he may hold prior parties through whom he received the instrument liable to him by sending them prompt notice of non-payment upon receiving such notice from the holder.

One who transfers a negotiable instrument by delivery, without indorsing it, simply warrants that the instrument is genuine, that he has title to it, and knows of no defence to it, but does not agree to pay it if unpaid at maturity.

**The maker of a note is liable** to pay it if unpaid at maturity without any notice from the holder or indorser.

Notice to one of several partners is sufficient notice to all.

**When a check is certified** by a bank the bank becomes primarily liable to pay it without notice of its non-payment, and when the holder of a check thus obtains its certification by the bank, the drawer of the check and previous indorsers are released from liability, and the holder looks to the bank for payment.

**A bona fide holder** of a negotiable instrument, that is, a party who takes an instrument regular on its face, before its maturity, pays value for it and has no knowledge of any defences to it, is entitled to hold the party primarily liable responsible for its payment, despite any defences he may have against the party to whom he gave it, except such as rendered the instrument void in its conception. Thus, if the maker of a note received no value for it or was induced to issue it through fraud or imposition, they do not defeat the right of a bona fide holder to compel its payment from him.

**The following States have enacted a** similar Negotiable Instrument Law: Alabama, Arizona, Colorado, Connecticut, Dist. of Columbia, Florida, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maryland, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Oregon, Pennsylvania, Rhode Island, Tennessee, Utah, Virginia, Washington, and Wisconsin—and the same general rules apply in all the States.

## ARREST IN CIVIL ACTION.

WHILE imprisonment for debt as it formerly existed in English and American law, by which a debtor might be arrested and imprisoned for mere inability to pay his creditor, no longer exists in the United States, the statutes of the majority of the States provide for the arrest of a defendant in a civil action under varying conditions. A large number of States determine the right of arrest by the character of the claim on which suit is brought, allowing in it actions for fraud or the injuries known in the law as "torts," such as an injury to the person or property, conversion or embezzlement, libel, slander, or the like.

In the following States no civil arrest is allowed: Arizona, District of Columbia, Florida, Maryland, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, Tennessee, and Texas.

In the following States the right to arrest depends upon the nature of claim in suit: In actions for fraud or torts, Connecticut; for fraud, libel, slander, or violent injury to person or property, Delaware; for fraud only, Iowa and Kansas; only after verdict of jury, finding malice, fraud, or wilful deceit, Colorado; for torts, breach of promise to marry, misconduct or embezzlement in office or professional capacity, Michigan, Pennsylvania, and New York (also for fine or penalty or to recover property concealed from Sheriff).

In the following States arrest is only allowed against a defendant about to remove from State or about to conceal, transfer, or remove his property to avoid plaintiff's claim or defraud creditors, irrespective of the nature of the claim: Indiana, Kentucky, Louisiana, New Hampshire, Utah, Virginia; In New Hampshire tax collector may also arrest person for non-payment of poll tax if not sufficient property upon which to make distress.

In the following States arrest is allowed in contract actions where the defendant is about to depart from the State or conceal or remove his property, and also in actions for fraud or torts of various kinds, though the provisions are not identical: Arkansas (fraud only), California, Idaho, Illinois, Maine, Massachusetts, Montana, Nevada, New Jersey, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Vermont, Washington, West Virginia (fraud only), Wisconsin.

In Georgia arrest only allowed against attorneys, Sheriffs or other officers of the court for failure to pay over money collected, and in certain circumstances against defendant who conceals property from Sheriff. The drawer of a check on which, on presentation to the bank, payment is refused is guilty of a misdemeanor.

In Wyoming (only after judgment) in actions for fraud, or money lost at gambling, or where defendant has removed or concealed property to avoid judgment.

In Rhode Island, allowed in all actions except to recover debt or taxes.

In Ohio, when an affidavit is filed showing: About to remove property to defraud creditors, convert property into money for same purpose, conceal property or rights in action fraudulently, assigned or disposed of property with intent to defraud creditors. Fraudulently contracted the debt, or incurred the obligation. Money or property sought to be recovered was in gambling on a bet or wager.

## INTEREST LAWS AND STATUTES OF LIMITATIONS.

| STATES AND TERRITORIES. | INTEREST LAWS. | | STATUTES OF LIM. | | | STATE AND TERRITORIES. | INTEREST LAWS. | | STATUTES OF LIM. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Legal Rate. | Rate Allowed by Contract. | Judgments, Years. | Notes, Years. | Open Accounts, Years. | | Legal Rate. | Rate Allowed by Contract. | Judgments, Years. | Notes, Years. | Open Accounts, Years. |
| | Per Ct. | Per Ct. | | | | | Per Ct. | Per Ct. | | | |
| Alabama... | 8 | 8 | 20 | 6 | 3 | Montana... | 8 | 10 | 10 | 8 | 5 |
| Alaska.... | 8 | 12 | 10 | 6 | 6 | Nebraska.. | 7 | 10 | 5 | 5 | 4 |
| Arkansas... | 6 to 10 | 0 to 10 | 10 | 5 | 3 | Nevada.... | 7 | 7 | 6 | 6 | 4 |
| Arizona.... | 6 | 10 | 4 | 4 | 3 | N. Hamp.. | 6 | 6† | 20 | 6 | 6 |
| California.. | 7 | 12 | 5 | 4 | 4 | New Jersey | 6 | 6 | 20 | 6 | 6 |
| Colorado... | 8 | 12 | 20 | 6 | 6 | New Mex.. | 10 | 12 | 7 | 6 | 4 |
| Connec'cut. | 6 | 6 | (*k*) | 6 | 6 | New York.. | 6 | 6†† | 20(*f*) | 6 | 6§ |
| Delaware.. | 6 | 6 | 10(*h*) | 6 | 3 | N. Carolina | 6 | 6 | 10 | 3* | 3 |
| Dist of Col. | 6 | 8 | 12 | 3 | 3 | N. Dakota. | 6 | 10 | 10 | 6 | 6 |
| Florida.... | 8 | 10 | 20 | 5‡ | 3 | Ohio..... | 6 | 8 | 21 | 15 | 6 |
| Georgia.... | 7 | 8 | 7 | 6 | 4‡ | Oklahoma.. | 6 | 10 | 5 | 5 | 3 |
| Hawaii.... | 8 | 12 | 20 | 6 | 6 | Oregon.... | 6 | 10 | 10 | 6 | 6 |
| Idaho..... | 7 | 10 | 6 | 5 | 4 | Pa..... | 6 | 6 | 5 (*f*) | 6‡ | 6 |
| Illinois.... | 5 | 7 | 7 | 10 | 5 | Porto Rico. | 6 | 12(*e*) | 5 | 3 | 3 |
| Indiana.... | 6 | 8 | 20 | 10 | 6 | Rhode Isl.. | 6† | Any rate. | 20 | 6 | 6 |
| Iowa..... | 6 | 8 | 20 | 10 | 5 | S. Carolina. | 7 | 8 | 10 | 6 | 6 |
| Kansas.... | 6 | 10 | 5 | 5 | 3 | S. Dakota.. | 7 | 12 | 20 | 6 | 6 |
| Kentucky.. | 6 | 6 | 5 | 15 | 2 | Tennessee.. | 6 | 6 | 10 | 6 | 6 |
| Louisiana.. | 5 | 8 | 10 | 5 | 3 | Texas..... | 6 | 10 | 10 | 4 | 2-4 |
| Maine..... | 6 | 12 | 6-20 | 6-20 | 6 | Utah..... | 8 | 12 | 8 | 6 | 4 |
| Maryland.. | 6 | 6 | 12 | 3 | 3 | Vermont... | 6 | (*m*) | 6 | 6 (*n*) | 6 |
| Mass..... | 6 | Any rate. | 6 (*c*) | 6 | 6 | Virginia.... | 6 | 6 | 20 | 5* | 3 |
| Michigan.. | 5 | 7 | 10 | 6 | 6 | Washington | 6 | 12 | 6 | 6 | 3 |
| Minnesota. | 6 | 10 | 10 | 6 | 6 | W. Virginia | 6 | 6 | 10 | 10 | 5 |
| Mississippi. | 6 | 8 | 7 | 6 | 3 | Wisconsin.. | 6 | 10 | 20 (*b*) | 6 | 6 |
| Missouri... | 6 | 8 | 10 | 10 | 5 | Wyoming.. | 8 | 12 | 10 | 10 | 8 |

* Under seal, 10 years. † Unless a different rate is expressly stipulated. ‡ Under seal, 20 years. †† New York has legalized any rate of interest on call loans of $5,000 or upward on collateral security. § Six years from last item on either side. (*a*) Judgments, 6 per cent. (*b*) Justice Court judgments, 6 years. (*c*) Witnessed, 20 years. (*d*) Thirty-five years in Courts of Record, eighteen years in inferior courts. (*e*) Pawnbrokers, 4 per cent. per month. (*f*) Ceases to be a lien after the period unless revived. (*h*) Subject to renewal. (*j*) Not of record, 6 years. (*k*) No limit. (*m*) No statute. (*n*) Except witnessed promissory note, 14 years.

In New York a judgment ceases after 10 years to be a lien on real estate.

### PENALTIES FOR USURY.

Penalties for usury differ in various States. California, first offense fine of $25 to $300, or prison, not over 6 months or both; subsequent offenses fine $100 to $500, or prison 6 months to year. Colorado, fine not over $300, and prison not over 6 months. Maine, Massachusetts (except on loans of less than $1,000), have no provisions on the subject. Loss of *principal and interest* is the penalty in Arkansas and New York. Loss of principal in Delaware and in Oregon entire debt.

Loss of interest in Alabama, Arizona, District of Columbia, Florida, Idaho, Illinois, Iowa, Louisiana, Michigan, Mississippi, Nebraska, New Jersey, North Carolina (double amount if paid), North Dakota (double amount if paid), Porto Rico, South Carolina, Virginia, Washington (double amount if paid), Wisconsin, and Wyoming. In Alaska, Montana, Oklahoma, Texas, Vermont, double the amount of interest collected. In Minnesota usurious contract is void. Borrower may lose both principal and interest. In South Dakota taking over 10% on real estate loan punishable by fine of not over $500.

Loss of excess of interest in Connecticut, Georgia, Indiana, Kansas, Kentucky, Maryland, Missouri, Nevada, Ohio, Pennsylvania, Tennessee, Vermont and West Virginia. Loss of principal and interest in Rhode Island, not over 30% of amount exceeding $50 or more than 5% per month for first six months of amount less than $50. In New Mexico, fine and forfeiture of double amount collected.

By the Federal act No. 103, the period of military service is to be excluded from the computation of time limited for the bringing of an action by or against persons in the service.

## ACKNOWLEDGMENT OF DEEDS.

AN ACKNOWLEDGMENT is the act of declaring the execution of an instrument before an officer authorized to certify to such declaration. The officer certifies to the fact of such declaration, and to his knowledge of the person so declaring. Conveyances or deeds of land to be entitled to be recorded must first be acknowledged before a proper officer. Most of the States have forms of acknowledgments, which should be followed.

Acknowledgments may be taken in general by Notaries Public, Justices of the Peace, Judges or Clerks of Courts of the higher grades, Registers, Masters in Chancery, Court Commissioners, Town Clerks, Mayors and Clerks of incorporated cities, within their respective jurisdictions.

The requisities to a valid deed are the same in general as other contracts, but the appointment of an attorney to execute a deed for another person must in general be executed with the same formalities requisite to the deed itself.

SEALS or their equivalent (or whatever is intended as such) are necessary in Alaska, Connecticut, Delaware, District of Columbia, Florida, Idaho, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Oregon, Pennsylvania, South Carolina, Vermont, Virginia, West Virginia, Wisconsin, Wyoming. In almost all the States deeds by corporations must be under seal. FORMS are prescribed or indicated by the statutes of most of the States except Connecticut, Florida, Louisiana. SEPARATE ACKNOWLEDGMENT by wife is required in Alaska, Arkansas, Delaware, District of Columbia, Florida, Georgia, Idaho, Kentucky, Louisiana, Montana, Nevada, New Jersey, North Carolina, Oregon, Pennsylvania, South Carolina, Tennessee, Texas. ONE WITNESS to the execution of deeds is required in District of Columbia, Maine (customary), Maryland, Nebraska, New Jersey (usual), Oklahoma, Utah, Wyoming. TWO WITNESSES to the execution of deeds are required in Arkansas, Connecticut, Florida, Georgia, Louisiana, Michigan, Minnesota, New Hampshire, Ohio, Oregon, South Carolina, Texas, Vermont, Wisconsin.

## THE BANKRUPTCY LAW.

(Extracts from the United States Bankruptcy Act of July 1, 1898, as amended by subsequent acts.)

SEC. 4. WHO MAY BECOME BANKRUPTS.—(*a*) Any person, except a municipal, railroad, insurance or banking corporation, shall be entitled to the benefits of this act as a voluntary bankrupt.

(*b*) Any natural person, except a wage-earner or a person engaged chiefly in farming or the tillage of the soil, any unincorporated company, and any moneyed, business, or commercial corporation, except a municipal, railroad, insurance, or banking corporation, owing debts to the amount of one thousand dollars or over, may be adjudged an involuntary bankrupt upon default or an impartial trial, and shall be subject to the provisions and entitled to the benefits of this act.

### OFFICERS AND STOCKHOLDERS OF CORPORATIONS ARE LIABLE.

The bankruptcy of a corporation shall not release its officers, directors, or stockholders, as such, from any liability under the laws of a State or Territory or of the United States. (30 Stat. 547. 32 Stat. 797. 36 Stat. 839.

SEC. 7. DUTIES OF BANKRUPTS.—(*a*) The bankrupt shall (1) attend the first meeting of his creditors, if directed by the court or a Judge thereof to do so, and the hearing upon his application for a discharge, if filed; (2) comply with all lawful orders of the court; (3) examine the correctness of all proofs of claims filed against his estate; (4) execute and deliver such papers as shall be ordered by the court; (5) execute to his trustee transfers of all his property in foreign countries; (6) immediately inform his trustee of any attempt, by his creditors or other persons, to evade the provisions of this act, coming to his knowledge; (7) in case of any person having to his knowledge proved a false claim against his estate, disclose that fact immediately to his trustee; (8) prepare, make oath to, and file in court within ten days, unless further time is granted, after the adjudication if an involuntary bankrupt, and with the petition if a voluntary bankrupt, a schedule of his property, showing the amount and kind of property, the location thereof, its money value, in detail, and a list of his creditors, showing their residences, if known (if unknown that fact to be stated), the amount due each of them, the consideration thereof, the security held by them, if any, and a claim for such exemptions as he may be entitled to, all in triplicate, one copy of each for the clerk, one for the referee, and one for the trustee; and (9) when present at the first meeting of his creditors, and at such other times as the court shall order, submit to an examination concerning the conducting of his business, the cause of his bankruptcy, his dealings with his creditors and other persons, the amount, kind, and whereabouts of his property, and, in addition, all matters which may affect the administration and settlement of his estate; but no testimony given by him shall be offered in evidence against him in any criminal proceedings.

### WHEN BANKRUPT MAY COLLECT ACTUAL TRAVELLING EXPENSES.

Provided, however, that he shall not be required to attend a meeting of his creditors, or at or for an examination at a place more than one hundred and fifty miles distant from his home or principal place of business, or to examine claims except when presented to him, unless ordered by the court, or a Judge thereof, for cause shown, and the bankrupt shall be paid his actual expenses from the estate when examined or required to attend at any place other than the city, town, or village of his residence.

### ALLOWABLE DEBTS.

SEC. 63. DEBTS WHICH MAY BE PROVED.—(*a*) Debts of the bankrupt may be proved and allowed against his estate which are (1) a fixed liability as evidenced by a judgment or an instrument in writing, absolutely owing at the time of the filing of the petition against him, whether then payable or not, with any interest thereon which would have been recoverable at that date, or with a rebate of interest upon such as were not then payable and did not bear interest; (2) due as costs taxable against an involuntary bankrupt who was at the time of the filing of the petition against him plaintiff in a cause of action which would pass to the trustee and which the trustee declines to prosecute after notice; (3) founded upon a claim for taxable costs incurred in good faith by a creditor before the filing of the petition in an action to recover a provable debt; (4) founded upon an open account, or upon a contract express or implied; and (5) founded upon provable debts reduced to judgments after the filing of the petition and before the consideration of the bankrupt's application for a discharge, less costs incurred and interest accrued after the filing of the petition and up to the time of the entry of such judgments.

(*b*) Unliquidated claims against the bankrupt may, pursuant to applications to the court, be liquidated in such manner as it shall direct, and may thereafter be proved and allowed against his estate.

### DEBTS NOT AFFECTED BY A DISCHARGE IN BANKRUPTCY.

(Amendment approved by the President and in effect January 7, 1922.)

A discharge in bankruptcy shall release a bankrupt from all of his provable debts, except such as (first) are due as a tax levied by the United States, the State, county, district, or municipality in which he resides; (second) are liabilities for obtaining property by false pretenses or false representation, or for wilful and malicious injuries to the person or property of another, or for alimony due or to become due, or for maintenance or support of wife or child, or for seduction of an unmarried female, or for breach of promise of marriage accompanied by seduction, or for criminal conversation; (third) have not been duly scheduled in time for proof and allowance, with the name of the creditor, if known to the bankrupt, unless such creditor had notice or actual knowledge of the proceedings in bankruptcy, or (fourth) were created by his fraud, embezzlement, misappropriation, or defalcation while acting as an officer or in any fiduciary capacity; or (fifth) are for wages due to workmen, clerks, travelling or city salesmen, or servants, which have been earned within three months before the date of commencement of the proceedings in bankruptcy; or (sixth) are due for moneys of an employee received or retained by his employer to secure the faithful performance by such employee of the terms of a contract of employment.

## WILLS.

A WILL OR TESTAMENT is a final disposition of a person's property, to take effect after his death. A codicil is an addition or alteration in such disposition. All persons are competent to make a will except idiots, persons of unsound mind, and infants. In many States a will of an unmarried woman is deemed revoked by her subsequent marriage. A nuncupative or unwritten will is one made *orally* by a soldier in active service, or by a mariner while at sea.

In most of the States a will must be in writing, signed by the testator, or by some person in his presence, and by his direction, and attested by witnesses, who must subscribe their names thereto in the *presence* of the testator. The form of wording a will is immaterial as long as its intent is clear.

Age at which persons may make wills is in most of the States 21 years. Males and females are competent to make wills at 18 years in the following States: California, Connecticut, Idaho, Montana, Nevada, North Dakota, Oklahoma, South Dakota, Utah and the Hawaiian islands; and in the following States only females at 18 years: Colorado, District of Columbia, Illinois, Maryland, Missouri, Washington, Wisconsin.

In the following States persons of 18 years may dispose of personal property only: Alabama, Arkansas, Missouri, Oregon, Rhode Island, Virginia, West Virginia; in Georgia and Ohio over 14 years and in Louisiana any one over 16 years, is competent to make a will. In Colorado, persons of 17 years, and in New York males of 18 and females of 16 years may dispose of personalty. Witnesses—Most of the States require two witnesses, except in Connecticut (3), Maine (3), Massachusetts (3), New Hampshire (3), South Carolina (3), Vermont (3).

## ADMINISTRATION OF DECEASED PERSONS ESTATES.

THE following is a synopsis of the laws of the various States affecting the administration of the estate of a deceased person:

1. Who to Administer.—(a) If the deceased leaves a will, the duty of administration falls upon the executor. If no executor is named, or in the event of the death or refusal of the executor to act, the Court will grant administration under the will to some suitable person, generally selected from those most largely interested under the provisions of the will, such as the residuary legatees, if any. (b) If the deceased died intestate, letters of administration are granted to the following persons in practically all the States:

First—To the surviving husband or widow.

Second—To one or more of the next of kin entitled to share in the estate.

Third—If none of the above consent to act, to one of the creditors of the estate, except in localities where there is provided by law a Public Administrator, who is preferred to creditors.

In practically all the States an administrator is required to give bond for the faithful performance of his duties in double the value of the estate to be administered.

In most of the States, if so provided by the will, no bond is required of an executor, except that in some States an executor is required to give a bond to cover the probable amount of the debts of the estate, and in practically all the States, in the discretion of the Court, for cause shown, an executor may be required to give a bond.

2. Claims of Creditors.—The procedure in the several States in presenting creditors' claims against the estate varies very considerably. In the majority of the States the executor or administrator is required promptly to give public notice to creditors to present their claims to him, and the creditors are required so to present their claims supported by an affidavit that the same are justly due and owing from the estate, above any offsets or counter claims, within a period limited generally to six months or a year. The law of each State should be consulted for more specific details. Most of the States direct a final closing of the estate by the executor or administrator within a year or eighteen months after his appointment, though the time limit may be extended by the Probate Court if conditions require it.

3. The following table contains an analysis of the laws of the several States, covering:

(1) The inheritance or succession tax upon property received either by intestate laws, last will, or by gift or transfer, designed to take effect at death, excepting legacies for religious, charitable or educational purposes, which are tax exempt in most of the States. In the great majority of the States no distinction as to tax is made between real estate and personal property.

(2) The various classes of estate obligations given priority over other claims in case of the insolvency of the estate.

NOTE—*Tax* when used below means Inheritance Tax, and *Obligations* means Preferred Obligations.

ALABAMA—*Tax*—None. *Obligations*—1, Funeral expenses; 2, administration expenses; 3, expenses of last sickness; 4, taxes; 5, wages of servants or employes.

ALASKA—*Tax*—Primary rates: On amounts up to $15,000; to wife or lineal issue, 1%; to husband or lineal ancestor, 1½%; to brother or sister or descendant of such, wife or widow of son, or husband of daughter, 3%; brother or sister of father or mother, or descendant of such, 4%; other collaterals, or strangers, or body politic or corporate, 5%. On amounts $15,000 to $30,000, double primary rates; $30,000 to $50,000, 2½ times; $50,000 to $100,000, 3 times; over $100,000, 3½ times primary rates. Exemptions, to widow, husband, lineal issue (including adopted children), $10,000; to lineal ancestors, $3,000; to collaterals, $1,000; charitable transfers to hospitals, schools, etc., $2,500. *Obligations*—1, Funeral expenses; 2, administration expenses; 3, expenses of last sickness; 4, taxes; 5, wages of servants or employees.

ARIZONA—*Tax*—To grandfather, grandmother, parents, husband, wife, child, brother, sister, son-in-law, or daughter-in-law, lineal descendant, or adopted child, 1%; $5,000 exempt to each beneficiary above named. Estates less than $10,000 exempt. To uncle, aunt, nephew, niece or descendant thereof, 2%; $2,000 exempt to each beneficiary named. Estate less than $5,000 exempt. To others, 3% up to $10,000; 4% from $10,000 to $20,000; 5% from $20,000 to $50,000; 6% above $50,000. $500 exempt. *Obligations*—No statutory provision.

ARKANSAS—*Tax*—On amounts not exceeding $5,000 the rate is 1% to parents, husband or wife, child or adopted child, lineal descendant, brother, sister, son-in-law or daughter-in-law. To all others the rate on the same amount is 4%. $3,000 passing to widow or minor child and $1,000 passing to the other immediate relatives mentioned is exempt. The exemption to others more remote is $500. On amounts in excess of $5,000 the primary rates (1% and 4% respectively) are increased as follows: From $5,000 to $10,000, twice the primary rates; from $10,000 to $30,000, 3 times the primary rates; from $30,000 to $50,000, 4 times; $50,000 to $100,000, 5 times; $100,000 to $500,000, 6 times; $500,000 to $1,000,000, 7 times; above $1,000,000, 8 times. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, wages of servants; 4, judgments which are liens on land of deceased; 5, all debts due by estate, including taxes, cost of administration, etc.; 6, Federal Estate tax.

CALIFORNIA—*Tax*—To husband, wife, descendants, ancestors, adopted children or issue thereof, 1% up to $25,000; 2% from $25,000 to $50,000; 4% from $50,000 to $100,000; 7% $100,000 to $200,000; 10% $200,000 to $500,000; 12% above $500,000. $24,000 is exempt to widow or minor child; to others in this paragraph $10,000 is exempt. Property received by any one belonging in this classification from a member of this class who died within five years and having paid a tax thereon is exempt. To brothers, sisters, or their descendants, or to a son-in-law or daughter-in-law, 3% up to $25,000; upon the increasing amounts in the preceding paragraph the rates are 6%, 9%, 12%, 15% and 18%. $2,000 exempt from tax. To uncles, aunts, or their descendants, 4% up to $25,000; the rates increase, as above, up to $200,000 as follows: 8%, 10% and 15%; above $200,000, the rate is 20%. $1,000 exemption. To others more remote in blood, 5% up to $25,000; the rates increase as above up to $100,000 as follows: 10% and 15%; above $100,000 the rate is 20%. $500 exemption. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, wages due within 60 days; 4, debts preferred by U. S. laws; 5, judgments, mortgages and other liens.

COLORADO—*Tax*—Direct heirs—Father, mother, husband, wife, child, adopted child or descendants, in excess of exemption ($20,000 for widow, others $10,000) up to $50,000, 2%; to $100,000, 3%; to $150,000, 4%; to $250,000, 5%; to $500,000, 6%; over $500,000, 7%. Wife or widow of son, husband or widower of daughter, grandfather or grandmother, brother, sister, in excess of exemption ($2,000) up to $10,000, 3%; to $25,000, 4%; to $50,000, 5%; to $100,000, 6%; to $250,000, 7%; to $500,000, 8%; over $500,000, 10%. Uncle, aunt, nephew or niece or descendant, in excess of $500, up to $5,000, 4%; to $10,000, 5%; to $25,000, 6%; to $100,000, 8%; to $250,000, 10%; to $500,000, 12%; over $500,000, 14%. Strangers, all others, in excess of $500, up to $5,000, 7%; to $10,000, 8%; to $25,000, 9%; to $100,000, 10%; to $250,000, 12%; to $500,000, 14%; over $500,000, 16%. *Obligations*—1, Moneys held in a fiduciary capacity; 2, reasonable administration expenses; 3, expenses for funeral and last sickness; 4, allowances to widow and orphans.

CONNECTICUT—*Tax*—To husband, wife, parent, grandparents, descendants, adopted parent, adopted child or its descendants, $10,000 to $25,000, 1%; $25,000 to $100,000, 2%; $100,000 to $200,000, 3%; in excess of $200,000, 4%. To brothers, sisters or their descendants, step-child, son-in-law or daughter-in-law, $3,000 to $25,000, 2%; $25,000 to $100,000, 3%; $100,000 to $200,000, 4%; in excess of $200,000, 5%. To any person, corporation or association not included in above, $500 to $25,000, 5%; $25,000 to $100,000, 6%; $100,000 to $200,000, 7%; in excess of $200,000, 8%. *Obligations*—1, Funeral and administration expenses; 2, expenses of last sickness; 3, taxes; 4, wages within three months; 5, other preferred claims by State laws.

DELAWARE—*Tax*—To grandparents, parents, husband or wife, child or descendant, son- or daughter-in-law, or adopted child, $3,000 exempt. Rates on excess, 1% up to $30,000; 2%, $30,000 to $100,000; 3%, $100,000 to $200,000; 4%, above $200,000. To brother, sister, uncle, aunt, great-uncle, great-aunt or their descendants, $1,000 exempt. Rates on excess, 2% up to $25,000; 3%, $25,000 to $100,000; 4%, $100,000 to $200,000; 5% above $200,000. To others more remote, 5% up to $25,000; 6%, $25,000 to $100,000; 7%, $100,000 to $200,000; 8%, above $200,000. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, wages to servants and laborers; 4, rent (not over one year); 5, judgments; 6, obligations of record; 7, obligations under seal; 8, contracts for payment of money or delivery of goods.

DISTRICT OF COLUMBIA—*Tax*—None (see also United States, end of table). *Obligations*—1, Judgments or decree of Court; 2, other debts.

FLORIDA—*Tax*—None. *Obligations*—1, Administration expenses; 2, funeral expenses; 3, expenses of last sickness; 4, judgments and debts due to State.

GEORGIA—*Tax*—Exemption of $5,000 to widow, widower, child, son-in-law, daughter-in-law or adopted child; of $2,000 to lineal descendants and lineal ancestors. All bequests to purely educational, literary, scientific, religious and charitable purposes are exempt. In excess of exemption up to $25,000, 1%; to brothers, sisters and step-children, 3% of first $25,000; to uncles, aunts, nephews and nieces, 5%; to all others, 7%. On second $25,000, one and one-half times primary rate; over $50,000 and not over $100,000, twice primary rate; $100,000 to $500,000, two and one-half times primary rate; in excess of $500,000, three times the primary rate. *Obligations*—1, Year's support of family; 2, expenses of funeral and last sickness; 3, administration expenses; 4, taxes; 5, fiduciary obligations; 6, judgments, mortgages and other liens; 7, rent; 8, liquidated demands.

IDAHO—*Tax*—Tax on estates less than $25,000 at following rates: To husband or wife, lineal issue or ancestor, adopted child or its issue, 1%; exempt to widow or minor child, $10,000; to others of this class, exempt $4,000. To brother or sister, or their descendants, or wife or widow of son, or husband of daughter, 1½%; exempt, $2,000. To uncles, aunts or descendants, 3%; exempt, $1,500. To great-uncles, great-aunts or descendants, 4%; exempt, $1,000. To more distant relatives or strangers in blood, 5%; exempt, $500. On larger estates than $25,000 the above rates are multiplied as follows: $25,000 to $50,000, 1½ times above; $50,000 to $100,000 2 times above; $100,000 to $500,000, 2½ times above; $500,000 and upward, 3 times above. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, debts preferred by U. S. laws; 4, judgments and mortgages.

ILLINOIS—*Tax*—To parents, lineal ancestors, husband, wife, child, brother or sister, on amounts in excess of exemption up to (and including) $50,000, 2%; on next $100,000, or fraction, 4%; on next $100,000, 6%; on next $250,000, 10%; on over $250,000, 14%; exemption is $20,000, except brother and sister, $10,000. To uncle, aunt, niece, nephew and lineal descendants of such, up to (and including) $20,000 in excess of exemption, 6%; on next $50,000, 8%; on next $100,000, 12%; over $170,000, 16%. Exemption is $500. In all other cases on amounts in excess of exemption up to $20,000, 10%; on next $30,000, 12%; on next $50,000, 16%; on next $50,000, 20%; on next $100,000, 24%; on balance over above, 30%. Exemption in this class, $100. Bequests to charitable, religious and educational institutions wholly exempt. *Obligations*—1, Funeral and administration expenses; 2, allowance to widow and children; 3, expenses of last sickness, except doctor's bill and wages to servants; 4, debts to common school or township funds; 5, doctor's bill, last sickness; 6, money owed in fiduciary capacity.

INDIANA—*Tax*—On amounts not exceeding $25,000, the primary rates are: To husband, wife, ancestor, descendant, adopted child, or its descendants, 1%. Exempt, $15,000 to widow and $2,000 to other parties just named, except descendants' children under 18, $5,000. To brother, sister or their descendants, or to son-in-law or daughter-in-law, 2%; exempt $500. To uncle, aunt or their descendants, 3%; exempt $250. To great-uncle, great-aunt or their descendants, 4%; exempt $150. To others more remote, 5%; exempt $100. On larger amounts the primary rates are multiplied as follows: From $25,000 to $50,000, 2 times; from $50,000 to $300,000, 3 times; from $300,000 up, 4 times. *Obligations*—1, Administration expenses; 2, funeral expenses; 3, expenses of last sickness; 4, taxes; 5, debts secured by liens on real estate; 6, wages, not over $50.

IOWA—*Tax*—Direct inheritance—Over exemption, graduated tax; 1% on the first $15,000, 1½% on next $15,000, 2% on next $15,000, 2½% on next $30,000, 3% on next $30,000, 4% on next $60,000, 5% on next $60,000, 6% on next $60,000, 7% on the balance. Exemptions—Husband or wife, one-third of net estate plus $15,000; each direct heir, $15,000. Collateral Inheritance—Parents, husband or wife, lineal descendants, adopted child or issue thereof, exempt; to others above $1,000, 5% up to $100,000; 6% to $200,000; 7% in excess of $200,000. *Obligations*—1, Debts preferred by U. S. laws; 2, public rates and taxes; 3, wages within 90 days of death; 4, claims filed within six months after notice.

KANSAS—*Tax*—To husband, wife, lineal ancestor, lineal descendant, wife or widow of same: On first $25,000, 1%; on second $25,000, 2%; on next $50,000, 3%; on next $400,000, 4%; on all over $500,000, 5% (except in case of wife of decedent one-half of above rates). To brothers and sisters, on first $25,000, 3%; on second $25,000, 5%; on next $50,000, 7½%; on next $400,000, 10%; on all over $500,000, 12½%. To relatives of all degrees other than as above, and to strangers, on first $25,000, 5%; on second $25,000, 7½%; on next $50,000, 10%; on next $400,000, 12½%; on all over $500,000, 15%. *Obligations*—1, Funeral expenses; 2, expenses of last sickness, administration expenses, wages of servants; 3, debts due to State; 4, judgments; 5, all demands presented within one year after letters of administration; 6, demands presented after one year and before two years.

KENTUCKY—*Tax*—On amounts not exceeding $25,000, the primary rates are: To husband, wife, ancestor, descendant, adopted child, 1%. $10,000 exempt to widow and each minor child, to others in this class $5,000 exempt. To brother, sister, or their descendants, or to son-in-law or daughter-in-law, 1½%; exempt $2,000. To uncle, aunt, or their descendants, 3%; exempt $1,500. To great-uncle, great-aunt, or their descendants, 4%; exempt $1,000. To others more remote, 5%; exempt $500. On larger amounts the primary rates are multiplied at the same amounts and rates as provided by the Indiana statute (above). *Obligations*—1, Funeral expenses; 2, administration expenses; 3, moneys due in fiduciary capacity.

LOUISIANA—*Tax*—To direct descendant by blood or affinity, ascendant or surviving spouse in excess of $5,000, $5,000 to $20,000, 2%; over $20,000, 3%. To a collateral relation (including brothers or sisters by affinity), in excess of $1,000, on amount in excess of $1,000, $1,000 to $20,000, 5%; in excess of $20,000, 7%. To a stranger, in excess of $500, on amount in excess of $500, up to $5,000, 5%; in excess of $5,000, 10%. Exemptions—To direct descendant, ascendant or surviving spouse, $5,000; to collateral relations, $1,000; to a stranger, $500. All legacies and donations to charitable, religious or educational institutions located in State entirely exempt. *Obligations*—1, Funeral expenses; 2, legal expenses; 3, expenses of last sickness; 4, servants' wages within one year; 5, salaries, clerks.

MAINE—*Tax*—To ancestors, parents, husband, wife, descendants, adopted child, adoptive parent, wife of son, husband of daughter, the rates are as follows: Up to $50,000, 1%; $50,000 to $100,000, 1½%; above $100,000, 2%; $10,000 exempt to parents, husband, wife, child, adopted child, or adoptive parent. To brother, sister, uncle, aunt, nephew, niece or cousin, the rates on the above amounts are 4%, 4½% and 5%; $500 exempt. To others, rates on the same amounts are 5%, 6% and 7%; same exemption. *Obligations*—1, Funeral and administration expenses; 2, allowance to husband, widow or children; 3, expenses of last sickness; 4, debts preferred under U. S. laws; 5, taxes.

MARYLAND—*Tax*—Exempt to parents, husband or wife, children, or lineal descendants; to others, 5% above $500. *Obligations*—1, Taxes; 2, funeral expenses; 3, arrears of rent; 4, judgments or decrees of court.

MASSACHUSETTS—*Tax*—To husband, or wife, parent, child, grandchild, adopted child, or adoptive parent, 1% up to $25,000; 2%, $25,000 to $50,000; 4%, $50,000 to $250,000; 5%, $250,000 to $500,000; 5½%, $500,000 to $750,000; 6%, $750,000 to $1,000,000; 7% above $1,000,000. To ancestor, or descendant, except those included in the previous class, or son-or daughter-in-law, descendant of adopted child, or ancestor of adoptive parent, wife or widow of son, husband of a daughter 1% up to $10,000; 2%, $10,000 to $25,000 4%, $25,000 to $50,000; 5%, $50,000 to $250,000; 6%, $250,000 to $500,000; 7%, $500,000 to $750,000; 8%, $750,000 to $1,000,000; 9% on excess of $1,000,000. To brother, sister, stepchild, step-parent, half-brother, half-sister, nephew or niece, the rates on the amounts given in above class are 3%, 5%, 7%, 8%, 9%, 10%, 11% and 12%. To others more remote, the rates on the same amounts are 5%, 6%, 7%, 8%, 9%, 10%, 11% and 12%. Husband, wife, parent, child, adopted child or adoptive parent pay no tax unless estate is more than $10,000; others, unless estate is more than $1,000. *Obligations*—1, Debts preferred by U. S. laws; 2, public rates and taxes; 3, wages, not over $100; 4, debts for necessaries furnished within six months not exceeding $150.

MICHIGAN—*Tax*—To grandparents, parents, husband or wife, child, brother or sister, wife or widow of son, husband of daughter, lineal descendants, adopted child, or one to whom deceased stood in relation of parent up to $50,000; in excess of $50,000 up to $500,000, 2%; in excess of $500,000, 3%. Exempt to $2,000. To others over $100, 5% up to $50,000; in excess of $50,000, up to $500,000, 10%; in excess of $500,000, 15%. Exemption to widow is $5,000. Aliens are taxed 25%. *Obligations*—1, Administration expenses; 2, funeral expenses; 3, expenses of last sickness; 4, debts preferred by U. S. laws.

MINNESOTA—*Tax*—Five classes of beneficiaries are recognized: (a) wife, or lineal descendant; (b) husband, parents, ancestors, adopted children or issue thereof; (c) brother or sister or their descendants, son-in-law or daughter-in-law; (d) uncles, aunts or their descendants; (e) others more remote. The rates for amounts not exceeding $15,000 (called the primary rates) for the classes given above are respectively 1%, 1½%, 3%, 4% and 5%. On amounts from $15,000 up, the rates vary from 2% to 20%. Exemptions are to classes (a) and (b) $10,000, except ancestors, $3,000; to class (c) $1,000; to class (d) $250 and to class (e) $100. These rates apply to estates of persons dying on or after April 24, 1919. *Obligations*—1, Administration expenses; 2, funeral expenses; 3, expenses of last sickness; 4, debts preferred by U. S. laws; 5, taxes.

MISSISSIPPI—*Tax*—To grandparent, husband, wife, child, brother, sister, nephew, niece, wife or widow of son, husband or widower of daughter, adopted child, upon amounts (in excess of exemptions) not exceeding $25,000, ½%; from $25,000 to $50,000, 1%; $50,000 to $75,000, 1½%; $75,000 to $100,000, 2%; $100,000 to $500,000, 2½%; in excess of $500,000, 3%. To others upon amounts (in excess of exemptions) not exceeding $25,000, 5%; $25,000 to $50,000, 5½%; $50,000 to $150,000, 6%; $150,000 to $250,000, 6½%; $250,000 to $1,000,000, 7%; in excess of $1,000,000, 8%. Exemptions, to widow or minor child under 18, $7,500; to other relatives, $4,000 each, but one exemption of $4,000 to a family. Bequests to societies, etc., for charitable, benevolent or educational purposes. *Obligations*—1, Funeral expenses; 2, expenses of administration; 3, support of widow as fixed by Chancery Court; 4, all debts.

MISSOURI—*Tax*—To husband, wife, lineal descendant, adopted child or descendant, illegitimate child, up to $20,000, 1%; to $40,000, 2%; to $80,000, 3%; to $200,000, 4%; to $400,000, 5%; in excess of $400,000, 6%. To brother, sister or descendants, son-in-law, daughter-in-law, aunt, uncle or descendants, 3%, 6%, etc., over $400,000, 18%. To brother or sister of grandparents or descendants, 4%, 8%, etc., over $400,000, 24%. To all others, including foreign, charitable and religious bequests, 5%, 10%, etc., over $400,000, 30%. Exemptions, husband or wife, $20,000; insane or blind lineal descendants, $15,000; lineal ancestor, lineal descendant, adopted child or its descendant or illegitimate child, $5,000; brother, sister or descendants, son-in-law, daughter-in-law, $500; aunt, uncle or their descendants, $250; brother or sister of grandparents or their descendants, $100; others of less than $100 not taxed. *Obligations*—1, Funeral expenses; 2, expenses of last sickness, wages of servants, tombstone; 3, taxes and public debts; 4, judgments; 5, all demands presented within six months after letters; 6, all demands exhibited after six months and before one year.

MONTANA—*Tax*—To widow, husband, lineal ancestor or descendant, adopted child or lineal issue, 1%. To brother or sister or descendant, son's wife or widow, or husband of a daughter, on first $25,000, less exemption, 2%; on next $25,000, 4%; on next $50,000, 6%; on next $400,000, 8%; on excess of $500,000, 10%. To brother or sister of father or mother or descendant, on first $25,000, 3%; then, 6%, 9%, 12% and 15%. To brother or sister of a grandfather or grandmother or descendant, on first $25,000, 4%; then, 8%, 12%, 16% and 20%. To any other degree of consanguinity or a stranger in blood, or a body politic or corporate, on first $25,000, 5%; then, 10%, 15%, 20%, 25%. Exemptions, widow, $10,000; husband, lineal ancestor or descendant, etc., $2,000; brother or sister of father, etc., $500; brother or sister of father or mother, etc., $250; brother or sister of grandfather, etc., $150. Any other degree, etc., $100. Missouri act effective when death occurred on or after April 1, 1921. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, debts preferred under U. S. laws; 4, judgments and mortgages No preference is given to U. S. Inheritance Tax, or those of other States.

NEVADA—*Tax*—On amounts not exceeding $25,000 the primary rates are: To husband or wife, ancestors, descendants or adopted child, 1%. $20,000 exempt to widow or minor child; to others just named $10,000 exempt. To brother, sister, or their descendants, son-in-law or daughter-in law, 2%; $10,000 exempt. To uncles, aunts or their descendants, 3%; $5,000 exempt. To great-uncles, great-aunts or their descendants 4%. To all others, 5%. On larger amounts the primary rates are multiplied as follows: $25,000 to $50,000, twice primary rates; $50,000 to $100,000, 3 times; $100,000 to $500,000, 4 times; above $500,000, 5 times. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, wages, within ninety days; 4, debts preferred by U. S. laws; 5, judgments and mortgages.

NEW HAMPSHIRE—*Tax*—On class A (beneficiary) consisting of educational, religious, cemetery, or other institutions, societies, etc., of public charity in N. H., or for public purposes, no tax is imposed. To husband or wife no tax on $10,000, or less; $10,000 to $25,000, 1%; to $50,000, 2%; to $100,000, 2½%; to $250,000, 3%; in excess of $250,000, 5%. To father, mother lineal descendant, adopted child, wife or widow of son, husband of a daughter, on $10,000 or less, 1%; if under 21, no tax; $10,000 to $25,000, 1%; to $50,000, 2%; to $100,000, 2½%; to

$250,000, 3%; in excess of $250,000, 5%. To all others on any and all amounts, 5%. Deductions allowed are real estate taxes if assessed at time of decedent's death, income taxes up to date of death, inheritance taxes paid to foreign States. Federal inheritance tax is not deducted. *Obligations*—1, Administration expenses; 2, funeral expenses; 3, allowance to widow; 4, taxes and expenses of last sickness. Note—The inheritance tax is included as an administration expense.

NEW JERSEY—*Tax*—Effective on and after March 11, 1922. To husband, wife, child, lineal descendant, adopted child and issue, on amount over exemptions ($5,000) to $50,000, 1%; $50,000 to $150,000, 1½%; to $250,000, 2%; over $250,000, 3%. To father, mother, brother, sister, wife or widow of son, husband of daughter, churches, hospitals, orphan asylums, public libraries, Bible and tract societies, religious, benevolent and charitable institutions, if less than $500, exempt; if over $500, no exemptions, 5%. All others except class D, 8%. If less than $500, exempt; if over, no exemption. Class D, State of New Jersey, municipal corporations within State or other political division thereof, entirely exempt. *Obligations*—1, Inheritance tax; 2, judgments; 3, funeral expenses; 4, medical expenses of last sickness.

NEW MEXICO—*Tax*—To father, mother, husband, wife, lineal descendant, adopted child, on amount over exemption, 1%; and an additional tax of 1½% on grantee or donee in conveyance taking effect upon death. To wife or widow of son, husband of daughter, lineal descendant of adopted child, brother or sister, on amount over exemption, 5%, and an additional 3% on grantee or donee in conveyance taking effect upon death. To other collateral kindred, strangers to the blood, corporations, voluntary associations or societies, in amount over exemption, 5%, and an additional tax on grantee or donee in conveyance taking effect upon death, 3%. Exemptions are on entire estate, $10,000, as to first two classes as above; $500, as to collaterals, strangers, etc. All gifts of paintings, books, etc., for free exhibitions within State, are entirely exempt. *Obligations*—1, Inheritance tax; 2, judgments; 3, funeral expenses; 4, medical expenses of last sickness.

NEW YORK—*Tax*—To parents, husband or wife, child, adopted child ($5,000 exempt), and to descendants ($500 exempt), 1% up to $25,000; 2% on the next $75,000; 3% on the next $100,000; 4% upon all additional sums. To brother, sister, son-in-law, or daughter-in-law, 2% up to $25,000; 3% on the next $75,000; 4% on the next $100,000; 5% thereafter; unless estate amounts to at least $500, there is no tax. To others more remote, 5% up to $25,000; 6% on the next $75,000; 7% on the next $100,000; 8% thereafter; unless estate amounts to at least $500, there is no tax. *Obligations*—1, Funeral and administration expenses; 2, debts preferred under U. S. laws; 3, taxes; 4, judgments and decrees.

NORTH CAROLINA—*Tax*—To husband or wife, heirs at law, son or daughter-at-law, stepchild, adopted child. Exempt, $10,000 to widow, $5,000 to minor child, $2,000 to others of this class. Rates on excess, 1% up to $25,000; 2%, $25,000 to $100,000; 3%, $100,000 to $250,000; 4%, $250,000 to $500,000; 5%, above $500,000. To brother, sister, or their descendants, no exemption. Rates on the amounts given above are: 3%, 4%, 5%, 6% and 7%. To others more remote, the rates on the same amounts are: 5%, 6%, 7%, 8% and 9%. *Obligations*—1, Debts secured by liens on property of deceased; 2, funeral expenses; 3, taxes; 4, debts due U. S. or State; 5, judgments; 6, wages within one year, medical attendance within one year.

NORTH DAKOTA—*Tax*—To husband, wife, lineal issue, lineal ancestor of decedent, adopted child, on not to exceed $15,000, over amount of exemption, 1%. To brother or sister, descendants of same, wife or widow of son, or husband of daughter, on $15,000, 1½%. To brother or sister of father or mother, or descendant of same, on $15,000, 3%. To brother or sister of grandfather or grandmother, or descendant, on $15,000, 4%. To any other collateral degree, or stranger, or body politic or corporate, on $15,000, 5%. Above are termed primary rates. In excess of $15,000, up to $30,000, 1½ times primary rates. On $30,000 to $50,000, 2 times; $50,000 to $100,000, 2½ times; $100,000 to $300,000, 3 times; $300,000 to $500,000, 3½ times; in excess of $500,000, 4 times primary rate. Exemptions, to husband or wife, $10,000; to each minor child, $5,000; brother or sister, $2,000; descendants of brother or sister, $500; wife or widow of son, or husband of daughter, $250; devises or bequests to municipal corporations for county, town or municipal purposes, or to corporations of this State, organized for religious, charitable or educational purposes, entirely exempt. *Obligations*—1, Administration expenses; 2, funeral and last sickness expenses; 3, allowance to family; 4, debts preferred by U. S. laws; 5, debts secured by liens on property of deceased.

OHIO—*Tax*—To wife or minor child, father, mother, husband, adult child, or adopted child, or lineal descendants thereof, on $25,000 or part thereof, over exemptions, 1%; on next $75,000, 2%; on next $100,000, 3%; on balance, 4%. To brother, sister, niece, nephew, wife or widow of a son, husband of a daughter, or child treated as son or daughter for ten years though not formally adopted, on $25,000 or part thereof, over exemptions, 5%; on next $75,000, 6%; on next $100,000, 7%; on balance, 8%. To other persons, institutions or corporations, on $25,000 or part thereof, 7%; on next $75,000, 8%; on next $100,000, 9%; on balance, 10%. Exemptions, to wife or child, $5,000; to father, mother, husband, adult child, or adopted child, or lineal descendants, $3,500; to brother, sister, nephew, niece, wife or widow of son, husband of daughter, $500. *Preferred obligations*—1, Administration, funeral and last sickness expenses; 2, allowance to widow and children for twelve months; 3, debts; 4, taxes.

OKLAHOMA—*Tax*—To parents, husband or wife, child, brother, sister, son-in-law, daughter-in-law, adopted child, or lineal descendant, 1% up to $25,000; 2%, $25,000 to $50,000; except to brother, sister, wife or widow of son, or husband of daughter, 3%; 3%, $50,000 to $100,000, except brother, sister, wife or widow of son or husband of daughter, 4%; 4% in excess of $100,000, except to brother, sister, wife or widow of son, or husband of daughter, 5%. To other persons and corporations, on from $500 to $25,000, 6%; $25,000 to $50,000, 7%; $50,000 to $100,000, 8%; over $100,000, 10%. Exemptions, to wife, $15,000; to each child, $10,000; to other relatives as above, $5,000, except brother, sister, wife or widow of son, or husband of daughter, $1,000. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, support of family for ninety days; 4, taxes to U. S. or State; 5, debts preferred by U. S. or State laws; 6, judgments or mortgages; 7, other claims presented within six months.

OREGON—*Tax*—To grandfather, grandmother, father, mother, husband, wife, child or any lineal descendant (exemption $10,000), $10,000 to $25,000, 1%; $25,000 to $50,000, 1½%; $50,000 to $100,000, 2%; $100,000 to $300,000, 3%; $300,000 to $500,000, 5%; $500,000 to $1,000,000, 7%; over $1,000,000, 10%. To brother, sister, uncle, aunt, niece, nephew, or lineal descendant (exemption $1,000), additional tax, $1,000 to $3,000, 1%; $3,000 to $5,000, 2%; $5,000 to $10,000, 4%; $10,000 to $30,000, 7%; $30,000 to $50,000, 10%; over $50,000, 15%. Additional tax in all other cases (no exemption) up to $500, 2%; $500 to $1,000, 4%; $1,000 to $2,000, 6%; $2,000 to $4,000, 8%; $4,000 to $10,000, 10%; $10,000 to $25,000, 15%; $25,000 to $50,000, 20%; over $50,000, 25%. Effective on and after May 29, 1919. *Obligations*—1, Funeral expenses; 2, taxes due U. S.; 3, expenses of last sickness; 4, public rates and taxes; 5, debts preferred by U. S. laws; 6, debts secured by liens on property of deceased; 7, wages within ninety days.

PENNSYLVANIA—*Tax*—Collateral Inheritance tax, estates less than $250 exempt. To parents, husband or wife, children or lineal descendants, stepchildren, adopted children, wife or widow of son, 2%. To all others, 5%. Direct Inheritance tax, 2%. No exemptions. *Obligations*—1, Funeral and last sickness expenses, wages due household servants within one year; 2, rent, within one year.

RHODE ISLAND—*Tax*—Estates under $5,000 tax exempt (above said sum a general tax of ½% is imposed in addition to the rates specified below). To grandparents, parents, husband or wife, child, or descendant, adopted child, brother, sister, nephew, niece, son-in-law, or daughter-in-law, $25,000 is exempt. Rates on excess are: ½% below $50,000; 1%, $50,000 to $250,000; 1½%, $250,000 to $500,000; 2%, $500,000 to $750,000; 2½%, $750,000 to $1,000,000; 3% above $1,000,000. To others more remote, $1,000 is exempt, and rates on excess are: 5% up to

$50,000; 6%, $50,000 to $250,000; 7%, $250,000 to $1,000,000; 8% above $1,000,000. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, debts due U. S.; 4, State and town taxes; 5, wages up to $100; 6, other claims presented within six months; 7, all other debts. If property insufficient to pay all debts of any class, creditors of that class shall be paid ratably, and no payment shall be made to creditors of any class until all of preceding class or classes have been paid in full.

SOUTH CAROLINA—*Tax*—To husband, wife, minor child, adult child, father or mother, on amount in excess of exemption: up to $20,000, 1%; $20,000 to $40,000, 2%; $40,000 to $80,000, 3%; $80,000 to $150,000, 4%; $150,000 to $300,000, 5%; in excess of $300,000, 6%. To lineal ancestor, lineal descendant (other than above), brother, sister, uncle, aunt, niece, nephew, wife or widow of son, or husband of daughter, on amount in excess of exemption, up to $20,000, 2%; to $40,000, 3%; to $80,000, 4%; to $150,000, 5%; to $300,000, 6%; over $300,000, 7%. To any other beneficiary, double above rates, viz., 4%, 6%, 8%, 10%, 12% and 14%. Exemptions, husband or wife, $10,000; minor child, $7,500; adult child, father or mother, $5,000; lineal ancestor or descendant, brother, sister, uncle, aunt, etc., $500; any other beneficiary, $200. Devises or bequests for educational, religious, or public charities in this State, or for city or town for public purposes, entirely exempt. Act of Feb. 23, 1922. *Obligations*—1, Funeral, last sickness, probate and administration expenses; 2, debts due to public; 3, judgments, mortgages and executions; 4, rent; 5, bonds, contract debts.

SOUTH DAKOTA—*Tax*—Primary rates: To wife or lineal issue, up to $15,000 in excess of exemptions, 1%; to husband, lineal ancestor of decedent or any child legally adopted, or mutually acknowledged for not less than ten years or lineal issue of such, 2%; to brother or sister, or descendant o brother or sister of decedent, a wife or widow of a son or husband of a daughter, 3%. To brother or sister of father or mother, or a descendant of a brother or sis'er of the father or mother of decedent, 4%; to any person or persons in any other degree than as above, or strangers, or a body politic or corporate, 5%. Over $15,000 and up to $50,000, two times the primary rate; $50,000 to $100,000, 3 times; in excess of $100,000, 4 times the primary rate. Exemptions, all property transferred to public corporations within the State for strictly county, township or municipal purposes, property of clear value of $10,000 transferred to widow or husband of decedent, each of lineal issue, or adopted or mutually acknowledged children and issue of such, lineal ancestors of decedent, exemption, $3,000; $500 exemption to brother or sister of decedent, or descendants of such, wife or widow of son or husband of daughter, $200 exemption to brother or sister of father or mother or descendants of such; $100 exemption to others. Exemption of $2,500 to hospitals, colleges, etc., and charitable institutions, deductions to be made of amounts received from outside the State. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, administration expenses; 4, wages for 60 days; 5, debts preferred by U. S. laws; 6, debts secured by liens on property of deceased.

TENNESSEE—*Tax*—To husband, wife or direct descendants, child adopted in conformity with laws of State, or ascendants of person making transfer, from $10,000 to $25,000, 1%; on next $25,000, or any part thereof, 1½%; on next $50,000, 2%; on next $500,000, 3%; on $500,000 and all over that sum, 5%. To all others, from $1,000 to $50,000, 5%; on next $50,000, 6%; on next $50,000, 7%; on next $50,000, 8%; on next $50,000, 9%; 10% on $250,000 and all over that sum. Exemptions, property of intestate, testator or grantor when clear market value is less than $1,000. Property of clear market value of less than $10,000, transferred to wife, direct descendants and ascendants, or either of them, of person from whom transfer is made, the estate to be treated as a whole. All property transferred to municipal corporations for strictly municipal purposes. Property devised or transferred to any church for purely religious purposes, to any school or college for purely educational purposes, to any hospital or bona fide charitable institution. *Obligations*—1, Transfer and inheritance taxes are included as debts in settlement of estate.

TEXAS—*Tax*—Exempt to parents, husband or wife or descendants. The rate of taxation on other legacies varies (above such sum as is exempt) with the amount of the legacy. Six divisions as to amount are recognized: (1) up to $10,000; (2) $10,000 to $25,000; (3) $25,000 to $50,000; (4) $50,000 to $100,000; (5) $100,000 to $500,000; (6) above $500,000. To ancestors, brothers, sisters or their descendants, the rates on the above amounts are 2%, 2½%, 3%, 3½%, 4% and 5%, $2,000 being exempt. To uncles, aunts or their descendants the rates are 3%, 4%, 5%, 6%, 7% and 8%, $1,000 being exempt. To others more remote the rates are 4%, 5½%, 7%, 8½%, 10% and 12%, $500 being exempt. *Obligations*—1, Funeral and last sickness expenses; 2, administration expenses; 3, debts secured by mortgage or other lien; 4, other debts presented within twelve months.

UTAH—*Tax*—$10,000 of each estate exempt; tax 3%, $10,000 to $25,000; 5% above $25,000. *Obligations*—1, Funeral expenses the only preferred obligations. The term "debts" shall include local or State taxes due at time of death, court costs, statutory fees of executors, administrators or trustees.

VERMONT—*Tax*—To husband, wife, child, father, mother or grandchild, wife or widow of a son or husband of a daughter, child adopted during minority, stepchild or other lineal descendant, no tax unless legacy or share exceeds $10,000; between $10,000 and $25,000, 1%; between $25,000 and $50,000, 2%; between $50,000 and $250,000, 4%; over $250,000, 5%. To all others, 5%. Exemptions, devises or bequests for charitable, religious or educational societies or institutions, cemetery purposes created or existing under laws of this State, to a Bishop in his ecclesiastical capacity for religious uses in this State. *Obligations*—1, Funeral expenses; 2, headstone not over $25; 3, expenses of last sickness; 4, taxes; 5, debts due to State; 6, debts due to U. S.; 7, wages within 3 months, not over $50 per creditor.

VIRGINIA—*Tax*—To husband, wife, lineal ancestor, lineal descendant, in excess of exemption and up to $50,000, 1%; in excess of $50,000 and up to $100,000, 2%; in excess of $100,000 and up to $500,000, 3%; in excess of $500,000 and up to $1,000,000, 4%; in excess of $1,000,000, 5%. To brother, sister, nephew or niece, in excess of exemption, amounts as above, 2%, 4%, 6%, 8% and 10%. All others, in excess of exemption, etc., 5%, 7%, 9%, 12% and 15%. Exemptions, husband, wife, ancestor, descendant, $10,000; brother, sister, nephew, niece, $4,000; others, $1,000. *Obligations*—1, Funeral and administration expenses; 2, expenses of last sickness, not exceeding $50, doctor or druggist; 3, taxes; 4, money owing as trustee or in fiduciary capacity.

WASHINGTON—*Tax*—To parents, husband or wife, lineal descendant, adopted child or its descendants, $10,000 exempt. Rates on excess are: 1% up to $50,000; 2%, $50,000 to $100,000; 3%, $100,000 to $250,000; 5% above $250,000. To brother, sister, uncle, aunt, nephew or niece, no exemption, the rates on the amounts stated are: 3%, 5%, 7% and 9%. To others more remote, the rates on the same amounts are: 6%, 9%, 12% and 15%. *Obligations*—1, Funeral expenses; 2, expenses of last sickness; 3, debts preferred by U. S. laws; 4, wages, within ninety days; 5, taxes; 6, judgments and mortgages which are liens on land.

WEST VIRGINIA—*Tax*—To wife, husband, child or children of deceased child, or father or mother of decedent, not exceeding $50,000, 2%. To brother or sister of decedent (not including those of half blood), 4%. To those further removed in relationship from decedent than brother or sister, 6%. To those of no blood relationship, strangers, institutions corporate or otherwise, except eleemosynary institutions hereinafter exempt, 10% of market value of such interest in such property. The foregoing are termed primary rates. In excess of $50,000 up to and not over $100,000, two times primary rate; over $100,000 up to $150,000, 2¼ times; over $150,000 up to $200,000, 2½ times; over $200,000 up to $300,000, 2¾ times; over $300,000 up to $400,000, 3 times; over $400,000 up to $500,000, 3¼ times. Upon all in excess of $500,000, 3½ times primary rates. Exemptions, property transferred to person or corporation for educational, literary, scientific, religious or charitable purposes, or to State, county or municipal corporation for public purposes, used exclusively in this State. To widow, $15,000; to wife, husband, child, children

of deceased child, father or mother of decedent $10,000, except that exemption to children of child shall be per stirpes not per capita. *Obligations*—1, Funeral and administration expenses; 2, debts owing to U. S.; 3, taxes; 4, fiduciary obligations.

WISCONSIN—*Tax*—Tax of 2% to husband, wife, lineal descendants, lineal ancestors, adopted child, and lineal issue thereof. To brothers, sisters and their descendants, wife or widow of son, or husband of daughter, 4%. To uncles, aunts or their descendants, 6%. To all others, 8%. When the estate is above $25,000 the above rates are multiplied as follows: $25,000 to $50,000, 2 times on excess; $50,000 to $100,000, 3 times on excess; $100,000 to $500,000, 4 times on excess; above $500,000, 5 times on excess. Exempt, $25,000 to widow and lesser amounts to other relatives, down to $100 exemptions to strangers in blood. *Obligations*—1, Last sickness and funeral expenses; 2, debts.

WYOMING—*Tax*—Tax of 2% on amount above $10 000 to parents, husband or wife, child, brother, sister, lineal descendants, wife or widow of son, husband of daughter, adopted child or mutually acknowledged child. To others than above, tax of 5%, if estate less than $500, no tax. *Obligations*—1, Funeral and administration expenses; 2, expenses of last sickness and sixty days' wages, including medical attendance and medicines; 3, judgments and mortgages; 4, all claims presented within six months; 5, all claims presented within one year.

UNITED STATES—*Tax*—The Federal Tax is imposed on the estate as a whole, not on the shares of the several legatees, irrespective of the relationship of the beneficiaries to the decedent. $50,000 of each estate is exempt from tax. The rates on the excess are as follows: Not exceeding $50,000, 1%; $50,000 to $150,000, 2%; $150,000 to $250,000, 3%; $250,000 to $450,000, 4%; $450,000 to $750,000, 6%; $750,000 to $1,000,000, 8%; $1,000,000 to $1,500,000, 10%; $1,500,000 to $2,000,000, 12%; $2,000,000 to $3,000,000, 14%; $3,000,000 to $4,000,000, 16%; $4,000,000 to $5,000,000, 18%; $5,000,000 to $8,000,000, 20%; $8,000,000 to $10,000,000, 22%; exceeding $10,000,000, 25%.

## DISTRIBUTION OF INTESTATE'S PERSONAL ESTATE.

THE following is a synopsis of the laws of the various States providing for the distribution of the personal estate of a deceased after the payment of funeral expenses and other debts where there is no will:

In many of the States the widow and children are entitled to receive a small portion of the estate, generally varying from $100 to $500, before the claims of creditors are paid. Aside from such exempt portion of the estate, the property to be distributed to widow or relatives is that remaining after all creditors' claims have been satisfied.

The following is the plan of distribution of a male's property. The same rules apply to a female's estate, except in some States, where the rights of a husband in the estate of his deceased wife differ.

I. In all States where the deceased leaves a child or children, or descendants of any deceased child, and no widow, the children or descendants take the entire estate, to the exclusion of all other relatives. The children take equal shares, and in most States the descendants of a deceased child together take the share of their parent, except where the descendants are all in equal degree to the deceased (all grandchildren, no children surviving), when they share equally and do not take their proportionate share of their parent's interest.

No statement is given in this synopsis of the law of Louisiana, which, being founded on the provisions of the French code and Roman law instead of the English common law, which is the underlying principle in the other States, differs in many respects from the principles followed in the other States, especially on the question of the rights of a husband and wife in each other's property and in the property acquired by the husband and wife during their married life. The provisions of the law of Indiana are also not included, for the reason that for an accurate statement of its provisions a reading of the entire statute is necessary, together with the decisions of the Indiana courts construing its provisions, which would occupy too much space for a statement here.

II. (a) If deceased leaves a widow, and no children or descendants, the widow takes all. This is the rule in Alabama, Arizona, Colorado, Florida, Georgia, Illinois, Kansas, Minnesota, Mississippi, New Jersey, New Mexico, Ohio, Oregon, Tennessee, Texas, Washington, West Virginia and Wisconsin.

(b) In the following States the widow takes one-half, the residue being taken by the other relatives in the manner and proportion in which they take the entire estate when the deceased leaves neither widow nor descendants (given below); Arkansas, California, Delaware, District of Columbia, Idaho, Iowa, Kentucky, Maine, Maryland, Missouri, Montana, Nebraska, Nevada, North Carolina, Oklahoma, Rhode Island, Texas, Washington, West Virginia and Wisconsin. In Delaware the widow takes all up to $3,000 and one-half after that. If no kin, widow takes all.

(c) In Massachusetts, North Dakota, Pennsylvania and Utah the widow takes the entire estate up to $5,000 and one-half of the residue.

(d) In Connecticut the widow takes the entire estate up to $2,000 and one-half of the residue.

(e) In New York, if there be a father or mother of deceased surviving, the widow takes one-half; if there be no father or mother, but a brother or sister, nephew or niece surviving, the widow takes $2,000 and one-half residue; if there be no parent, brother, sister, nephew or niece, the widow takes all. The residue after the widow's share passes in each case in accordance with the provisions applying where no widow or issue survive.

(f) In New Hampshire the widow takes $1,500, and, if the estate exceeds $3,000, one-half of the residue.

(g) In Wyoming the widow takes the entire estate up to $20,000 and three-fourths of the residue (if brother, sister or parent survive, otherwise all to widow).

(i) In Michigan the widow takes the entire estate up to $3,000 and one-half of the residue (if brother, sister or parent survive, otherwise all to widow).

(j) In Vermont the widow takes entire estate if not exceeding $2,500; if more than $2,500, widow takes that sum and one-half of residue.

III. (a) When the deceased leaves a widow and children, or descendants, the widow takes one-third and the children share equally in the residue in the following States: Arizona, Arkansas, Connecticut, Delaware, District of Columbia, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Ohio (one-half if less than $400), Pennsylvania, Rhode Island, South Carolina, Texas, Vermont, Virginia and West Virginia.

(b) In the following States, if there be but one child, the widow takes one-half and the child one-half; if two or more children or their descendants, the widow takes one-third, as above, and the children or their descendants the residue: California, Florida, Idaho, Michigan, Montana, Nevada, North Dakota, Oklahoma, South Dakota and Utah.

(c) In the following States the widow takes one-half and the children, or descendants, the residue: Colorado, Kansas, Kentucky, Oregon, Washington and Wyoming.

(d) In the following States the widow takes the same share as each of the children: Mississippi, Missouri, Tennessee and Wisconsin.

(e) In North Carolina, if there are less than three children, the widow takes one-third and the children the residue; if there are three or more children, the widow takes the same share as each of the children.

(f) In Alabama, if there is but one child, the widow takes one-half and the child one-half; if there are more than one child and less than five children, the widow takes the same share as each of the children; if there are five or more children, the widow takes one-fifth and the children or their descendants share equally in the residue.

(g) In Georgia, if there are less than five children, the widow takes the same share as each of the children; if there are five or more children, the widow takes one-fifth and the children or their descendants share equally in the residue.

(h) In Nebraska if widow is not the parent of all the children of the deceased and there be more than one child, widow takes one-fourth and children the residue. If widow is parent of all children of the deceased, she takes one-half if there be but one child and the child the residue; if there be more than one child the widow takes one-third and the children the residue.

(l) In New Mexico, the widow takes one-half of the estate acquired during marriage, otherwise than by gift (by purchase, for example) and the children or their descendants share equally in the residue; the widow also takes one-fourth of the estate acquired before marriage, or by gift or legacy during marriage, the children or their descendants taking the residue.

IV. (a) When the deceased leaves no widow,

children or descendants, the parents take the entire estate in equal shares in the following States: Alabama, Arizona, California, Colorado, Connecticut, Idaho, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, North Carolina, Oklahoma, Pennsylvania, Texas, Utah, Vermont, Washington, Wisconsin and Wyoming.

In all of the States just mentioned, except Alabama, Arizona, Maine, and Texas, if one parent is dead, the surviving parent takes the entire estate to the exclusion of brothers and sisters. In Alabama, Arizona, Maine, and Texas the surviving parent takes one-half and the brothers and sisters, or their descendants, take the residue.

In all of them, if both parents are dead, the brothers and sisters and their descendants take the entire estate.

(b) In the following States the father, if living, takes the entire estate; if the father is dead, then to the mother and brothers and sisters, or their descendants equally; and if both parents are dead, then to the brothers and sisters, or their descendants: Florida, New York, Oregon, Rhode Island, South Dakota, Tennessee, Virginia, and West Virginia.

(c) In the following States the father, if living, takes the entire estate; if the father is dead, then to the mother, and if both parents are dead, then to the brothers and sisters of their descendants: Arkansas, District of Columbia and North Dakota.

(d) In the following States the parents, if living, and the brothers and sisters, or their descendants, take the entire estate, sharing equally: Georgia, Illinois, Mississippi, Missouri, New Jersey and South Carolina.

(e) In Delaware, Ohio and Maryland (where the property did not descend to intestate from either parent), the brothers and sisters, or their descendants, take the entire estate in preference to the parents, who only inherit if there are no brothers or sisters or lawful issue of any deceased brothers or sisters.

DISTRIBUTION OF FEMALE'S ESTATE.

In the following States, if the deceased was a married woman, the rights of her surviving husband in her personal estate differ from the rights of a widow in the estate of her deceased husband as shown in the above synopsis.

(a) In Delaware, District of Columbia, North Carolina, Rhode Island, and Virginia the husband takes the entire personal estate, whether there is any issue of the marriage or not.

(b) In New York, the husband takes the same distributing share as a widow would take.

(c) In Florida, Georgia, and Pennsylvania, if there are no children or descendants, the husband takes the entire estate; if there are children, the husband takes the same share as each child.

(d) In Ohio the husband takes the entire estate if there are no children or descendants; if there are children or descendants, they take the entire estate.

(e) In Alabama the husband takes one-half of the estate, the children, or descendants, taking the residue.

(f) In North Carolina, where surviving husband is not also the father of all the children of decedent, if there be one child the husband takes one-half and the child one-half; if there be more than one child, husband takes child's share.

## MARRIAGES AND DIVORCES IN UNITED STATES.

| Calendar Year. | Marriages. | | Divorces. | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Granted to Husb'd. | | Granted to Wife. | |
| | Number. | Increase Over Preceding Year | Total Number. | Increase Over Preceding Year | Number. | Per Cent. | Number. | Per Cent. |
| 1887 | 483,069 | ..... | 27,919 | 2,384 | 9,729 | 34.8 | 18,190 | 65.2 |
| 1888 | 504,530 | 21,461 | 28,669 | 750 | 10,022 | 35.0 | 18,647 | 65.0 |
| 1889 | 531,457 | 26,927 | 31,735 | 3,066 | 11,126 | 35.1 | 20,609 | 64.9 |
| 1890 | 542,537 | 11,080 | 33,461 | 1,726 | 11,625 | 34.7 | 21,836 | 65.3 |
| 1891 | 562,412 | 19,875 | 35,540 | 2,079 | 12,478 | 35.1 | 23,062 | 64.9 |
| 1892 | 577,870 | 15,458 | 36,579 | 1,039 | 12,577 | 34.4 | 24,002 | 65.6 |
| 1893 | 578,673 | 803 | 37,468 | 889 | 12,590 | 33.6 | 24,878 | 66.4 |
| 1894 | 566,161 | *12,512 | 37,568 | 100 | 12,551 | 33.4 | 25,017 | 66.6 |
| 1895 | 598,855 | 32,694 | 40,387 | 2,819 | 13,456 | 33.3 | 26,931 | 66.7 |
| 1896 | 613,873 | 15,018 | 42,937 | 2,550 | 14,448 | 33.6 | 28,489 | 66.4 |
| 1897 | 622,350 | 8,477 | 44,699 | 1,762 | 14,765 | 33.0 | 29,934 | 67.0 |
| 1898 | 625,655 | 3,305 | 47,849 | 3,150 | 15,988 | 33.4 | 31,861 | 66.6 |
| 1899 | 650,610 | 24,955 | 51,437 | 3,588 | 16,925 | 32.9 | 34,512 | 67.1 |
| 1900 | 685,284 | 34,674 | 55,751 | 4,314 | 18,620 | 33.4 | 37,131 | 66.6 |
| 1901 | 716,621 | 31,337 | 60,984 | 5,233 | 20,008 | 32.8 | 40,976 | 67.2 |
| 1902 | 746,733 | 30,112 | 61,480 | 496 | 20,056 | 32.6 | 41,424 | 67.4 |
| 1903 | 786,132 | 39,399 | 64,925 | 3,445 | 21,321 | 32.8 | 43,604 | 67.2 |
| 1904 | 781,145 | *4,987 | 66,199 | 1,274 | 22,189 | 33.5 | 44,010 | 66.5 |
| 1905 | 804,787 | 23,642 | 67,976 | 1,777 | 22,220 | 32.7 | 45,756 | 67.3 |
| 1906 | 853,290 | 48,503 | 72,062 | 4,086 | 23,455 | 32.5 | 48,607 | 67.5 |
| 1916 | 1,040,778 | ..... | 112,036 | ..... | 33,809 | 31.1 | 74,893 | 68.9 |

* Decrease. In 1916 there were 106 counties, including 10 new counties, from which no returns as to marriages were received. Returns were got from 9 counties through State reports. No divorce returns were got in 1916 from 95 counties.

## DIVORCES REPORTED BY STATES: 1916, 1906 AND 1896.

| Division and State. | 1916. | 1906. | 1896. | Division and State. | 1916. | 1906. | 1896. | Division and State. | 1916. | 1906. | 1896. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit'd St'tes | 112,036 | 72,062 | 42,937 | W. N. Cent.: | | | | Alabama | 2,265 | 2,162 | 940 |
| | | | | Minnesota | 1,956 | 1,066 | 876 | Mississippi | 1,893 | 1,930 | 981 |
| New Engl'd: | | | | Iowa | 3,309 | 2,385 | 1,591 | W. S. Cent.: | | | |
| Maine | 702 | 783 | 681 | Missouri | 5,791 | 3,936 | 2,543 | Arkansas | 3,747 | 2,428 | 1,317 |
| N. Hamp. | 698 | 473 | 417 | N. Dakota | 478 | 320 | 308 | Louisiana | 1,343 | 882 | 352 |
| Vermont | 419 | 301 | 292 | S. Dakota | 585 | 604 | 278 | Oklahoma | 3,693 | 1,869 | 672 |
| Mass'setts | 2,336 | 1,540 | 1,235 | Nebraska | 1,675 | 1,186 | 645 | Texas | 8,504 | 5,173 | 2,885 |
| Rhode Is'd | 623 | 368 | 359 | Kansas | 2,618 | 1,940 | 1,321 | Mountain: | | | |
| Con'ecticut | 961 | 557 | 450 | S. Atlantic: | | | | Montana | 1,484 | 491 | 244 |
| | | | | Delaware | 210 | 51 | 20 | Idaho | 797 | 320 | 139 |
| Mid. Atl'c: | | | | Maryland | 1,003 | 696 | 351 | Wyoming | 296 | 143 | 70 |
| New York | 3,269 | 2,069 | 1,270 | Dist. of C. | 47 | 86 | 163 | Colorado | 1,061 | 1,165 | 531 |
| New Jersey | 1,169 | 530 | 352 | Virginia | 1,886 | 1,074 | 525 | N. Mexico | 387 | 218 | 107 |
| Pen'sylv'a. | 4,980 | 3,027 | 1,725 | W. Virginia | 789 | 966 | 452 | Arizona | 613 | 214 | 111 |
| | | | | N. Carolina | 668 | 380 | 378 | Utah | 661 | 387 | 225 |
| E. N. Cent.: | | | | S. Carolina | ..... | ..... | ..... | Nevada | 648 | 119 | 42 |
| Ohio | 7,607 | 4,781 | 2,794 | Georgia | 1,399 | 862 | 428 | | | | |
| Indiana | 5,636 | 4,048 | 2,793 | Florida | 1,334 | 830 | 262 | Pacific: | | | |
| Illinois | 8,546 | 5,943 | 3,847 | E. S. Central: | | | | Washingt'n | 3,448 | 1,981 | 529 |
| Michigan | 5,327 | 3,259 | 1,723 | Kentucky | 2,981 | 2,050 | 1,500 | Oregon | 2,100 | 1,026 | 399 |
| Wisconsin | 1,721 | 1,458 | 1,085 | Tennessee | 2,800 | 2,172 | 1,449 | California | 5,573 | 1,813 | 1,280 |

## MARRIAGE AND DIVORCE LAWS.

(Figures in parentheses after each State show number of years residence required before divorce action can be begun.)

**Marriage Licenses**—Required in all the States and Territories. California and New Mexico require both parties to appear and be examined under oath, or submit affidavit.

**Marriage, Prohibition of**—Marriages between whites and persons of Negro descent are prohibited and punishable in Ala., Ariz., Ark., Cal., Col., Del., Fla., Ga., Idaho, Ind., Ky., La., Md., Miss., Mo., Mont., Neb., Nev., N. C., N. Dak., Okla., Ore., S. C., S. Dak., Tenn., Tex., Utah, Va., and W. Va. The causes for absolute divorce given in the table are in addition to adultery, which is a primary cause in every State except South Carolina. Marriages between whites and Indians are void in Ariz., N. C., Ore., and S. C.; and between whites and Chinese in Ariz., Cal., Idaho, Miss., Ore., and Utah. Both parties must submit in Oregon to physical examination on applying for license. N. J. and N. H. bar communicable diseases in either party.

Note—Marriage between first cousins is forbidden in all of the States except Ala., Cal., Col., Conn., Del., Dist. of Col., Ga., Hawaii, Ky., Me., Mass., N. Mex., N. Y., N. C., R. I., S. C., Tex., Va., and Wash.; between step-relatives except in Alaska, Ariz., Ark., Del., Hawaii, Ill., Ind., Iowa, La., Md., Minn., Neb., Nev., N. Mex., N. Y., Ohio, Ore., Tenn., Utah, Wis. and Panama.

### SUMMARY OF DIVORCE LAWS OF THE STATES.

(*Causes* means causes for absolute divorce.)

**Alabama**—(1-3). *Causes:* Abandonment 2 years, crime against nature, habitual drunkenness, violence, pregnancy of wife by other than husband at marriage, physical incapacity, imprisonment for 2 years for felony, confinement in insane asylum for 20 years, provided insanity is incurable, if husband becomes addicted to cocaine, morphine or similar drugs. New ground for divorce: To the wife, when the wife without support from the husband for 2 years preceding the filing of the bill has lived separate and apart from the bed and board of the husband for 5 years next preceding the filing of the bill and she has actually resided in this State during all of said period.

**Alaska**—(2). *Causes:* Felony, physical incapacity, desertion 2 years, cruelty, habitual drunkenness.

**Arizona**–(1). *Causes:* Felony, physical incapacity, desertion 1 year, excesses, cruelty, neglect to provide 1 year, pregnancy of wife by other than husband at marriage, conviction of felony prior to marriage unknown to other party, habitual drunkenness.

**Arkansas**–(1). *Causes:* Desertion 1 year, felony, habitual drunkenness 1 year, cruelty, former marriage existing, physical incapacity.

**California**—(1). *Causes:* Cruelty, desertion 1 year, neglect 1 year, habitual drunkenness 1 year, felony.

**Colorado**—(1). *Causes:* Desertion 1 year, physical incapacity, cruelty, failure to provide 1 year, habitual drunkenness or drug fiend 1 year, felony, former marriage existing.

**Connecticut**—(3). *Causes:* Fraudulent contract, wilful desertion 3 years, with total neglect of duty, habitual drunkenness, cruelty, imprisonment for life, infamous crime involving violation of conjugal duty and punishable by imprisonment in State prison, 7 years' absence without being heard from.

**Delaware**—(1). *Causes:* Desertion 2 years, habitual drunkenness for 2 years, cruelty, bigamy, felony followed by a continuous imprisonment for at least 2 years—and at the discretion of the Court, fraud, want of age, neglect to provide 3 years. "When at the time the cause of action arose, either party was a bona fide resident of the State, and has continued so to be down to the time of the commencement of the action; except that no action for absolute divorce shall be commenced for any cause other than adultery, or bigamy, unless one of the parties has been for the 2 years next preceding the commencement of the action, a bona fide resident of this State."

**District of Columbia**—(3). *Causes:* Marriages may be annulled for former existing marriage, lunacy, fraud, coercion, physical incapacity and want of age at time of marriage.

**Florida**—(2). *Causes:* Cruelty, violent temper, habitual drunkenness, physical incapacity, desertion 1 year, former marriage existing, relationship within prohibited degrees.

**Georgia**—(1). *Causes:* Mental and physical incapacity, desertion 3 years, felony, cruelty, force, duress, or fraud in obtaining marriage, pregnancy of wife by other than husband at marriage, relationship witnin prohibited degrees.

**Hawaii**—(2). *Causes:* Desertion 1 year, felony, leper, cruelty, habitual drunkenness.

**Idaho**—(6 months). *Causes:* Cruelty, desertion 1 year, neglect 1 year, habitual drunkenness 1 year, felony, insanity.

**Illinois**—(1). *Causes:* Desertion 2 years, habitual drunkenness 2 years, former existing marriage, cruelty, felony, physical incapacity, attempt on life of other party; divorced party cannot marry for 1 year.

**Indiana**—(2). *Causes:* Abandonment 2 years, cruelty, habitual drunkenness, failure to provide 2 years, felony, physical incapacity.

**Iowa**—(1). *Causes:* Desertion 2 years, felony, habitual drunkenness, cruelty, pregnancy of wife by other than husband at marriage, unless husband has illegitimate child or children living of which wife did not know at time of marriage. The marriage may be annulled for the following causes existing at the time of the marriage: Insanity, physical incapacity, former existing marriage.

**Kansas**—(1). *Causes:* Abandonment 1 year, cruelty, fraud, habitual drunkenness, gross neglect of duty, felony, physical incapacity, pregnancy of wife by other than husband at marriage, former existing marriage.

**Kentucky**—(1). *Causes:* Separation 5 years, desertion 1 year, felony, physical incapacity, loathsome disease, habitual drunkenness 1 year, cruelty, force, fraud or duress in obtaining marriage, joining religious sect believing marriage unlawful, pregnancy of wife by other than husband at marriage or subsequent unchaste behavior, ungovernable temper.

**Louisiana**—(1). *Causes:* Felony, habitual drunkenness, excesses, cruelty, public defamation of other party, abandonment, attempt on life of other party, fugitive from justice.

**Maine**—(1). *Causes:* Cruelty, desertion 3 years, physical incapacity, habits of intoxication by liquors, opium, or other drugs, neglect to provide, insanity under certain limitations.

**Maryland**–(2). *Causes:* Abandonment 3 years, unchastity of wife before marriage, physical incapacity, any cause which renders the marriage null and void *ab initio*. Exceedingly vicious conduct.

**Massachusetts**—(3-5). *Causes:* Cruelty, desertion 3 years, habits of intoxication by liquors, opium or other drugs, neglect to provide, physical incapacity, imprisonment for felony, uniting for 3 years with religious sect believing marriage unlawful.

**Michigan**–(1). *Causes:* Felony, desertion 2 years, habitual drunkenness, physical incapacity, and in the discretion of the Court for cruelty or neglect to provide.

**Minnesota**–(1). *Causes:* Desertion 1 year, habitual drunkenness 1 year, cruelty, physical incapacity, imprisonment for felony.

**Mississippi**—(1). *Causes:* Felony, desertion 2 years, consanguinity, physical incapacity, habitual drunkenness by liquor, opium or other drugs, cruelty, insanity at time of marriage, former existing marriage, pregnancy of wife by other than husband at marriage.

**Missouri**—(1). *Causes:* Felony, absence 1 year, habitual drunkenness 1 year, cruelty, indignities, vagrancy, former existing marriage, physical incapacity, conviction of felony prior to marriage unknown to other party, wife pregnant by other than husband at marriage.

**Montana**—(1). *Causes:* Cruelty, desertion, neglect 1 year, habitual drunkenness 1 year, felony. Innocent party may not remarry within 2 years and guilty party within 3 years of the divorce.

**Nebraska**—(1†) *Causes:* Abandonment 2 years, habitual drunkenness, physical incapacity, felony, failure to support 2 years, cruelty, imprisonment for more than 3 years.

**Nevada**—(6 months). *Causes:* Desertion 1 year, felony, habitual drunkenness, physical incapacity, cruelty, neglect to provide 1 year.

**New Hampshire**—(1; 3 in case of desertion). *Causes:* Cruelty, felony, physical incapacity, absence 3 years habitual drunkenness 3 years, failure to provide 3 years, treatment endangering health or reason, union with sect regarding marriage unlawful, wife separate without the State 10 years, not claiming marital rights, husband, absent from United States 3 years intending to

become citizen of another country without making any provision for wife's support.

**New Jersey**—(2). *Causes:* Desertion 2 years, cruelty. No divorce may be obtained on grounds arising in another State unless they constituted ground for divorce in the State where they arose. The marriage may be annulled for the following causes existing at the time of the marriage: Want of legal age, former existing marriage, consanguinity, physical incapacity, idiocy. In other cases, an action may be begun if the overt act was committed here.

**New Mexico**—(1). *Causes:* Abandonment, cruelty, neglect to provide, habitual drunkenness, felony, physical incapacity, pregnancy of wife by other than husband at marriage.

**New York**—(‡). *Causes:* Adultery; abandonment or absence for 5 successive years. The marriage may be annulled for such causes as rendered the relationship void at its inception.

**North Carolina**—(2). *Causes:* Pregnancy of wife by other than husband at marriage, physical incapacity, husband and wife living apart for ten years and having no issue.

**North Dakota**—(1). *Causes:* Cruelty, desertion 1 year, neglect 1 year, habitual drunkenness 1 year, felony. The marriage may be annulled for the following causes existing at the time of the marriage: Former existing marriage, insanity, physical incapacity, force or fraud inducing the marriage, or want of age.

**Ohio**—(1). *Causes:* That either party had a husband or wife living at the time of the marriage from which the divorce is sought, wilful absence of either party from the other for 3 years, adultery, impotency, extreme cruelty, fraudulent contract, any gross neglect of duty, habitual drunkenness for 3 years, the imprisonment of either party in a penitentiary under sentence thereto. The petition for divorce under this clause must be filed during the imprisonment of the adverse party. The procurement of a divorce without this State, by a husband or wife, by virtue of which the party who procured it is released from the obligations of the marriage, while they remain binding upon the other party.

**Oklahoma**—(1). *Causes:* Abandonment 1 year, cruelty, fraud, habitual drunkenness, felony, gross neglect of duty, physical incapacity, former existing marriage, pregnancy of wife by other than husband at marriage.

**Oregon**—(1). *Causes:* Felony, habitual drunkenness 1 year, physical incapacity, desertion 1 year, cruelty or personal indignities rendering life burdensome.

**Pennsylvania**—(1). *Causes:* Former existing marriage, desertion 2 years, personal abuse or conduct rendering life burdensome, felony, fraud, relationship within prohibited degrees, physical incapacity.

**Porto Rico**—(1). *Causes:* Felony, habitual drunkenness, abandonment 1 year.

**Rhode Island**—(2). *Causes:* Cruelty, desertion 5 years, habitual drunkenness, excessive use of morphine, opium or chloral, neglect to provide 1 year, gross misbehavior, living separate 10 years, physical incapacity, cruel treatment of husband by wife, making it unsafe for him to live with her. Either party civilly dead for crime or prolonged absence. The marriage may be annulled for causes rendering the relationship originally void or voidable.

**South Carolina**—No divorces granted.

**South Dakota**—(1). *Causes:* Cruelty, desertion 1 year, neglect 1 year, habitual drunkenness 1 year, felony. The marriage may be annulled for the following causes existing at the time of the marriage: Want of age, former existing marriage, insanity, physical incapacity, force or fraud inducing marriage.

**Tennessee**—(2). *Causes:* Former existing marriage, desertion 2 years, felony, physical incapacity, attempt on life of other party, refusal of wife to live with husband in the State and absenting herself 2 years, pregnancy of wife by other than husband at marriage; at the discretion of the Court for cruelty, indignities, abandonment or neglect to provide, habitual drunkenness.

**Texas**—(1). *Causes:* Abandonment 3 years, physical incapacity, cruelty, excess or outrages rendering life together insupportable, felony.

**Utah**—(1). *Causes:* Desertion 1 year, physical incapacity, habitual drunkenness, felony, cruelty, permanent insanity.

**Vermont**—(2). *Causes:* Imprisonment 3 years, intolerable severity, desertion 3 years, neglect to provide, absence 7 years without being heard from.

**Virginia**—(1†). *Causes:* Insanity at marriage, felony, desertion 3 years, fugitive from justice 2 years, pregnancy of wife by other than husband at marriage, wife a prostitute, or either party convicted of felony before marriage unknown to other, physical incapacity.

**Washington**—(1). *Causes:* Abandonment 1 year, fraud, habitual drunkenness, refusal to provide, felony, physical incapacity, incurable insanity, cruelty or indignities rendering life burdensome, or 5 years' separation.

**West Virginia**—(1). *Causes:* Desertion 3 years, felony, physical incapacity, pregnancy of wife by other than husband at marriage, husband a licentious character or wife a prostitute unknown to other party, either party convicted of felony before marriage unknown to other. The marriage may be annulled for the following causes existing at the time of the marriage: Former existing marriage, consanguinity, insanity, physical incapacity, miscegenation, want of age.

**Wisconsin**—(2). *Causes:* Felony (imprisonment 3 years), desertion 1 year, cruelty, physical incapacity, habitual drunkenness 1 year, separation 5 years. In the discretion of the Court for cruelty or neglect to provide. The marriage may be annulled for the following causes existing at the time of the marriage: Want of age or understanding, consanguinity, force or fraud inducing marriage.

**Wyoming**—(1). *Causes:* Felony, desertion 1 year, habitual drunkenness, cruelty, neglect to provide 1 year, husband a vagrant, physical incapacity, indignities rendering condition intolerable, pregnancy of wife by other than husband at marriage, either party convicted of felony before marriage unknown to other. The marriage may be annulled for the following causes existing at the time of the marriage: Want of age, force or fraud.

† Two years for causes arising out of State. ‡ Actual residence.

## AGES AT WHICH MARRIAGE IS VALID.

Males (age without parents' consent), 21 years in every State except Idaho, Ill., Mich., Minn., Nev., N. H., N. C., S. C., Tenn., and W. Va., where it is 18 years.

Males (age with parents' consent), 14 years in Ky., La., N. H., and Va.; 16 years in Iowa, Tex., and Utah; 17 years in Ala., Ark., Ga., and Kan.; 18 years in Ariz., Cal., Hawaii, Idaho, Ill., Ind., Mich., Minn., Mont., Neb., Nev., N. Mex., N. C., N. Dak., Ohio, Okla., Ore., Porto Rico, S. C., S. Dak., Tenn., Wis., Wyo. There is no definite age provision in Conn., Del., District of Columbia, Fla., Me., Mass., N. Y., R. I., S. C., Tex., and Vt.; 21 years elsewhere.

Females (age with parents' consent), 16 years in Md., N. H.; 21 years in Fla., Ky., La., Pa., Porto Rico, R. I., Va., W. Va., and Wyo.; 18 years in the other States.

Females (age with parents' consent), 12 years in Ky., La., Md., Miss., Va.; 13 years in N. H.; 14 years in Ala., Ariz., Ark., Ga., Iowa, N. C., R. I., S. C., Tex., Utah; 15 years in Cal., Hawaii, Kan., Minn., Mo., N. Mex., N. C., N. Dak., Okla., S. Dak., and Wis.; 16 years in Ill., Ind., Mich., Mo., Mont., Neb., Nev., Ohio, Ore., Porto Rico, W. Va., and Wis.; 18 years in Alaska, Col., Idaho, N. J., N. Y., Tenn., and Vt.

The lowest age at which a single female can make a valid contract, except marriage, is 18 years in Ark., Cal., Col., Hawaii, Idaho, Ill., Iowa, Kan., Minn., Mont., Neb., Ohio, Okla., Ore., S. Dak., Vt., and Wash.; 21 years in the other States.

Most of the States require consent of parents to marriages of males under 21 or of females under 18; exceptions are for males under 18 in Idaho, Ill., Minn., Nev., N. H., S. C.; under 20 in Hawaii; under 16 in Conn. and Tenn.; for women under 21 in Fla., Ky., La., Pa., Va., W. Va., and Wyo.; under 16 in Conn., Ill., Md., Nev., N. H., R. I., Tenn., and W. Va.; under 15 in Minn.

The lowest age at which a married female can make a valid contract, except marriage, is 14 years in Ariz., Iowa, Tex.; 16 years in Neb., Ore., Porto Rico; 18 years in Ala., Alaska, Ark., Cal., Hawaii, Idaho, Ill., Ind., Kan., Minn., Mont., Ohio, Okla., S. Dak., Utah, Vt., Wash.; 21 years in the other States.

## CRIMES AND PENALTIES.

WHILE the penalties for homicide are not precisely uniform throughout the various States of the Union, except for the continuance or the abolishment of capital punishment, they are similar. With regard to other serious crimes, likewise, differences are more seeming than real. Felonies, such as manslaughter, arson, burglary, robbery and larceny, are in some States subdivided into degrees, first, second, third and even fourth; while in others there is a single general classification. Where there is no subdivision into degrees, however, the modifying of penalties by reason of attending circumstances results in the same effect as though there were degrees.

### CRIMES AGAINST THE UNITED STATES.

**Treason**—Whoever, owing allegiance to the United States, levies war against them, or adheres to their enemies, giving them aid and comfort, is guilty of treason. The penalty upon conviction is imprisonment for not less than 5 years, fine of not less than $10,000, or death. Misprision of treason consists in general of having knowledge of, concealing and not disclosing the treason of others. The penalty is imprisonment for not more than 7 years, and fine of not more than $1,000; or both fine and imprisonment. Rebellion or insurrection is the inciting, setting on foot, assisting or engaging in armed resistance to the execution of the laws by two or more. The penalty on conviction is imprisonment for not more than 10 years, fine of not more than $10,000, or both. Offenses against the mails fall into two general classes; one, the misuse of the mails for immoral or fraudulent purposes; the other, robbing the mails; penalties vary with the nature of the particular offense.

### CRIMES AGAINST THE STATES, PROVIDED FOR IN THE VARIOUS STATE PENAL CODES

**Bank Hold-Up**—Kan., 10 to 50 yrs.; No. Dak., 30 yrs. or less.

**Murder in the First Degree** may be generally defined to be the unlawful, intentional and premeditated killing of a human being, or such a killing resulting from the commission or attempt to commit one of the graver crimes, such as arson, burglary, rape or robbery.

**Murder in the Second Degree** is such a killing without premeditation, or resulting from the attempt to commit some lesser crime.

The penalty for murder in the first degree by the Federal Statutes is death by hanging. Hanging is also the penalty in Arizona, Connecticut, Delaware, Florida, Georgia, Missouri, New Mexico, Hawaii and the District of Columbia. Death by hanging or life imprisonment in Alabama, California, Colorado, Idaho, Iowa, Louisiana, Maryland, Mississippi, Montana, New Hampshire, Oregon, West Virginia and Wyoming, Alaska and Porto Rico. In Illinois, hanging or imprisonment not less than 14 years to life. In Texas, hanging, or any term of imprisonment not less than 5 years. Death by electricity in Arkansas, Massachusetts, Nebraska, New Jersey, New York, North Carolina, Pennsylvania and Vermont. Death by electricity or life imprisonment in Indiana, Kentucky, Ohio, Oklahoma and South Carolina. Life imprisonment in Kansas, Maine, Michigan, Minnesota, South Dakota and Wisconsin. In the State of Utah, the penalty may be death or life imprisonment; if death, the convicted person may choose between hanging or shooting. In Tennessee, the jury may fix the term of imprisonment. In the State of Washington, the jury may, by special verdict, find for the death penalty. In New Jersey and Oregon penalty is death, unless jury recommends life imprisonment; in Nevada, lethal gas.

Murder in the second degree is punished in the Federal Constitution by imprisonment for not less than 10 years to life. The same penalty, not less than 10 years up to life is imposed in the States of Arizona, Idaho, Iowa, Nebraska, Nevada, Rhode Island, Utah. Not less than 10 (the statutes not mentioning life imprisonment) is the penalty in Alabama, California, Kansas, Missouri, Montana, Washington and Porto Rico. Life imprisonment is the penalty in Connecticut, Delaware, Florida, Georgia, Indiana, Michigan, Minnesota, Ohio, Oregon, Vermont. The statutes of Illinois, Kentucky, Louisiana, Mississippi, Oklahoma, South Carolina and Texas have no second degree murder classification. In Arkansas the penalty is from 5 to 21 years; Maryland, 5 to 18; Michigan and New Hampshire, any term of years to life; no minimum term mentioned. New Jersey, not over 30; New Mexico, 3 or more; New York, not less than 20 up to life; North Carolina, 2 to 30; North Dakota, 10 to 30; Pennsylvania, not over 20; Tennessee, 10 to 20; Virginia and West Virginia, 5 to 18; Wisconsin, 14 to 25; Wyoming, not less than 20 up to life; Alaska, not less than 15; Hawaii, 20 up to life; District of Columbia, not less than 20 up to life.

In Colorado the death sentence is not imposed where the conviction is had on circumstantial evidence, nor on one under 18 years of age. In Delaware the jury may recommend commutation of the death sentence to imprisonment for life. In Delaware killing by husband of man found in adultery with wife is a misdemeanor, not a felony.

**Manslaughter** may be defined as a killing either unintentionally resulting from the careless or unlawful doing of some otherwise lawful act or from the commission of some unlawful act of comparatively trivial character or intentionally in the heat of passion and without premeditation.

Penalties for manslaughter vary, scarcely any two States fixing precisely the same. Many of the States do not subdivide into first and second. Where there is but the single heading the penalties are as follows: California (not over 10), Connecticut (not over 10 years and fine of $1,000), Delaware (1-10 and $500 to $5,000), Florida (not over 20 or $5,000), Idaho (not over 10), Illinois (any term up to life fixed by the Division of Pardons and Paroles), Indiana (2-21), Iowa (not over 8 and $1,000), Louisiana (not over 20 and $2,000), Maine (not over 20 and $1,000, or both), Maryland (not over 10 or $500), Massachusetts (not over 20), Michigan (15 or not over $1,000), Mississippi (not over 20 and $500), Montana (not over 10), Nebraska (1-10), Nevada (not over 10), New Jersey (not over 10), New Mexico (1-10), North Carolina (4 months to 20 years), Ohio (1-20), Oregon (1-15 and $5,000), Rhode Island (not over 20), South Carolina (2-30), Texas (2-5) Vermont (not less than 1 up to life or $1,000), Virginia (1-15), Washington (not over 20 and fine), Wyoming (1-20), Alaska (1-15), District of Columbia (not over 15, or $1,000, or both). Where two degrees are specified the penalty for manslaughter in the first is: Alabama (1-10), Arizona (not over 10), Arkansas (2-7), Colorado (1-8), Georgia (1-20), Kansas (5-21), Kentucky (2-21), Minnesota (5-20), Missouri (not less than 5), New Hampshire (not over 30), New York (not over 20), North Dakota (5-15), Oklahoma (not less than 4), Pennsylvania (not over 12 and $1,000), South Dakota (not less than 4), Tennessee (2-10), Utah (1-10), West Virginia (1-5), Wisconsin (5-10), Hawaii (10-20), Porto Rico (not over 10). And for second degree: In Alabama (not over 1 and $500), Georgia (1-3), Kansas (3-5), Kentucky (1-6), Minnesota (1-15), Missouri (3-5), New Hampshire (not over 10 or $1,000, or both), New York (not over 15 or $1,000, or both), North Dakota (1-15), Oklahoma (2-4), Pennsylvania (not over 2 and $1,000), South Dakota (2-4), Tennessee (1-15), Utah (not over 1), West Virginia (court fixes penalty), Wisconsin (4-7), Hawaii (5-10), Porto Rico (not over 10).

**Assault with Intent to Kill**—Under Federal Statutes, assault with intent to kill or to commit a rape is punishable by imprisonment for not more than 20 years, while assault with intent to commit a felony other than murder or rape is punishable by not more than 5 years' imprisonment and a fine of not over $3,000. In Iowa, assault with intent to kill is punishable by 10 years' imprisonment; not over 10 in Kansas, Massachusetts, Missouri, New York and Oklahoma; from 1 to 10 North Dakota, Oregon, Virginia; not less than 10 in Porto Rico; 1 to 14, California, Colorado, Idaho, Illinois, Nevada, Wyoming; 1-20, Maine, Rhode Island and Utah; Alabama (2-20), Arizona (5 up to life), Arkansas (1-21), Connecticut (10-30), Delaware (not over 3), Florida (not over 20), Georgia and Maryland (2-10), Indiana (2-14 and $2,000), Kentucky (1-5), Louisiana (not over 2 and $1,000), Michigan (any term to life or $8,000), Minnesota (5-10 and not over $100), Mississippi (not over 5 or $1,000), Montana (5-10), Nebraska and Texas (2-15), New Hampshire (not over 20), New Jersey (not over 7 or $200, or both), New Mexico (1 to 25 years or $1,000), North Carolina (fine or imprisonment, or both), Ohio and Alaska (1-15), Pennsylvania (not over 7 and $1,000), South Dakota (not over 5), Tennessee (3-21), Vermont (not over 10 and $1,000), Washington (not less than 5), West Virginia (2-10), Wisconsin (1-5 or $1,000), Hawaii (not over 5 and a fine), District of Columbia (not over 15). In Texas, an assault with a dagger incurs a double penalty. In Iowa, assault with intent to commit a rape (not more than 20).

**Rape**—In Federal Courts, rape is punishable with death by hanging. While many States have death as the extreme penalty, in few is it the same one. Arkansas and North Carolina (death by electricity), Alabama, Delaware, Kentucky, and Louisiana (hanging), Florida and Mississippi (hanging or life imprisonment), Georgia (hanging or 1-20), Missouri (hanging or not less than 5), Oklahoma electrical execution or not less than 15), South Carolina (elec-

trical execution or 5-40), Tennessee (electrical execution or not less than 10 to life), Texas (hanging or not less than 5 to life), Virginia (electrical execution or 5-20), West Virginia (hanging or 7-20), District of Columbia (hanging or 5-30). Many of the States do not inflict the death penalty. Arizona (5 to life), California (not over 50), Colorado (3 to life), Connecticut (not over 20), Idaho (not less than 5 to life), Illinois (1-life), Indiana (2-21), Iowa (any term to life), Kansas (5-21), Maine (any term of years), Maryland (hanging or 18 months-21 years), Massachusetts and Michigan (any term to life), Minnesota (7-30), Montana (not less than 5), Nebraska (3-20), Nevada (not less than 20 up to life), New Hampshire (not over 30), New Jersey (not over 15, or $5,000, or both), New Mexico (5-20), New York (10-20), North Dakota (not less than 1), Ohio and Oregon (3-20) Pennsylvania (not over 15 and $1,000), Rhode Island (not less than 10 up to life), South Dakota (not less than 10), Utah and Washington and Porto Rico (not less than 5), Vermont (not over 20 or $2,000, or both), Wisconsin (1-30), Wyoming (not less than 1 up to life), Alaska (3-20), Hawaii (up to life and $1,000). The rape of a daughter, sister or female under 12 is punishable in Alaska by life imprisonment. In Indiana rape of female under 12 life imprisonment. In Nevada rape accompanied with extreme violence may be punished by death or imprisonment not less than 20 years in jury's discretion.

**Arson**—where classified in degrees—though the number and exact definitions of degrees vary greatly—is in general classified with reference to two conditions, first, the character of the building burned, whether a dwelling house or structure likely to contain a human being; and, second, whether the crime is committed by day or night. Thus the most serious offense is the burning of an inhabited dwelling by night, and the least serious, the burning of an uninhabited structure by day. Often intermediate degrees are recognized, such as burning a dwelling by day or an uninhabited building by night. The Federal Statutes for arson in the first degree impose a penalty of not more than 20 years, and for the second degree, not more than 20 years and a fine of not more than $5,000. Some States punish arson in the first degree with death. These are: Alabama (hanging or not less than 10), Delaware (hanging), Louisiana (hanging or 1 to 10), Maryland (hanging or not over 20), Mississippi (hanging or life imprisonment), North Carolina, South Carolina and Virginia (death by electricity), Vermont (any term to 30 years or death by electricity), Hawaii (hanging or life imprisonment). The imprisonment which may be imposed for arson in the first degree takes a wide range—New York (not over 40), Iowa (30), New Hampshire (not over 30), Oklahoma (10-30), Florida and Michigan (any term up to life), Georgia (1 to life), Idaho (2 to life), Illinois (1-20), Indiana (2-21), Kansas (10-21), Kentucky (5-12), Maine (1-20), Minnesota and North Dakota (not less than 10), Nebraska (1-20), New Jersey (not over 15 or $2,000, or both), New Mexico (2-20), Ohio (not over 20), Oregon, West Virginia and Alaska (10-20), Texas (5-20), Utah (2-15), Wisconsin (3-14), Wyoming (1-21), South Dakota and Porto Rico (not less than 10), Arizona and California (not less than 2), Arkansas (2-10), Colorado and District of Columbia (1-10), Connecticut (not over 10), Missouri, Montana and Washington (not less than 5). The penalties for arson in the second degree are as varied as those for the first. In the Federal Courts, not more than 20 and $5,000. California (1-25), Colorado (not over 2 and $1,000), Delaware (1-10 and $500 to $5,000), Iowa (10-20), Kansas (7-10), Louisiana (1-20), Maine (any term of years), Maryland (2-20), Minnesota (7-15), New Hampshire (not over 20), New Mexico (1-15), New York (not over 25), North Dakota (7-10) Oregon (5-15), Pennsylvania (not over 10 and $2,000), South Dakota (7-10), Tennessee (2-21), Vermont (not over 10 or $1,000) Virginia (5-18), Washington (not over 10 or $5,000), Alaska (5-15), Hawaii (life or any number of years), Alabama and Oklahoma (2-10), Arizona, Idaho, Montana, Utah and Porto Rico (1-10), Arkansas (6 months and fine), Massachusetts and Mississippi (not over 10), Missouri (not less than 5), Nevada (1-3 and fine), South Carolina (in discretion of the court) Wisconsin (3-10).

**Burglary**—The classification of burglary or housebreaking depends on substantially the same elements as those of arson; namely, the building entered, whether a dwelling or other building, and whether the offense was committed by day or night. Burglary in the first degree is punished in North Carolina by death by electricity; Virginia (electricity or 5-18), Delaware (hanging or not over 14), Florida and Iowa (any term up to life), Maine (any term of years), Massachusetts (life imprisonment or not less than 10), Ohio (life or 5-30), Rhode Island and South Carolina (not less than 5 up to life), Alabama, Georgia and Illinois (1-20), Arkansas, California, Idaho, Montana, Alaska and Porto Rico (1-15), Connecticut, Michigan and Hawaii (not over 20), Indiana (10-20), Kansas (10-20), Mississippi (7-15), Nevada and Wyoming (1-14), New Hampshire (not over 30), New Mexico (3-12), Oklahoma (7-20), Oregon, Tennessee and Wisconsin (5-15), Pennsylvania (not over 10 and $10,000), Texas (2-12), Utah (25-40), Vermont (not over 15 or $1,000), District of Columbia (not over 15), West Virginia (2-15), Minnesota, New York, North Dakota, South Dakota (not less than 10), Missouri and Washington (not less than 5), Arkansas (3-7), Colorado and Nebraska (1-10), Kentucky (2-10), Maryland (3-10). Burglary by means of dynamite or other explosives is punished in Colorado by imprisonment from 25 to 40 years; in Wisconsin (15-40), and in Wyoming (not over 20). Quite a number of States have no heading of second degree burglary. These are Alabama, Arkansas, Colorado, Kentucky, Louisiana, Maryland, Michigan, Nebraska, New Jersey, Rhode Island, South Carolina, West Virginia, and Wyoming, also the District of Columbia. The penalties where it is specified do not show as much variance as in the first degree. Connecticut, Florida, Iowa, Massachusetts (not over 20), Delaware, Georgia and Utah (1-20), Minnesota, Mississippi, New York, North Carolina and Hawaii (not over 10), Maine (1-10), Arizona, California, Idaho, Montana, Nevada and New Hampshire (not over 5), Texas (not less than 5), North Dakota and New Mexico (1-5), Oregon, South Dakota, Tennessee and Virginia (3-10), Indiana (2-14), Kansas (5-10), Missouri (not less than 2), Ohio (1-15), Oklahoma (2-7), Pennsylvania (not over 10 and $500), Vermont (not over 10 or $1,000), Washington (not over 15), Wisconsin (3-8), Alaska (2-5), Porto Rico (not over 2).

**Robbery** may be generally defined as the theft of property from the person or immediate presence of the victim, accomplished by force or fear. Where degrees of robbery are recognized, the distinction is generally determined by whether the thief be armed or unarmed, though some States also distinguish the second from the first degree, where the theft is accomplished by means of threats of future rather than immediate injury. In the following synopsis, degrees are not considered. Federal Statutes fix the penalty for robbery at not more than 15 years. Alabama punishes robbery by death (hanging or not less than 10), Virginia (electrical execution or 5-18), Massachusetts, Michigan and Hawaii (any number of years to life), Maine (any term of years), Idaho, Rhode Island and Texas (5 to life), Oregon and Utah (3 to life), Illinois (1 to life), Oklahoma (not less than 10), New York and South Dakota (10-20), Kansas (10-21), Arizona, Nevada and Washington (not less than 5), North Carolina (5-60), Minnesota (5-20), Tennessee (5-15), Indiana (5-14 and $1,000), West Virginia (5-10), Arkansas (3-21), Nebraska, New Mexico and Wisconsin (3-15), Colorado (3-14), Maryland (3-10), Kentucky and South Carolina (2-10), Georgia and Iowa (2-20), Montana and Porto Rico (1-20), Ohio and Alaska (1-15), Wyoming (1-14), North Dakota (1-10), California (not less than 1), New Hampshire (not over 30), Vermont (not over 20 and $1,000), Florida (not over 20), New Jersey (not over 15 or $1,000, or both), Louisiana (not over 14), Delaware (not over 12), Connecticut (not over 7), Pennsylvania (not over 5 and $1,000), District of Columbia (6 months to 15 years). In Nevada train robbery and in Texas robbery by means of deadly weapons may be punished with death. Train robberies in Territories are punishable by imprisonment not more than 20 years and a fine of not more than $5,000.

**Grand Larceny** is simply theft of property above a fixed value, generally $25 to $50—more States also classify as grand larceny theft of property from the person of the victim, irrespective of value, though, of course, accomplished without the force or fear which constitutes the crime of robbery. In the Federal Courts, grand larceny is punishable by not more than 10 years' imprisonment and a fine of not more than $10,000. Wisconsin (1-25), Alabama and Georgia, (1-20), Maryland (1-15), Idaho, Indiana, Montana and Nevada (1-14), New Mexico, Oregon, Utah, Virginia, Alaska, Porto Rico and District of Columbia (1-10), Tennessee, Texas and West Virginia (2-10), Nebraska and Ohio (1-7), Arkansas, Kentucky, Maine and North Dakota (1-5), Hawaii (not over 20), Washington (not over 15), Louisiana, New York, North Carolina and Wyoming (not over 10), Kansas and Missouri (not over 7), New Jersey (not over 7 or $2,000, or both), Connecticut, Iowa, Massachusetts, Mississippi, New Hampshire, Oklahoma and South Dakota (not over 5), Florida and Rhode Island (not over 5 or $1,000), Michigan (not over 5 or $5,000), Pennsylvania (3 and $500), Delaware (not over 3), South Carolina (3 months to 10 years). Special penalties are imposed in certain States for horse and cattle stealing. In Calif., Mont.

and N. Mex., taking horses, cattle, etc., is grand larceny, irrespective of value; in Arkansas for stealing horse or mule (1-15); in Missouri and New Hampshire, larceny of horse or cattle (not over 7); in Texas horse theft (5-10); in Georgia there are various grades of larceny of horses, cattle, etc. In Connecticut the punishment for larceny of over $2,000 (not over 20). In North Carolina habitual offenders receive longer terms.

**Forgery** in general means the false making, imitating or counterfeiting or alteration of a genuine signature or written instrument. There are numerous Federal Statutes defining and imposing penalties for alteration of public records and documents. These do not come within the purview of this synopsis, being no one general classification. Counterfeiting is punished by imprisonment of not more than 15 years and a fine of not more than $5,000. There is some uniformity but not a great deal in the various State penalties for forgery. North Dakota (not less than 10), North Carolina (4 months to 10 years), Oklahoma (7-20), Kentucky (5-15), Tennessee (3-15), Arkansas (2-21), Oregon and Alaska (2-20), Mississippi and New Mexico (2-15), Indiana (2-14 or $1,000), Alabama, Georgia and West Virginia (2-10), Texas (2-7), Nebraska, Ohio and Utah (1-20), Montana (1-15), Nevada and Wyoming (1-14), Maryland, Virginia, Porto Rico and District of Columbia (1-10), Wisconsin (1-7), South Carolina (1-7), Kansas (not over 21), Minnesota, New York and Washington (not over 20), Michigan (not over 14), Florida, Iowa, Maine, Massachusetts, Missouri, South Dakota (not over 10), Pennsylvania and Vermont (not over $1,000), Rhode Island (not over 10, or $1,000, or both), Hawaii (not over 10 and $500), New Hampshire (not over 7), New Jersey (not over 7 or $2,000, or both), Connecticut (not over 5). In Iowa changing plate numbers on autos is classified as forgery.

**Bigamy**—A person who, having a husband or wife living, marries another, is guilty of bigamy. Under Federal Statutes, polygamy (or bigamy) in the Territories is punished by imprisonment for not more than 5 years and a fine of not more than $500. Five years' imprisonment is the most general maximum penalty in the States for bigamy and fines are quite commonly imposed. Some of the States, however, have a more severe extreme penalty and some a lesser maximum. Kentucky (3-9), Virginia (3-8), Tennessee (2-21), Arkansas (3-7), New Mexico and District of Columbia (2-7), Alabama and Texas (2-5), Indiana (2-5 or $1,000), Georgia (1-10), Nebraska, Ohio and Alaska (1-7), North Dakota, West Virginia and Wyoming (1-5), Illinois, Nevada and Rhode Island (1-5 and $1,000), Louisiana (1-5 and $500), Wisconsin (1-5 and fine), Oregon (1-4), Mississippi (not over 10), California (not over 10 and $5,000), Arizona (not over 10 and $2,000), New Jersey (not over 10 or $1,000, or both), Delaware (not over 6 and $2,000), Connecticut, Iowa, Kansas, Massachusetts, Missouri, New York, Oklahoma, South Dakota and Washington (not over 5), Idaho (not over 5 and $2,000), Minnesota and Vermont (not over 5 and $1,000), Florida, Maine, Michigan and Utah (not over 5 or $500), Porto Rico (not over 3 or $2,000), Montana (not over 3 and $1,000), New Hampshire (not over 3 and $500), Pennsylvania (not over 2 and $1,000), Hawaii (not over 2 or $500).

**Perjury** under the various State codes usually means false testimony on a material point given in an action or proceeding at law. The following are the penalties imposed in accordance with this usual definition. In the Federal Courts (not more than 5 and not more than $2,000), Iowa (10 up to life), Oklahoma (5-20), Georgia (4-10), Ohio and Oregon (3-10), Indiana (2-21 or $50 and $1,000), Minnesota, Texas and District of Columbia (2-10), Wisconsin (2-5), South Dakota (1-20), Arkansas and Tennessee (1-15), Arizona, California, Colorado, Idaho, Illinois, Montana, Nebraska, Nevada and Wyoming (1-14), North Dakota, Utah, Alaska and Porto Rico (1-10), New Mexico (1-7), Kentucky (1-5), West Virginia (1 year and $1,000), North Carolina (4 months to 10 years), Florida, New Hampshire, Massachusetts, Rhode Island and Hawaii (not over 20), Michigan and Washington (not over 15), Vermont (not over 15 and $1,000), Maine, Maryland, Mississippi and New York (not over 10), Delaware (not over 10 and $2,000), Kansas, Missouri and South Carolina (not over 7), New Jersey (not over 7 or $2,000, or both), Pennsylvania (not over 7 and $500), Connecticut and Louisiana (not over 5), Virginia (not over 1 and $1,000). In many of the States severer penalties than those given above are imposed, varying with the character of the action or the results of the false testimony. Thus in Colorado and Texas perjury which causes conviction in a capital case is punished by death. In capital cases, irrespective of results, the penalty is: In Alaska (2-20), Oregon (5-20), Kansas (not less than 7), Maine, Mississippi and Missouri (not less than 10), Massachusetts and Michigan (any term up to life), Wisconsin (3-15). In cases of felony not necessarily capital: Alabama (3-20), New York (not more than 20), North Dakota (not less than 10), Virginia (2-10), West Virginia (1-10).

Where crimes are divided into several degrees it is generally within the province of the jury, in convicting, to fix the degree of the crime, and in almost every case in which a crime is punishable by death or imprisonment it is the province of the jury to determine the punishment, except upon a plea of guilty, when the duty devolves upon the court.

NOTE—Figures in parentheses in the laws on crimes with their penalties are years. Money figures are maximum.

## LITIGATION OF CUSTOMS CLAIMS.

(By the Board of United States General Appraisers.)

A statutory judicial remedy is given by the Customs Practice Act of June 10, 1890, and supplements thereto, for the return of money illegally exacted by the administrative customs officials before a special statutory Court of Customs Claims called the Board of United States General Appraisers. If the valuation by the local appraiser of imported merchandise upon which an ad valorem duty is assessed is disputed by the importer he may appeal for a revaluation (or reappraisement as it is called) within ten days after the local appraiser has made the assessment. If the importer is dissatisfied with the classification by the Collector of Customs at the port of entry, he may file a protest in writing within thirty days with such Collector, who thereupon must forward the papers to the board, and the case is regularly docketed.

### NO LIMITATION ON AMOUNT.

There is no limitation upon the amount involved in such litigation. It covers and includes merchandise imported by Parcel Post and claims arising from the assessment and classification of baggage not exempt from duty. The trial of the case is usually had at the port of entry or some nearby place. Regular dockets for the trial of such cases are held at New York, Philadelphia, Boston, Baltimore, Chicago, Cincinnati, St. Louis, St. Paul, Seattle, Portland, San Francisco and Los Angeles. In addition special dockets are held in other customs districts at the convenience and on request of the importers' attorneys. There are no court costs and the procedure is simple and expeditious, yet includes all the safeguards and protections of an ordinary court trial. Numerous claims against the Government, arising from the administration of the customs laws are thus litigated and involve in the aggregate large sums of money. Reappraisement cases are heard by a single member of the board, with an appeal by either the Government or the importer from his judgment to a board of three. Classification cases, including contests over the legality of an appraisement, the legality of any administrative regulation promulgated by the Secretary of the Treasury, or the legality of other administrative action resulting in the levy of an excessive rate or amount of duty by the Collector of Customs are decided by the Classification Board.

### METHOD OF APPEAL.

An appeal lies from this board's judgment to the Court of Customs Appeals at Washington, from whence certiorari lies to the Supreme Court of the United States in treaty cases, constitutional cases and other cases which the Attorney General certifies as of sufficient importance.

## U. S. NATURALIZATION LAWS.

By an act of Congress approved Sept. 22, 1922, it is provided that after that date the citizenship status of a married woman shall no longer follow that of the husband, and that thereafter a married woman shall have the privilege of becoming naturalized on her own account.

The two principal classes of married women specifically referred to in the above legislation, with the means each class must take in order to acquire American citizenship, are described below:

1. *An alien woman marrying an American citizen after the passage of the above act, or any woman whose husband is naturalized after said act.*

She may become naturalized by filing the usual petition for naturalization and complying with all requirements of the naturalization laws, with the following exceptions:

(a) No declaration of intention required.

(b) Only one year's continuous residence in the United States, Hawaii, Alaska, or Porto Rico immediately preceding the filing of her petition required.

2. *A woman who before the passage of the above act was an American citizen and lost her United States citizenship by marriage to an alien.*

She may become naturalized by filing the usual petition for naturalization and complying with all requirements of the naturalization laws, with the following exceptions:

(a) No declaration of intention required.

(b) Only one year's continuous residence in the United States, Hawaii, Alaska, or Porto Rico immediately preceding the filing of her petition required.

(c) No certificate of arrival required if during the continuance of the marital status she shall have resided within the United States.

An alien woman married to an alien at the time of the passage of the above act, or who thereafter marries an alien may become naturalized by complying with all requirements of the naturalization laws, including declaration, five years' continuous United States residence, one year continuous State residence, certificate of arrival if her entry dates from June 29, 1906, etc.

The status of *single* alien women is not affected by this law, and women of this class may continue as in the past to file declarations and petitions for the purpose of becoming naturalized.

The act referred to further provides that no married woman whose husband is not eligible to citizenship shall be naturalized during the continuance of the marital status, and that she herself must be eligible to citizenship. Eligibility for citizenship is determined almost entirely by the question of whether the persons concerned are "white persons" or "persons of African nativity or African descent," as provided by the Revised Statutes, and whether the husband is disbarred from citizenship because of withdrawal of declaration of intention under the act of July 9, 1918, for the purpose of securing immunity from military service during the recent war.

The following courts alone have the power to naturalize aliens: United States District Courts in the States and Territories; also all courts of record in any State or Territory having a seal, a clerk, and jurisdiction in actions at law or equity, or law and equity, in which the amount in controversy is unlimited.

The power to naturalize is limited to persons residing within the geographical limits of the respective courts.

Any alien, white, or of African nativity or descent, is required, if he desires to become naturalized, to file a declaration of intention in the clerk's office of a court having jurisdiction, and such declaration may not be filed until the alien has reached the age of eighteen. This declaration must contain information as to the name, age, occupation, time and place of arrival in the United States, and must further show that it is the declarant's *bona fide* intention to become a citizen of the United States and to renounce forever all allegiance and fidelity to any foreign prince, potentate, state or sovereignty

Not less than two years after an alien has filed his declaration of intention, and after not less than five years' continuous residence in the United States, he may file a petition for citizenship in any one of the courts which has jurisdiction over the place in which he resides, provided he has lived at least one year continuously, immediately prior to the filing of such petition, in the State or Territory in which such place is located. This petition must be signed by the petitioner in his own handwriting and shall give his full name, place of residence, occupation, place of birth and the date thereof, the place from which he emigrated, and the date and place of his arrival in the United States. If such arrival occurred subsequent to the passage of the act of June 29, 1906, he must secure a certificate from the Department of Labor showing the fact of such arrival and the date and place thereof, for filing with the clerk of the court to be attached to his petition. If he is married he must state the name of his wife and, if possible, the country of her nativity and her place of residence at the time of the filing of his petition, and, if he has children, the name, date and place of birth and present place of residence of each living child. The petition must set forth that he is not a disbeliever in or opposed to organized government, or a member of or affiliated with any organization or body of persons teaching disbelief in or opposition to organized government; that he is not a polygamist or a believer in the practice of polygamy, and that he absolutely and forever renounces all allegiance and fidelity to any foreign country of which he may, at the time of filing such petition, be a citizen or subject. This petition must be verified at the time it is filed by the affidavit of two credible witnesses, who are citizens of the United States and who shall state that they have known the petitioner during his entire residence (not exceeding five years) in the State in which the petition is filed, which must be not less than one year, and that they have known him to be a resident of the United States continuously during the five years immediately preceding the filing of the petition; that during such time he acted as a man of good moral character, attached to the principles of the Constitution of the United States and well disposed to the good order and happiness of the same. If a portion of the five years has been passed by the petitioner in some other State than that in which he resides at the time of filing his petition the affidavit of the witnesses may verify so much of the petitioner's residence as has been passed in the State (not less than one year), and the portion of said five years' residence out of the State may be shown by depositions at the time of hearing on the petition.

No petition may be heard until the expiration of at least ninety days after it is filed nor within thirty days preceding a general election.

The act of May 9, 1918, in reference to naturalization of honorably discharged soldiers and sailors who served during the recent war, has been superseded by the act of July 19, 1919, as follows: "Any person of foreign birth, who served in the military or naval forces of the United States during the present war, after final examination and acceptance by the said military or naval authorities, and shall have been honorably discharged after such acceptanec and service, shall have the benefits of the seventh subdivision of Section 4, of the act of June 29, 1906, 34 Statutes at Large, Part 1, Page 596, as amended, and shall not be required to pay any fee therefor; and this provision shall continue for the period of one year after all of the American troops are returned to the United States."

Alien seamen who have sailed three years on United States merchant or fishing vessels are protected as American citizens after declaring intention of becoming such. (This means that aliens who have sailed three years or more on American vessels may claim protection as American citizens by simply asking for it and, at the same time, declaring their intention of becoming citizens.) Aliens honorably discharged on account of disability in performance of duty while in military or naval service during the war or at its termination, may be relieved of the necessity of proving continuous five years' residence. Citizens having lost citizenship by entering the service of the Allies may resume citizenship by taking the oath of allegiance.

### STATUS OF NATURALIZED AMERICANS ABROAD.

Section 2 of the Citizenship Act of March 2, 1907, contains the following provision: "When any naturalized citizen shall have resided for two years in the foreign state from which he came, or for five years in any other foreign state, it shall be presumed that he has ceased to be an American citizen, and the place of his general abode shall be deemed his place of residence during said years: provided, that such presumption may be overcome on the presentation of satisfactory evidence to a diplomatic or consular office of the United States, under such rules and regulations as the Department of State may prescribe: and provided also, that no American citizen shall be allowed to expatriate himself when this country is at war."

## UNITED STATES IMMIGRATION LAW OF FEB. 5, 1917.

The *tax* on immigrant aliens entering, including seamen, is $8. Children under sixteen years, when with a parent, are exempted, also aliens in transit to another country.

*Excluded Classes*—All idiots, imbeciles, feeble-minded persons, epileptics, insane persons; persons who have had one or more attacks of insanity at any time previously; persons of constitutional psychopathic inferiority; persons with chronic alcoholism; paupers; professional beggars; vagrants. persons afflicted with tuberculosis in any form or with a loathsome or dangerous contagious disease; persons not comprehended within any of the foregoing excluded classes who are found to be and are certified by the examining surgeon as being mentally or physically defective, such physical defect being of a nature which may affect the ability of such alien to earn a living; persons who have been convicted of or admit having committed a felony or other crime or misdemeanor involving moral turpitude; polygamists, or persons who practise polygamy or believe in or advocate the practise of polygamy;

Anarchists, or persons who believe in or advocate the overturow by force or violence of the Government of the United States or of all forms of law, or who disbelieve in or are opposed to organized government, or who advocate the assassination of public officials, or who advocate or teach the unlawful destruction of property; persons who are members of or affiliated with any organization entertaining and teaching disbelief in or opposition to organized government, or who advocate or teach the duty, necessity, or propriety of the unlawful assaulting or killing of any officer or officers, either of specific individuals or of officers generally, of the Government of the United States or of any other organized government because of his or their official character, or who advocate or teach the unlawful destruction of property; prostitutes, or persons coming into the United States for the purpose of prostitution or for any other immoral purpose; persons who directly or indirectly procure or attempt to procure or import prostitutes or persons for the purpose of prostitution or for any other immoral purpose; persons who are supported by or receive in whole or in part the proceeds of prostitution.

Persons, hereinafter called contract laborers, who have been induced, assisted, encouraged, or solicited to migrate to this country by offers or promises of employment, whether such offers or promises are true or false, or in consequence of agreements, oral, written, or printed, express or implied, to perform labor in this country of any kind, skilled or unskilled; persons who have come in consequence of advertisements for laborers printed, published, or distributed in a foreign country; persons likley to become a public charge, persons who have been deported under any of the provisions of this act, and who may again seek admission within one year from the date of such deportation, unless prior to their re-embarkation at a foreign port or their attempt to be admitted from foreign contiguous territory the Secretary of Labor shall have consented to their reapplying for admission;

Persons whose ticket or passage is paid for with the money of another, or who are assisted by others to come, unless it is affirmatively and satisfactorily shown that such persons do not belong to one of the foregoing excluded classes; persons whose ticket or passage is paid for by any corporation, association, society, municipality, or foreign Government, either directly or indirectly; stowaways, except that any such stowaway, if otherwise admissible, may be admitted in the discretion of the Secretary of Labor; all children under sixteen years of age unaccompanied by or not coming to one or both of their parents, except that any such children may, in the discretion of the Secretary of Labor, be admitted if in his opinion they are not likely to become a public charge and are otherwise eligible;

Unless otherwise provided for by existing treaties, persons who are natives of islands not possessed by the United States adjacent to the continent of Asia, situate south of the twentieth parallel latitude north, west of the one hundred and sixtieth meridian of longitude east from Greenwich, and north of the tenth parallel of latitude south, or who are natives of any country, province, or dependency situate on the continent of Asia west of the one hundred and tenth meridian of longitude east from Greenwich and east of the fiftieth meridian of longitude east from Greenwich and south of the fiftieth parallel of latitude north, except that portion of said territory situate between the fiftieth and the sixty-fourth meridians of longitude east from Greenwich and the twenty-fourth and thirty-eighth parallels of latitude north, and no alien now in any way excluded from or prevented from entering the United States shall be admitted to the United States.

*The provision next foregoing, however, shall not apply to persons of the following status or occupations:* Government officers, ministers or religious teachers, missionaries, lawyers, physicians, chemists civil engineers, teachers, students, authors, artists, merchants, and travellers for curiosity or pleasure, nor to their legal wives or their children under sixteen years of age who shall accompany them or who subsequently may apply for admission to the United States, but such persons or their legal wives or foreign-born children who fail to maintain in the United States a status or occupation placing them within the excepted classes shall be deemed to be in the United States contrary to law, and shall be subject to deportation as provided in section nineteen of this act.

All aliens over sixteen years of age, physically capable of reading, who cannot read the English language or some other language or dialect, including Hebrew or Yiddish: *Provided*, That any admissible alien, or any alien heretofore or hereafter legally admitted, or any citizen of the United States, may bring in or send for his father or grandfather over fifty-five years of age, his wife, his mother, his grandmother, or his unmarried or widowed daughter, if otherwise admissible, whether such relative can read or not; and such relative shall be permitted to enter.

*The following classes of persons shall be exempt from the operation of the illiteracy test, to wit:* All aliens who shall prove to the satisfaction of the proper immigration officer or to the Secretary of Labor that they are seeking admission to the United States to avoid religious persecution in the country of their last permanent residence, whether such persecution be evidenced by overt acts or by laws or governmental regulations that discriminate against the alien or the race to which he belongs because of his religious faith; all aliens who have been lawfully admitted to the United States and who have resided therein continuously for five years and who return to the United States within six months from the date of their departure therefrom; all aliens in transit through the United States; all aliens who have been lawfully admitted to the United States and who later shall go in transit from one part of the United States to another through foreign contiguous territory:

*Provided*, That nothing in this act shall exclude, if otherwise admissible, persons convicted or who admit the commission, or who teach or advocate the commission of an offense purely political:

*Provided further*, That the provisions of this act relating to the payments for tickets or passage by any corporation, association, society, municipality, or foreign Government shall not apply to the tickets or passage of aliens in immediate and continuous transit through the United States to foreign contiguous territory:

*Provided further*, That skilled labor, if otherwise admissible, may be imported if labor of like kind unemployed cannot be found in this country, and the question of the necessity of importing such skilled labor in any particular instance may be determined by the Secretary of Labor upon the application of any person interested, such application to be made before such importation, and such determination by the Secretary of Labor to be reached after a full hearing and an investigation into the facts of the case:

*Provided further*, That the provisions of this law applicable to contract labor shall not be held to exclude professional actors, artists, lecturers, singers, nurses, ministers of any religious denomination, professors for colleges or seminaries, persons belonging to any recognized learned profession, or persons employed as domestic servants:

*Provided further*, That whenever the President shall be satisfied that passports issued by any foreign Government to its citizens or subjects to go to any country other than the United States, or to any insular possession of the United States or to the Canal Zone, are being used for the purpose of enabling the holder to come to the continental territory of the United States to the detriment of labor conditions therein, the President shall refuse to permit such citizens or subjects of the country issuing such passports to enter the continental territory of the United States from such other country or from such insular possession or from the Canal Zone;

*Provided further*, That aliens returning after a temporary absence to an unrelinquished United States domicile of seven consecutive years may be

admitted in the discretion of the Secretary of Labor and under such conditions as he may prescribe:

*Provided further*, That nothing in the contract-labor or reading-test provisions of this act shall be construed to prevent, hinder, or restrict any alien exhibitor, or holder of concession or privilege for any fair or exposition authorized by act of Congress, from bringing into the United States, under contract, such otherwise admissible alien mechanics, artisans, agents, or other employees natives of his country as may be necessary for installing or conducting his exhibit or for preparing for installing or conducting any business authorized or permitted under any concession or privilege which may have been or may be granted by any such fair or exposition in connection therewith, under such rules and regulations as the Commissioner General of Immigration, with the approval of the Secretary of Labor, may prescribe both as to the admission and return of such persons:

*Provided further*, That the Commissioner General of Immigration with the approval of the Secretary of Labor shall issue rules and prescribe conditions, including exaction of such bonds as may be necessary to control and regulate the admission and return of otherwise inadmissible aliens applying for temporary admission:

*Provided further*, That nothing in this act shall be construed to apply to accredited officials of foreign Governments, nor to their suites, families, or guests.

## VIOLATIONS AND PENALTIES.

Violations of the immoral-women clause are punishable, on conviction, by imprisonment up to ten years and a fine up to $5,000. Violations of the contract-labor clause are punishable, on conviction, by $1,000 fine in each case and (or) imprisonment up to two years. Violations of the Anarchist clause carry prison up to five years and fine up to $5,000. Other violations carry various penalties. It is unlawful for any person or concern engaged in bringing immigrants to give fare rebates or to solicit immigration; penalty, $400 fine in each case. The penalty for smuggling immigrants is fine up to $2,000 and prison up to five years. Immigrant ships must bring written records of each alien, with name, description, destination, etc., signed by the ship's surgeon; penalty, $10 for each unrecorded alien.

Incoming aliens at all U. S. ports are examined by U. S. Public Health Service doctors, and each immigrant must be examined by at least two inspectors, under oath. False testimony by an immigrant or in his behalf is punishable as perjury. Impeding inspection is punishable by fine up to $2,000 and prison up to one year. An alien can appeal to a board of special inquiry, and then to the Secretary of Labor, whose word is final. Excluded aliens are returned at the ship's expense.

Aliens may be deported at any time within five years of their arrival if found guilty of crime or of having been of the excluded classes at arrival. An alien otherwise admittable may be let in by giving a cash bond that he or she will not become a public charge. The amount of cash is fixed in each case by the Secretary of Labor. It is unlawful for a ship to pay off or discharge an alien seaman in a U. S. port unless he lands merely to reship. An alien seaman unlawfully entered may be deported within three years of arrival, and this applies to any other person who got in unlawfully and who was not of the excluded classes.

Whenever an alien shall have been naturalized or shall have taken up his permanent residence in this country and thereafter shall send for his wife or minor children to join him, and said wife or any of said minor children shall be found to be affected with any contagious disorder, such wife or minor children shall be held under such regulations as the Secretary of Labor shall prescribe, until it shall be determined whether the disorder will be easily curable or whether they can be permitted to land without danger to other persons; and they shall not be either admitted or deported until such facts have been ascertained; and if it shall be determined that the disorder is easily curable and the husband or father or other responsible person is willing to bear the expense of the treatment, they may be accorded treatment in hospital until cured and then be admitted, or if it shall be determined that they can be permitted to land without danger to other persons, they may, if otherwise admissible, thereupon be admitted:

*Provided*, That if the person sending for wife or minor children is naturalized, a wife to whom married or a minor child born subsequent to such husband or father's naturalization shall be admitted without detention for treatment in hospital, and with respect to a wife to whom married or a minor child born prior to such husband or father's naturalization the provisions of this section shall be observed, even though such person is unable to pay the expense of treatment, in which case the expense shall be paid from the appropriation for the enforcement of this act.

## AMENDMENT EXCLUDING ALIENS.

An act of Congress, approved June 5, 1920, amends the amendment of Oct. 16, 1918, as to Anarchists so as to exclude from admission to the United States the following classes:

(*a*) Aliens who are Anarchists; (*b*) aliens who advise, advocate, or teach, or who are members of or affiliated with any organization, association, society, or group that advises, advocates, or teaches, opposition to all organized government; (*c*) aliens who believe in, advise, advocate, or teach, or who are members of or affiliated with any organization, association, society, or group, that believes in, advises, advocates, or teaches: (1) the overthrow by force or violence of the Government of the United States or of all forms of law, or (2) the duty, necessity or propriety of the unlawful assaulting or killing of any officer or officers (either of specific individuals or of officers generally) of the Government of the United States or of any other organized government because of his or their official character, or (3) the unlawful damage, injury or destruction of property, or (4) sabotage:

(*d*) Aliens who write, publish, or cause to be written or published, or who knowingly circulate, distribute, print, or display, or knowingly cause to be circulated, distributed, printed, published, or displayed, or who knowingly have in their possession for the purpose of circulation, distribution, publication, or display, any written or printed matter advising, advocating, or teaching opposition to all organized government, or advising, advocating or teaching: (1) the overthrow by force or violence of the Government of the United States or of all forms of law, or (2) the duty, necessity or propriety of the unlawful assaulting or killing of any officer or officers (either of specific individuals or of officers generally) of the Government of the United States or of any other organized government, or the unlawful damage, injury or destruction of property, or (4) sabotage:

(*e*) Aliens who are members of or affiliated with any organization, association, society, or group that writes, circulates, distributes, prints, publishes, or displays, or causes to be written, circulated, distributed, printed, published, or displayed, or that has in its possession for the purpose of circulation, distribution, publication, issue, or display, any written or printed matter of the character described in subdivision (*d*).

For the purpose of this section: (1) the giving, loaning, or promising of money or any thing of value to be used for the advising, advocacy, or teaching of any doctrine above enumerated shall constitute the advising, advocacy, or teaching of such doctrine; and (2) the giving, loaning, or promising of money or any thing of value to any organization, association, society, or group of the character above described shall constitute affiliation therewith; but nothing in this paragraph shall be taken as an exclusive definition of advising, advocacy, teaching, or affiliation.

Any alien who shall, after he has been excluded and deported or arrested and deported in pursuance of the provisions of this act, thereafter return to or enter the United States or attempt to return to or to enter the United States shall be deemed guilty of a felony, and upon conviction thereof shall be punished by imprisonment for not more than five years; and deported.

## ALIENS ADMITTED TO MARRY.

An act of Congress, approved June 5, 1920, amends the Immigration Act by adding that an alien who cannot read may, if otherwise admissible, be admitted if within five years hereafter a citizen of the United States who has served in the military or naval forces of the United States during the war with the Imperial German Government requests that such alien be admitted, and with the approval of the Secretary of Labor marries such alien at a United States immigration station. Approved June 5, 1920.

Under an act of Congress, approved May 1[illegible]

1920, the Secretary of Labor is given power to deport, after a hearing, aliens found guilty of violating any of the so-called war acts, including interned aliens.

Congress, by a joint resolution, approved Oct. 19, 1918, amended the Immigration Law so as to readmit any alien who enlisted or served here or abroad in the United States or other Allied forces if such alien applies for readmission within a year after the war's end, or returns to a United States port within two years after the war's end. In such cases the head tax is remitted, and the alien is let in.

### THE IMMIGRATION RESTRICTION LAW.

The Immigration Restriction Law of May 19, 1921, operative until June 30, 1924, defines "alien" as any person not native born or naturalized, exclusive of Indians not taxed, and citizens of the islands under U. S. jurisdiction. It limits the number of aliens admissible to three per cent. of the number of the particular nationality in each case resident in the U. S. as shown by the 1910 census. Exceptions are government employees, their families and servants, visitors for pleasure or business, others merely going through the country as a convenient route, one year residents of Canada, Newfoundland, Cuba, Mexico, or Central or South American countries, and children (under eighteen) of U. S. citizens. Not more than 20 per cent. of each nationality to be admitted in any one month. Preference to be given to relatives and fiancees of U. S. citizens, of applicants for citizenship, and of persons eligible to citizenship by service in U. S. military or naval forces between April 6, 1917 and Nov. 11, 1918, inclusive.

The penalty for bringing aliens in who are inadmissible under the Restriction Act is $200 for each alien.

## PASSPORT REGULATIONS.

1. AUTHORITY TO ISSUE—Section 4075 of the Revised Statutes of the United States, as amended by the act of Congress approved June 14, 1902, provides that "the Secretary of State may grant and issue passports, and cause passports to be granted, issued, and verified in foreign countries by such diplomatic or consular officers of the United States, and by such chief or other executive officer of the insular possessions of the United States, and under such rules as the President shall designate and prescribe for and on behalf of the United States."

2. TO WHOM PASSPORTS ARE ISSUED—Section 4076 of the Revised Statutes of the United States (U. S. Comp. Stat., 1901, 2765) provides that "no passport shall be granted or issued to or verified for any other persons than those owing allegiance, whether citizens or not, to the United States." Persons who have declared their intention to become citizens are not classed as citizens.

3. BY WHOM ISSUED AND REFUSAL TO ISSUE—No one but the Secretary of State may grant and issue passports in the United States (Rev. Stat., Secs. 4075, 4078) and he is empowered to refuse them in his discretion. Passports are not issued by American diplomatic and consular officers abroad, except in cases of emergency; and a citizen who is abroad and desires to procure a passport must apply therefor through the nearest diplomatic or consular officer to the Secretary of State. Applications for passports by persons in Hawaii, Porto Rico or the Philippines should be made to the chief executives of those islands. The evidence required of such applicants is similar to that required of applicants in the United States.

4. FEE—A fee of $10 is required to be collected for every citizen's passport issued. That amount in currency or postal money order should accompany each application made by a citizen or person owing allegiance or entitled to the protection of the United States. Orders should be made payable to the Disbursing Clerk of the Department of State. Drafts or checks will not be accepted. No fees charged to widow, child, parent, brother or sister of an American soldier, sailor or marine buried abroad, to visit country of burial.

5. APPLICATIONS: AFFIDAVIT OF APPLICANT—A person who is entitled to receive a passport, if within the United States, must submit a written application, in duplicate, in the form of an affidavit, to the Secretary of State. The application should be made by the person to whom the passport is to be issued and signed by him, as it is not proper for one person to apply for another. The affidavit must be made before a clerk of a Federal court or of a State court authorized by the act of Congress of June 29, 1906, to naturalize aliens, within the jurisdiction of which the applicant or his witness resides, and the seal of the court must be affixed; *but in any place where there is a Federal court the affidavit must be made before a clerk of such court*, unless there is in such place an agent of the Department of State, in which case the Secretary may, in his discretion, require the application to be made before such agent.

The applicant must state from what point he intends to leave the United States, the object of trip and evidence of same, and the date of his intended departure, and also, if by a port of the United States, by what ship he intends to sail.

A person applying for a passport or for a renewal of his passport or for an amendment thereto to include additional countries should state in a brief form the object or objects of his proposed trip abroad, but it is no longer necessary to submit with the application documentary evidence supporting the statements as to the objects of the visit.

If the applicant is proceeding abroad on his own behalf he should so indicate by the use of expressions similar to the following: Study, Health, Tourist, Recreation, Temporary Residence, Settling my own Estate, Care for my Property, Visit my Relatives.

If the applicant is proceeding abroad for other personal reasons or to represent some other person or organization, he should state definitely the object of the trip. The following expressions will serve as examples: Commercial Banking, Legal, (or other) business for (name of person or organization); Research, Literary, Construction, Relief (or other) work for (name of person or organization); Distribute funds (food, clothing, etc.) for (name of person or organization).

If there is more than one object of the trip each object should be clearly stated opposite the name of the country in which it is intended to accomplish the objects.

Passports will be issued to all parts of the world except countries where internal conditions or relations with the United States prevent.

(*c*) PHOTOGRAPHS—The application must be accompanied by duplicate photographs of the applicant, on thin paper, unmounted, and not larger in size than three by three inches. One must be attached to the back of application by the clerk of court or the department's agent before whom the application is made, with an impression of such officer's seal so placed as to cover part of the photograph but not the features, and the other sent loose, to be attached to the passport by the department. The loose photograph must be signed by the applicant across its face, so as not to obscure the features, and the signature thereon must correspond to the applicant's signature affixed to the application. *Photographs on cardboard or postcards will not be accepted.*

(*d*) WITNESS—The application must be supported by an affidavit of at least one credible witness, who has known the applicant at least two years, stating that the applicant is the person he represents himself to be and that the facts stated in the application are true to the best of the witness's knowledge and belief. This affidavit must be made before the clerk of court or the department's agent before whom the application is executed, and the witness must accompany the applicant when he makes his application. The witness must be an American citizen, established in a recognized profession or business and having his office or place of business within the jurisdiction of the court or the department's agent (e. g., a clergyman, lawyer, physician, banker, broker, real estate dealer, or merchant). The witness, in signing the application, should state the nature of his profession or business and his professional or business address. *No lawyer or other person will be accepted as witness to a passport application if he has received or expects to receive a fee for his services in connection therewith.* A passport issued by the Secretary of State on and after June 3, 1918, to which is attached the photograph and signature of the person to whom the passport was originally issued, will be accepted in lieu of an identifying witness.

6. NATIVE CITIZEN—An application containing the information indicated by rule 5 will be sufficient evidence in the case of a native citizen; except that a person born in the United States in a place where births are recorded will be required to submit a birth certificate with his application. If a birth certificate is not obtainable, the application must be supported by a baptismal certificate or an affidavit of the physician who attended the birth or affidavits of parents or other reputable persons having sufficient knowledge to be able to testify as to the place and date of the applicant's birth. Passports issued by the Department of State or its diplomatic or

consular representatives are intended for identification and protection in foreign countries and not to facilitate entry into the United States, immigration being under the supervision of the Department of Labor.

7. A PERSON BORN ABROAD WHOSE FATHER WAS A NATIVE CITIZEN OF THE UNITED STATES—In addition to the statements required by rule 5, his application must show that his father was born in the United States, resided therein, and was a citizen at the time of the applicant's birth. In such case evidence of the father's birth in this country, similar to that required in section 6, above, should be submitted.

8. NATURALIZED CITIZEN—In addition to the statements required by rule 5, a naturalized citizen must transmit his certificate of naturalization, or a duly certified copy of the court record thereof, with his application. It will be returned to him after inspection. He must state in his affidavit when he emigrated to this country, where he has lived since his arrival in the United States, when and before what court he was naturalized, and that he is the identical person described in the certificate of naturalization. The signature to the application should conform in orthography to the applicant's name as written in his certificate of naturalization, or an explanation of the difference should be submitted.

9 WOMAN'S APPLICATION—If she is unmarried in addition to the statements required by rule 5, she should state that she has never been married. If she is the wife of a native citizen of the United States, the fact should be made to appear in her application, which should be made according to the form prescribed for a native citizen, whether she was born in this country or abroad. If she is the wife of a naturalized citizen, in addition to the statements required by rule 5, she must transmit for inspection her husband's certificate of naturalization or a certified copy of the court record thereof, must state that she is the wife of the person described therein, and must set forth the facts of his birth, emigration, naturalization, and residence, as required in the rules governing the application of a naturalized citizen. She should sign her own Christian name with the family name of her husband. (Thus, Mary Doe; not Mrs. John Doe.) A married woman's citizenship follows that of her husband. It is essential, therefore, that a woman's marital relation be indicated in her application for a passport, and that in the case of a married woman her husband's citizenship be established.

10. THE CHILD OF A NATURALIZED CITIZEN CLAIMING CITIZENSHIP THROUGH THE NATURALIZATION OF THE PARENT—In addition to the statements required by rule 5, the applicant must state that he or she is the son or daughter, as the case may be, of the person described in the certificate of naturalization, which must be submitted for inspection, and must set forth the facts of emigration, naturalization, and residence as required in the rules governing the application of a naturalized citizen.

11. A RESIDENT OF AN INSULAR POSSESSION OF THE UNITED STATES WHO OWES ALLEGIANCE TO THE UNITED STATES—In addition to the statements required by rule 5, he must state that he owes allegiance to the United States and that he does not acknowledge allegiance to any other government, and must submit affidavits from at least two credible witnesses who are able to corroborate his statements as to birth, residence, and loyalty.

12. EXPIRATION OF PASSPORT—*A passport is valid for twelve months from date of its issuance, and may be renewed for another twelve months.* A new one will be issued upon a new application. If the applicant is a naturalized citizen, the old passport will be accepted in lieu of a certificate of naturalization, provided the application upon which a previous passport was issued is found to contain sufficient information as to the naturalization of the applicant. If the applicant is a native citizen, a reference to a previous application with which the required evidence of birth was submitted will be sufficient, provided the application upon which the previous passport was issued is found to contain the necessary record of the evidence submitted.

13. WIFE, MINOR CHILDREN, AND SERVANTS—When the applicant is accompanied by his wife, minor children, and maid servant, who owes allegiance to the United States, it will be sufficient to state the fact, giving their names in full, the dates and places of their births, and the allegiance of the servant, when one passport will suffice for all those under twenty-one years of age. In such case, however, photographs of each person should accompany the passport application. For a man servant or any other person in the party a separate passport will be required. A woman's passport may include her minor children and maid servant under the above-named conditions. (The term "maid servant" does not include a governess, tutor, pupil, companion, or person holding like relation to the applicant for a passport.)

14. TITLES—Professional and other titles will not be inserted in passports, but an applicant's name in religion, an author's nom de plume, a stage name, etc., may be included in parentheses.

15. SURRENDER OF OLD PASSPORTS—An applicant for a new passport who holds an expired or unexpired passport or passports should submit the latter to the clerk of court or agent of the Department of State before whom he executes his application for a new passport. In such case the clerk of court or agent of the Department of State will cancel the old passport by cutting out a piece of the seal thereon and stamping, or writing in indelible ink, the word "Cancelled," across the face of the passport, which may then be returned to the applicant. After cancelling an old passport the official who takes the application should make a notation on the margin thereof, giving the number and date of issuance of the passport cancelled.

16. BLANK FORMS OF APPLICATION—They will be furnished by the department free of charge to persons who desire to apply for passports. Supplies of blank applications are also furnished by the department to clerks of courts and are held by the department's agents.

17. ADDRESS—Communications should be addressed to the Department of State, Division of Passport Control, Washington, D. C., and each communication should give the post office address of the person to whom the answer is to be directed.

No passports are required from Cubans, Santo Dominicans, or Haitians. Aliens regularly residing in the United States going to Canada, New Foundland, Bermuda, the Bahamas, St. Pierre-Miquelon, Mexico, Cuba, Santo Domingo or Hayti, may return within six months without passports.

After passport has been received it is necessary to obtain a Clearance Certificate at port of departure to show Income Tax laws have been complied with. It is necessary to obtain vises from the consuls representing countries named in passport.

## GRAIN FUTURES ACT.

THE Grain Futures Act, authorizing the Secretary of Agriculture to supervise trading in grain futures on the Chicago Board of Trade and other Exchanges in the United States, was signed Sept. 21, 1922, by the President.

"The new law takes the place of the regulatory provisions of the Future Trading Act of Aug. 24, 1921, which was declared unconstitutional by the Supreme Court of the United States last May," said Secretary Wallace. "In substance the new law is the same as the old, but the new law is based on the power of Congress to regulate interstate commerce, while the former statute was based on the taxing power of Congress.

"The new law does not become operative until Nov. 1, 1922. As all of the Exchanges were fully acquainted with the requirements of the former law, there should be no difficulty or delay in complying with the new law. The Exchanges affected are those at Chicago, Minneapolis, Duluth, Kansas City, St. Louis, Toledo, Milwaukee, San Francisco, Los Angeles, and Baltimore.

"This law does not interfere with hedging transactions on the Boards of Trade. Neither does it interfere with ordinary speculation in the buying or selling of contracts for future delivery. If, however, there should be evidence of undue manipulation or attempts to corner the market, or of the dissemination of false or misleading information about crop or market conditions by members of the Exchanges, such conduct would be inquired into and promptly dealt with as required by the law. In addition it prohibits the Exchanges from discriminating against co-operative associations of grain producers who may desire membership in order to obtain the use of the facilities of the grain Exchanges."

## NARCOTIC (FEDERAL) LAW AMENDED.

President Harding signed, May 26, 1922, the bill passed by Congress to strengthen the Harrison Anti-Narcotic Act.

The new law establishes a Federal Narcotics Board, composed of the heads of the State, Treasury and Commerce Departments, which is empowered to authorize the importation of such quantities of crude opium and cocoa leaves as may be found necessary for medical and other legitimate purposes. Any alien convicted of violating the act is to be deported, while for others a fine of $5,000 or ten years' imprisonment is provided.

## WORKMEN'S COMPENSATION LAWS.

(Year named is date of basic act. Text includes amendments to 1922.)

### ALASKA, 1915.

**Administrative System**—The courts. **Security for Compensation**—Attachment pending action, or employer may deposit cash or bond with court. **Employments Covered**—Elective, as to mining operations having five or more employees. **Waiting Period**—Two weeks. **Medical and Surgical Provisions**—Only in fatal cases involving no dependents, maximum, $150. **Compensation for Disability: Total, (a) Temporary; (b) Permanent**—(a) 50% of wages during disability, maximum, 6 months. (b) $3,600; $1,200 additional for wife, and $600 for each child under 16; if single, $600 for each dependent parent, maximum, $6,000. **Partial, (a) Temporary**—(a) 50% of wages; maximum period, 6 months; maximum amount, $4,800. If permanent, lump sums proportioned to number of dependents, ranging from $120 to $3,000, less payments for temporary disability. **Death Benefits (a) Dependents, (b) No Dependents**—(a) $3 000 to widow or minor orphan; $600 to each child under 16 and to dependent parents, maximum, $6,000; if single, $1,200 to each dependent parent. (b) $150 for burial; $150 for other expenses between death and burial.

### ALABAMA, 1919.

**Adm. Sys.**—Circuit Courts with appeal to Supreme Court, and Insurance and Compensation Commission. **Sec. for Comp.**—Right to compensation, and award has same preference as other unpaid wages. **Employ.**—Where sixteen or more are regularly employed, excluding casuals domestic servants, farm laborers, common carriers engaged in interstate commerce, and municipalities (cities towns, villages, school districts); but municipalities and employers of less than sixteen may elect to come under provisions of act. **Wait.**—Sixteen days. **Med. and Surg.**—Reasonably necessary medical and surgical treatment and attention, medicine, supplies and apparatus during first sixty days of disability not to exceed $100. **Comp. for Dis.: Temp. Total**—Fifty per cent. to 60% of average weekly wages, not less than $5, nor more than $15, during disability not more than 300 weeks. **Temp. Partial**—Fifty per cent. of difference between amount earned before injury and after; during disability not more than 300 weeks. **Perm. Partial**—Schedule of rates of payment according to extent and character of injury. **Perm. Total**—Fifty per cent. of average weekly wages ($5 to $15) for 550 weeks, reduced to 35 after 400 weeks; increased 5% for each totally dependent child; not over 60%, and per week to not over $15. **Death Ben.**—To dependen widow or husband and no child, 30%; widow or husband and one child, 40%; widow or husband and 2 or 3 children, 50%; 4 or more children, 60%; to dependent orphan 30%; 10% added for each additional orphan, not to exceed 60%; dependent husband and no child, 25%; if no husband, widow or child, to one parent, 25%; to two, 35%; grandparent, brother, sister, mother-in-law, or father-in-law, to one, 20%; more than one 25%. Total compensation not to exceed $5,000. Expenses of last illness and burial not to exceed $100.

### ARIZONA, 1912.

**Adm. Sys.**—Agreement; arbitration; reference to Attorney-General; courts. **Sec. for Comp.**—A judgment is collectible without relief from valuation or appraisement laws, and has same preference as unpaid wages or claim for personal services. **Employ.**—All especially dangerous employments. Elective as to other industries. "Especially dangerous" as specified in law include building and running of railroads, mining, using, making or working near explosives; places where power machinery is used; working on derricks and scaffolds, etc. **Wait.**—Two weeks. **Med. and Surg.**—In fatal cases where there are no dependents the reasonable expenses of medical attendance and burial. **Comp. for Dis. Total**—A semi-monthly payment equal to one-half the wage decrease. Fifty per cent of semi-monthly earnings during time unable to work at any gainful occupation. The total for partial or total disability caused by a single injury not to exceed $4,000. **Death Ben. (a) Depen.**—(a) To persons wholly dependent, a lump sum equal to 2,400 times one-half the daily wages or earnings of the deceased; not to exceed $4,000, payments to children to cease at 18 years of age. See under column for medical and surgical provisions for death cases where there are no dependents.

### CALIFORNIA, 1918.

**Adm. Sys.**—State Industrial Accident Commission. Subject to limited review by the courts. **Sec. for Comp.**—Insurance is required. Policies inure directly to benefit of employee, who also has first lien on amounts due employer. Self-insurers may be required to give bond or deposit securities. Claims or awards have same preference as those for wages. **Employ.**—All excepting agriculture, casual and domestic service, which may come under the act by joint election. **Wait.**—Seven days. **Med. and Surg.**—Such medical, surgical, and hospital treatment as may reasonably be required to cure and relieve. In case of death, the reasonable expense of burial, not exceeding $100. **Compen. for Dis. Total, (a) Temp. (b) Perm.**—(a) 65% of average weekly earnings during such disability. (b) When the degree of disability reaches or exceeds 70%, after the expiration of 240 weeks, a further benefit varying from 10 to 40% of the weekly earnings is payable during the remainder of life. **Part., (a) Temp. (b) Perm.**—(a) 65% of weekly loss of wages during such disability. (b) 65% of average weekly earnings, for periods varying from 4 to 279 weeks, according to the degree of the disability. In case of permanent incapacity or death a lump sum may be substituted for benefits, to equal the present value of the benefits commuted at 6%. Average weekly earnings shall be considered as not less than $6.41, nor more than $32.05. **Death Ben.**—To persons wholly dependent three times the annual earnings of the deceased; not less than $1,000, nor more than $5,000, payable at least monthly in instalments equal to 65% of the wages. If only partial dependents survive, three times the annual contribution of the deceased to their support, subject to same limitations as above. Disability payments and burial expenses to be considered as parts of above totals.

### COLORADO, 1917.

**Adm. Sys.**—Industrial Commission, with limited appeal to the courts. **Sec. for Comp.**—Insurance is required. Insurers are primarily liable to a workman or his beneficiaries. Notice to employer is notice to insurer. Claims are not assignable, and payments are exempt from attachment or execution. **Employ**—All except interstate commerce and domestic and agricultural labor by which four or more are employed in which employers elect to come under the act, but lose no defenses if they do not, except elective staff officials and State National Guard. Includes firemen and policemen. **Wait.**—Ten days. **Med. and Surg.**—Medical and surgical assistance for first 60 days not more than $200 in value. In death cases where there are no dependents, $75 for funeral expenses. **Compen. for Dis., Total**—Fifty per cent. of weekly wages during continuance, $5 minimum, $10 maximum; full wages if less than $5. **Part.**—Fifty per cent. of the weekly wage decrease, $10 maximum. Total not to exceed $2,600. Special schedule for specified injuries, 50% of weekly wages for periods ranging from 4 to 208 weeks. Facial disfigurement may be compensated for in an amount not exceeding $500. Payments may be commuted to a lump sum after six months. **Temp. Part.**—Fifty per cent. of wage loss, maximum $10 weekly, minimum $5; aggregate maximum $1,300. **Death Ben.**—To persons wholly dependent, including acknowledged illegitimate children, 50% of the weekly wages for 6 years, $10 maximum, total not to exceed $3,125, nor to be less than $1,560. If no dependents, medical services and $75 funeral expenses. Benefits to aliens one-third those payable to citizens and not to exceed $1,041.66. If death occurs during receipt of disability benefits any unaccrued and unpaid remainder goes to dependents; if only partial dependents survive, 50% of weekly wages for such part of 6 years as commission may determine, total not to exceed $3,125. **Insurance**—Required in State fund, stock or mutual company; or proof of financial ability; public employees must be insured in State fund.

### CONNECTICUT, 1914.

**Adm. Sys.**—Compensation Commissioners. Each Commissioner has jurisdiction within the Congressional District in which he resides. Appeals from findings and awards to the Superior Court of the county. **Sec. for Comp.**—Employer must furnish proof of solvency and financial ability, file security, or insure in approved stock or mutual companies or associations. Payments are not assignable, are exempt from execution, and have same preference as wage debts. **Employ.**—All industries in which five or more persons are employed, in absence of contrary election by employer. **Wait.**—Seven days. **Med. and Surg.**—Medical and surgical aid and hospital service during such time as needed. $100 for burial expenses. **Compen. for Dis., Total**—For total disability a weekly compensation equal to one-half the employee's earnings, not more than $18 nor less than $5 weekly, or for longer than 520 weeks. **Part. (a) Temp. (b) Perm.**—(a) A weekly compensation equal to one-half the wage loss, but not more than $18 per week or for longer than 520 weeks. (b) For specified injuries one-half the average weekly earnings for fixed periods in lieu of all other payments. Lump sum payments may be approved by the commissioner, provided they equal the value of the compensations. **Death Ben.**—To persons wholly dependent, a weekly compensation equal to one-half the

earnings of the deceased employee. If only partial dependents survive, a weekly compensation determined according to the measure of dependence, not exceeding one-half the earnings of the deceased employee. Compensation shall in no case be more than $18 nor less than $5 weekly, and shall not continue longer than 312 weeks. A widow's or widower's dependence ceases upon remarriage, and a child's upon reaching 18 years of age, unless physically or mentally incapacitated. If a widow or dependent widower dies during the term of benefit payments, subsequent payments go to other dependents, if any.

### DELAWARE, 1918.

**Adm. Sys.**—Industrial Accident Commission of three, whose award is final unless appeal is taken to the Supreme Court of the county within ten days. **Sec. for Comp.**—Payments have same priority as wage debts and are not subject to assignment or execution. Policies must inure directly to benefit of person entitled. **Employ.**—All except domestic servants, farm and casual laborers, outworkers, State officers and employees in interstate or foreign commerce. **Wait.**—Fourteen days. **Med and Surg.**—Medical care up to $100 during waiting period; $100 for burial. **Compen. for Dis.**—Fifty per cent. of wages for 475 weeks, not less than five nor more than 15 weeks, not to exceed in aggregate $4,000. **Death Ben.**—For a dependent widow or widower, 25% of wages with additional percentages up to 60% in proportion to number of dependents and children under 16. Aliens (widows and children only) receive one-half above amounts. Payments are for a period of 285 weeks, minus any disability benefits paid prior to death, but cease on death of beneficiary, or remarriage, or child reaching 16; compensation continued to children until 16, even beyond 285 weeks. Shares lapsing redistributed. Orphan children or those abandoned by surviving parent continue to receive benefit until 16 even beyond 285 weeks. Wages in computing death benefits reckoned as not less than $10 nor more than $30 per week.

### GEORGIA, 1921.

**Adm. Sys.**—Industrial Commission. **Sec. for Comp.**—Insurance required or proof of financial ability. Comm. may require deposit of security. **Employ.**—Any individual, firm, association or corporation in business for gain or profit, municipal corporations in State and political divisions. Common carriers whose motive power is steam are excluded and public service corporations having less than 10 employees. Employees do not include farm hands, domestic servants nor casuals. **Wait.**—Fourteen days. **Med. and Surg.**—Not more than 30 days and over $100. **Comp. for Dis.: Total**—One-half weekly wages, not over $12, nor ess than $6; not more than 350 weeks, nor to exceed $4,000. **Temp. Part.**—One-half of loss in earning capacity, not to exceed 300 weeks. **Perm. Part.**—Fifty per cent. of average weekly wages from 10 weeks to 200 weeks according to injury. **Death Ben.**—Reasonable expenses of last illness and burial not to exceed $100. To dependents, 50% of average weekly wages, not more than $10, nor less than $5. To partial dependents proportionate to amount theretofore contributed by employee. If dependents do not reside in U. S. or Canada at time of accident, compensation not to exceed $1,000, in no case not over $4,000. Dependence of widow or widower ceases on remarriage, of children at 18, unless mentally or physically unable to earn a livelihood.

### HAWAII, 1917.

**Adm. Sys.**—Industrial Accident Boards for each county; appeals to courts. **Sec. for Comp.**—Payments are preferred the same as wage claims. Employees have direct recourse to insuring company. Insolvency of employer does not release insurer. **Employ.**—All public and all industrial employment for pecuniary gain. **Wait.**—Seven days. **Med. and Surg.**—Reasonable surgical, medical and hospital services during disability, not exceeding $150: $100 funeral expenses if death within 6 months. **Compen. for Dis.: Total**—Sixty per cent. of weekly wages, $3 minimum, $18 maximum, for not longer than 312 weeks; total not to exceed $5,000. If wages are less than $3, full wages will be paid unless disability is permanent, when $3 will be paid. **Partial**—Fifty per cent. of wage decrease, $12 maximum, not over 312 weeks; total not to exceed $5,000. Fixed awards for specified injuries in lieu of all other benefits. Payments may be commuted to one or more lump sums in any case. **Death Ben.**—To widow or dependent widower alone, 40% of average weekly wages; if one or two dependent children, 50%; if three or more, 60%; 30% to one or two orphans; 10% additional for each child in excess of two; total not to exceed 50%. If no consort or child, but other dependents, 25% to 40%. Payments to widow to cease on death or remarriage, and to widower on termination of disability or remarriage; to children reaching 16, unless incapable of self-support, then to 18; to other beneficiaries on termination of disability. No payments except to children for more than 312 weeks. Wages not less than $5 nor over $36.

The act does not apply to elective officials, nor to employees receiving over $1,800 a year.

### IDAHO, 1918.

**Adm. Sys.**—Industrial Accident Board of three. Awards final unless appeal is taken to the District Court within 30 days. **Sec. for Comp.**—Private employers must either insure in the State Insurance Fund, insurance companies authorized to do business in the State of Idaho, or deposit security according to the law and Board's regulations entitling them to self-insure. **Employ.** — All public or private carried on for pecuniary gain. Employees injured outside State are covered as well as those hired outside of State if they would be entitled under law of State where hired. Agricultural, domestic and casual employees, outworkers, employees of charitable organizations and members of employer's amily, although excluded may be included by agreement. **Wait.**—If disability is 4 weeks or less no compensation is paid for first 7 days. If disability exceeds 4 weeks, the 7 days waiting period is absorbed at the rate of 1 day for each week. No deduction if disabled 7 weeks or more. **Med. and Surg.**—Reasonable medical, surgical and hospital service. In death case $200 for burial and if there are no dependents employer must pay $1 000 to Industrial administration Fund. **Compen. for Dis.**—Total compensation for time lost at rate of 55% average weekly wage but not more than $12 or less than $6, if single, additional 5% with a maximum of $13.10, minimum of $6.55, if there is a dependent wife, plus an extra 5% for each dependent minor child, but in no case to exceed $16 per week. Limit 400 weeks, $6 a week thereafter. **Part.**—Fifty-five per cent. difference between wages before and after accident, maximums as above, the same if no total disability, limited to 150 weeks. **Death Ben.**—To dependent widow or widower, 45% of average weekly wage with additional percentages up to 55% in proportion to the number of dependents and children under 18. No payments cover over 400 weeks except dependent children, who are paid up to the age of 18 and may be paid 400 weeks thereafter if incapable of self-support. Except as otherwise provided by treaty, alien dependents of countries having reciprocal laws get only one-half of the usual income. If law excludes citizens of the United States, either residents or non-residents, the fu l amount due to dependents is paid to the Industrial Administration Fund of the State of Idaho. The act does not apply to public officials who are elected by popular vote or who receive salaries exceeding $2,400 a year.

### ILLINOIS, 1917.

**Adm. Sys.**—Disputes determined by the Industrial Board through an arbitrator or arbitration committee, subject to review by the board. Questions of law and fact may be reviewed by the courts. **Sec. for Comp.**—Awards constitute liens on all property of employer within the county paramount to all other claims, except wages, taxes, mortgages or trust deeds. Injured employees are subrogated to right of insolvent employer to insurance. **Employ.**—Building trades; construction, excavating and electrical work; transportation; mining and quarrying; work with or about explosives, molten metals, injurious gases or vapors or corrosive acids, and all enterprises in which the law requires protective devices. Other employers may elect, but forfeit no defenses if they do not. **Wait.** Six days. **Med. and Surg.**—Medical and surgical aid for not over 8 weeks, not over $200; hospital services unlimited. If no dependents, a burial benefit not over $150. **Compen. for Dis.: Total**—Fifty per cent. of employee's weekly arnings, $7.50 minimum, $14 maximum, during disability, or until payments equal death benefit; thereafter, if the disability is permanent, a sum annually equal to 8% of a death benefit, not less than $10 per month. **Partial (b) Perm.**—(b) 50% of loss of earning capacity not more than $14 per week. For certain specific injuries (mutilations, etc.), a benefit of 50% of weekly wages for fixed periods, in addition to temporary total disability. The basis of 50% is to be increased 5% for each child under 16 years of age, maximum 65%. The minimum of $7.50 per week is to be increased for each such child, the total not to exceed $10. The maximum of $14 is to be increased $1 for each child, the total not to exceed $17. For serious and permanent disfigurement, not causing incapacity and not otherwise compensated, a sum not exceeding one-fourth the death benefits. No payments are to extend beyond 8 years, except in case of permanent total incapacity. **Death Ben.**—To persons wholly dependent, a sum equal to 4 years' earnings, not less than $1,650 (to a widow with one child under 16, $1,750, if two or more children, $1,850), nor more than $3,750. To a widow with one child under 16, $4,000; and if two or more children, $4,250. If only dependent collateral heirs survive, such a percentage of the above sum as the support rendered the last two

years was of the earnings of deceased Lump sum payments for either death or disability may be substituted by the Industrial Board for periodic payments. Employers may maintain a benefit system.

### INDIANA, 1917.

**Adm. Sys.**—Industrial Board, with appeals to courts on questions of law. **Sec. for Comp.**—Contracts of insurance must inure directly to benefit of persons entitled to payments under an award. Payments have same preference and priority as unpaid wages, and are exempt from claims of creditors. Insurance required, or proof of financial ability to meet payments. **Employ.**—All except interstate and foreign commerce, for which Federal laws make provision; railroad emp oyees engaged in train service and domestic and agricultu al labor, unless employer makes contrary election; compulsory as to State and its municipalities. **Wait**—Seven days. **Med. and Surg.**—Medical and hospital services for first 30 days, and 30 days longer if ordered by Industrial Board; employee must accept unless otherwise ordered by Industrial Board; $100 for funeral expenses if death from the injury occurs within 300 weeks. **Compen. for Dis.: Total**—Fifty-five per cent. of wages for not more than 500 weeks. **Partial**—Fifty-five per cent. of wage loss for not more than 300 weeks. For certain specified injuries, 55% of wages for designated periods ranging from 10 to 200 weeks. Wage basis and total amounts are limited as fo death benefits. Any payments may be commuted to a lump sum after 26 weeks. **Death Ben.**—To persons wholly dependent, 55% of weekly wages in equal shares; to those partially dependent amounts proportionate to decedent's contribution to their support. Term of payment limited to 300 weeks. Payments cease on remarriage of widow o dependent widower; or on children attaining the age of 18 years, unless mentally or physically disabled for earning. Wages are to be considered as not above $24 nor less than $10 weekly, no total to exceed $5,000.

### IOWA, 1917.

**Adm. Sys.**—Committees of Arbitration, with the Industrial Commissioner as Chairman; limited appeals to courts. **Sec. for Comp.**—Employers must insure in approved companies or mutual associations, furnish proof of financial ability, deposit security or contract with employees. Claim for compensation is first lien. If insured is incapable, insurer must settle direct with beneficiary. **Employ.**—All industries except agriculture and domestic service, clerical and casual, in absence of contrary election by employer. Compulsory as to State and municipalities. **Wait.**—Two weeks. **Med. and Surg.**—Reasonable surgical, medical and hospital services, and supplies for first 4 weeks, not exceeding $100; if injury exceptional, an additional $100 may be ordered on application. Reasonable expenses of last sickness, and burial not to exceed $100. **Comp. for Dis.: Total (a) Temp.: (b) Part.**—(a) 60% of wages, not more than $15 nor less than $6 (unless wages are less than $6, then fu l wages), for not more than 300 weeks. (b) The same as for temporary disability, to be paid for a period of not more than 400 weeks. **Partial, (b) Perm.**—(b) Specified maimings—60% of average weekly wages for fixed periods, beginning with the date of injury. Payments for total temporary and total permanent disability for fifth, sixth and seventh weeks are 60% of the weekly earnings plus two-thirds of weekly rate of compensation. If disability continues beyond those dates, 60% continues. Lump sum payments may be substituted on approval of the Industrial Commissioner and an order of the court. **Death Ben.**—To persons wholly dependent, a weekly payment equal to 60% of the wages, but not more than $15 nor less than $6 per week, for 300 weeks. If only partial dependents survive, such a proportion of the above as the amounts contributed by the employee to such partial dependents bear to his annual earnings. If employee was a minor whose earnings were received by the parent, a sum to the parent equal to two-thirds of the amount provided for persons wholly dependent. If the spouse dies during compensation period, unpaid benefits go to other dependents if any; if she remarries and there are no dependent children, payments cease.

### KANSAS, 1917

**Adm. Sys.**—Disputes not settled by agreement may be referred to arbitration, subject to an appeal to the courts. **Sec. for Comp.**—Lump sums awarded by the court may be secured by order of the court by a bond. If employer was insured, insurer is subrogated to the rights and duties of the employer. Claims and awards are not assignable or subject to execution, etc. **Employ.**—Railways, factories, quarries, electrical, building or engineering work, laundries, natural gas plants, county and municipal work, employments requiring the use of dangerous explosive or inflammable materials, if employing five or more and mines; employers in other industries and those employing less than five persons may also elect. **Wait.**—One week. **Med. and Surg.**—On demand, medical, surgical and hospital treatment, not over $150 in value, for not more than 50 days. If no dependents, a reasonable expense for burial, not exceeding $150. **Comp. for Dis.: Total**—Payments during incapacity, after the first week, equal to 60% of the earnings, not less than $6 nor more than $15 per week. **Partial**—Sixty per cent. of wage loss during incapacity after first week. Lump sums equal to 50% of the wages for specified periods are to be paid for designated injuries in lieu of all other compensation. No payments for total or partial disability shall extend for over 8 years. After 6 months lump sum payments may be substituted at the employer's option, the sum to be agreed upon or determined by the court. **Death Ben.**—To persons wholly dependent, a sum equal to 3 years' earnings of the deceased, not less than $1,400 nor more than $3,800. For non-resident alien beneficiaries (except in Canada) the maximum is $750. If only partial dependents survive, a sum proportionate to the injury to such dependents. Compensation ceases upon the marriage of any dependent or when a minor becomes 18 unless physically or mentally incapable of wage earning.

### KENTUCKY, 1916

**Adm. Sys.**—Workmen's Compensation Board, a member thereof, or a referee appointed by it. Limited appeals to courts. **Sec. for Comp.**—Employers accepting act must insure in a stock or mutual company or the State Employees' Insurance Association, or give proof of financial ability. Policies must provide for direct liability to beneficiaries. Self-insurers must furnish bond or other security. Benefits have same priority as wages and are not subject to assignment or attachment. **Employ.**—All except domestic service and farm labor where three or more are employed; excepted industries may become subject to act by joint application of employers and employees. **Wait.**—Seven days. **Med. and Surg.**—Medical, surgical and hospital aid for 90 days, unless by order extended to not exceed $100. Reasonable burial expenses, not over $75. **Comp. for Dis.: Total**—Sixty-five per cent. of average weekly wages for 8 years, not over $15 nor less than $5; total not to exceed $6,000. **Partial**—Sixty-five per cent. of the weekly wage loss, not to exceed $12, for not more than 335 weeks; total not to exceed $4,000. Compensation periods are fixed for specified injuries. Lump sums may be awarded after six months, if approved by the board. **Death Ben.**—To persons wholly dependent, 65% of the average weekly earnings, not more than $12 for 335 weeks; total. If only partial dependents survive, a proportional of the amount for total dependency, determined by the degree of dependence. If no dependents, $100 to the personal representative. Payments to a widow or widower cease on remarriage, and to a child on reaching the age of 16, unless incapacitated for wage earning. Payments thus terminated go to other beneficiaries, if any.

### LOUISIANA, 1915.

**Adm. Sys.**—Disputes are settled by Judges of the courts in simple, summary procedure. **Sec. for Comp.**—Insurance is required, or bond. Policies must give claimants right to direct payment. Compensation payments have same preference as wage debts. **Employ.**—Hazardous trades, businesses or occupations in absence of contrary election; extensive list, and others may be so adjudged or brought within act by voluntary agreement. Compulsory as to State employees, its municipalities and public boards. **Wait.**—Two weeks. **Med. and Surg.**—Reasonable medical, surgical, and hospital service, not over $150. $100 expenses for last sickness and burial. **Comp. for Dis.: Total**—Sixty per cent. of the weekly wages, $3 minimum, $18 maximum, for not more than 400 weeks. **Partial**—Sixty per cent. of the wage loss, not over $18, for not more than 300 weeks. Fixed schedule for specified injuries for periods from 10 to 150 weeks. Payments in any case may be commuted to a lump sum on agreement of the parties and approval by the courts. **Death Ben.**—To widow or dependent widower alone, 30% of weekly wages, 45% if one child, 60% if two or more. If one child alone, 30%, 45% for two, 60% for three or more. For one dependent parent, 30%; for two, 60%. If one brother or sister, 30%, and 10% for each other. The total in no case to exceed 60%, $3 minimum, $18 maximum, for not over 300 weeks. Payment to any beneficiary ceases on death or marriage; to children on reaching the age of 18, unless mentally or physically incapacitated.

### MAINE, 1915.

**Adm. Sys.**—Industrial Accident Commission; appeals to courts on questions of law. **Sec. for Comp.**—Insurance required unless employer gives proof of solvency and makes deposit or bond to secure payments. Claims not assignable, subject to attachment or liable in any way for debt. **Employ.**—All except agricultural and domestic labor, and seamen

in interstate or foreign commerce, if employer elects. Abrogation of defenses does not affect employers of five or less, or the cutting, hauling, driving, or rafting of logs. **Wait.**—Seven days. **Med. and Surg.**—Reasonable medical and hospital services during 30 days, not over $100 unless by agreement or order of commission a larger amount or a longer period is provided for. If no dependents not over $200 for last sickness and burial. **Comp. for Dis.: Total**—Two-thirds of the wages, for not more than 500 weeks, $6 minimum, $16 maximum, total not to exceed $6,000. **Partial.**—Two-thirds of the weekly wage loss, not over $16, for not more than 300 weeks. For specified injuries causing permanent partial disability, two-thirds of the wages for various fixed periods, then compensation on basis of wage loss, if any, for not more than 300 weeks in all. Lump sum payments may be approved by the commission, after weekly payments for not less than six months. **Death Ben.**—Not to exceed $4,000 to persons wholly dependent, two-thirds of weekly wages for 300 weeks, $6 minimum, $16 maximum. If only partial dependents survive, amounts proportionate to their degree of dependency for 300 weeks. If no one wholly dependent and more than one partly dependent, payments are to be divided according to the relative extent of dependency. Payments to children cease at age of 18, unless mentally or physically incapacitated for earning a living; payments to widows cease at remarriage.

## MARYLAND, 1914.

**Adm Sys.**—Industrial Accident Commission, with appeal to the courts. **Sec. for Comp.**—Insurance in State fund, stock, or mutual company, or proof of financial ability is required. Policies must permit action by commission to secure payments to persons entitled. Payments not assignable, nor subject to execution or attachment. **Employ.**—Extra hazardous (enumerated list); others by joint election of employer and employees. Farm and domestic labor, country blacksmiths and wheelwrights are excluded. **Wait.**—Three days. **Med. and Surg.**—Medical, surgical, etc., not over $300. Funeral expenses not over $125. **Comp. for Dis.: Total**—Sixty-six and two-thirds per cent. of weekly wages, $8 minimum, $18 maximum for not over eight years, total not to exceed $5,000. If wages less than $8, full wages will be paid. **Partial**—Sixty-six and two-thirds per cent. of weekly wage loss, $18 maximum, total not over $3,750, specific periods for specified maimings. Where the injured employee is a learner, with prospect of increase of wages, this fact may be considered in fixing awards. Payments may, in the discretion of the commission, be made in part or in whole in lump sums. **Death Ben.**—To persons wholly dependent, 66⅔ % of the weekly wages for eight years, not more than $5,000 nor less than $1,000. To persons partly dependent, 66⅔ % of the weekly wages for such portion of eight years as the commission may fix, amount not to exceed $3,000. If no dependents, funeral expenses only. Payments to widow close on remarriage, and to children on reaching the age of 16, unless mentally or physically incapacitated.

## MASSACHUSETTS, 1917.

**Adm. Sys.**—On request of either party, Industrial Accident Board assigns case for hearing to single member, whose decision is subject to review by the entire Board. **Sec. for Comp.**—Employer must become a subscriber of some authorized liability insurance company. All risks must be insured in approved companies. Payments are not subject to assignment, attachment or execution. **Employ.**—All industries, if the employer so elects. The State shall, and any county, city, town or district accepting this act may, compensate its laborers, workmen and mechanics. **Wait.**—Ten days. **Med. and Surg.**—Reasonable medical and hospital services, and medicines as needed, for the first two weeks, and in unusual cases for a longer period, in the discretion of the board. Reasonable expenses of burial, not over $100. If dependents survive, this sum shall be deducted from the compensation payable. **Comp. for Dis.: Total**—A sum equal to two-thirds the average weekly wages, not less than $7 nor over $16 per week, not exceeding 500 weeks nor $4,000. **Partial**—Two-thirds the wage loss, not over $16 or less than $7 per week for not longer than 500 weeks. In specified injuries (mutilations, etc.), two-thirds the weekly wages, not exceeding $10 nor less than $4 per week, for fixed periods, not to exceed $4,000, in addition to other compensation. Lump sum payments may be substituted in whole or part, after payments for injury or death have been made for not less than six months. **Death Ben.**—To persons wholly dependent, weekly payment equal to two-thirds the average weekly wages of the deceased employee, not less than $4 nor more than $10, for a period of 500 weeks, the total not to exceed $4,000. If only partial dependents survive, a sum proportionate to the portion of the annual earnings contributed to their support by the deceased employee. Children cease to be dependents at 18, unless mentally or physically incapacitated from earning a living. If no dependents, payment to State treasury of $100 is made by the employer.

There is a limited appeal to the courts.

## MICHIGAN, 1917.

**Adm. Sys.**—Either party may notify Dept. of Labor and Industry, the hearing to be conducted by member or deputy member of Department, whose decisions are subject to review by the commission. The Supreme Court may review questions of law. **Sec. for Comp.**—Employers may insure with the State Accident Fund or in approved companies, or furnish proof of financial ability. Claims are a first lien on all property of employer. **Employ.**—All industries if employer elects; compulsory as to State and its municipalities, public boards, etc. **Wait.**—One week. **Med. and Surg.**—Reasonable medical and hospital services for the first 90 days. If no dependents, the reasonable expense of the last sickness and burial, not exceeding $200. **Comp. for Dis.: Total**—A weekly payment equal to 60% of the earnings, not less than $7 nor more than $14 per week, nor for a period longer than 500 weeks from the date of the injury, and not exceeding $7,000. **Partial**—A weekly payment equal to 60% of the wage loss, not over $14 per week nor for longer than 500 weeks. For certain specified injuries (mutilation, etc.), 60% of average weekly earnings for fixed periods. Payments begin with the eighth day after the injury, but if the disability continues for six weeks or longer, compensation is computed from the date of the injury. After six months lump sums may be substituted for weekly payments. **Death Ben.**—To persons wholly dependent, a weekly payment equal to 60% of the deceased workman's earnings, not less than $7 nor more than $14 per week, for a period of 300 weeks. If only partial dependents survive such proportion of the above as the amount of previous contributions bears to such earnings.

Where a principal contracts with another, the principal shall be liable to pay to any workman employed any compensation under this act he would have been liable for if directly employed by him.

## MINNESOTA, 1917.

**Adm. Sys.**—Industrial Commission, or commissioner, or referee, hears evidence; the Commission makes all decisions; appeals may be taken to Supreme Court. **Sec. for Comp.**—Employers shall insure or show financial ability to Commission or maintain co-operative schemes. Insured workmen have an equitable lien on any policy falling due. Claims have same preference as unpaid wages. **Employ.**—All excepting common carriers by steam railroad and farm and domestic service, in absence of contrary election by employers. **Wait.**—One week. **Med. and Surg.**—Reasonable medical and surgical treatment, not exceeding 90 days nor $100, unless ordered in exceptional cases, when limit is $200. $150 funeral expenses. **Comp. for Dis.: Total**—66⅔ per cent. of wages, maximum $18; minimum $8, not to exceed $10,000. **Partial**, (a) **Temp.** (b) **Perm.**—(a) 66⅔ % of the wage loss, not beyond 300 weeks. (b) For specified permanent partial disability (mutilations, etc.), 66⅔ % of the earnings for 15 weeks, and after that fixed by a schedule, 10 weeks to 200 weeks. **Death Ben.**—To a widow alone, 40% of monthly wages of deceased, increasing to 66⅔ % if four or more children; to a dependent husband alone, 30%, to a dependent orphan, 45%, with 10% additional for each additional orphan, with a maximum of 66⅔ % to the dependent parent or parents; if no dependent widow, widower, or children, 35% if one parent, and 45% if both survive; if none of the foregoing, but a brother, sister, grandparent, mother-in-law, or father-in-law is wholly dependent, if but one such relative, 30%, or if more than one, 35%, divided equally. If only partial dependents survive, that proportion of benefits provided for actual dependents which contributions bore to wages earned. Payments continue for not more than 300 weeks, and not over $7,500, and cease upon marriage or when 16, unless mentally or physically incapacitated. There is provision also for education and rehabilitation of persons incapacitated or handicapped by injuries. If no dependents, payment to State treasury of $100 is made by employer. Occupational diseases incurred are included as accidents.

## MONTANA, 1915.

**Adm. Sys.**—Proceedings to determine disputes must be instituted before the Board and not elsewhere; limited appeals to courts. **Sec. for Comp.**—Employer may carry his own insurance on proof of financial ability; may insure in any company in State, or may contribute to State fund. Liabilities under act are first lien upon any deposit, and on other property pro-rata with other lienable claims. **Employ.**—All inherently hazardous works and occupations, including manufactures, construction work, transportation and repair of means thereof, and any hazardous occupations not enumerated, in which employers elect, but not including agricultural,

domestic or casual labor. **Wait.**—Two weeks, unless injury incapacitates longer than six weeks, in which event compensation is paid from date of accident. **Med. and Surg.**—Medical and hospital services during first two weeks, not over $100, unless there is a hospital contract. $125 for funeral expenses if death occurs within six months. **Comp. for Dis.: Total, (a) Temp.: (b) Perm.**—(a) 50% of wages during disability, $12.50 maximum, $6 minimum, unless wages are less than $6, when full wages will be paid, for not more than 300 weeks. (b) Same scale as above for 400 weeks, then $5 per week, while disability continues. **Partial, (a) Temp.: (b) Perm.**—(a) 50% of wage loss, wages and benefits not to exceed $10 nor fall below $6, unless wages were less than $6; total payments in no case to exceed one-half of payments allowed for temporary total disability; payments to continue not more than 150 weeks for permanent cases and 50 weeks where disability is temporary. (b) For maimings, compensation of same scale and limits as in total temporary, for terms ranging from 3 to 200 weeks. **Death Ben.**—To widow, widower, child, or children under 16, or invalid child over 16, 50% of wages of the deceased if residents of the United States, if not, 25%, unless otherwise required by treaty. To major dependents (father or mother), in case there are no beneficiaries, 40%. To minor dependents (brothers or sisters actually dependent), if no beneficiary or major dependent, 30%. Non-resident alien dependents receive nothing unless required by treaty. Terms of payment may not exceed 400 weeks. $12.50 maximum, $6 minimum; if wages less than $6, then full wages. Payments cease on remarriage of widow or widower, or when child, brother, or sister reaches the age of 16, unless an invalid.

## NEBRASKA, 1917.

**Adm. Sys.**—Compensation Commissioner; appeal to District Court of county, with further appeal to Supreme Court. **Sec. for Comp.**—Employer must insure or give proof of financial ability. Policies must inure directly to beneficiaries. Awards have same preference as wage claims. **Employ.**—All industries, except domestic service, agriculture, and interstate or foreign commerce in absence of contrary election. Exempt employees may make affirmative election. **Wait.**—Seven days. **Med. and Surg.**—Medical and hospital service as and when needed. A reasonable sum, not over $150, for expenses of last sickness and burial. **Comp. for Dis.: Total**—66⅔% of the weekly wages, not less than $6 nor more than $15 per week for 300 weeks; thereafter, while disability lasts, 45%, not less than $4.50 nor more than $15. If weekly wages are less than minimum, full wages are paid. **Partial**—66⅔% of loss of earning capacity, not over $15 per week nor for more than 300 weeks. For certain specified injuries (mutilations, etc.) 66⅔% of wages for fixed periods in lieu of other payments, $15 maximum, $6 minimum, unless wages are less than $6, when full wages are to be paid. Payments begin with the eighth day, but if disability continues six weeks or more compensation is computed from date of injury. Lump sums may be substituted for periodic payments, but if for death or permanent disability, the approval of the court must be obtained. **Death Ben.**—To persons wholly dependent, 66⅔% of the employee's wages, not less than $6 nor more than $15, not exceeding 350 weeks; if wages were less than $6, full wages. If only partial dependents survive, a proportion of the above corresponding to the relation the contribution of deceased to their support bore to his wages. Compensation to children ceases when they reach 18, unless mentally or physically incapacitated from earning. Occupational diseases are not included as accidents.

## NEVADA, 1917.

**Adm. Sys.**—Industrial Commission. **Sec. for Comp.**—Employers may insure in State Insurance Fund; where employer elects to reject provisions of act, he is presumed guilty of negligence in all accident cases; burden of proof is on him to prove absence of negligence. State management of fund and collection of premiums by the State. Payments not assignable, exempt from attachment, etc. **Employ.**—All except domestic and farm labor, provided the employer elects; compulsory as to the State and its municipalities. **Wait.**—Seven days. **Med. and Surg.**—Reasonable medical, surgical, and hospital aid for 90 days, but may be extended to one year by the Industrial Commission. Burial expenses not to exceed $125. **Comp. for Dis.: Total**—60% of the average monthly wages, not less than $30 nor more than $72; $10 additional per month where total dependents. **Partial**—60% of the loss of earning capacity, not more than $40 per month for not more than 60 months, wages in excess of $120 need not be considered. For certain specific injuries (mutilations, etc.) a monthly payment equal to one-half the monthly wages, not less than $30 nor more than $60 for fixed periods, in addition to payments for temporary total disability. No compensation is payable for the first week of disability, but if it continues two weeks or longer compensation is paid from the date of the injury. The Industrial Commission may permit the substitution of lump sums for monthly payments in an amount not exceeding $5,000, except in cases of total dependents. **Death Ben.**—To widow or dependent widower, 30% of the average wages, with 10% additional for each child under 18 years of age, total not to exceed 66⅔%. If only children survive, they receive 15% each, the total not to exceed 66⅔%. In addition to foregoing dependent parents may receive 25% of the average monthly wage during dependency; if dependent brothers or sisters under 18, 20% for one and 30% if more than one, other cases according to the facts. Payments to a widow or dependent widower cease on remarriage, but the widow shall receive two years' benefits in a lump sum. Payments to children cease at 18, unless incapable. Payments to non-resident aliens 60% of above. No excess of wages over $120 per month considered.

## NEW HAMPSHIRE, 1911.

**Adm. Sys.**—Disputes settled by agreement or action in equity. **Sec. for Comp.**—No provision for insurance. Employer must satisfy Commissioner of Labor of financial ability or file a bond. Payments have same preferences as claims for unpaid wages, or for personal services. **Employ.**—Industries dangerous to life or limb, including operation and maintenance of steam and electric roads, work in shops, mills, factories, etc., employing five or more; work about quarries, mines, foundries. **Wait.**—Two weeks. **Med. and Surg.**—If no dependents, expenses of medical care and burial not in excess of $100. **Comp. for Dis.: Total**—Beginning with the fifteenth day, a sum not exceeding 50% of average weekly earnings. **Partial**—A sum not in excess of 50% of loss of earning capacity. In no case is compensation to exceed $10 a week, nor run for a longer period than 300 weeks. The court may determine the amount of lump sums payable as a substitute for weekly payments. **Death Ben.**—To persons wholly dependent, a sum equal to 150 times the average weekly earnings of deceased, not to exceed $3,000.

## NEW JERSEY, 1914.

**Adm. Sys.**—Workmen's Compensation Bureau, subject to appeal to courts. **Sec. for Comp.**—Employers must furnish proof of financial ability or insure. Policies must be for benefit of employees. Right of compensation has same preference as claim for unpaid wages. **Employ.**—All employments in absence of contrary election. **Wait.**—Ten days. **Med. and Surg.**—Reasonable medical services up to $50, also hospital services up to $50, additional for either without limit upon order of Bureau. Expense of last sickness and of burial, not exceeding $100 for burial. **Comp. for Dis.: Total, (a) Temp. (b) Perm.**—(a) 66⅔% of wages, payable during disability, but not beyond 300 weeks. (b) 66⅔% of wages during such disability, not beyond 400 weeks. **Partial, (b) Perm.**—(b) For certain specific injuries (mutilations, etc.), 66⅔% of wages during fixed periods. All weekly payments are subject to maximum and minimum of $12 and $6. A lump sum payment may be substituted at the discretion of the Compensation Bureau. **Death Ben.**—To one dependent, 35% of the wages of the deceased, and for each additional dependent 5% additional, the total not to exceed 60%, payable for not more than 300 weeks. Compensation not to be less than $6 nor more than $12 per week, unless the earnings are less than $6, when full wages are paid. Payments to widows cease on remarriage, to orphans at 18, unless mentally or physically deficient. Provision is made also for education and rehabilitation.

## NEW MEXICO, 1917.

**Adm. Sys.**—District courts. **Sec. for Comp.**—Employer must file bond or certificate of guarantee, mutual, or other insurance, unless he can satisfy the Judge he is solvent. **Employ.**—Extra hazardous (enumerated), where four or more are employed, or where work is carried on upon a derrick, scaffolding, pole, or other structure ten or more feet above the surface of the ground; others by election. **Wait.**—Ten days. **Med. and Surg.**—Medical care up to $150, during "waiting" period of 10 days. $75 for funeral expenses. **Comp. for Total Dis.**—Fifty per cent. of earnings for 520 weeks. Compensation is increased 50% if caused by employer's failure to provide safety devices provided by law, and decreased 50% if caused by the employee's failure to observe a statutory regulation concerning safety, or to use a safety device provided. **Death Ben.**—To a dependent widow or widower, 40% of earnings, 5% additional for each child up to 60%.

There is a special schedule for permanent partial disabilities, ranging from 6 to 150 weeks, and from $6 to $12 per week. Lump sum settlements can be made.

## NEW YORK, 1913.

**Adm. Sys.**—State Department of Labor with

limited appeals to the courts. **Sec. for Comp.**—Employer must give proof of financial ability, or must insure in State fund, or mutual, or stock company. Policies must inure directly to beneficiary. Payments have same preference as unpaid wages. **Employ.**—Enumerated industries, employers having four or more "workmen or operatives," except farm and domestic service, and employers voluntarily insuring. **Wait.**—Two weeks, except when disability lasts more than forty-nine days or where permanent partial disability paid from date of accident. **Med. and Surg.**—Care and treatment until recovery unlimited as to time; costs to be approved by department; $100 for funeral expenses. **Comp. for Dis.: Total**—Two-thirds of wages during continuance. **Partial**—Two-thirds of wage loss. For permanent loss or partial loss of limb or vision or total hearing, two-thirds of wages for fixed period. For facial or head disfigurement an equitable amount not to exceed $3,500. Compensation rate, minimum, $8; maximum, $20 per week. If employee dies, amounts for disability due or remaining payable to dependents. **Death Ben.**—To a widow or dependent widower alone, 30% of wages of deceased, 10% additional for each child under 18; or if no surviving parent, children under 18 receive 15% each, and dependent parents or grandparents, 25%; brothers or sisters, 15% each; aggregate payments in no case to exceed 66⅔%. Payments to widow or widower cease on death or remarriage, with 2 years lump sum to widow on remarriage; payments to children, brothers and sisters cease at 18 and to parents when dependency ceases. In computing the above death benefits no wages in excess of $125 monthly are considered. The law covers certain occupational diseases. Municipalities are self-insurers, if not insured otherwise. Acceptance of premium estops carrier from denying coverage. Contractors are responsible for sub-contractors. The State fund pays its entire expenses and makes its own budget. Failure to insure is punishable by a fine of $500 or prison for one year or both. Awards may be recorded as judgments.

## NORTH DAKOTA, 1919.

**Adm. Sys.**—Workmen's Compensation Bureau. **Sec. for Comp.**—Insurance compulsory; self-insurance not permitted. **Employ.**—All public and private, other than agricultural and domestic service, and common carriers by steam railroad (which may come in by election). **Comp. for Dis.**—66⅔% of wages during total, and 66⅔% of wage loss during temporary partial, not to exceed $20 per week. **Death Ben.**—To widow or dependent widower until death or remarriage; to children up to 18; payments to parents until death, remarriage or cessation of dependency; to other beneficiaries, eight years, not to exceed $20, nor less than $6 per week; funeral benefit up to $150.

There is a limited appeal to the courts. When the widow of a victim remarries she receives 156 weeks' compensation as a lump sum settlement.

## OHIO, 1917.

**Adm. Sys.**—Industrial Commission; limited appeal to civil courts. **Sec. for Comp.**—State Insurance Fund. Employers must insure or give proof of ability to pay benefits. Non-insurers must give bond or security. Insurance is under State control. Claims have same preference as on tax judgments. **Employ.**—All employing five or more regularly; also establishments employing less than five, if employer elects to pay premiums. **Wait.**—One week. **Med. and Surg.**—Medical, hospital, etc., not over $200, but more may be allowed in case of necessity. Burial expenses not to exceed $150. If no dependents, medical and hospital services, not over $200, and burial expenses as above. **Comp. for Dis.: Total, (b) Temp.** (a) **Perm.**—(a) Weekly payments of 66⅔% of average weekly wages during disability, not less than $5 nor more than $15; but not for longer than six years, nor exceeding $3,750. (b) A weekly payment as above, continuing until death. **Partial, (a) Temp.** (b) **Perm.**—(a) 66⅔% of loss of earning capacity during continuance, but not exceeding $15 per week, or a total of $3,750. (b) In certain specified injuries (mutilations, etc.), 66⅔% of wages for fixed periods, with the same maximum and minimum limitations as noted above, in addition to payments during temporary total disability. In all cases, if wages are less than prescribed minimum, then total wages are paid as compensation; an expected increase in wages may be given consideration. **Death Ben.**—To persons wholly dependent, 66⅔% of the average weekly earnings of the deceased for eight years, not less than $2,000 nor more than $5,000. If only partial dependents survive, a proportionate sum to continue for all or such portion of the period of eight years as the Industrail Commission may determine in each case, not exceeding a maximum of $5,000.

## OKLAHOMA, 1915.

**Adm. Sys.**—Industrial Commission. Appeals to the Supreme Court. **Sec. for Comp.**—Insurance companies or fund systems must be approved by the commission. Claims cannot be assigned and payments are exempt from levy, execution, etc. **Employ.**—"Hazardous" (enumerated list and general clause), in which more than two are employed; agriculture, stock raising, retail stores, and interstate railways not included; work by State or municipalities is included. **Wait.**—One week. **Med. and Surg.**—Necessary medical, surgical, or other treatment for first sixty days, or $100 or more if approved by Commission. **Comp. for Dis.: Total, (a) Temp. (b) Perm.**—(a) 50% of average weekly wages for not more than 300 weeks. (b) 50% of average weekly wages for not more than 500 weeks. **Partial, (b.) Perm.**—(b) 50% of wage loss for not more than 300 weeks; for specified injuries, 50% of weekly wages for fixed periods in lieu of other compensation. Payments may not exceed $18 per week nor be less than $8, unless wages were less than $8, when full wages will be paid. Periodical payments may be commuted to lump sums, and aliens who are non-residents may have payments commuted to lump sums equal to one-half of the value of the present worth.

## OREGON, 1916.

**Adm. Sys.**—State Industrial Accident Commission. Review by Circuit Court. Appeals therefrom as in other civil cases. **Sec. for Comp.**—Exclusive State fund. State contributes one-half of administrative cost, contributions by employer of one cent per day worked deducted from employee's wages and a percentage of monthly payroll varying from one-tenth of one per cent. to eight per cent, according to hazard. **Employ.**—All hazardous occupations involving power driven machinery and general construction work automatically subject unless notice to contrary. All non-hazardous occupations (includes farming) may become subject by election. **Med. and Surg.**—Transportation, medical, surgical and hospital expense not to exceed $250. **Comp. for Dis.: Total, (a) Temp. (b) Perm.**—(a) Per cent. of injured workman's wages according to marital condition as follows: Single, 40%, maximum $55; with wife, 48%, maximum $65; wife and one child, 53%, maximum $73; wife and two children, 58%, maximum, $81; wife and three children, 63%, maximum $89; wife and four children, 66⅔%; maximum $97. Widow or widower same as single workman and add 5% of wage, but not more than $8 per month, for each child under 16. Minimum for single workman, $30 per month, and $40 for workman having wife or invalid husband, unless actual wage be less than these amounts, in which event compensation equal to wages is paid. (b) Monthly payments as follows: If unmarried, $30; if with wife or invalid husband, but no child under 16, $35; if husband is not invalid, $30; if married or a widow or widower with a child or children under 16, $8 additional for each child until 16, no maximum. **Partial, (a) Temp. (b) Perm.**—(a) A proportionate amount, corresponding to loss of earning power for not exceeding two years. (b) For certain specified injuries (amputations and functional losses), monthly payments of $25 in addition to compensation for total disability, maximum 96 months. Lump sum optional with injured party in cases for which the period of payments does not exceed twenty-four months and at the discretion of the commission not to exceed 50% of the amount due in other cases. All lump sum payments based on present worth computed at 4% interest. **Death Ben.**—To widow or invalid widower, monthly payment of $30, and to each child under 16, $8 per month, no maximum. To orphans under 16 (female 18) a monthly payment of $15 each, no maximum. To other dependents, there being none of the foregoing, a monthly payment to each equal to 50% of the average support received during the preceding year, not to exceed $30 in all. To parents of an unmarried minor, a monthly payment of $25, until such time as he would have become 21, after which compensation is paid according to average support. Payments to widow or widower until death or remarriage. On remarriage of a widow a lump sum of $300. **Vocational Rehabilitation**—Commission is authorized to provide such retraining to injured workmen as may be deemed advisable and pay for such expense as board and room, tuition, school supplies and financial aid to dependents in connection therewith.

## PENNSYLVANIA, 1916.

**Adm. Sys.**—Workmen's Compensation Board. Appeal to courts. **Sec. for Comp.**—Employers must insure in State Fund, a stock or mutual company, or give proof of financial ability. Agreements are filed with a prothonotary, if approved becomes a lien as a judgment. Act provides for direct payments to beneficiaries. **Employ.**—All, unless employer elects to contrary. Agricultural and domestic employees are excluded. **Wait.**—Fourteen

days. **Med. and Surg.**—Reasonable medical, surgical, and hospital expenses for first 30 days, cost not to exceed $100. $100 funeral expenses. **Comp. for Dis.: Total**—Sixty per cent. of weekly wages for 500 weeks, $6 minimum, $12 maximum, total not to exceed $5,000; if wages are less than $6, full wages will be paid. **Partial**—Sixty per cent. of weekly wage loss, $12 maximum; for not over 300 weeks, fixed periods for specified injuries, $6 minimum, $12 maximum; full wages if less than $6 payments may be commuted to lump sum. **Death Ben.**—Forty per cent. of weekly wages to widow or dependent widower, 10% additional for each child, total not to exceed 60%; if no parent, 30%; if one or two children, 10% additional for each child in excess of two, total not to exceed 60% if no consort or child under 16, but dependent parent, 20% if partially dependent, 40% if totally dependent; brothers, or sisters, 15% to 25% of wages. Payments cease on death, remarriage of widow or widower, or child, brother or sister at 18; not to continue beyond 300 weeks, unless for children under 16, when 15% will be paid for one, and 10% additional for each succeeding child, total not to exceed 50%. Basic wages are not less than $10 nor more than $20 weekly.

## PORTO RICO, 1917.

**Adm. Sys.**—Workmen's Relief Commission, with limited appeals to the courts. **Sec. for Comp.**—A Workmen's Relief Trust Fund is administered by the Treasurer of the island. Rights not assignable nor subject to attachment. **Employ.**—All employing three or more, except domestic service and agricultural work without mechanically driven machinery, and common carriers by railroad. **Med. and Surg.**—Necessary medical attendance and such medicines and necessary food as the Workmen's Relief Commission may prescribe; food supplies granted to be deducted from the award. Burial expenses not exceeding $40. **Comp. for Dis.: Total, (a) Temp. (b) Perm.**—(a) An amount equal to 50% of the weekly wages, not less than $3 nor more than $7, for not more than 104 weeks (b) Not less than $2,000 nor more than $4,000. **Partial, (a) Temp. (b) Perm.**—(b) Not more than $2,500. The time and manner of payments are to be determined by the Workmen's Relief Commission. **Death Ben.**—Not over $3,000 to $4,000. Benefits may be apportioned among the dependent legal heirs by the Workmen's Relief Commission.

## RHODE ISLAND, 1917.

**Adm. Sys.**—Any party interested may petition Superior Court. Appeals to the Supreme Court. **Sec. for Comp.**—Employer must insure, give proof of financial ability, or furnish security or bond. Insurers directly liable to claimants. Beneficiaries have first lien. **Employ.**—All except domestic service and agriculture, if employer elects. Defenses in suits for damages not abrogated unless more than five persons employed. **Wait.**—Seven days. **Med. and Surg.**—Necessary medical and surgical care and hospital services for the first eight weeks, not to exceed $200. If no dependents, the expense of the last sickness and burial, not over $200. **Comp. for Dis.: Total**—A weekly payment equal to one-half the wages, not less than $7 nor more than $16 per week, for not more than 500 weeks. **Partial**—A weekly payment equal to one-half the loss of earning power, not exceeding $10 per week, for not longer than 300 weeks. For certain specified injuries (mutilations, etc.), in addition to above, one-half the wages, weekly payments to be not less than $4 nor more than $10 per week, for fixed periods. Payments begin on the eighth day, but if incapacity extends beyond four weeks they begin from date of injury. Lump sum payments may be substituted by order of the Superior Court after compensation has been paid for six months for either death or injury. **Death Ben.**—To persons wholly dependent, a weekly payment equal to one-half the average weekly earnings, not less than $4 nor more than $10 per week, for a period of 300 weeks. If only partial dependents survive, a sum proportionate to the amount which the annual contributions bear to the annual earnings of the deceased, for not over 300 weeks. Payments to children cease on their reaching eighteen unless physically or mentally incapacitated.

## SOUTH DAKOTA, 1917.

**Adm. Sys.**—Industrial Commissioner. Arbitration Committee, one representative of each side and the Industrial Commissioner. **Sec. for Comp.**—Insurance required unless employer can furnish proof of financial ability, when security may be required. **Employ.**—All except domestic, farm and casual laborers, and employees in interstate and foreign commerce. **Wait.**—Ten days, but payment dates from time of disability if physician will certify that disability existed for any portion of the ten days. **Med. and Surg.**—Medical care up to $150 for 12 weeks. If no dependents, $150 for burial. **Comp. for Total Dis.**—55% of earnings up to a maximum of $3,000 or four times average annual earnings. Compensation for partial disability is on basis of 55% or not more than $15 a week for not longer than six years. **Death Ben.**—In death cases practically the same as for total disability.

## TENNESSEE, 1919.

**Adm. Sys.**—The courts. **Sec. for Comp.**—Insurance is required. Self-insurers may be required to give a bond, or file security; policies inure directly to benefit of employees; same preference as for unpaid wages and exemption from claims of creditors. **Employ.**—Employees where ten or more employees are regularly employed, other than of State, counties thereof, and municipal corporations; except those engaged in agriculture, domestic service, coal mines, common carriers doing interstate business, casual employees. Employers of less than ten, mine operators and State and municipalities may accept provisions. **Wait.**—Ten days. **Med. and Surg.**—Such medical and surgical treatment, medicines, supplies and apparatus as may be reasonably required for thirty days after notice by employee to employer of accident. In case of death, reasonable burial expenses up to $100. **Comp. for Dis.: Total, (a) Temp.**—Fifty per cent. of average weekly wages up to $11 per week; minimum, $5 per week; during disability, not to exceed 300 weeks. **(b) Temp. Part.**—Fifty per cent. of difference between amount earned at time of injury and amount since able to earn; not to exceed 300 weeks; special schedule for specified injuries. **Perm. Total**—Fifty per cent. of average weekly wages, not exceeding 550 weeks, not over $5 per week after 400 weeks; total not to exceed $5,000. **Death Ben.**—To widow, 30% of average weekly wages; to widow and one dependent child, 40%; to widow and two or more dependent children, 50%; to dependent orphan, 30%; and 10% additional for additional orphans, not to exceed 50%; to dependent husband, 20%; to a parent, 25%; to two parents, 35%; if no widow, child, husband, or parent, to dependent grandparent, brother, sister, mother-in-law, or father-in-law, if but one, 25%, if two or more, 35%. This compensation during dependency for not more than 400 weeks

## TEXAS, 1917.

**Adm. Sys.**—Industrial Accident Board. Appeals to courts. **Sec. for Comp.**—Employers may insure. Compensation is payable directly by the insurance association. Benefits are unassignable, and exempt from garnishment attachment, etc. **Employ.**—All except domestic and farm and ranch labor, railways operated as common carriers, and those who have less than three employees, and vessels in interstate and foreign commerce. **Wait.**—One week. **Med. and Surg.**—Medical and hospital care for first two weeks and hospital care for such additional time as may be needed, provided procedure prescribed is followed. If no beneficiaries or creditors, expenses of last illness and a funeral benefit not over $100. **Comp. for Dis.: Total**—Sixty per cent. of average weekly wages, not less than $5 nor more than $15, for not more than 401 weeks. **Partial**—Sixty per cent. of loss of earning power, not over $15 per week nor more than 300 weeks. For certain specified injuries (mutilations, etc., an additional compensation equal to 60% of the average weekly wages for fixed periods, not less than $5 nor more than $15 per week, in lieu of all other compensation. A lump sum payment may be substituted for weekly payments in cases of death or total permanent disability, subject to the approval of the Industrial Acciden Board, and may be directed by Board if case appears to be one where requirements of person entitled to receive it. **Death Ben.**—To the legal beneficiary a weekly payment equal to 60% of his wages, not less than $5 nor more than $15, for a period of 360 weeks, distributed according to law governing property distribution.

## UTAH, 1917.

**Adm. Sys**—Industrial Commission. **Sec. for Comp.**—Employers must insure or be liable to respond in damages. **Employ.**—Public and private employers of three or more. Agricultural, domestic and casual laborers, elected officials, and employees in interstate and foreign commerce are excluded. **Wait.**—Three days. **Med. and Surg.**—Medical care up to $500, which may be increased upon application and after investigation. $150 for burial. **Comp. for Total Dis.**—Sixty per cent. of the average weekly wages for five years and 45% thereafter; temp. tot. dis. not over $5,000 for six years. **Death Ben.**—Dependents are paid 60% of wages for a minimum period of six years. There is a limited appeal to the courts.

## VERMONT, 1915.

**Adm. Sys.**—Commissioner of Industries. Appeal to courts. **Sec. for Comp.**—Insurance required

unless deposit of security or proof of financial responsibility. Employees have direct recourse to insurer. Compensation rights are preferred claims. **Employ.**—All industrial establishments in which more than ten are employed, commerce as far as permissible under Federal laws, domestic and casual labor excluded. **Wait.**—Seven days. **Med. and Surg.**—Medical and hospital service for fourteen days, not over $100. $100 for funera expenses if death within two years. **Comp. for Dis.: Total**—Fifty per cent. of weekly wages for not more than 260 weeks, $6 minimum, $15 maximum, total not to exceed $4,000. If wages less than $3, full wages will be paid. **Partial**—Fifty per cent. of wage decrease, maximum $10, for not more than 200 weeks. For certain specified injuries, 50% of weekly wages, but not more than $15, for designated periods runn ng from 4 to 170 weeks. Payments may be commuted to one or more lump sums in any case. **Death Ben.**—To dependent widow or widower, 33⅓% of weekly wages, 40% if there be one or two children, 45% if more than two; if no parent, 25% to one or two children, 10% additional for each child in excess of two, total not to exceed 40%; if no consort or child under eighteen, and dependent parent, grandparent, or grandchild, 15% to 25%. Payments to widow cease on death or remarriage; to widower on remarriage or cessation of dependency; to children on reaching eighteen, unless incapable, in no case to exceed 260 weeks or $3,500. Payments to other classes end in 208 weeks at most. Basic wages not less than $5 weekly.

## VIRGINIA, 1918.

**Adm. Sys.**—State Commission of three. **Sec. for Comp.**—Policies inure directly to employee. Claims or awards have same preference as those for wages. **Employ.**—All except domestic service and farm labor, and steam railroads; includes public employment. **Wait.**—Ten calendar days. **Med. and Surg.**—Medical and surgical aid by employers for sixty days. Funeral expenses not over $100. **Comp. for Dis.: Total**—Fifty per cent. of weekly wages, maximum $12, minimum $5, total for disability not over 500 weeks or $4 500. **Partial**, (a) **Temp.** (b) **Perm.**—(b) Act has schedule for permanent partial loss of thumb so much, index finger so much, and so on. (a) 50% of weekly loss during disability, not more than $12 nor over 300 weeks. **Death Ben.**—Not more than 300 weeks or $4,500; to alien dependents (except Canadians), not over $1,000. Fifty per cent. of average weekly wages to dependents. There is an appeal to the courts.

## WASHINGTON, 1917.

**Adm. Sys.**—Department of Labor and Industries. Review by Superior Court. Appeals from Superior Court as in other civil cases. **Sec. for Comp.**—Accident fund, under State control. **Employ.**—All extra-hazardous employment, including mills, factories, workshops where machinery is used; blast furnaces, mines, quarries, and wharves, engineering, logging, lumbering, building trades, telegraph, telephone, and electric lights, etc. Railroads are excluded. **Wait.**—Seven days. **Med. and Surg.**—Proper and necessary medical and surgical services, and hospital care if injuries temporary; if permanent, until awards are made on basis of nature of disability. Expenses of burial not over $100. **Comp. for Dis.: Total, (a) Temp. (b) Perm.**—(b) If unmarried, $30 per month; if with a wife or invalid husband, but no child under sixteen, $30 per month; if husband not an invalid, $22.50 per month; if married or a widow or widower with a child or children under sixteen, $5 additional for each child, total not to exceed $52.50; if so helpless as to require attendant, $20 per month, in addition to other benefits. **Partial, (a) Temp. (b) Perm.**—(a) Payment as for total disability continues in proportion to loss of earning power, provided this exceeds 5%. (b) For specified permanent partial disabilities, lump sums ranging from $500 to $2,000; others to be compensated proportionately; if the injured person is a minor, the parents receive an additional sum equal to 10% of the award to the injured person. Monthly payments may be converted into a lump sum, payment not over $4,000, in case of death or permanent total disability. No benefits are to be paid for the first seven days, unless the disability continues for more than thirty days. **Death Ben.**—To widow or invalid widower, a monthly payment of $30; to each child under sixteen, $5 per month, total not over $50; if no parent, $10 to each child under sixteen, total not to exceed $40. To other dependents, if none above survive, a monthly payment equal to 50% of the average amount previously contributed, total not to exceed $20. To the parent or parents of unmarried minor, a monthly payment of $20, until he would have been twenty-one. Payments to widow or widower continue until death or remarriage, and to a child under sixteen. If a widow remarries she receives a lump sum of $240. If burial expense does not exceed $100, widow receives an immediate payment of $250.

## WEST VIRGINIA, 1915.

**Adm. Sys.**—Compensation Commissioner; limited appeal to Supreme Court. **Sec. for Comp.**—Insurance through a State fund. Employers of approved ability may carry own risks, giving bond. Payments only to beneficiaries, and exempt from claims of creditors, attachment or execution or assignment. **Employ.**—All except domestic or agricultural labor, if the employer becomes a member of the State Insurance Fund. **Wait.**—One week. **Med. and Surg.**—Medical, surgical and hospital services, not over $300 ($600 in special cases). Reasonable funeral expenses, not over $150. **Comp. for Dis.: Total**—For permanent total disability (85% or above); 50% of the average weekly wages during life. **Partial, (a) Temp. (b) Perm.**—(a) 50% of average weekly earnings, not more than $12 per week nor exceeding 52 weeks, except that for certain ununited fractures, etc., may be 78 weeks. (b) 50% of wages for periods varying with degree of disability (from 2% to 85%), from 8 to 340 weeks. Lump sum payments may be substituted for periodic payments. **Death Ben.**—To widow or invalid widower, $20 per month and $5 per month additional for each child under the age of fifteen years. To other persons wholly dependent, if no widow, widower or child, 50% of average monthly support received from deceased during preceding year, not exceeding $20 per month for six years. If deceased was a single minor, to a dependent parent 50% of earnings, not over $6 per week until he would have become twenty-one. If only partial dependents survive, compensation computed. Payments to widow or widower cease on remarriage, and to children at fifteen. If widow or widower remarry within two years, to be paid 20% of balance of 10 years.

## WISCONSIN, 1917.

**Adm. Sys.**—Industrial Commission; limited review by the courts. **Sec. for Comp.**—Employer must give proof of financial ability or insure. Claims have preference, are non-assignable, and exempt from attachment or execution. Commission may require deposits, purchase of annuities, or the giving of bonds. **Employ.**—All, if the employer elects. Election is presumed where there are three or more employees, except as to agriculture and railroads. **Wait.**—One week. **Med. and Surg.**—Medical, surgical, and hospital treatment for ninety days, and for such additional time as will in judgment of commission lessen the period of compensation. Christian Science healing permitted if both employer and employee agree. Occupational disease is subject to compensation same as industrial accidents. Artificial limbs supplied. Reasonable expense of burial, up to $100. **Comp. for Dis.: Total**—Sixty-five per cent. of average weekly earnings. **Partial**—Sixty-five per cent. loss of earning power. For certain specific injuries (mutilations, etc.), a sum equal to 65% of average weekly earnings for fixed periods, ranging from 6 to 320 weeks, which include the time for healing. For serious permanent disfigurement, a lump sum may be allowed, not over $1,300. Payments begin with the eighth day, but if disability continues for twenty-eight days, benefits are payable for first seven days. In case of temporary or partial disability, aggregate compensation not over four years' earnings; for permanent total disabilities payments are limited—nine to fifteen years, according to age of injured person. Lump sum payments may be substituted at any time. **Death Ben.**—To persons wholly dependent, a sum equal to four years' earnings, but which when added to any pr or compensation will not exceed six years' earnings. If only partial dependents survive, a sum not to exceed four times the amount provided for their support during the preceding year. All payments are to be made in weekly instalments equal to 65% of the average weekly earnings. Dependenee of children ceases at eighteen, unless physically or mentally incapacitated.

## WYOMING, 1917.

**Adm. Sys.**—Disputes settled by District Courts of the Counties with appeal to the Supreme Court of the State. **Sec. for Comp.**—Insurance in State fund required. Insurance under State control Payments not assignable nor subject to attachment, execution, etc. **Employ.**—Extra-hazardous (enumerated list) in which one or more are employed, nterstate railroads excepted, use of explosives included. **Wait.**—Seven days. **Med. and Surg. and Hosp.**—$200, unless other arrangements exist. $100 for funeral expenses, unless other arrangements exist under agreement. **Comp. for Dis.: Total, (a) Temp. (b) Perm.**—(b) Lump sum of $4,000 and a sum equal to $120 per year for each child under sixteen years of age—total for children shall not exceed $4,000. (a) $50 per month if single,

$60 if married, and $7.50 per month for each child under sixteen. Total monthly payments shall not exceed $90 per month, and aggregate not to exceed the amount payable if the disability were permanent. No payments for first seven days unless the disability continues for more than 21 days. **Death Ben.**—Lump sum payment of $2,000 to widow or invalid widower and an additional sum equal to $120 per year until sixteen, for each child. Total for children not to exceed $3,600. If there are dependent parents and no spouse and no children under sixteen, a sum equal to 50% of the average monthly support received during the three years next preceding the accident, not exceeding $1,000. Payments to non-resident aliens. Beneficiaries are limited to 33⅓% of the above amounts and only the widow and children under sixteen are considered.

### UNITED STATES, 1916.

**Adm. Sys.**—United States Employees Compensation Commission. **Sec. for Comp.**—No provision for insurance. Payments made from special compensation fund. **Employ.**—All civilian employments of the United States Government, the Panama Railroad and the Alaska Engineering Commission. **Wait.**—Three days. **Med. and Surg.**—Reasonable medical, surgical, and hospital services and supplies. $100 burial expenses and transportation of bodies of residents of the United States dying away from home station, if relations desire it. **Comp. for Dis.: Total**—66⅔% of the monthly pay during continuance of the disability. **Partial**—66⅔% of the difference in wage earning capacity due to such disability. Payments are subject to the same maximum and minimum amounts as in case of death. Payments on account of death, or permanent disability, may be computed to a lump sum. **Death Ben.**—To widow or dependent widower alone, 35% of the monthly wages, with 10% additional for each child, total not to exceed 66⅔%. To dependent parents, 25% if one, 40% if both are dependent. If there is a widow, widower, or child, the parents' rights are subordinate, and the total awards may not exceed 66⅔%. Other dependent relatives receive benefits in smaller amounts, subject to claims of foregoing. Payments to widow or widower terminate on death or remarriage, to a child on marriage, reaching eighteen. Payments to other beneficiaries in death cases in no case extend beyond eight years. All payments subject to maximum of $66.67 per month, and minimum of $33.33, unless actual earnings are less, when compensation will equal earnings. If only children survive, one child gets 25%, and each additional child 10%, total not to exceed 66⅔%.

## THE SINGLE TAX.

THE following statement of the single tax principle was written by Henry George, Sr.:

We assert as our fundamental principle the self-evident truth enunciated in the Declaration of American Independence, that all men are created equal and are endowed by their Creator with certain inalienable rights. We hold that all men are equally entitled to the use and enjoyment of what God has created and of what is gained by the general growth and improvement of the community of which they are a part. Therefore, no one should be permitted to hold natural opportunities without a fair return to all for any special privilege thus accorded to him, and that value which the growth and improvement of the community attaches to land should be taken for the use of the community; that each is entitled to all that his labor produces; therefore, no tax should be levied on the products of labor.

To carry out these principles we are in favor of raising all public revenues for national, State, county, and municipal purposes by a single tax upon land values, irrespective of improvements, and of the abolition of all other forms of direct and indirect taxation.

### A TAX ON LAND VALUES.

Since in all our States we now levy some tax on the value of land, the single tax can be instituted by the simple and easy way of abolishing, one after another, all other taxes now levied and commensurately increasing the tax on land values until we draw upon that one source for all expenses of government, the revenue being divided between local government, State government, and the general government as the revenue from direct taxes is now divided between the local and State governments, or by a direct assessment being made by the general government upon the States and paid by them from revenues collected in this manner. The single tax we propose is not a tax on land, and therefore would not fall on the use of land and become a tax on labor.

It is a tax not on land, but on the value of land. Thus it would not fall on all land, but only on valuable land, and on that not in proportion to the use made of it, but in proportion to its value—the premium which the user of land must pay to the owner, either in purchase money or rent, for permission to use valuable land. It would thus be a tax not on the use and improvement of land, but on the ownership of land, taking what would otherwise go to the owner as owner, and not as user.

### NO TAX ON IMPROVEMENTS.

In assessments under the single tax all values created by individual use or improvement would be excluded, and the only value taken into consideration would be the value attaching to the bare land by reason of neighborhood, etc., to be determined by impartial periodical assessments. Thus the farmer would have no more taxes to pay than the speculator who held a similar piece of land idle, and the man who on a city lot erected a valuable building would be taxed no more than the man who held a similar lot vacant. The single tax in short would call upon men to contribute to the public revenues not in proportion to what they produce or accumulate, but in proportion to the value of the natural opportunities they hold. It would compel them to pay just as much for holding land idle as for putting it to its fullest use. The single tax, therefore, would—

1st. Take the weight of taxation off the agricultural districts, where land has little or no value irrespective of improvements, and put it on towns and cities, where bare land rises to a value of millions of dollars per acre.

2d. Dispense with a multiplicity of taxes and a horde of tax-gatherers, simplify government, and greatly reduce its cost.

3d. Do away with the fraud, corruption, and gross inequality inseparable from our present methods of taxation, which allow the rich to escape while they grind the poor. Land cannot be hid or carried off, and its value can be ascertained with greater ease and certainty than any other.

### FREEDOM OF TRADE.

4th. Give us with all the world as perfect freedom of trade as now exists between the States of the Union, thus enabling our people to share through free exchanges in all the advantages which nature has given to other countries, or which the peculiar skill of other peoples has enabled them to attain. It would destroy the trusts, monopolies, and corruptions which are the outgrowths of the tariff. It would do away with the fines and penalties now levied on any one who improves a farm, erects a house, builds a machine, or in any way adds to the general stock of wealth. It would leave every one free to apply labor or expend capital in production or exchange without fine or restriction, and would leave to each the full product of his exertion.

5th. It would, on the other hand, by taking for public use that value which attaches to land by reason of the growth and improvement of the community, make the holding of land unprofitable to the mere owner and profitable only to the user. It would thus make it impossible for speculators and monopolists to hold natural opportunities unused or only half used, and would throw open to labor the illimitable field of employment which the earth offers to man. It would thus solve the labor problem, do away with involuntary poverty, raise wages in all occupations to the full earnings of labor, make overproduction impossible until all human wants are satisfied, render labor-saving inventions a blessing to all, and cause such an enormous production and such an equitable distribution of wealth as would give to all comfort, leisure, and participation in the advantages of an advancing civilization in securing to each individual equal right to the use of the earth. It is also a proper function of society to maintain and control all public ways for the transportation of persons and property, and the transmission of intelligence; and also to maintain and control all public ways in cities for furnishing water, gas, and all other things that necessarily require the use of such common ways.

# The Tariff Act of 1922.

The Fordney-McCumber tariff act was signed by President Harding Sept. 21 1922, and it went into effect at 12:01 A. M., Sept. 22. It was over twenty months in the making. The Republican members of the House Ways and Means Committee began hearings on it Jan. 6, 1921, which continued until Feb. 16, and the bill passed the House July 21, 1921. It rested for eight months and three weeks in the Finance Committee of the Senate, and was reported April 11, 1922, to the Senate with 2,082 amendments. The Senate began consideration of it April 19, and adopted 2,436 amendments. It was passed by the Senate Aug. 19 by a vote of 48 to 25 and was sent to conference at once.

The conference report was submitted to the House Sept. 12 and on the 13th the House sent it back to the Conference Committee by a vote of 177 to 130 (102 Republicans joining with the Democrats) with instructions to eliminate the embargo on dyestuffs and the duty on potash. When submitted again with these changes it was adopted and the bill passed by a vote of 210 to 90 on Sept. 15. The Senate adopted the conference report as amended on Sept. 19 by a vote of 43 to 28.

Treasury experts figure that the new Tariff Act will yield about $400,000,000 a year in revenue, one-half from these four sources: Sugar, $87,000,000; raw wool, $63,000,000; tobacco, $35,000,000; laces and embroideries, $15,000,000. The Underwood-Simmons law yielded last year $308,025,125.17. The Payne-Aldrich law brought $318,891,395.86 into the Treasury in 1913, the last year of its operation.

## FLEXIBLE TARIFF PROVISIONS.

The power of the President to alter rates of duty is provided for under Title III.—Section 315—reads:

"(a) When the President, after careful investigation, finds that the rates of duty in the Tariff of 1922 do not in fact equalize the costs of production of any article or articles between the United States and the principal competing foreign country, he shall determine the rates that will so equalize such difference, and 30 days after the proclamation is made the rates of duty proposed by him shall be in effect on the articles named in the proclamation in lieu of the rates of duty specified in the Tariff of 1922. These rates of duty are to be based upon foreign valuation. He cannot increase or decrease any rate of duty more than 50 per centum of the amount thereof as provided in the Tariff of 1922.

"(b) When the increase or decrease of 50 per centum in the rates of duty based upon foreign valuation do not equalize the difference in the cost of production between the United States and the principal competing foreign country, then the President shall, after due investigation, ascertain the American selling price of the competing article or articles and by proclamation may announce new rates of duty that will equalize the costs of production between the United States and the principal competing foreign country on the articles involved in the inquiry. Such rates of duty, when based upon the American selling price of imported articles, shall not decrease the rates of duty in the Tariff of 1922 by more than 50 per centum of such rates, and shall in no case increase them. The rates based upon the American selling price are to be effective 15 days from the date of the proclamation.

"(c) Differences in the costs of production at home and abroad shall be ascertained by giving due weight to differences in conditions of production, wages, costs of materials, hours of labor, and other items involved in production; differences in the wholesale selling prices in this country of similar domestic and foreign articles; subsidies or other assistance foreign governments give their producers; and any other advantages or disadvantages in competition."

The President can make no proclamation of changes of rates under the flexible tariff provisions until after the United States Tariff Commission has investigated the differences of cost of production at home and abroad.

The investigation by the Tariff Commission is required to be very thorough.

The President must determine in fact that the differences in cost of production really exist or that unfair practices exist, before he can take action. The Tariff Commission shall hold public hearings at which parties interested may be present and heard, and is authorized to make proper rules and regulations for the holding of such hearings.

If, subsequent to any proclamation or a change in rates, the President finds that the costs of production at home and abroad have changed or ceased to exist, he may modify or terminate the rates formerly proclaimed by him.

The President cannot transfer a dutiable article to the free list, or an article on the free list to the dutiable list, or substitute an ad valorem rate for a specific rate, or a specific rate for an ad valorem rate. Nor can he increase a rate beyond the maximum ad valorem rate as provided in the Tariff of 1922, when such act declares that the combined specific and ad valorem rates of duty shall not exceed a specified maximum ad valorem. For instance, if the act says that the rate on any article shall be 20 cents per pound and 40 per centum ad valorem, but that in no case shall the total duty collected be more than 50 per centum ad valorem, the President cannot announce new rates that would increase the total duty beyond the maximum of 50 per centum ad valorem.

Section 316 authorizes the President to investigate unfair methods of competition and unfair acts of importation, and to declare the same to be unlawful. The Tariff Commission is authorized to report upon such methods and acts, and its findings are to be conclusive if supported by evidence; the offending parties may be given a rehearing by the Commission; appeal may be taken to the United States Court of Customs Appeals and its decision shall be final, except that the subject may be reviewed by the United States Supreme Court. In such cases, the President shall increase the duties upon the article or articles in question by not less than 10 per centum ad valorem or more than 50 per centum ad valorem; or the articles may be excluded from entry into the United States. The President's decision is conclusive, but he can modify it thereafter as the facts may warrant.

## RETALIATORY PROVISIONS.

Section 317 provides that when any foreign country discriminates against articles wholly or in part the product or products of this country, by imposing, directly or indirectly, by any unreasonable charge, fee, duty, exaction, regulation or limitation, or other method of discrimination and the commerce in them, and the President finds in fact that said foreign country has done and continues so to do, and that the American public interest will be served thereby, he shall by proclamation declare such new and additional rates of duty, as will offset the burdens placed upon our commerce, not exceeding 50 per centum ad valorem on the commodities from the offending country or countries named in his proclamation; or he may by proclamation exclude the articles named. The provisions of a proclamation become effective 30 days after its date. It is the duty of the Tariff Commission to continually make investigation concerning the welfare of our commerce abroad, and to bring to the attention of the President any discrimination.

In order to give prompt effect to the flexible tariff and retaliatory provisions of the act, the Tariff Commission, under Section 318 is directed to obtain and compile and have ready for prompt use, the conversion costs; costs of production; import costs; growers', manufacturers' or producers' selling prices at home and in the manufacturing, producing and growing centres of foreign countries, which export to the United States competitive articles. This will afford the President, the Congress and the country the information necessary for immediate and effective action.

## TWELVE-MILE LIMIT NOW.

The act extends the zone of search and seizure at sea from the former three-mile extent to twelve miles, in this section:

"Sec. 581—Boarding Vessels—Officers of the customs or of the coast guard, and agents or other persons authorized by the Secretary of the Treasury, or appointed for that purpose in writing by a collector may at any time go on board of any vessel or vehicle at any place in the United States or within four leagues of the coast of the United States, without as well as within their respective districts, to examine the manifest and to inspect, search, and examine the vessel or vehicle, and every part thereof, and any person, trunk or package on board, and to this end to hail and stop such vessel or vehicle, if under way, and use all necessary force to compel

compliance, and if it shall appear that any breach or violation of the laws of the United States has been committed, whereby or in consequence of which such vessel or vehicle, or the merchandise, or any part thereof, on board of or imported by such vessel or vehicle is liable to forfeiture, it shall be the duty of such officer to make seizure of the same, and to arrest or, in case of escape or attempted escape, to pursue and arrest any person engaged in such breach or violation.

"Officers of the Department of Commerce and other persons authorized by such department may go on board of any vessel at any place in the United States or within four leagues of the coast of the United States and hail, stop, and board such vessels in the enforcement of the navigation laws and arrest or, in case of escape or attempted escape, pursue and arrest any person engaged in the breach or violation of the navigation laws."

The more important rates in the tariff law are given below, with the corresponding rates in the Payne-Aldrich (Republican) tariff law of 1911, and in the Underwood (Democratic) law of 1914;

AGRICULTURAL PRODUCTS.

**Cattle**, from 1½ to 2 cents a pound; Payne-Aldrich, from 2 cents a head to 27% ad valorem: Underwood, free.

**Sheep and goats**, $2 a head; Payne-Aldrich, from 75 cents to $1.50; Underwood, free.

**Fresh lamb**, 4 cents a pound; Payne-Aldrich, 1½; Underwood, free.

**Hogs**, ½ cent a pound; Payne-Aldrich, $1.50 a head; Underwood, free.

**Bacon, hams and shoulders**, 2 cents a pound; Payne-Aldrich, 4 cents a pound; Underwood, free.

**Lard**, 1 cent a pound; Payne-Aldrich 1½ cents; Underwood, free: lard, compounds and substitutes, 4 cents a pound; Payne-Aldrich (no provision); Underwood, free.

**Milk**, fresh, 2½ cents a gallon; Payne-Aldrich, 2 cents; Underwood, free; buttermilk, 1 cent a gallon; Payne-Aldrich and Underwood (no corresponding provision): cream, 20 cents a gallon; Payne-Aldrich, 5 cents; Underwood, free.

**Milk**, condensed or evaporated, unsweetened, 1½ cents a pound; sweetened, 1½ cents a pound; Payne-Aldrich 2 cents in each case; Underwood, free.

**Butter and oleomargarine**, and other butter substitutes, 8 cents a pound; Payne-Aldrich, 6 cents; Underwood, 2½ cents.

**Cheese** and substitutes, 5 cents a pound; Payne-Aldrich, 6 cents; Underwood, 20%.

**Poultry**, live, 3 cents a pound; Payne-Aldrich, 3 cents; Underwood, 1 cent; poultry, dead, 6 cents a pound; Payne-Aldrich, 5 cents; Underwood, 2 cents.

**Eggs** of poultry, in the shell, 8 cents a dozen; Payne-Aldrich, 5 cents a dozen; Underwood, free.

**Honey**, 3 cents a pound; Payne-Aldrich, 20 cents a gallon; Underwood, 10 cents a gallon.

**Horses and mules**, valued at not more than $150 each, $30 each; valued at over $150 each, 20%; Payne-Aldrich, $30 each and 25% respectively; Underwood, 10%.

**Fresh or frozen salmon, mackerel and halibut**, 2 cents a pound; Payne-Aldrich, 1 cent a pound; Underwood free; other fresh or frozen fish, 1 cent a pound; Payne-Aldrich, same; Underwood, free.

**Herring and mackerel**, pickled or salted, 1 cent a pound; Payne-Aldrich, ½ cent a pound; Underwood, free.

**Barley**, 20 cents a bushel; Payne-Aldrich, 30 cents; Underwood, 15 cents; barley flour, 2 cents a pound; Payne-Aldrich, same; Underwood, 1 cent.

**Corn**, 15 cents a bushel; Payne-Aldrich, 15 cents: Underwood, free; cornmeal, 30 cents per 100 pounds; Payne-Aldrich, 40 cents; Underwood, free.

**Macaroni and noodles**, 2 cents a pound; Payne-Aldrich, 1½ cents: Underwood, 1 cent.

**Oats**, 15 cents a bushel; Payne-Aldrich, 15 cents; Underwood, 6 cents.

**Oatmeal, rolled oats, etc.**, 80 cents per 100 pounds; Payne-Aldrich, 1 cent a pound; Underwood, 30 cents per 100 pounds.

**Milled rice**, 2 cents a pound; Payne-Aldrich, same; Underwood, 1 cent.

**Rye**, 15 cents a bushel; Payne-Aldrich, 10 cents; Underwood, free.

**Wheat**, 30 cents a bushel; Payne-Aldrich, 25 cents; Underwood, free.

**Wheat flour**, 78 cents per 100 pounds; Payne-Aldrich, 25%; Underwood, free.

**Apples**, 25 per cent a bushel; Payne-Aldrich, 25 cents; Underwood, 10 cents.

**Apricots**, green, ripe, dried, or in brine, ½ cent a pound; Payne-Aldrich and Underwood, free.

**Cider**, 5 cents a gallon; Payne-Aldrich, 5 cents; Underwood, 2 cents.

**Figs**, fresh, dried, or in brine, 2 cents a pound; Payne-Aldrich, 2½ cents; Underwood, 2 cents.

**Raisins**, 2 cents a pound; Payne-Aldrich, 2½ cents; Underwood, 2 cents.

**Lemons**, 2 cents a pound; Payne-Aldrich, 1½ cents; Underwood, ½ cent.

**Limes, oranges and grapefruit**, 1 cent a pound; Payne-Aldrich, 1 cent; Underwood, ½ cent.

**Olives**, in brine, green or ripe, 20 cents a gallon; Payne-Aldrich and Underwood, 15 cents a gallon.

**Peaches and pears**, ½ cent a pound; Payne-Aldrich, same; Underwood 1-5 cent.

**Pineapples**, ¾ cent each; Payne-Aldrich, 4-5 cent; Underwood, ½ cent.

**Marmalades, jellies and fruit butters**, 35%; Payne-Aldrich, 2 cents a pound: Underwood, 1 cent a pound.

**Almonds**, unshelled, 4¾ cents a pound; Payne-Aldrich, 4 cents; Underwood, 3 cents; shelled, 14 cent a pound; Payne-Aldrich, 6 cents; Underwood, 4 cen s.

**Brazil nuts**, 1 cent a pound; Payne-Aldrich, free; Underwood, 1 cent.

**Cocoanut meat**, shredded, 3½ cents a pound; Payne-Aldrich and Underwood 2 cents a pound.

**Peanuts**, unshelled, 3 cents a pound; shelled, 4 cents a pound; Payne-Aldrich and Underwood, 1 cent a pound in each case.

**Walnuts** of all kinds, unshelled, 4 cents a pound; Payne-Aldrich, 3 cents; Underwood, 2 cents; shelled, 12 cents a pound; Payne-Aldrich, 5 cents; Underwood 4 cents.

**Peas**, green or dried, 1 cent a pound; Payne-Aldrich, 5-12 cent a pound; Underwood, 1-6 cent a pound.

**Onions**, 1 cent a pound; Payne-Aldrich, 40 cents a bushel; Underwood, 20 cents a bushel.

**Irish potatoes**, 50 cents per 100 pounds; Payne-Aldrich, 25 cents a bushel; Underwood, free.

**Tomatoes**, ½ cent a pound; Payne-Aldrich, 25%; Underwood, 15%.

**Turnips**, 12 cents per 100 pounds; Payne-Aldrich, 25%; Underwood, 15 per cent.

**Chocolate and cocoa**, 2 cents a pound; Payne-Aldrich, from 2½ cents a pound to 50%; Underwood, from 2 cents a pound to 25%.

**Hay**, $4 a ton; Payne-Aldrich, same; Underwood, $2.

**Hops**, 24 cents a pound; Payne-Aldrich and Underwood, 16 cents a pound.

SUGARS AND MANUFACTURES OF.

**Sugar**, 2.20 cents a pound (1.76 cents a pound, Cuban raw); Payne-Aldrich, 1.68 cents (1.35 Cuban raw): Underwood, 1.25 cents (1 cent Cuban raw).

**Maple sugar and maple syrup**, 4 cents a pound; Payne-Aldrich, same; Underwood, 3 cents.

**Sugar, candy, and all confectionery**, 40%; Payne-Aldrich, from 4 cents a pound and 15% to 50%; Underwood, 2 cents a pound to 25%.

WOOL AND MANUFACTURES OF.

**Raw wool**, 31 cents a pound of scoured content: Payne-Aldrich, 33 cents; Underwood, free.

**Women's and children's dress goods**, from 37 cents a pound and 50% to 45 cents a pound of the wool content and 50%; Payne-Aldrich, 11 cents a square yard and 50% to 11 cents a square yard and 55%; Underwood, 35%.

**Woolen cloths** for men's suits and overcoats; from 24 cents a pound and 40% to 45 cents a pound of the wool content and 50%; Payne-Aldrich, from 33 cents a pound and 50% to 44 cents a pound and 55%; Underwood, 35%.

**Blankets, automobile robes**, and similar articles, from 18 cents a pound and 30% to 37 cents a pound and 40%; Payne-Aldrich, from 22 cents a pound and 30% to 33 cents a pound and 40%; Underwood, 25%.

**Hose and half hose, gloves and mittens**, from 36 cents a pound and 35% to 45 cents a pound and 50%; Payne-Aldrich, 33 cents a pound and 50% to 44 cents a pound and 55%; Underwood, 20% to 40%.

**Knit underwear**, from 36 cents a pound and 30% to 45 cents a pound and 50%; Payne-Aldrich, 44 cents a pound and 60%; Underwood, 35%.

**Sweaters** and other outerwear, knit or crocheted, from 36 cents a pound and 40% to 45 cents a pound and 50%; Payne-Aldrich, 44 cents a pound and 60%; Underwood, 35%.

**Clothing** and other articles of wearing apparel, not knit or crocheted, from 24 cents a pound and 40% to 45 cents a pound and 50%; Payne-Aldrich, 44 cents a pound and 60%; Underwood, 35%.

**Oriental and chenille Axminster carpets and rugs**, 55%; Payne-Aldrich, 60 cents a square yard and 40%; Underwood, 35%.

**Axminster carpets and rugs** not specially provided for and Wilton and Brussels carpets and rugs and velvet and tapestry carpets and rugs, 40%; Payne-Aldrich, 40 cents a square yard and 40% to 50 cents a square yard and 40%; Underwood, from 25% to 30%.

COTTON AND MANUFACTURES OF.

**Cotton sewing thread**, from 20% to 35%; Payne-Aldrich 20%; Underwood 15%.

**Cotton cloth**, 30 to 45%; Payne-Aldrich, from 15% to 40%; Underwood, from 7½% to 30%.

**Table damask**, 30%; Payne-Aldrich, 40% Underwood, 25%.

**Quilts or bed spreads**, 40%; Payne-Aldrich 45%; Underwood, 25%.

**Sheets, pillow cases, blankets and towels**, 25%; Payne-Aldrich, 45%; Underwood, 25%.

**Table and bureau covers, napkins, centre pieces and doilies**, 30%; Payne-Aldrich, 45% Underwood, 30%.

**Gloves**, from 25% to 75%; Payne-Aldrich, 40% to 50%; Underwood, 35%.

**Hose and half hose**, 30% to 50%; Payne-Aldrich, from 55% to 70%; Underwood, 40% to 50%.

**Knit underwear** and all other wearing apparel not specially provided for, 45%; clothing and other wearing apparel not specially provided for, 35%; Payne-Aldrich, 35% to 50%; Underwood, 30%.

**Lace window curtains**, 60%; Payne-Aldrich, 50%; Underwood, 60%.

FLAX, HEMP AND JUTE.

**Linen cloth**, from 50% to 55%; Payne-Aldrich, from 30% to 50%; Underwood, 35%.

**Table damask**, 40%; Payne-Aldrich, from 45% to 50%; Underwood, 35%.

**Towels and napkins**, 40% to 55%; sheets and pillow cases, 40%; Payne-Aldrich, 45% to 50%; Underwood, 35%.

**Linen handkerchiefs**, unhemmed, 35%; hemmed, 45%; Payne-Aldrich, 50%, and Underwood, 35% in each case.

**Clothing** and all articles of wearing apparel not specially provided for, 35%; Payne-Aldrich 50%; Underwood, 40%.

SILK AND SILK GOODS.

**Sewing silk, twist and floss**, ungummed, $1.50 a pound; Payne-Aldrich, same; Underwood, 15%.

**Silk cloth**, 55%; Payne-Aldrich, $1.25 to $4 a pound; Underwood, 45%.

**Knit underwear, hose, half hose and gloves**, 60%; Payne-Aldrich, 60%; Underwood, 50%.

**Outerwear** and other knit or crocheted goods, 60%; Payne-Aldrich, 60%; Underwood, 50%.

**Clothing** and all other wearing apparel, not knit or crocheted, 60%; Payne-Aldrich, 60%; Underwood, 50%.

**Handkerchiefs and woven mufflers**, unhemmed, 55%; hemmed or hemstitched, 60%; Payne-Aldrich, 50% and 60%, respectively; Underwood, 40% and 50%, respectively.

**Knit goods, ribbons and other fabrics and articles of artificial silk**, 45 cents a pound and 60%; Payne-Aldrich, 45 cents a pound and 60%; Underwood, 60%.

METALS AND MANUFACTURES OF.

**Pig iron**, 75 cents a ton; Payne-Aldrich, $2.50 a ton; Underwood, free.

**Steel wire**, ¾ cent to 1½ cent a pound; Payne-Aldrich, 1 cent to 1¾ cent; Underwood, 15%.

**Steel rails**, 1-10 cent a pound; Payne-Aldrich, 7-40 of one cent; Underwood, free.

**Horseshoes**, 1-5 cent a pound; Payne-Aldrich, ¾ of 1 cent a pound; Underwood, free.

**Steel wool**, 10 cents a pound and 30%; Payne-Aldrich, 40%; Underwood, 20%.

**Nails**, exceeding two inches in length, 4-10 cent a pound; Payne-Aldrich, same; Underwood, free; if less than two inches in length, 15%; Payne-Aldrich, 4-10 of 1 cent a pound; Underwood, free.

**Screws**, 25%; Payne-Aldrich, from 3 cents to 10 cents a pound; Underwood, 25%.

**Table, household and hospital utensils, and hollow or flat ware of iron or steel and enamelled or glazed with vitreous glasses**, 5 cents a pound and 30%; Payne-Aldrich, 40%; Underwood, 25%; composed wholly or in chief value of alutninum, 11 cents a pound and 55%; Payne-Aldrich, 45%; Underwood, 25%; of copper, brass or other metal, 40%; Payne-Aldrich, 45%; Underwood 25%.

**Hair, safety, hat and other pins**, of brass, copper or other base metal, 35%; Payne-Aldrich, 35%; Underwood, 20%.

**Fountain pens**, 72 cents a dozen and 40%; Payne-Aldrich, 30%; Underwood, 25%.

**Pocket and other knives**, having other than fixed blades, from 1 cent each and 50% to 35 cents each and 55%; Payne-Aldrich, from 40% to 20 cents each and 40%; Underwood, 35% to 55%.

**Table, kitchen, bread, butcher's, hunting and similar knives**, with handles of mother of pearl, shell or ivory, animal horn or silver, 16 cents each and 45%; Payne-Aldrich, 14 cents each and 15%; Underwood, 30%; with handles of hard rubber, bone or celluloid, 8 cents each and 45%; Payne-Aldrich, 4 cents each and 15%; Underwood, 30%; with handles of any other material, from 2 cents each and 45% to 8 cents each and 45%; Payne-Aldrich, 1 cent each and 15%; Underwood, 30%.

**Scissors and shears**, from 3½ cents each and 45% to 20 cents each and 45%; Payne-Aldrich, from 1¼ cents each and 15% to 75 cents a dozen and 25%; Underwood, 30%.

**Safety razors and handles and frames**, 10 cents each and 30%; straight razors and parts, from 13 cents each and 45% to 45 cents each and 45%; Payne-Aldrich, from 35% to 15 cents each and 35%; Underwood, 35% to 55%.

**Shotguns and rifles**, from $1.50 each and 45% to $10 each and 45%; Payne-Aldrich, from $1.50 each and 15% to 35%; Underwood, 35%.

**Pistols**, from $1.25 each and 55% to $3.50 each and 55%; Payne-Aldrich, 75 cents each and 25%; Underwood, 35%.

**Automobiles and motorcycles**, and parts, 25%; Payne-Aldrich, 45%; Underwood, 30% to 45%.

**Airplanes, hydroplanes, motor boats** and parts, 30% (no corresponding provision in Payne-Aldrich and Underwood law).

**Bicycles**, 30%; Payne-Aldrich, 45%; Underwood, 25%.

**Sewing machines**, from 15% to 30%; Payne-Aldrich, 30%; Underwood, free.

**Cash registers**, 25%; Payne-Aldrich, 40%; Underwood, free.

**Cream separators** valued above $50, 25%; Payne-Aldrich, 15%; Underwood, free, where valued at less than $75.

**Shovels, scythes, sickles**, 30%; Payne-Aldrich, 45%; Underwood, free.

**Aluminum**, crude, 5 cents a pound; Payne-Aldrich, 7 cents; Underwood, 2 cents.

**Lead bullion**, 2½ cents a pound; Payne-Aldrich, same; Underwood, 25%.

**Zinc** in blocks or pigs, 1¾ cents a pound; Payne-Aldrich, 1¾ cents a pound; Underwood, 15%. In sheets, 2 cents a pound; Payne-Aldrich, 1⅝ cents; Underwood, 15%.

**Magnesite**, crude, 5-16 cent a pound; caustic, calcined, ⅝ cent a pound; dead-burned and grain, 2 3-40 cents a pound.

TOBACCO AND MANUFACTURES OF.

**Wrapper tobacco**, unstemmed, $2.10 a pound; Payne-Aldrich, $1.85; Underwood, same; stemmed, $2.75 a pound; Payne-Aldrich, $2.50; Underwood, same.

**Filler tobacco**, unstemmed, 35 cents a pound; stemmed, 50 cents a pound; Payne-Aldrich, 35 cents and 50 cents a pound, respectively; Underwood, same.

**Cigars and cigarettes**, $4.50 a pound and 25%; Payne-Aldrich and Underwood, same.

SPIRITS, WINES AND OTHER BEVERAGES.

**Brandy and other spirits**, $5 a proof gallon; Payne-Aldrich, $2.60; Underwood, same.

**Champagne** and other sparkling wines, $6 a proof gallon; Payne-Aldrich, $3.20 a gallon; Underwood same.

**Still wines**, $1.25 a gallon; Payne-Aldrich and Underwood, 45 cents a gallon.

**Ale, porter and beer**, $1 a gallon; Payne- Aldrich and Underwood, 45 cents.

**Grapejuice** containing less than 1% alcohol, 70 cents a gallon, and $5 proof gallon on the alcohol. Payne-Aldrich and Underwood, no corresponding provisions.

**Ginger ale** and other non-alcoholic beverages, 15 cents a gallon; Payne-Aldrich, 12 cents; Underwood, 8 cents.

CHEMICALS.

**Dyes, synthetic chemicals and explosives**, products of coal tar, in intermediate state, 7 cents a pound and 55% ad valorem on American valuation, for the first two years, and 7 cents a pound and 40% ad valorem on American valuation after that (cannot be increased under the flexible tariff provision); Payne-Aldrich, 20%; Underwood, 15%.

**Dyes, synthetic chemicals**, products of coal tar, in finished state, 7 cents a pound and 60% ad valorem on American valuation for the first two years, and 7 cents a pound and 45% ad valorem on American valuation after that (cannot be increased under the flexible tariff provision); Payne-Aldrich, 30%; Underwood, same.

**Acetic acid** (vinegar), 2 cents a pound; Payne-Aldrich, same; Underwood, free.

**Citric acid**, 17 cents a pound; Payne-Aldrich, 7 cents; Underwood, 5 cents.

**Alcohol**, amyl, 6 cents a pound; Payne-Aldrich, ¼ cent a pound; Underwood, same; wood, 12 cents per gallon; Payne-Aldrich, 20%; Underwood, free.

**Ink and ink powders**, 20% ad valorem; Payne-Aldrich, 25%; Underwood, 15%.

**Menthol**, 50 cents a pound; Payne-Aldrich, 25%; Underwood, 50 cents a pound; camphor, crude natural, 1 cent per pound. Payne-Aldrich, free; Underwood, 1 cent a pound; camphor, refined or synthetic, 6 cents a pound; Payne-Aldrich, same; Underwood, 5 cents.

**Castor oil**, 3 cents a pound; Payne-Aldrich, 35 cents a gallon; Underwood, 12 cents a gallon.

**Linseed oil**, 3 3-10 cents a pound; Payne-Aldrich, 15 cents a gallon or 7½ pounds weight; Underwood, 10 cents a gallon of same weight.

**Olive oil**, in containers, 7½ cents a pound; Payne-Aldrich, 50 cents a gallon; Underwood, 30 cents a gallon; in bulk, 6½ cents a pound; Payne-Aldrich 40 cents a gallon; Underwood, 20 cents a gallon.

**Cottonseed oil**, 3 cents a pound; Payne-Aldrich and Underwood, free.

**Cocoanut oil**, 2 cents a pound; Payne-Aldrich and Underwood, free.

**Peanut oil**, 4 cents a pound; Payne-Aldrich, free; Underwood, 6 cents a gallon.

**Soya bean oil**, 2½ cents a pound; Payne-Aldrich and Underwood, free.

**Perfumery**, including toilet waters, cosmetics, etc., if containing alcohol, 40 cents a pound and 75 cents ad valorem; Payne-Aldrich, 60 cents a pound and 50%; Underwood, 40 cents and 60%; if not containing alcohol, 75%; Payne-Aldrich and Underwood, 60%.

**Spirit varnishes**, containing less than 5% of methyl alcohol, $2.20 a gallon and 25% ad valorem; Payne-Aldrich, $1.32 a gallon and 35%; Underwood, $1.32 a gallon and 15%; containing more than 5% methyl alcohol, 25% ad valorem; Payne-Aldrich, same; Underwood, 10%.

**Soap**, castile, 15%; Payne-Aldrich, 1¼ cents a pound; Underwood, 10%. Perfumed toilet, 30%; Payne-Aldrich, 50%; Underwood, 30%. Unperfumed toilet, 30%; Payne-Aldrich, 20%; Underwood, 10%. All other soap and soap powder, 15%; Payne-Aldrich, 20%; Underwood, 5%.

**Baking soda**, ¼ cent a pound; Payne-Aldrich, ⅝ cent a pound; Underwood, ¼ cent.

**Table salt**, in containers, 11 cents per 100 pounds; in bulk, 7 cents per hundred pounds; Payne-Aldrich, same; Underwood, free.

**Starch**, potato, 1¼ cents a pound; Payne-Aldrich, 1½ cents; Underwood, 1 cent.

## JEWELRY.

**Diamonds and other precious stones**, uncut, 10%; Payne-Aldrich, free; Underwood, 10%; cut, but not set, 20%; Payne-Aldrich, 10%; Underwood, 20%.

**Pearls**, not set or strung, 20%; Payne-Aldrich, 10%; Underwood, 20%.

**Imitation precious stones**, cut or faceted, 20%; not cut or faceted, 60%; Payne-Aldrich and Underwood, 20%.

**Buckles, cardcases, chains, cigar and cigarette holders and cases, collar, cuff and dress buttons, meshbags, purses, etc.**, 80%; Payne-Aldrich and Underwood, 60%.

**Watch movements**, in cases or otherwise, from 75 cents each to $10.75 each; Payne-Aldrich, from 70 cents each to $3 each and 25%; Underwood, 30%.

**Watch cases and parts of watches**, 45%; Payne-Aldrich, 40%; Underwood, 30%.

**Clocks and clock movements**, 45%; Payne-Aldrich, 40%; Underwood, 30%.

## EARTHENWARE AND GLASSWARE.

**Common yellow, brown or gray earthenware**, undecorated, 15% ad valorem; Payne-Aldrich, 25%; Underwood, 15%; decorated, 20% ad valorem; Payne-Aldrich, 40%; Underwood, 20%.

**White granite and semi-porcelain earthenware and stoneware**, undecorated, 45%; Payne-Aldrich, 55%; Underwood, 35%; decorated, 50%; Payne-Aldrich, 60%; Underwood, 40%.

**China, porcelain and other vitrified wares**, undecorated, 60% ad valorem; Payne-Aldrich, 55%; Underwood, 50%; if decorated, 70%; Payne-Aldrich, 60%; Underwood, 55%.

**Plain glass bottles**, from 1 cent a pound to 50 cents a gross; Payne-Aldrich, same; Underwood, 30%.

**Illuminating articles of glass**, 60%; Payne-Aldrich, 45%; Underwood, 30% ad valorem.

**Table and kitchen articles and utensils of glass**, 55%; Payne-Aldrich, 35 to 45%; Underwood, 20 to 25%.

**Spectacles, eyeglasses and goggles**, from 20 cents a dozen to 40% ad valorem; Payne-Aldrich, 20 cents to 50%; Underwood, 35%.

**Incandescent electric light bulbs and lamps**, 20%; Payne-Aldrich, 45%; Underwood, 30%.

## WOOD AND MANUFACTURES OF.

**Toothpicks**, 25%; Payne-Aldrich, 2 cents a thousand and 15%; Underwood, 25%.

**Furniture of rattan, reed, willow or fibre**, 60%; Payne-Aldrich, 35%; Underwood, 15%.

**Furniture of wood**, 33 1-3 per cent; Payne-Aldrich, 35%; Underwood, 15%.

**Logs of fir, spruce, cedar or Western hemlock**, $1 a thousand board feet; Payne-Aldrich and Underwood, free.

**Spanish cedar, ebony, mahogany, rosewood, etc.**, in the log, 10%; Payne-Aldrich and Underwood, free; in sawed boards, 15%; Payne-Aldrich, same; Underwood, 10%; in form of veneers, 20%; Payne-Aldrich, same; Underwood, 15%.

## PAPER.

**Printing paper** not specially provided for (exclusive of newsprint, which is free), 1 cent a pound and 10%; Payne-Aldrich, from 5-10 cent a pound to 15%; Underwood, 12%.

**Writing, letter and note paper**, plain, 3 cents a pound and 15%; Payne-Aldrich, same; Underwood, 25%.

**Paper envelopes**, plain, 20% and 3 cents a pound; Payne-Aldrich, 20%; Underwood, 15%.

**Playing cards**, 10 cents a pack and 20%; Payne-Aldrich, 10 cents a pack and 20%; Underwood, 60%.

## SUNDRIES.

**Boxing gloves, baseballs, footballs, tennis rackets, bats and other similar athletic equipment**, 30%; Payne-Aldrich and Underwood, no corresponding provision.

**Ice and roller skates**, 20%; Payne-Aldrich and Underwood, no corresponding provision.

**Shoes and other footwear**, having uppers of wool, cotton, hair or silk, 35%; Payne-Aldrich and Underwood, no corresponding provision.

**Hats, bonnets, etc.**, of straw, grass, horsehair, rattan, etc., blocked or trimmed, 50%; Payne-Aldrich, 50%; Underwood, 40%.

**Brooms**, 15%; Payne-Aldrich, 40%; Underwood, 15%.

**Tooth brushes and other toilet brushes**, 45%; Payne-Aldrich, 40%; Underwood, 35%.

**Dice, dominoes, billiard balls and poker chips**, 50%; Payne-Aldrich and Underwood, 50%.

**Dolls and toys**, 70%; Payne-Aldrich and Underwood, 35%.

**Matches**, 8 cents a gross; Payne-Aldrich, 6 cents; Underwood, 3 cents.

**Furs**, dressed on the skin, excepting silver or black fox, 25%; Payne-Aldrich, 20%; Underwood, 30%.

**Manufactures of furs**, 50%; Payne-Aldrich, 35%; Underwood, 40%.

**Silver or black fox skins, and manufactures thereof**, 50%; Payne-Aldrich, 20%; Underwood, 30%.

**Wearing apparel**, in chief value of fur not specially provided for, 50%; Payne-Aldrich and Underwood, same.

**Hats, bonnets, etc., of fur**, from $1.50 per dozen and 25% to $16 per dozen and 25%; Payne-Aldrich, from $1.50 per dozen and 20% to $7 per dozen and 20%; Underwood, 15%.

**Laces, lace window curtains, and burnt-out laces** (other than those of cotton), 90%; Payne-Aldrich, 70%; Underwood, 60%.

**Embroideries** not specially provided for and all fabrics and articles embroidered by hand or machinery, 75%; Payne-Aldrich and Underwood, 60%.

**Bags, satchels, and pocketbooks and other boxes and cases of leather, rawhide, or parchment**, 30%; Payne-Aldrich, 40%; Underwood, 30%; if fitted with travelling, luncheon, and similar sets, 45%; Payne-Aldrich, 50%; Underwood, 35%.

**Leather gloves, men's**, not over twelve inches in length, $5 per dozen pairs; women's and children's, not over the same length, $4 per dozen pairs; for each inch in length in excess thereof, 50 cents a pair; Payne-Aldrich from $1.25 to $4.75 a dozen pairs; Underwood, from $1 to $2.50 per dozen pairs.

**Musical instruments, and parts**, 40%; Payne-Aldrich, 45%; Underwood 35%.

**Phonographs and similar articles and parts**, 30%; Payne-Aldrich, 45%; Underwood, 25%.

**Rosaries, chaplets and similar articles of religious devotion**, of other than precious metals or stones, from 15% to 30%; of precious metals or precious stones, 50%; Payne-Aldrich and Underwood, no corresponding provisions.

**Pencils** of materials other than metal, 45 cents a gross and 25%; Payne-Aldrich, 45 cents a gross and 25%; Underwood, 25%.

**Photographic cameras and parts**, 20%; Payne-Aldrich, 45%; Underwood, 15%.

**Moving picture films**, sensitized but not exposed or developed 4-10 of a cent a linear foot;

Payne-Aldrich, 25%; Underwood, free. Exposed but not developed, 2 cents a linear foot; Payne-Aldrich, 25%; Underwood, 2 cents. Exposed and developed, 3 cents a linear foot; Payne-Aldrich, 25%; Underwood, 3 cents. Positives in any form, 1 cent a linear foot; Payne-Aldrich, 1½ cents; Underwood, 1 cent.

**Thermostatic bottles, jars and jugs**, from 15 cents each and 45% to 30 cents each and 45%; Payne-Aldrich and Underwood, no corresponding provisions.

**Umbrellas, parasols and sunshades**, covered with other than paper or lace, 40%; Payne-Aldrich, 50%; Underwood, 35%.

FREE LIST.

Agricultural implements, including ploughs, tooth or disk harrows, harvesters, reapers, agricultural drills and planters, mowers (except lawn mowers), horserakes, cultivators, threshing machines, cotton gins, wagons and carts.
Animals imported for breeding purposes.
Antimony ore
Antitoxins, vaccines, serums and bacterines.
Sulphide of arsenic.
Asbestos, crude.
Bibles.
Binding twine made from New Zealand hemp, manila, Tampico fibre, sisal grass, or sunn.
Bread.
Books, maps, music, engravings, etchings, bound or unbound, if printed more than twenty years. Books and pamphlets printed wholly or chiefly in foreign languages.
Books, libraries, "usual and reasonable," furniture and similar household effects of persons or families from foreign countries, not intended for sale.
Borax, crude.
Old brass.
Bristles, crude.
Bullion, gold or silver.
Linotype and all typesetting machines.
Typewriters.
Shoe machinery.
Tar and oil-spreading machines for road construction.
Chalk, crude.
Coal, anthracite, bituminous, culm, slack and shale, and coke.
Cocoa and cacao beans.
Coffee.
Coins of gold, silver, copper or other metals.
Copper ore and copper in plates, bars, ingots or pigs.
Cork wood or cork bark.
Cotton.
Fans, common palm leaf, not ornamented or decorated.
Guano, basic slag, manures and other substances used chiefly for fertilizers.
Hair of horses and cattle.
Rope made of rawhide.
Hides of cattle.
Ice.
India rubber and gutta-percha, crude.
Iodine, crude.
Iron ore.
Ivory tusks in their natural state.
Jet, unmanufactured.
Junk.
Boots and shoes made wholly or in chief value of leather.
Leather cut into shoe uppers, vamps or soles.
Asphalt and bitumen.
Lemon juice and lime juice, containing less than 2% of alcohol.
Mechanically ground and chemical wood pulp.
Needles, hand sewing or darning.
Newspapers and periodicals.
Oil cake and oil-cake meal.
Oakum.
Whale and other fish oils of American fisheries
Crude petroleum and fuel oil.
Ores of gold, silver or nickel and of the platinum metals.
Parchment and vellum.
Pearl, mother of, and shells, not sawed, cut, flaked or advanced in any value from the natural state.
Personal effects, not merchandise, of citizens of the United States dying in foreign countries.
Phosphates, crude and apatic.
Platinum, unmanufactured or in ingots, bars, sheets or plates.
Potassium chloride and sulphate.
Quinine sulphate.
Radium and salts of.
Shrimps and lobsters.
Silk, raw, and silk cocoons and silk waste.
Sodium nitrates, sulphate, crude, or salt cake and nitre cake.
Standard newsprint paper.
Sulphur in any form, and sulphur ore.
Tar and pitch of wood.
Tea.
Teeth, natural.
Tin ore and black oxide of tin, provided that there shall be imposed upon black oxide of tin a duty of 4 cents a pound and upon bar, block, or pig tin a duty of 6 cents a pound when the American mines are producing 1,500 tons of cassiterite and bar, block and pig tin a year.
Turpentine, gum, and spirits of, and rosin.
Vegetable tallow.
Wax.
All barbed wire, whether plain or galvanized.
Original paintings in oil, mineral, water, or other colors, and original sketches.
Works of art, productions of American artists residing temporarily abroad.
White arsenic.
Bananas.
Common house brick.
Portland cement.
Cotton, both long and short staple.
Cyanide.
Fish for fertilizer.
Gloves made from cattle leather.
Gunpowder, sporting powder.
Potassium nitrate, or saltpetre, crude.
Shingles.
Tin, in bars, blocks, or pigs.
Wood: Logs, timber, round, unmanufactured, hewn, sided or squared.
Paving posts, railroad ties and telephone, electric light, etc., poles.
Pickets, palings, hoops and staves.
Potash.

## BALANCE OF TRADE UNDER TARIFF ACTS.

(From act of July 4, 1789, to and including the year 1921 of the act of October 3, 1913.)

| Act of— | Fiscal Years. | Imports. | Exports. | Annual Average Excess Imports. | Annual Average Excess Exports. |
|---|---|---|---|---|---|
| July 4, 1789.... | 1790 | $23,000,000 | $20,205,156 | $2,794,844 | ..... |
| Aug. 10, 1790.... | 1791-1792 | 60,700,000 | 39,765,139 | 10,467,430 | ..... |
| May 2, 1792.... | 1793-1794 | 55,700,000 | 59,153,297 | 3,273,351 | ..... |
| June 7, 1794.... | 1795-1812 | 1,523,538,964 | 1,213,983,049 | 17,197,551 | ..... |
| July 1, 1812.... | 1813-1816 | 295,114,274 | 169,261,263 | 31,464,253 | ..... |
| Apr. 27, 1816.... | 1817-1824 | 686,533,674 | 608,707,242 | 9,728,304 | ..... |
| May 22, 1824.... | 1825-1828 | 349,308,444 | 331,720,223 | 4,397,055 | ..... |
| May 19, 1828.... | 1829-1832 | 349,589,837 | 314,695,705 | 8,723,533 | ..... |
| July 14, 1832.... | 1833 | 108,118,311 | 90,140,433 | 17,977,878 | ..... |
| Mar. 2, 1833.... | 1834-1842 | 1,218,445,645 | 1,060,257,281 | 17,576,485 | ..... |
| Aug. 30, 1842.... | 1843-1846 | 349,333,077 | 423,681,648 | ..... | $18,589,643 |
| July 30, 1846.... | 1847-1857 | 2,336,430,244 | 2,512,765,531 | ..... | 16,030,481 |
| Mar. 3, 1857.... | 1858-1861 | 1,170,440,593 | 1,330,901,092 | ..... | 40,115,125 |
| Mar. 2, 1861.... | 1862 | 178,330,200 | 227,558,141 | ..... | 49,227,941 |
| July 14, 1862.... | 1863-1864 | 526,488,602 | 532,355,587 | ..... | 2,933,492 |
| June 30, 1864.... | 1865-1870 | 2,176,889,958 | 2,193,871,147 | ..... | 2,830,198 |
| July 14, 1870.... | 1871-1872 | 1,059,359,997 | 1,065,317,286 | ..... | 2,978,644 |
| June 6, 1872.... | 1873-1883 | 6,235,725,983 | 7,313,389,153 | ..... | 97,969,379 |
| Mar. 3, 1883.... | 1884-1890 | 4,758,262,722 | 5,080,073,791 | ..... | 45,973,010 |
| Oct. 1, 1890.... | 1891-1894 | 3,112,621,836 | 3,588,238,021 | ..... | 118,904,046 |
| Aug. 27, 1894.... | 1895-1897 | 2,280,107,204 | 2,688,600,689 | ..... | 136,164,495 |
| July 24, 1897.... | 1898-1909 | 11,981,155,035 | 17,964,899,699 | ..... | 498,645,389 |
| Aug. 5, 1909.... | 1910-1913 | 6,482,467,103 | 8,322,459,209 | ..... | 459,998,026 |
| Oct. 3, 1913.... | 1914-1921 | 24,205,272,824 | 44,715,614,243 | ..... | 2,563,792,677 |

Fiscal years ending Sept. 30 prior to 1843; from 1844 to 1918, fiscal years ended June 30; calendar year after 1918.

EXPORTS, 1914-1921, AS FOLLOWS.

1914, $2,329,684,025; 1915, $2,716,178,465; 1916, $4,272,177,579; 1917, $6,227,164,050; 1918, $5,838,552,057; 1918 (6 months ending Dec. 31, 1918), $3,122,533,666; 1919 (calendar year), $7,749,815,556; 1920 (calendar year), $8,080,480,821; 1921 (calendar year), $4,378,928,024.

Imports contain gold and silver from 1790 to 1842, inclusive. Exports contain gold and silver from 1790 to 1872, inclusive.

## TARIFFS OF 1789 AND 1816.

(From the Congressional Record.)

### THE TARIFF OF 1789.

(Approved July 4, 1789, by George Washington.)

| | Cts. |
|---|---|
| Distilled spirits, Jamaica proof.....per gallon | 10 |
| Molasses.....do | 2½ |
| Brown sugar.....do | 1 |
| Loaf sugar.....do | 3 |
| All other sugars.....do | 1½ |
| Coffee.....do | 2½ |
| Boots.....per pair | 50 |
| Shoes, slippers, etc.....do | 7 |
| Nails and spikes.....per pound | 1 |
| Salt.....per bushel | 6 |
| Manufactured tobacco.....per pound | 6 |
| Indigo.....do | 16 |
| Black teas.....do | 10 |
| Hyson teas.....do | 20 |
| Looking-glasses, window glass, china, stone, and earthenware, gunpowder, paints ground in oil, knee buckles.....per cent. | 10 |
| Cabinet wares, buttons, saddles, leather gloves, men's hats, ready-made clothing, iron castings, rolled iron, leather manufactures, ready-made millinery, jewelry, and plated ware, anchors, wrought, tin and pewter wares.....per cent. | 7½ |
| Raw cotton.....per pound | 3 |
| Cotton goods.....per cent. | 5 |
| "All other goods, wares, and merchandise"..do | 5 |

Average of all tariff duties, about 6.5 per cent.

The introduction to the bill declared its purpose to be "for the support of the Government, for the discharge of the debts of the United States, and the encouragement and protection of manufacturers."

### THE TARIFF OF 1816.

(Approved April 27, 1816, by James Madison)

| | Cts. |
|---|---|
| Dyes, jewelry, watches, gold and silver, lace and embroidery, precious stones and pearls, laces, lace shawls, etc.....per cent. | 7½ |
| Gold leaf and all articles not free.....per cent. | 15 |
| Hempen cloth, woolen or cotton stockings; printing types, and all articles manufactured from brass, copper, iron, steel, pewter, lead, or tin; brass wire, cutlery, pins, needles, buttons, and buckles of all kinds; gilt, plated, and Japan wares; cannon, muskets, firearms, etc.; chinaware, earthen and stone ware, porcelain, and glass manufactures..per cent. | 25 |
| Woolen manufactures.....do | 25 |
| After three years.....do | 20 |
| Cotton manufactures, first three years.....do | 25 |
| After three years.....do | 20 |
| Umbrellas, parasols, women's bonnets, caps, fans, feather ornaments, etc.; men's hats and caps; painted floor cloths, cabinet wares, saddles, bridles, harness, and ready-made clothing.....per cent. | 30 |
| Boots, per pair:.....dollars | 1.50 |
| Cheese, per pound.....cents | 9 |
| Chocolate, per pound.....do | 3 |
| Iron in bars and bolts, per 100 pounds.....do | 45 |
| Iron in sheets, rods, and hoops, per cwt..dollars | 2.50 |
| Indigo, per pound.....cents | 15 |
| Playing cards, per pack.....do | 30 |
| Lead in pigs, bars, or sheets, per pound...cent | 1 |
| Red and white lead, per pound.....cents | 3 |
| Molasses, per gallon.....do | 5 |
| Nails, per pound.....do | 3 |
| Salt, per bushel.....do | 20 |
| Shoes and slippers, per pair.....do | 25 |

This act placed an average tariff on foreign goods of 20 per cent. The making of pig and bar iron was not protected, but has been in each tariff bill since.

## PROTECTION AND REVENUE.

THIS table of the cost of protection to consumers and Government revenue derived under the Payne law and the Underwood law, is taken from the Congressional Record:

(*Millions of Dollars*)

| ARTICLES. | Payne Law, 1914 (Fiscal) | | Underwood Law, 1919 (Calendar) | | | |
|---|---|---|---|---|---|---|
| | Cost to Consumer if Tariff Allowance Used. | Revenue Collected (Per Cent.) | Tariff Allowance to Manufacturers. | Cost to Consumer if Tariff Allowance Used. | Revenue Collected (Per Cent.) | Revenue Collected 1920 (Calendar). |
| Wool, manufactures of | 384 | 10.5 | 265 | 535 | 2.9 | 8.6 |
| Cotton, manufactures of | 492 | 27.1 | 557 | 1,114 | 15.6 | 32.4 |
| Silk | 170 | 14.1 | 214 | 428 | 20.3 | 23 |
| Cutlery and edge tools | 20 | 1.3 | 18 | 36 | .2 | .8 |
| Lead, ore bullion, pig, manufactures of | 178 | .6 | 40 | 80 | .4 | 1.9 |
| Aluminum ware | 12 | .2 | 13 | 26 | .005 | .2 |
| Chocolate and cocoa | 14 | .1 | 11 | 22 | .03 | .05 |
| Collars and cuffs | 14 | .02 | 11 | 22 | .02 | .04 |
| Corsets | 28 | .03 | 22 | 44 | .01 | .004 |
| Umbrellas and canes | 8 | .8 | 6 | 12 | .02 | .06 |
| Wire, wire work, rope, etc | 70 | .3 | 35 | 70 | .1 | .2 |
| Glassware, including plate and window glass | 114 | 2.8 | 100 | 200 | .6 | 2 |
| Oilcloth and linoleum | 16 | .6 | 17 | 34 | .04 | .4 |
| Paints and varnishes | 68 | .4 | 36 | 72 | .1 | .4 |
| Asbestos, manufactured | 2 | .06 | 4 | 8 | .05 | .1 |
| Furs | 34 | 1.6 | 56 | 112 | 1.5 | 1.9 |
| Clocks and watches | 18 | 1.2 | 17 | 34 | 3.4 | 4.1 |
| Glucose and grape sugar | 22 | .003 | 17 | 34 | .0005 | ..... |
| Starch | 10 | .2 | 6 | 12 | .03 | .1 |
| Hosiery and knit goods | 216 | 2.8 | 192 | 384 | .6 | 2.3 |
| Earthen, stone, and china ware | 130 | 5.6 | 94 | 188 | 3.4 | 5.2 |
| Gloves, leather | 14 | 3.3 | 6 | 12 | .8 | 2 |
| Files | 4 | .03 | 4 | 8 | .01 | .03 |
| Buttons | 14 | .8 | 13 | 26 | .6 | .6 |
| Automobiles | 245 | .5 | 780 | 975 | .1 | .7 |
| Toys and games | 8 | 3.2 | 12 | 24 | 1.0 | 3.4 |
| Carpets and rugs | 52 | 2.5 | 40 | 80 | 1.4 | 4.5 |
| Men's shirts | 64 | ..... | 53 | 106 | ..... | ..... |
| Hardware | 46 | ..... | 24 | 48 | ..... | ..... |
| Total (20 industries) | 2,467 | 80.6 | 2,663 | 4,741 | 53.2 | 95 |

# Constitution of the United States.

THE Constitution originally consisted of a Preamble and seven Articles, and in that form was "Done in Convention by the Unanimous Consent of the States present the Seventeenth Day of September in the Year of our Lord one thousand seven hundred and Eighty seven and of the Independence of the United States of America the Twelfth." The Constitution was declared in effect on the first Wednesday in March, 1789. The signers of the original Constitution, by virtue of their membership in Congress, were:

GO. WASHINGTON, *Presidt. and deputy from Virginia.* NEW HAMPSHIRE—John Langdon, Nicholas Gilman. MASSACHUSETTS—Nathaniel Gorham, Rufus King. CONNECTICUT—Wm. Saml. Johnson, Roger Sherman. NEW YORK—Alexander Hamilton. NEW JERSEY—Wil. Livingston, David Brearley, Wm. Patterson, Jona. Dayton. PENNSYLVANIA—B. Franklin, Robt. Morris, Tho. Fitzsimons, James Wilson, Thomas Mifflin, Geo. Clymer, Jared Ingersoll, Gouv. Morris. DELAWARE—Geo. Read, John Dickinson, Jaco. Broom, Gunning Bedford jun, Richard Bassett. MARYLAND—James McHenry, Dan. Carroll, Dan. of St. Thos. Jenifer. VIRGINIA—John Blair, James Madison, Jr. NORTH CAROLINA—Wm. Blount, Hu. Williamson, Richd. Dobbs Spaight. SOUTH CAROLINA—J. Rutledge, Charles Pinckney, Charles Cotesworth Pinckney, Pierce Butler. GEORGIA—William Few, Abr. Baldwin. Attest: WILLIAM JACKSON, *Secretary.*

The Constitution was ratified by the thirteen original States in the following order:

Delaware, December 7, 1787, unanimously.
Pennsylvania, December 12, 1787, vote 46 to 23.
New Jersey, December 18, 1787, unanimously.
Georgia, January 2, 1788, unanimously.
Connecticut, January 9, 1788, vote 128 to 40.
Massachusetts, February 6, 1788, vote 187 to 168.
Maryland, April 28, 1788, vote 63 to 12.
South Carolina, May 23, 1788, vote 149 to 73.
New Hampshire, June 21, 1788, vote 57 to 46.
Virginia, June 25, 1788, vote 89 to 79.
New York, July 26, 1788, vote 30 to 28.
North Carolina, November 21, 1789, vote 193 to 75.
Rhode Island, May 29, 1790, vote 34 to 32.

## THE CONSTITUTION.

*PREAMBLE.*

WE, the people of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquillity, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this CONSTITUTION for the United States of America.

### ARTICLE I.

**Section 1**—(Legislative powers; in whom vested.)

All legislative powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

**Section 2**—(House of Representatives, how and by whom chosen. Qualifications of a Representative. Representatives and direct taxes, how apportioned. Enumeration. Vacancies to be filled. Power of choosing officers, and of impeachment.)

1. The House of Representatives shall be composed of members chosen every second year by the people of the several States, and the electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State Legislature.

2. No person shall be a Representative who shall not have attained to the age of twenty-five years and been seven years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State in which he shall be chosen.

3. Representatives and direct taxes shall be apportioned among the several States which may be included within this Union according to their respective numbers, which shall be determined by adding to the whole number of free persons, including those bound to service for a term of years, and excluding Indians not taxed, three-fifths of all other persons. The actual enumeration shall be made within three years after the first meeting of the Congress of the United States, and within every subsequent term of ten years, in such manner as they shall by law direct. The number of Representatives shall not exceed one for every thirty thousand, but each State shall have at least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to choose 3; Massachusetts, 8; Rhode Island and Providence Plantations, 1; Connecticut, 5; New York, 6; New Jersey, 4; Pennsylvania, 8; Delaware, 1; Maryland, 6; Virginia, 10; North Carolina, 5; South Carolina, 5, and Georgia 3.*

4. When vacancies happen in the representation from any State, the Executive Authority thereof shall issue writs of election to fill such vacancies.

5. The House of Representatives shall choose their Speaker and other officers, and shall have the sole power of impeachment.

**Section 3**—(Senators, how and by whom chosen. How classified. State Executive, when to make temporary appointments, in case, etc. Qualifications of a Senator. President of the Senate, his right to vote. President pro tem., and other officers of the Senate, how chosen. Power to try impeachments. When President is tried, Chief Justice to preside. Sentence.)

1. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six years; and each Senator shall have one vote.

2. Immediately after they shall be assembled in consequence of the first election, they shall be divided as equally as may be into three classes. The seats of the Senators of the first class shall be vacated at the expiration of the second year, of the second class at the expiration of the fourth year, and of the third class at the expiration of the sixth year, so that one-third may be chosen every second year; and if vacancies happen by resignation, or otherwise, during the recess of the Legislature of any State, the Executive thereof may make temporary appointment until the next meeting of the Legislature, which shall then fill such vacancies.

3. No person shall be a Senator who shall not have attained to the age of thirty years, and been nine years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State for which he shall be chosen.

4. The Vice-President of the United States shall be President of the Senate, but shall have no vote unless they be equally divided.

5. The Senate shall choose their other officers, and also a President pro tempore, in the absence of the Vice-President, or when he shall exercise the office of President of the United States.

6. The Senate shall have the sole power to try all impeachments. When sitting for that purpose, they shall be on oath or affirmation. When the President of the United States is tried, the Chief Justice shall preside: and no person shall be convicted without the concurrence of two-thirds of the members present.

7. Judgment of cases of impeachment shall not extend further than to removal from office, and disqualification to hold and enjoy any office of honor, trust, or profit under the United States; but the party convicted shall nevertheless be liable and subject to indictment, trial, judgment, and punishment, according to law.

**Section 4**—(Times, etc., of holding elections, how prescribed. One Session in each year.)

1. The times, places, and manner of holding elections for Senators and Representatives shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by law make or alter such regulations, except as to places of choosing Senators.

2. The Congress shall assemble at least once in every year, and such meeting shall be on the first Monday in December, unless they shall by law appoint a different day.

**Section 5**—(Membership. Quorum. Adjournments. Rules. Power to punish or expel. Journal. Time of adjournments, how limited, etc.)

1. Each House shall be the judge of the elections, returns, and qualifications of its own members, and a majority of each shall constitute a quorum to do business; but a smaller number may adjourn from day to day, and may be authorized to compel the attendance of absent members in such manner and under such penalties as each House may provide.

2. Each House may determine the rules of its proceedings, punish its members for disorderly behavior, and with the concurrence of two-thirds expel a member.

3. Each House shall keep a journal of its proceedings, and from time to time publish the same, excepting such parts as may in their judgment require secrecy; and the yeas and nays of the members of

* See Article XIV., Amendments.

either House on any question shall, at the desire of one-fifth of those present, be entered on the journal.

4. Neither House, during the session of Congress, shall, without the consent of the other, adjourn for more than three days, nor to any other place than that in which the two Houses shall be sitting.

**Section 6**—(Compensation. Privileges. Disqualification in certain cases.)

1. The Senators and Representatives shall receive a compensation for their services, to be ascertained by law, and paid out of the Treasury of the United States. They shall in all cases, except treason, felony, and breach of the peace, be privileged from arrest during their attendance at the session of their respective Houses, and in going to and returning from the same; and for any speech or debate in either House they shall not be questioned in any other place.

2. No Senator or Representative shall, during the time for which he was elected, be appointed to any civil office under the authority of the United States which shall have been created, or the emoluments whereof shall have been increased during such time; and no person holding any office under the United States shall be a member of either House during his continuance in office.

**Section 7**—(House to originate all revenue bills. Veto. Bill may be passed by two-thirds of each House, notwithstanding, etc. Bill, not returned in ten days, to become a law. Provisions as to orders, concurrent resolutions, etc.)

1. All bills for raising revenue shall originate in the House of Representatives, but the Senate may propose or concur with amendments, as on other bills.

2. Every bill which shall have passed the House of Representatives and the Senate shall, before it becomes a law, be presented to the President of the United States; if he approve, he sl all sign it, but if not, he shall return it, with his objections, to that House in which it shall have originated, who shall enter the objections at large on their journal, and proceed to reconsider it. If after such reconsideration two-thirds of that House shall agree to pass the bill, it shall be sent, together with the objections, to the other House' by which it shall likewise be reconsidered; and if approved by two-thirds of that House it shall become a law. But in all such cases the votes of both Houses shall be determined by yeas and nays, and the names of the persons voting for and against the bill shall be entered on the journal of each House respectively. If any bill shall not be returned by the President within ten days (Sundays excepted) after it shall have been presented to him, the same shall be a law in like manner as if he had signed it, unless the Congress by their adjournment prevent its return; in which case it shall not be a law.

3. Every order, resolution, or vote to which the concurrence of the Senate and House of Representatives may be necessary (except on a question of adjournment) shall be presented to the President of the United States; and before the same shall take effect shall be approved by him, or being disapproved by him, shall be repassed by two-thirds of the Senate and the House of Representatives, according to the rules and limitations prescribed in the case of a bill.

**Section 8**—(Powers of Congress.)

1. The Congress shall have power:

To lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defence and general welfare of the United States; but all duties, imposts, and excises shall be uniform throughout the United States.

2. To borrow money on the credit of the United States.

3. To regulate commerce with foreign nations, and among the several States, and with the Indian tribes.

4. To establish an uniform rule of naturalization and uniform laws on the subject of bankruptcies throughout the United States.

5. To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures.

6. To provide for the punishment of counterfeiting the securities and current coin of the United States.

7. To establish post-offices and post-roads.

8. To promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries.

9. To constitute tribunals inferior to the Supreme Court.

10. To define and punish piracies and felonies committed on the high seas, and offences against the law of nations.

11. To declare war, grant letters of marque and reprisal, and make rules concerning captures on land and water.

12. To raise and support armies, but no appropriation of money to that use shall be for a longer term than two years.

13. To provide and maintain a navy.

14. To make rules for the government and regulation of the land and naval forces.

15. To provide for calling forth the militia to execute the laws of the Union, suppress insurrections, and repel invasions.

16. To provide for organizing, arming, and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the States respectively the appointment of the officers, and the authority of training the militia according to the discipline prescribed by Congress.

17. To exercise exclusive legislation in all cases whatsoever over such district (not exceeding ten miles square) as may, by cession of particular States and the acceptance of Congress, become the seat of Government of the United States, and to exercise like authority over all places purchased by the consent of the Legislature of the State in which the same shall be, for the erection of forts, magazines, arsenals, dry-docks, and other needful buildings.

18. To make all laws which shall be necessary and proper for carrying into execution the foregoing powers and all other powers vested by this Constitution in the Government of the United States, or in any department or officer thereof.

**Section 9**—(Provision as to migration or importation of certain persons. Habeas Corpus. Bills of attainder, etc. Taxes, how apportioned. No export duty. No commercial preference. Money, how drawn from treasury, etc. No titular nobility. Officers not to receive presents, etc.)

1. The migration or importation of such persons as any of the States now existing shall think proper to admit shall not be prohibited by the Congress prior to the year one thousand eight hundred and eight, but a tax or duty may be imposed on such importation, not exceeding ten dollars for each person.

2. The privilege of the writ of habeas corpus shall not be suspended, unless when in cases of rebellion or invasion the public safety may require it.

3. No bill of attainder or ex post facto law shall be passed.

4. No capitation or other direct tax shall be laid, unless in proportion to the census or enumeration hereinbefore directed to be taken.

5. No tax or duty shall be laid on articles exported from any State.

6. No preference shall be given by any regulation of commerce or revenue to the ports of one State over those of another, nor shall vessels bound to or from one State be obliged to enter, clear, or pay duties in another.

7. No money shall be drawn from the Treasury but in consequence of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published from time to time.

8. No title of nobility shall be granted by the United States. And no person holding any office of profit or trust under them shall, without the consent of the Congress, accept of any present, emolument, office, or title of any kind whatever from any king, prince, or foreign state.

**Section 10**—(States prohibited from the exercise of certain powers.)

1. No State shall enter into any treaty, alliance, or confederation, grant letters of marque and reprisal, coin money, emit bills of credit, make anything but gold and silver coin a tender in payment of debts, pass any bill of attainder, ex post facto law, or law impairing the obligation of contracts, or grant any title of nobility.

2. No State shall, without the consent of the Congress, lay any impost or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws, and the net produce of all duties and imposts, laid by any State on imports or exports, shall be for the use of the Treasury of the United States; and all such laws shall be subject to the revision and control of the Congress.

3. No State shall, without the consent of Congress, lay any duty of tonnage, keep troops or ships of war in time of peace, enter into agreement or compact with another State, or with a foreign power, or engage in war, unless actually invaded, or in such imminent danger as will not admit of delay.

## ARTICLE II.

**Section 1**—(President; his term of office. Electors of President; number and how appointed. Electors to vote on same day. Qualification of President. On whom his duties devolve in case of his removal, death, etc. President's compensation. His oath of office.)

1. The Executive power shall be vested in a President of the United States of America. He shall hold his office during the term of four years, and, together with the Vice-President, chosen for the same term, be elected as follows:

2. Each State shall appoint, in such manner as the Legislature thereof may direct, a number of electors

equal to the whole number of Senators and Representatives to which the State may be entitled in the Congress; but no Senator or Representative or person holding an office of trust or profit under the United States shall be appointed an elector.

3. The electors shall meet in their respective States and vote by ballot for two persons, of whom one at least shall not be an inhabitant of the same State with themselves. And they shall make a list of all the persons voted for, and of the number of votes for each, which list they shall sign and certify and transmit, sealed, to the seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates, and the votes shall then be counted. The person having the greatest number of votes shall be the President, if such number be a majority of the whole number of electors appointed, and if there be more than one who have such a majority, and have an equal number of votes, then the House of Representatives shall immediately choose by ballot one of them for President; and if no person have a majority, then from the five highest on the list the said House shall in like manner choose the President. But in choosing the President, the vote shall be taken by States, the representation from each State having one vote. A quorum, for this purpose, shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. In every case, after the choice of the President, the person having the greatest number of votes of the electors shall be the Vice-President. But if there should remain two or more who have equal vote, the Senate shall choose from them by ballot the Vice-President.*

4. The Congress may determine the time of choosing the electors and the day on which they shall give their votes, which day shall be the same throughout the United States.

5. No person except a natural born citizen, or a citizen of the United States at the time of the adoption of this Constitution, shall be eligible to the office of President; neither shall any person be eligible to that office who shall not have attained to the age of thirty-five years and been fourteen years a resident within the United States.

6. In case of the removal of the President from office, or of his death, resignation, or inability to discharge the powers and duties of the said office, the same shall devolve on the Vice-President, and the Congress may by law provide for the case of removal, death, resignation, or inability, both of the President and Vice-President, declaring what officer shall then act as President, and such officer shall act accordingly until the disability be removed or a President shall be elected.

7. The President shall, at stated times, receive for his services a compensation which shall neither be increased nor diminished during the period for which he shall have been elected, and he shall not receive within that period any other emolument from the United States, or any of them.

8. Before he enter on the execution of his office he shall take the following oath or affirmation:

"I do solemnly swear (or affirm) that I will faithfully execute the office of President of the United States, and will, to the best of my ability, preserve, protect, and defend the Constitution of the United States."

**Section 2**—(President to be Commander-in-Chief. He may require opinions of Cabient Officers, etc., may pardon. Treaty-making power. Nomination of certain officers. When President may fill vacancies.)

1. The President shall be Commander-in-Chief of the Army and Navy of the United States, and of the militia of the several States when called into the actual service of the United States; he may require the opinion, in writing, of the principal officer in each of the executive departments upon any subject relating to the duties of their respective offices, and he shall have power to grant reprieves and pardons for offences against the United States except in cases of impeachment.

2. He shall have power, by and with the advice and consent of the Senate, to make treaties, provided two-thirds of the S nators present concur; and he shall nominate and by and with the advice and consent of the S nate shall appoint ambassadors, other public ministers and consuls, judges of the Supreme Court, and all other officers of the United States whose appointments are not herein otherwise provided for, and which shall be established by law; but the Congress may by law vest th appointment of such inferior officers as they think proper in the President alone, in the courts of law, or in the heads of departments.

3. The President shall have power to fill up all vacancies that may happen during the recess of the Senate by granting commissions, which shall expire at the end of their next session.

**Section 3**—(Preside t shall communicate to Congress. He may convene and adjourn Congress, in case of disagreement, etc. Shall receive ambassadors, execute laws, and commission officers.)

He shall from time to time give to the Congress information of the state of the Union, and recommend to their consideration such measures as he shall judge necessary and expedient; he may, on extraordinary occasions, convene both Houses, or either of them, and in case of disagreement between them with respect to the time of adjournment, he may adjourn them to such time as he shall think proper; he shall receive ambassadors and other public ministers; he shall take care that the laws be faithfully executed, and shall commission all the officers of the United States.

**Section 4**—(All civil offices forfeited for certain crimes.)

The President, Vice-President, and all civil officers of the United States shall be removed from office on impeachment for and conviction of treason, bribery or other high crim s and misdemeanors.

## ARTICLE III.

**Section 1**—(Judicial powers. Tenure. Compensation.)

The judicial power of the United States shall be vested in one Supreme Court, and in such inferior courts as the Congress may from time to time ordain and establish. The judges, both of the Supreme and inferior courts, shall hold their offices during good behavior, and shall at stated times receive for their services a compensation which shall not be diminished during their continuance in office.

**Section 2**—(Judicial power; to what cases it extends. Original jurisdiction of Supreme Court. Appellate. Trial by jury, etc. Trial, where.)

1. The judicial power shall extend to all cases in law and equity arising under this Constitution, the laws of the United States, and treaties made, or which shall be made, under their authority; to all cases affecting ambassadors, other public ministers and consuls; to all cases of admiralty and maritime jurisdiction; to controversies to which the United States shall be a party; to controversies between two or more States, between a State and citizens of another State, between citizens of different States, between citizens of the same State claiming lands under grants of different States, and between a State, or the citizens thereof, and foreign states, citizens, or subjects.

2. In all cases affecting ambassadors, other public ministers, and consuls, and those in which a State shall be party, the Supreme Court shall have original jurisdiction. In all the other cases before mentioned the Supreme Court shall have appellate jurisdiction both as to law and fact, with such exceptions and under such regulations as the Congress shall make.

3. The trial of all crimes, except in cases of impeachment, shall be by jury, and such trial shall be held in the State where the said crimes shall have been committed; but when not committed within any State the trial shall be at such place or places as the Congress may by law have directed.

**Section 3**—(Treason defined. Proof of. Punishment of.)

1 Treason against the United States shall consist only in levying war against them, or in adhering to their enemies, giving them aid and comfort. No person shall be convicted of treason unless on the testimony of two witnesses to the same overt act, or on confession in open court.

2. The Congress shall have power to declare the punishment of treason, but no attainder of treason shall work corruption of blood or forfeiture except during the life of the person attained.

## ARTICLE IV.

**Section 1**—(Each State to give credit to the public acts, etc., of every other State.)

Full faith and credit shall be given in each State to the public acts, records, and judicial proceedings of every other State. And the Congress may by general laws prescribe the manner in which such acts, records, and proceedings shall be proved, and the effect thereof.

**Section 2**—(Privileges of citizens of each State. Fugitives from justice to be delivered up. Persons held to service having escaped, to be delivered up.)

1. The citizens of each State shall be entitled to all privileges and immunities of citizens in the several States.

2. A person charged in any State with treason, felony, or other crime, who shall flee from justice, and be found in another State, shall, on demand of the

* This clause is superseded by Article XII., Amendments.

Executive authority of the State from which he fled, be delivered up, to be removed to the State having jurisdiction of the crime.

3. No person held to service or labor in one State, under the laws thereof, escaping into another shall, in consequence of any law or regulation therein, be discharged from such service or labor, but shall be delivered up on claim of the party to whom such service or labor may be due.

**Section 3**—(Admission of new States. Power of Congress over territory and other property.)

1. New States may be admitted by the Congress into this Union; but no new State shall be formed or erected within the jurisdiction of any other State, nor any State be formed by the junction of two or more States, or parts of States, without the consent of the Legislatures of the States concerned, as well as of the Congress.

2. The Congress shall have power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States; and nothing in this Constitution shall be so construed as to prejudice any claims of the United States, or of any particular State.

**Section 4**—(Republican form of government guaranteed. Each State to be protected.)

The United States shall guarantee to every State in this Union a Republican form of government, and shall protect each of them against invasion, and, on application of the Legislature, or of the Executive (when the Legislature cannot be convened), against domestic violence.

### ARTICLE V.

(Constitution; how amended. Proviso.)

The Congress, whenever two-thirds of both Houses shall deem it necessary, shall propose amendments to this Constitution, or, on the application of the Legislatures of two-thirds of the several States, shall call a convention for proposing amendments, which, in either case, shall be valid to all intents and purposes, as part of this Constitution, when ratified by the Legislatures of three-fourths of the several States, or by conventions in three-fourths thereof, as the one or the other mode of ratification may be proposed by the Congress; provided that no amendment which may be made prior to the year one thousand eight hundred and eight shall in any manner affect the first and fourth clauses in the Ninth Section of the First Article; and that no State, without its consent, shall be deprived of its equal suffrage in the Senate.

### ARTICLE VI.

(Certain debts, etc., declared valid. Supremacy of Constitution, treaties, and laws of the United States. Oath to support Constitution, by whom taken. No religious test.)

1. All debts contracted and engagements entered into before the adoption of this Constitution shall be as valid against the United States under this Constitution as under the Confederation.

2. This Constitution and the laws of the United States which shall be made in pursuance thereof and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land, and the judges in every State shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.

3. The Senators and Representatives before mentioned, and the members of the several State Legislatures, and all executive and judicial officers, both of the United States and of the several States, shall be bound by oath or affirmation to support this Constitution; but no religious test shall ever be required as a qualification to any office or public trust under the United States.

### ARTICLE VII.

(What ratification shall establish Constitution.)

The ratification of the Conventions of nine States shall be sufficient for the establishment of this Constitution between the States so ratifying the same.

## AMENDMENTS TO THE CONSTITUTION OF THE UNITED STATES.

THE following amendments to the Constitution, Articles I. to X. inclusive, were proposed at the First Session of the First Congress, begun and held at the City of New York, on Wednesday, March 4, 1789, and were adopted by the necessary number of States. The original proposal of the ten amendments was preceded by this preamble and resolution:

"The conventions of a number of the States having, at the time of their adopting the Constitution, expressed a desire, in order to prevent misconstruction or abuse of its powers, that further declaratory and restrictive clauses should be added, and as extending the ground of public confidence in the Government will best insure the beneficent ends of its institution:

"*Resolved*, By the Senate and House of Representatives of the United States of America, in congress assembled, two-thirds of both Houses concurring, that the following articles be proposed to the Legislatures of the several States, as amendments to the Constitution of the United States; all or any of which articles, when ratified by three-fourths of the said Legislatures, to be valid to all intents and purposes, as part of the said Constitution, namely:"

THE TEN ORIGINAL AMENDMENTS.

(They were declared in force December 15, 1791.)

### ARTICLE I.

**Religious Establishment Prohibited. Freedom of Speech, of the Press, and Right to Petition.**

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech or of the press; or the right of the people peaceably to assemble and to petition the Government for a redress of grievances.

### ARTICLE II.

**Right to Keep and Bear Arms.**

A well-regulated militia being necessary to the security of a free State, the right of the people to keep and bear arms shall not be infringed.

### ARTICLE III.

**No Soldier to Be Quartered in Any House, Unless, Etc.**

No soldier shall, in time of peace, be quartered in any house without the consent of the owner, nor in time of war but in a manner to be prescribed by law.

### ARTICLE IV.

**Right of Search and Seizure Regulated.**

The right of the people to be secure in their persons houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

### ARTICLE V.

**Provisions Concerning Prosecution, Trial and Punishment.—Private Property Not to Be Taken for Public Use, Without Compensation.**

No person shall be held to answer for a capital or other infamous crime unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the militia, when in actual service, in time of war or public danger; nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation.

### ARTICLE VI.

**Right to Speedy Trial, Witnesses, Etc.**

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which districts shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the assistance of counsel for his defense.

### ARTICLE VII.

**Right of Trial By Jury.**

In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury shall be otherwise re-examined in any court of the United States than according to the rules of the common law.

### ARTICLE VIII.

**Excessive Bail or Fines and Cruel Punishments Prohibited.**

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

### ARTICLE IX.

**Rule of Construction of Constitution.**

The enumeration in the Constitution of certain rights shall not be construed to deny or disparage others retained by the people.

### ARTICLE X.

**Rights of States Under Constitution.**

The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

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*The following amendment was proposed to the Legis-*

*latures of the several States by the Third Congress on the 5th of March, 1794, and was declared to have been ratified in a message from the President to Congress, dated Jan. 8, 1798.*

### ARTICLE XI.
### Judicial Powers Construed.

The judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States, by citizens of another State, or by citizens or subjects of any foreign state.

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*The following amendment was proposed to the Legislatures of the several States by the Eighth Congress on the 12th of December, 1803, and was declared to have been ratified in a proclamation by the Secretary of State, dated September 25, 1804. It was ratified by all the States except Connecticut, Delaware, Massachusetts, and New Hampshire.*

### ARTICLE XII.
### Manner of Choosing President and Vice-President.

The Electors shall meet in their respective States, and vote by ballot for President and Vice-President, one of whom at least shall not be an inhabitant of the same State with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice-President; and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which list they shall sign and certify, and transmit, sealed, to the seat of the Government of the United States, directed to the President of the Senate; the President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates and the votes shall then be counted; the person having the greatest number of votes for President shall be the President, if such number be a majority of the whole number of Electors appointed; and if no person have such majority, then from the persons having the highest number, not exceeding three, on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by States, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. And if the House of Representatives shall not choose a President, whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the Vice-President shall act as President, as in the case of the death or other constitutional disability of the President. The person having the greatest number of votes as Vice-President shall be the Vice-President if such number be a majority of the whole number of Electors appointed, and if no person have a majority, then from the two highest numbers on the list the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice-President of the United States.

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*The following amendment was proposed to the Legislatures of the several States by the Thirty-eighth Congress on the 1st of February, 1865, and was declared to have been ratified in a proclamation by the Secretary of State dated December 18, 1865. It was rejected by Delaware and Kentucky; was conditionally ratified by Alabama and Mississippi; and Texas took no action.*

### ARTICLE XIII.
### Slavery Abolished.

1. Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

2. Congress shall have power to enforce this article by appropriate legislation..

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*The following, popularly known as the Reconstruction Amendment, was proposed to the Legislatures of the several States by the Thirty-ninth Congress on the 16th of June, 1866, and was declared to have been ratified in a proclamation by the Secretary of State, dated July 28, 1868. The amendment got the support of 23 Northern States; it was rejected by Delaware, Kentucky, Maryland, and 10 Southern States. California took no action. Subsequently it was ratified by the 10 Southern States.*

### ARTICLE XIV.
### Citizenship Rights Not to Be Abridged.

1. All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws.

### Apportionment of Representatives in Congress.

2. Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed. But when the right to vote at any election for the choice of Electors for President and Vice-President of the United States, Representatives in Congress, the executive and judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male members of such State, being of twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

### Power of Congress to Remove Disabilities of United States Officials for Rebellion.

3. No person shall be a Senator or Representative in Congress, or Elector of President and Vice-President or holding any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State Legislature or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid and comfort to the enemies thereof. But Congress may, by a vote of two-thirds of each House, remove such disability.

### What Public Debts Are Valid.

4. The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection and rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations, and claims shall be held illegal and void.

5. The Congress shall have power to enforce by appropriate legislation the provisions of this article.

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*The following amendment was proposed to the Legislatures of the several States by the Fortieth Congress on the 27th of February, 1869, and was declared to have been ratified in a proclamation by the Secretary of State, dated March 30, 1870. It was not acted on by Tennessee; it was rejected by California, Delaware, Kentucky, Maryland, and Oregon; ratified by the remaining 30 States. New York rescinded its ratification January 5, 1870. New Jersey rejected it in 1870, but ratified it in 1871.*

### ARTICLE XV.
### Equal Rights for White and Colored Citizens.

1. The right of the citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude.

2. The Congress shall have power to enforce the provisions of this article by appropriate legislation.

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*The following amendment was proposed to the Legislatures of the several States by the Sixty-first Congress on the 12th day of July, 1909, and was declared to have been ratified in a proclamation by the Secretary of State, dated February 25, 1913. The income tax amendment was ratified by all the States except Connecticut, Florida, Pennsylvania, Rhode Island, Utah, and Virginia.*

### ARTICLE XVI.
### Income Taxes Authorized.

The Congress shall have power to lay and collect taxes on incomes, from whatever sources derived, without apportionment among the several States, and without regard to any census or enumeration.

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*The following amendment was proposed to the Legislatures of the several States by the Sixty-second Congress on the 16th day of May, 1912, and was declared to have been ratified in a proclamation by the Secretary of State, dated May 31, 1913. It got the vote of all the States except Alabama, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Rhode Island, South Carolina, Utah, and Virginia.*

### ARTICLE XVII.
### United States Senators to Be Elected by Direct Popular Vote.

1. The Senate of the United States shall be composed of two Senators from each State, elected by the people thereof, for six years; and each Senator shall have one vote. The electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State Legislatures.

**Vacancies in Senatorships, When Governor May Fill by Appointment.**

2. When vacancies happen in the representation of any State in the Senate, the executive authority of such State shall issue writs of election to fill such vacancies: Provided, That the Legislature of any State may empower the Executive thereof to make temporary appointment until the people fill the vacancies by election as the Legislature may direct.

3. This amendment shall not be so construed as to affect the election or term of any Senator chosen before it becomes valid as part of the Constitution.

*The following amendment was proposed to the Legislatures of the several States by the Sixty-fifth Congress, December 18, 1917; and on January 29, 1919, the United States Secretary of State proclaimed its adoption by 36 States, and declared it in effect on January 16, 1920.*

*Early in 1920, the validity of the Eighteenth Amendment was upheld by the Supreme Court of the United States, in suits to void, brought by the States of Rhode Island and New Jersey, and by various brewers and distillers.*

**ARTICLE XVIII.**
**Liquor Prohibition Amendment.**

1. After one year from the ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

2. The Congress and the several States shall have concurrent power to enforce this article by appropriate legislation.

3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the Legislatures of the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

*The following amendment was proposed to the Legislatures of the several States by the Sixty-fifth Congress, having been adopted by the House of Representatives, May 21, 1919, and by the Senate, June 4, 1919. On August 26, 1920, the United States Secretary of State proclaimed it in effect, having been adopted (June 10, 1919–August 18, 1920), by three-quarters of the States. The Tennessee House, August 31, rescinded its ratification, 47 to 24.*

**ARTICLE XIX.**
**Giving Nation-Wide Suffrage to Women.**

1. The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of sex.

2. Congress shall have power, by appropriate legislation, to enforce the provisions of this article.

## THE FEDERAL SUFFRAGE AMENDMENT.

THE United States House of Representatives, in January, 1918, adopted a resolution submitting a Federal Suffrage Amendment to the States, but the United States Senate refused its consent. The House, May 21, 1919, readopted the resolution; and the Senate adopted it June 4, 1919. Then the resolution went to the Legislatures of the States, thirty-six of which—the necessary three-quarters of all—adopted Federal Suffrage for women in the following order:

DATES OF RATIFICATION OF SUFFRAGE AMENDMENT.

| States. | 1919. | States. | 1919. | States. | 1919. | States. | 1920. |
|---|---|---|---|---|---|---|---|
| Illinois | June 10 | Missouri | July 3 | North Dakota | Dec. 1 | Nevada | Feb. 7 |
| Wisconsin | June 10 | Arkansas | July 28 | South Dakota | Dec. 4 | New Jersey | Feb. 9 |
| Michigan | June 10 | Montana | July 30 | Colorado | Dec. 12 | Idaho | Feb. 11 |
| Kansas | June 16 | Nebraska | July 31 | | 1920. | Arizona | Feb. 12 |
| Ohio | June 16 | Minnesota | Sept. 8 | Rhode Island | Jan. 6 | New Mexico | Feb. 19 |
| New York | June 16 | New Hampshire | Sept. 10 | Kentucky | Jan. 6 | Oklahoma | Feb. 28 |
| Pennsylvania | June 24 | Utah | Sept. 30 | Oregon | Jan. 12 | West Virginia | Mar. 10 |
| Massachusetts | June 25 | California | Nov. 1 | Indiana | Jan. 16 | Washington | Mar. 22 |
| Texas | June 28 | Maine | Nov. 5 | Wyoming | Jan. 28 | Tennessee | Aug. 18 |
| Iowa | July 2 | | | | | | |

The Illinois Legislature ratified on June 10, 1919, but an error in the State's certification caused a re-ratification on June 17.

Ratification was *defeated* in Ala. (Sept. 2, 1919); Ga. (July 24, 1919); Miss. (Jan. 21, 1920); S. C. (Jan. 24, 1920); Va. (Feb. 12, 1920); Md. (Feb. 17, 1920); Del. (June 2, 1920); La. (June 15, 1920); N. C. (Aug. 17, 1920).

## DATES OF RATIFICATION OF PROHIBITION AMENDMENT.

| 1918. | | 1918. | | 1919. | | 1919. | |
|---|---|---|---|---|---|---|---|
| 1. Mississippi | Jan. 8 | 13. Georgia | July 22 | 23. Washington | Jan. 13 | 35. Utah | Jan. 15 |
| 2. Virginia | Jan. 10 | 14. Louisiana | Aug. 3 | 24. California | Jan. 13 | 36. Nebraska | Jan. 16 |
| 3. Kentucky | Jan. 14 | 15. Florida | Dec. 14 | 25. Arkansas | Jan. 14 | 37. Missouri | Jan. 16 |
| 4. S. Carolina | Jan. 23 | | | 26. Illinois | Jan. 14 | 38. Wyoming | Jan. 16 |
| 5. N. Dakota | Jan. 25 | 1919. | | 27. Indiana | Jan. 14 | 39. Minnesota | Jan. 17 |
| 6. Maryland | Feb. 13 | 16. Michigan | Jan. 2 | 28. Kansas | Jan. 14 | 40. Wisconsin | Jan. 17 |
| 7. Montana | Feb. 19 | 17. Oklahoma | Jan. 7 | 29. N. Carolina | Jan. 14 | 41. N. Mexico | Jan. 20 |
| 8. Texas | Mar. 4 | 18. Ohio | Jan. 7 | 30. Alabama | Jan. 14 | 42. Nevada | Jan. 21 |
| 9. Delaware | Mar. 18 | 19. Tennessee | Jan. 8 | 31. Iowa | Jan. 15 | 43. Vermont | Jan. 29 |
| 10. S. Dakota | Mar. 20 | 20. Idaho | Jan. 8 | 32. Colorado | Jan. 15 | 44. New York | Jan. 29 |
| 11. Mas'chusetts | April 2 | 21. Maine | Jan. 8 | 33. Oregon | Jan. 15 | 45. Pennsylvania | Feb. 25 |
| 12. Arizona | May 22 | 22. West Virginia | Jan. 9 | 34. N. Hamp. | Jan. 15 | | |

## THE WHITE HOUSE.

THE site was selected by President Washington and Major Peter Charles L'Enfant when they laid out Washington, 1791; architect, James Hoban of Dub'in; plans chosen by competition closed July 15, 1792. Cornerstone laid October 13, 1792. First occupation—President and Mrs. John Adams, November, 1800. Burned by British in 1814. Mr. Hoban superintended the restoration. First White House appropriation from the U. S. Treasury, April 24, 1800, $15,000, for furniture. The first appropriation for repairs, $15,000, March 3, 1807. Congress appropriated $8,137 for enlarging "the offices west of the President's House," 1819. South Portico finished 1823; cost $19,000. East Room finished and furnished by appropriation made in 1826. North Portico added; cost $24,769.25, 1829. Original plans always followed. First heated by gas, 1848; system of heating and ventilation installed, 1853.

A thorough overhauling and restoration was made under direction of New York architects, McKim, Mead & White, during incumbency of President Roosevelt June 20-September 29, 1902. Congress appropriated in all $475,445; the architects returning an unexpended balance of $7,906.10.

The principal apartments in the White House are officially designated: the East Room, Red Room, Blue Room, Green Room, State Dining Room; Family Dining Room, and Usher's Lobby. There are a Family Floor, a main stairway, and a private staircase and elevators.

The dimensions of the White House, in 1840, were length or frontage, 170 feet; depth or width, 86 feet. The mansion was built of gray sandstone, which was painted white after the fire, hence the name "the White House." Architect Hoban had modelled the structure after the palace of the Duke of Leinster. The original cost was defrayed out of the sale of lands donated by Maryland and Virginia.

The President's Office Building is located at the West of the White House. It was built and occupied in 1902, and was enlarged later. The building contains the President's Room, the Cabinet Room, a room for the President's Secretary, a telegraph room, a press room, and rooms for the clerical force.

## U. S. CONSTITUTI'AL AMENDMENTS IN CONGRESS AND IN N. Y. STATE

(Compiled by James Hodgson, Sub-Librarian Legislative Reference Section, N. Y. State Library.)

| No. | Short Title. | Date Passed by Congress | Vote in U. S. House. | Vote in U. S. Senate. | Date Received in N. Y. | Date Ap'roved in N. Y. | Vote in N. Y. As'mbly. | Vote in N. Y. Senate. | Date Promul. by Sec. of State of U. S. |
|---|---|---|---|---|---|---|---|---|---|
| 1–10 | Bill of rights | 25 Sept., 1789 | Passed | Passed | 12 Jan., 1790 | 27 Feb., 1790 | Passed | Passed | 30 Dec., 1791 and 18 Jan., 1792 |
| — | N. of Reps. in Congress | Adopted | by New | York wit | h other t | en amen | dments. | | |
| — | Compensation of Congressmen | | | | | | Failed | Failed | |
| 11 | Restraining Federal judicial power | 12 Mar., 1794 | 81 to 9 | 23 to 2 | 17 Mar., 1794 | 27 Mar., 1794 | 49 to 2 | Passed | 8 Jan., 1798 |
| 12 | Reform in taking electoral votes | 12 Dec., 1803 | 84 to 42 | 22 to 10 | 31 Jan., 1804 | 11 Feb., 1804 | 79 to 14 | 24 to 4 | 25 Sept., 1804 |
| — | Forbidding taking titles of nobility | 1 May 1810 | 83 to 3 | 19 to 5 | 4 Mar., 1811 | | No vote | Rejected | |
| — | Restricting power of Congress to interfere in local institutions such as slavery | 2 Mar., 1861 | 133 to 65 | 24 to 12 | 21 Mar., 1861 | Did not c | ome up | | |
| 13 | Slavery prohibited | 1 Feb., 1865 | 119 to 56 | 38 to 6 | 1 Feb., 1865 | 28 April, 1865 | 90 to 22 See notes | 18 to 3 See notes | 18 Dec., 1865 |
| 14 | Making negroes citizens and taking action against insurrection | 16 June, 1866 | 120 to 32 | 33 to 11 | 1 Jan., 1867 | 10 Jan., 1867 | 71 to 36 | 23 to 3 | 28 July, 1868 |
| 15 | Prohibiting color restrictions for voting | 27 Feb., 1869 | 145 to 44 | 39 to 13 | 10 Mar., 1869 | 14 April, 1869 | 72 to 47 See notes | 17 to 15 See notes | 30 Mar., 1870 |
| 16 | Income tax | 31 July, 1909 | 318 to 14 | 77 to 0 | 5 Jan., 1910 | 12 July, 1911 | 81 to 42 | 35 to 16 | 25 Feb., 1913 |
| 17 | Popular election of Senators | 15 May, 1912 | 238 to 39 | 64 to 24 | 1 Jan., 1913 | 15 Jan., 1913 | 128 to 4 | 43 to 4 | 31 May, 1913 |
| 18 | Prohibition | 18 Dec., 1917 | 282to128 | 47 to 8 | 31 Dec., 1917 | 29 Jan., 1919 | 81 to 66 | 27 to 24 | 29 Jan., 1919 |
| 19 | Suffrage | 4 June, 1919 | 304 to 89 | 56 to 25 | 12 June, 1919 | 16 June, 1919 | 137 to 0 | 44 to 0 | 26 Aug., 1920 |

Notes—Twelve amendments were proposed in 1789, of which New York ratified 11, but only 10 were adopted by three-fourths of the States. An attempt was made to have the amendments ratified by resolution, but the motion failed, 49 to 2.

"Date received in N. Y." means date on which received by the Legislature.

On February 4, 1818, the President reported to Congress that 12 States had ratified the amendment forbidding titles, while 3 had rejected it and 2 were undecided.

A resolution to ratify the amendment of 1865 passed the Senate on February 2, and the Assembly on February 3, 1865, in the Senate, 18 to 8, and in the Assembly, 72 to 40.

The fourteenth amendment was the first ratified in New York by resolution. Others were ratified by statute.

New York State, on Jan. 5, 1870, withdrew its approval of the Fifteenth Amendment.

## NATIONAL STATUARY HALL.

The National Hall of Statuary, formerly a corridor of the United States House of Representatives in the Capitol at Washington, was established by Congress July 2, 1864. Each State was invited to contribute marble or bronze statues of her two most distinguished deceased citizens. The following is a list of statues presented by the States and the dates of the works:

| State. | Name. | Date. | State. | Name. | Date. |
|---|---|---|---|---|---|
| Alabama | J. L. M. Curry | 1906 | New Hampshire | John Stark | 1894 |
| Arkansas | Uriah M. Rose | 1917 | " | Daniel Webster | 1894 |
| Connecticut | Roger Sherman | 1872 | New Jersey | Richard Stockton | 1886 |
| " | Jonathan Trumbull | 1872 | " | Philip Kearny | 1875 |
| Florida | John W. Gorrie | 1914 | New York | Robert R. Livingston | 1874 |
| " | Gen. E. Kirby Smith | 1918 | " | George Clinton | 1873 |
| Idaho | George L. Shoup | 1909 | North Carolina | Zebulon Baird Vance | 1916 |
| Illinois | James Shields | 1893 | Ohio | James A. Garfield | 1885 |
| " | Frances E. Willard | 1905 | " | William Allen | 1887 |
| Indiana | Oliver P. Morton | 1899 | Oklahoma | Sequoyah | 1917 |
| " | Lew Wallace | 1909 | Pennsylvania | J. P. G. Muhlenberg | 1881 |
| Iowa | James Harlan | 1909 | " | Robert Fulton | 1881 |
| " | Samuel J. Kirkwood | 1913 | Rhode Island | Nathanael Greene | 1869 |
| Kansas | John J. Ingalls | 1904 | " | Roger Williams | 1870 |
| " | George W. Glick | 1914 | South Carolina | John C. Calhoun | 1909 |
| Maine | William King | 1877 | Texas | Stephen F. Austin | 1904 |
| Maryland | Charles Carroll | 1901 | " | Samuel Houston | 1904 |
| " | John Hanson | 1901 | Vermont | Ethan Allen | 1875 |
| Massachusetts | Samuel Adams | 1873 | " | Jacob Collamer | 1879 |
| " | John Winthrop | 1872 | Virginia | Washington | 1908 |
| Michigan | Lewis Cass | 1889 | " | Robert E. Lee | 1908 |
| " | Zachariah Chandler | 1913 | West Virginia | John E. Kenna | 1901 |
| Minnesota | Henry Mower R ce | 1916 | " | Francis H. Pierpont | 1903 |
| Missouri | Francis P. Blair | 1899 | Wisconsin | James Marquette | 1895 |
| " | Thomas H. Benton | 1899 | | | |

Works of art in the Capitol have been acquired by gift, from private individuals and from States.

A group containing bust portraits of Lucretia Mott, Susan B. Anthony, and Elizabeth Cady Stanton was placed in the crypt of the Capitol in February, 1921.

## SALARY OF THE PRESIDENT.

The salary of the President of the United States was the cause of discussion in the First Congress, in view of the fact that the Constitution declared that the President should receive compensation for his services. Washington had notified his fellow citizens that he desired no salary. The limits suggested in Congress ranged from $15,000 to $70,000. The salary was finally placed at $25,000, and this remained the compensation until President Grant's second term (March 3, 1873), when it was increased to $50,000. Chapter 2918 of the Laws of the Second Session of the Fifty-ninth Congress, approved March 4, 1907, appropriated "for travelling expenses of the President of the United States, to be expended at his discretion and accounted for by his certificate solely, $25,000." In the Second Session of the Sixtieth Congress the President's salary was fixed at $75,000 a year.

# United States Government.

PRESIDENT.....WARREN GAMALIEL HARDING, of Ohio.....Salary, $75,000
VICE PRESIDENT.....CALVIN COOLIDGE, of Massachusetts..... " 12,000

## THE CABINET.

*Secretary of State*—Charles Evans Hughes, New York.
*Secretary of the Treasury*—Andrew W. Mellon, Pennsylvania.
*Secretary of War*—John Wingate Weeks, Massachusetts.
*Attorney General*—Harry M. Daugherty, Ohio.
*Postmaster General*—Hubert Work, Colorado.
*Secretary of the Navy*—Edwin Denby, Michigan.
*Secretary of the Interior*—Albert Bacon Fall, New Mexico.
*Secretary of Agriculture*—Henry Cantwell Wallace, Iowa.
*Secretary of Commerce*—Herbert Clark Hoover, California.
*Secretary of Labor*—James John Davis, Pennsylvania.

The salaries of Cabinet Officers are $12,000 each.

## THE WHITE HOUSE.

SECRETARY TO THE PRESIDENT.....GEORGE CHRISTIAN, JR., Ohio.....Salary, $7,500
EXECUTIVE CLERK.....RUDOLPH FORSTER, Virginia..... " 5,000

The Cabinet meets on Tuesdays and Fridays at eleven o'clock. The White House is open to visitors daily except Sundays and holidays from ten to two o'clock.

## DEPARTMENT OF STATE.

*Under Secretary*—William Phillips, Mass.....$7,500
*Assistant Secretary*—Leland Harrison, Ill..... 5,000
*Second Asst. Secretary*—Alvey A. Adee, D. C.. 4,500
*Third Asst. Secretary*—Robert Woods Bliss, N. Y..... 4,500
*Director of the Consular Service*—Wilbur J. Carr, N. Y..... 4,500
*Chief Clerk*—Ben G. Davis, Neb..... 3,000
*Ch. Div. Latin American Affairs*—Francis White,* Md..... 4,500
*Ch. Div. Mexican Affairs*—Matthew E. Hanna* 4,500
*Ch. Div. Far Eastern Affairs*—John Van A. MacMurray, D. C..... 4,500
*Ch. Div. Near Eastern Affairs*—Allen W. Dulles*..... 4,000
*Ch. Div. Eastern European Affairs*—DeWitt C. Poole,† Ill..... 4,500
*Ch. Div. Western European Affairs*—William R. Castle, D. C.....$4,000
*Ch. Div. Economic Adviser*—Arthur N. Young, N. J., Acting..... 4,500
*Ch. Div. Political and Economic Information*—Prentiss B. Gilbert, N. Y..... 4,000
*Ch. Div. Publications*—Gaillard Hunt, Va.... 4,500
*Ch. Div. Passport Control*—George L. Brist, Iowa..... 3,000
*Consular Bureau*—Herbert C. Hengstler, Ohio. 3,500
*Diplomatic Bureau*—Worthington E. Stewart, Ohio..... 3,500
*Appointment Bureau*—Miles M. Shand, N. J.. 3,000
*Bureau of Accounts*—William McNeir, Mich.. 3,500
*Bureau of Indexes and Archives*—David A. Salmon, Conn..... 3,500

(*Diplomatic Secretary. †Consular Officer.)

## TREASURY DEPARTMENT.

*Under Secretary*—S. Parker Gilbert, Jr., N. J. $7,500
*Assistant Secretary*—Elliot Wadsworth, Mass. 5,000
*Assistant Secretary*—Edward Clifford, Ill.... 5,000
*Treasurer of the U. S.*—Frank White, N. D.. 8,000
*Assistant Treasurer of the U. S.*—Frank J. F. Thiel, Ind..... 3,600
*Deputy Assistant Treasurer*—H. Theodore Tate, Tenn..... 3,200
*Commissioner of Internal Revenue*—David H. Blair, N. C..... 10,000
*Comptroller of the Currency*—D. R. Crissinger, Ohio..... 5,000
*Surgeon General Public Health Service*—H. S. Cumming, Va..... 6,000
*Captain Commandant of the U. S. Coast Guard*—W. E. Reynolds, Cal..... 5,000
*Director of the Mint*—F. E. Scobey, Tex..... 5,000
*Register of the Treasury*—Harley V. Speelman, Ohio..... 4,000
*Assistant Register of the Treasury*—Frank A. DeGroot, Mich..... 2,500
*Member Federal Farm Loan Board*—Charles E. Lobdell, Kan..... 10,000
*Member Federal Farm Loan Board*—John H. Guill, Jr., Cal..... 10,000
*Member Federal Farm Loan Board*—Vacant . 10,000
*Member Federal Farm Loan Board*—Robert A. Cooper, S. C..... 10,000
*Chief Clerk*—Wilmer G. Platt, Ind..... 4,000
*Chief, Division of Appointments*—James E. Harper, S. C..... 3,000
*Chief, Division of Bookkeeping and Warrants*—M. J. O'Reilly, Cal..... $4,000
*Chief, Division of Customs*—Ernest W. Camp, Mich..... 4,500
*Chief, Division of Printing and Stationery*—Fred F. Weston, Iowa..... 2,500
*Chief, Division of Loans and Currency*—C. N. McGroarty, Ala..... 3,500
*Chief, Division of Mails and Files*—Leo C. Martin, D. C..... 2,500
*Chief, Division of Secret Service*—W. H. Moran, D. C..... 4,000
*Assistant to Commissioner Internal Revenue*—Vacant..... 5,000
*Deputy Commissioner Internal Revenue*—E. H. Batson, Mo..... 5,000
*Deputy Commissioner Internal Revenue*—Charles R. Nash, Minn..... 5,000
*Deputy Commissioner Internal Revenue*—Francis G. Matson, Utah..... 5,000
*Deputy Commissioner Internal Revenue*—Arthur C. Holden, Mass..... 5,000
*Deputy Commissioner Internal Revenue*—McKenzie Moss, Ky..... 5,000
*Solicitor Internal Revenue*—C. A. Mapes, Mich..... 5,000
*Solicitor of the Treasury*—Richard R. McMahon, W. Va..... 5,000
*Commissioner of Accounts and Deposits*—Robert G. Hand, Miss..... 6,000
*Commissioner of Public Debt*—William S. Broughton, Ill..... 6,000

## WAR DEPARTMENT.

*Ass't Secretary*—J. M. Wainwright, N. Y ...$10,000
*Ass't and Chief Clerk*—John C. Scofield, Ga.. 4,000
*Chief of Staff*—Gen. John J. Pershing, Mo .. 10,000
*Chief Clerk*—Adolph Gerhard, Ill..... 2,500
*Adjt. Gen.*—Major Gen. Robert C. Davis, Pa. 8,000
*Chief Clerk*—Thomas A. O'Brien, Me..... 2,750
*Insp. Gen.*—Major Gen. Ell A. Helmick, Ind. 8,000
*Judge Adv. Gen.*—Major Gen. Enoch H. Crowder, Mo..... 8,000
*Chief Clerk & Solicitor*—E. B. Pitts, N. Y.... 2,500
*Quar. Gen.*—Major Gen. William H. Hart, Minn..... 8,000
*Surgeon Gen.*—Major Gen. M. W. Ireland, Ind..... 8,000
*Chief of Eng.*—Major Gen. Lansing H. Beach, Iowa ..... 8,000
*Chief of Ordn.*—Major Gen. C. C. Williams, Ga..... 8,000
*Chief Sig. Off.*—Major Gen. G. O. Squier, Mich..... 8,000
*Civilian Assistant*—Herbert S. Flynn, D. C.. 3,000
*Chief Bu. Ins. Affairs*—Major Gen. F. McIntyre, Ala..... 8,000
*Off. Charge Pub. Bldgs.*—Lieut. Col. Clarence O. Sherrill, Engr., N. C..... $3,500
*Chief Coast Art.*—Major Gen. F. W. Coe, Kan..... 8,000
*Chief Militia Bur.*—Major Gen. Geo. C. Rickards, Pa..... 8,000
*Chief Field Art.*—Major Gen. W. J. Snow, N. Y..... 8,000
*Chief Air Service*—Major Gen. Mason M. Patrick, W. Va..... 8,000
*Chief Clerk*—J. J. Mullaney, D. C..... 2,400
*Chief Chemical Warfare Service*—Brig. Gen. Ames A. Fries, Wis..... 6,000
*Chief Infantry*—Major Gen. Chas. S. Farnsworth, Pa..... 8,000
*Chief Cav.*—Major Gen. Willard A. Holbrook, Wis..... 8,000
*Chief Finance*—Brig. Gen. Kenzie W. Walker, Tex..... 6,000
*Chief Inland and Coastwise Waterways Service*—Col. Thomas Q. Ashburn, Ohio..... 6,000
*Chief Transportation Service*—Brig. Gen. George F. Downey, Utah..... 6,000

## DEPARTMENT OF JUSTICE.

*Solicitor General*—James M. Beck. N. J.....$10,000
*Sp. Ass't to the Att. Gen.*—Warren F. Martin, Penn..... 6,000
*Ass't to the Att. Gen.*—Augustus T. Seymour, Ohio..... 9,000
*Ass't Attys. Gen*—William W. Hoppin, N. Y.; Robert H. Lovett, Ill; William D. Riter, Utah; John W. H. Crim, N. J.; Albert Ottinger, N. Y.; Mrs. Mabel Walker Willebrandt, Cal.; Rush L. Holland, Col..... 7,500
*Sol. for P. O. Dept.*—John H. Edwards, Ind.. 5,000
*Sol. for Int. Dept.*—Edwin S. Booth, Mont... 5,000
*Sol. Dept. of Labor*—Theodore G. Risley, Ill.. 5,000
*Sol. of the Treas.*—Richard R. McMahon, Va. $5,000
*Sol. of Int. Rev.*—Carl A. Mapes. Mich..... 5,000
*Chief Clerk Administrative As. and Supt. of Bldgs.*—Sims Ely, Ariz..... 4,000
*Ass't Chief Clerk*—J. B. Rishel, Miss..... 3.000
*Appointment Clerk*—C. B. Sornborger, Vt.... 2,500
*Pardon Attorney*—James A. Finch, N. Y..... 4,200
*Supt. of Prisons*—Heber H. Votaw, Ohio.... 4,000
*Priv. Sec. and Ass't to the Att. Gen.*—K. M. Carroll, Ohio..... 3,600
*Dir. Bur. of Investig'rs*—W. J. Burns, N. Y... 7,500
*General Agent*—John D. Harris, Neb..... 5,000
*Disbursing Clerk*—Don C. Fees, Neb..... 2,750

## POST OFFICE DEPARTMENT.

*Chief Clerk*—William M. Mooney, Ohio.....$4,000
*Ass't Chief Clerk*—Thomas J. Howell, Mass... 3,000
*First Ass't Postmaster General*—John H. Bartlett, N. H..... 5,000
*Second Ass't Postmaster Gen.*—Paul Henderson, Ill..... 5,000
*Third Ass't Postmaster Gen.*—Warren Irving Glover, N. J..... 5,000
*Fourth Ass't Postmaster Gen.*—Harry Hilton Billany, Del..... 5,000
*Dir. Postal Savings*—Wm. E. Buffington, Pa. 4,800
*Solicitor*—John H. Edwards, Ind..... 5,000
*Purchasing Agent*—Thomas L. Degnan, Pa...$4,000
*Appointment Clerk*—Robert S. Regar, Pa..... 3,200
*Supt., Div. of Foreign Mails*—Edwin Sands, N. Y..... 3,000
*Supt., Div. of Money Orders*—Charles E. Matthews, Okla..... 2,750
*Supt., Div. of Postmasters' Appointments*—Lorel N. Morgan, W. Va..... 3,000
*Gen. Supt., Div. of Railway Mail Service*—Walter H. Riddell, Ill..... 4,000
*Supt., Div. of Dead Letters*—Charles N. Dalzell, N. Y..... 2,500
*Chief Inspector*—Rush D. Simmons, Wis..... 4,000

## NAVY DEPARTMENT.

*Ass't Sec.*—Colonel Theodore Roosevelt....$5,000
*Chief Clerk*—Frank S. Curtis..... 3,000
*Ch. Naval Oper.*—Adm. R. E. Coontz.....10,000
*Ch. Bureau Yards and Docks*—C. W. Parks (Rear Adm.)..... 8,000
*Ch. Bu. Nav.*—Thos. Washington (Rear Adm.) 8,000
*Ch. Bu. Ord.*—C. B. McVay, Jr. (Rear Adm.).. 8,000
*Ch. Bu. Constr. & Rep.*—John D. Beuret, Chief Constr. (Rear Adm.)..... 8,000
*Ch. Bu. Eng'r'g*—John K. Robison (Rear Adm.) 8,000
*Ch. Bu. Sup. & Accts.*—David Potter, Paymaster General (Rear Adm.)..... 8,000
*Ch. Bu. Med. & Sur.*—Edward R. Stitt, Surgeon General (Rear Adm.) M. C.....$8,000
*Ch. Bu. of Aero.*—W. A. Moffett (Rear Adm.). 8,000
*Judge Adv. Gen.*—Julian L. Latimer (Rear Adm.)..... 8,000
*Pres. Nav. Ex. Bd. & Nav. Rei. Bd.*—M. Johnston (Rear Adm.)..... 8,000
*Ch. Intell. Off.*—L. McNamee (Capt.)..... 6,000
*Supt. Nav. Obser.*—William D. MacDougall (Capt.)..... 6,000
*Dir. Naut. Almanac*—W. S. Eichelberger, Prof. Math..... 5,800
*Hydrographer*—F. B. Bassett (Capt.)..... 6,000
*Com. Mar. Corps*—J. A. Lejeune,, Major Gen. Comdt., M. C..... 8,000

## INTERIOR DEPARTMENT.

*First Ass't Secretary*—E. C. Finney, Kansas...$5,000
*Ass't Secretary*—F. M. Goodwin, Washington.. 4,500
*Chief Clerk*—John Harvey, Texas..... 4,000
*Solicitor*—E. S. Booth, Montana..... 5,000
*Comm. Gen. Land Office*—William Spry, Utah. 5,000
*Ass't Comm.*—G. R. Wickham, Calif..... 3,500
*Comm. of Pensions*—Washington Gardner, Michigan..... 5,000
*Dep. Comm.*—Hamlin M. Vandervort, Illinois. 3,600
*Comm. of Edu.*—Dr. John J. Tigert, Kentucky. 5,000
*Chief Clerk*—L. A. Kalbach, Pennsylvania.... 2,000
*Comm., Indian Affairs*—Charles H. Burke, South Dakota..... 5,000
*Ass't Comm.*—Edgar B. Meritt, Arkansas.....$3,500
*Comm. of Patents*—T. E. Robertson, Maryland 5,000
*First Ass't Comm.*—W. A. Kinnan, Michigan.. 4,500
*Ass't Comm.*—Karl Fenning, Ohio..... 3,500
*Chief Clerk*—William I. Wyman, Mass..... 3,000
*Director, U. S. Reclamation Service*—Arthur P. Davis, California..... 7,500
*Dir., Bur. of Mines*—A. W. Ambrose..... 5,500
*Ass't Director, Bureau of Mines*—E. A. Holbrook, Illinois..... 5,000
*Director, Nat. Park Ser.*—S. T. Mather, Illinois 4,500
*Ass't Dir., Nat. Park Ser.*—A. B. Cammerer, Wisconsin..... 2,500

## DEPARTMENT OF AGRICULTURE.

*Ass't Secretary*—C. W. Pugsley, Neb.....$5,000
*Ass't to Sec. of Agric., in charge of packers and stockyards act admin., and grain futures act admin.*—Chester Morrill, Tenn..... 6,500
*Administrative Ass't and Budget Officer*—W. A. Jump, Md..... 4,250
*Dir. of Scientific Work*—E. D. Ball, Iowa..... 5,000
*Solicitor*—R. W. Williams, Fla..... 5,000
*Chief Clerk*—Robert M. Reese, D. C.... 3,500
*Chief, Weather Bur.*—Charles F. Marvin, Ohio. 5,000
*Chief, Bur. of Animal Ind.*—J. R. Mohler, Pa. 5,000
*Dir., States Rela. Ser.*—A. C. True, Conn.... 4,500
*Chief, Bur. of Pl. Ind.*—Wm. A. Taylor, Mich. 5,000
*Librarian*—Claribel R. Barnett, N. Y..... 2,000
*Chief, Div. of Pub.*—John L. Cobbs, Jr., Ala.. 3,500
*Chief Editor*—E. C. Powell, Mass..... 3,000
*Chief, Div. of Accts. and Disbursements*—A. Zappone, D. C.....$4,000
*Chief, Bur. of Soils*—Milton Whitney, Md.... 4,000
*Chief, Forest Service*—W. B. Greeley, Cal..... 5,000
*Chief, Bur. of Entomology*—L. O. Howard, N.Y. 5,000
*Act. Chief, Bur. of Chem.*—W. G. Campbell, Ky. 4,500
*Chief, Bur. of Bio. Survey*—E. W. Nelson, Ariz. 4,000
*Chief, Bur. of Public Roads*—Thos. H. Macdonald, Iowa..... 6,000
*Chief, Bur. of Agricultural Economics*—H. C. Taylor, Wis..... 5,000
*Chairman, Federal Horticultural Board*—C. L. Marlatt, Kan..... 4,500
*Chief, Insecticide and Fungicide Board*—J. K. Haywood, N. Y..... 4,500
*Dir., Fixed Nit. Re. Lab.*—F. G. Cottrell, Cal. 6,000

## DEPARTMENT OF COMMERCE.

*Ass't Secretary*—Claudius H. Huston, Tenn...$5,000
*Ass't to the Sec.*—David W. Mulvane, Kan... 2,750
*Chief Clerk and Supt.*—Edw. W. Libbey, D. C. 3,000
*Disbursing Clerk*—Chas. E. Molster, Ohio.... 3,000
*Chief, Div. App.*—Clifford Hastings, Wash.... 2,500
*Ch., Div. Publications*—Thos. F. McKeon, N.Y. 2,500
*Chief, Div. Supplies*—Walter S. Erwin, Miss. 2,100
*Dir. of the Census*—William M. Steuart, Mich.. 6,000
*Director Standards*—S. W. Stratton, Ill.....$6,000
*Dir., Bur. Foreign and Domestic Commerce*—Julius Klein, Mass..... 6,000
*Commis'ner Fisheries*—Henry O'Malley, Wash 5,000
*Commissioner Lighthouses*—G. R. Putnam, Ia. 5,000
*Dir., Coast and Geod. Survey*—E. L. Jones, Va. Rel. rank and pay of Cap. U. S. N.
*Commis. of Nav.*—David B. Carson, Tenn.... 4,000
*Superv. Insp.-Gen'l's S. Insp.*—G. Uhler, Pa... 5,000

## DEPARTMENT OF LABOR.

*Ass't Sec.*—Edward J. Henning, Cal.....$5,000
*Second Ass't Sec.*—Robe Carl White, Ind..... 5,000
*Chief Clerk*—Samuel J. Gompers, N. Y..... 3,000
*Disbursing Clerk*—Geo. W. Love, Ohio..... 3,000
*Com.-Gen. Immig.*—W. W. Husband, Vt..... 5,000
*Commis. Naturalization*—R. K. Campbell, Va. 4,000
*Commis. Lab. Statistics*—Ethelbert Stewart, Ill. 5,000
*Ch., Children's Bureau*—Grace Abbott, Neb..$5,000
*Dir.-Gen., U. S. Employ. Serv.*—Francis I. Jones, N. J..... 5,000
*Dir., Div. Council*—Hugh L. Kerwin, Pa.... 5,000
*Dir., Women's Bureau*—Mary Anderson, Ill... 5,000
*Dir., Indust. Housing and Transp.*—Robert Watson, Mass..... 5,000

## SUPREME COURT OF THE UNITED STATES.

(Dates in parentheses show when born and when appointed.)

*Chief Justice* ($15,000)—William Howard Taft, of Conn. (1857—June 30, 1921). *Associate Justices* ($14,500)—Joseph McKenna, of California (1843—Jan. 21, 1898); Oliver Wendell Holmes, of Massachusetts (1841—Dec. 4, 1902); Willis Van Devanter, of Wyoming (1859—Dec. 16, 1910); Mahlon Pitney, of New Jersey (1858—March 13, 1912); James Clark McReynolds, of Tennessee (1862—Aug. 29, 1914); Louis D. Brandeis, of Massachusetts (1856—June 1, 1916); George Sutherland, of Utah (1862—Sept. 18, 1922). *Clerk*—William R. Stansbury, of Washington, D. C. ($6,000). *Marshal*—Frank Key Green, of Washington, D. C. ($4,500). *Reporter*—Ernest Knaebel, of Colorado ($4,500).

Pierce Butler, of Minnesota, was nominated by the President, Nov. 23, 1922, to succeed Associate Justice of the Supreme Court, William R. Day, resigned.

### FEDERAL CIRCUIT JUDGES ($8,500), AND THEIR HEADQUARTERS.

*First* (Me., Mass., N. H., R. I., Porto Rico)—George H. Bingham, Concord, N. H.; Charles F. Johnson, Portland, Me.; George W. Anderson, Boston.

*Second* (Conn., N. Y., Vt.)—Julius M. Mayer, N. Y. City; Henry W. Rogers, New Haven; Charles M. Hough, N. Y. City; Martin T. Manton, Brooklyn, N. Y.

*Third* (Del., N. J., Pa.)—Joseph Buffington, Pittsburgh, Pa.; Victor B. Woolley, Wilmington, Del.; J. Warren Davis, Trenton, N. J.

*Fourth* (Md., No. Car., So. Car., Va., W. Va.)—Edmund Waddill, Jr., Richmond; Martin A. Knapp, Wash., D. C.; Charles A. Woods, Marion, S. C.

*Fifth* (Ala., Fla., Ga., La., Miss., Tex., Canal Zone)—Richard W. Walker, Huntsville, Ala.; Nathan P. Bryan, Jacksonville, Fla.; Alex. C. King, Atlanta, Ga.

*Sixth* (Ky., Mich., Ohio, Tenn.)—Loyal E. Knappen, Grand Rapids, Mich.; Arthur C. Denison, Grand Rapids, Mich.; Maurice H. Donahue, Columbus, Ohio.

*Seventh* (Ill., Ind., Wis.)—Francis E. Baker, Hammond, Ind.; Julius W. Mack, Chicago; Samuel Alschuler, Chicago; Evan A. Evans, Madison, Wis.; Geo. T. Page, Chicago, Ill.

*Eighth* (Ark., Col., Iowa, Kan., Minn., Mo., Neb., N. M., N. D., Okla., S. D., Utah, Wyo.)—Walter H. Sanborn, St. Paul, Minn.; W. S. Kenyon, Fort Dodge, Iowa; Kimbrough Stone, Kansas City, Mo.; Robert E. Lewis, Col.

*Ninth* (Ariz., Calif., Idaho, Mont., Nev., Ore., Wash., Alaska, Hawaii)—William B. Gilbert, Portland, Ore.; Erskine M. Ross, Los Angeles, Cal.; William W. Morrow, San Francisco; William H. Hunt, San Francisco.

### FEDERAL COURT OF CLAIMS.

*Chief Justice* ($8,000)—Edward K. Campbell, of Ala. *Judges* ($7,500)—Fenton W. Booth, of Ill.; Geo. E. Downey, of Ind.; James Hay, of Va.; Samuel J. Graham, of Pa.

### FEDERAL COURT OF CUSTOMS APPEAL.

*Presiding Judge*—(vacant, Nov. 19, 1922). *Associate Judges*—James F. Smith, of California; Orion M. Barber, of Vermont; George E. Martin, of Ohio. *Marshal*—Frank H. Briggs, of Maine. *Clerk*—Arthur B. Shelton, Washington, D. C.

### DISTRICT COURTS OF THE UNITED STATES—(Judges, $7,500 Each).

| *District.* | *Judges.* | *Addresses.* | *App.* |
|---|---|---|---|
| Ala.: N.&M. | Henry D. Clayton | Montgomery | 1914 |
| " N. | Wm. I. Grubb | Birmingham | 1909 |
| " S. D. | Robert T. Ervin | Mobile | 1917 |
| Ariz. | Wm. H. Sawtelle | Tucson | 1913 |
| Ark.: E. D. | Jacob Trieber | Little Rock | 1900 |
| " W. D. | F. A. Youmans | Fort Smith | 1911 |
| Cal.: N. D. | M. T. Dooling | San Francisco | 1913 |
| " N. D. | Wm. C. Van Fleet | San Francisco | 1907 |
| " S. D. | Oscar A. Trippet | Los Angeles | 1915 |
| " S. D. | Benj. F. Bledsoe | Los Angeles | 1914 |
| Colorado | John F. Symes | Denver | 1922 |
| Connecticut | Edwin S. Thomas | Norwalk | 1913 |
| Delaware | Hugh M. Morris | Wilmington | 1919 |
| Fla.: N. D. | W. B. Sheppard | Pensacola | 1907 |
| " S. D. | Rhydon M. Call | Jacksonville | 1913 |
| Ga.: N. D. | Sam'l T. Sibley | Atlanta | 1919 |
| " S. D. | W. H. Barrett | Augusta | 1922 |
| Idaho | Frank S. Dietrich | Boise | 1907 |
| Ill.: N. D. | J. H. Wilkerson | Chicago | 1922 |
| " N. D. | Geo. A. Carpenter | Chicago | 1910 |
| " S. D. | Louis Fitz Henry | Peoria | 1918 |
| " E. D. | Geo. W. English | East St. Louis | 1918 |
| " E. D. | W. C. Lindley | Danville | 1922 |
| Indiana | A. B. Anderson | Indianapolis | 1902 |
| Iowa: N. D. | Geo. C. Scott | Sioux City | 1922 |
| " S. D. | Martin J. Wade | Davenport | 1915 |
| Kansas | John C. Pollock | Kansas City | 1903 |
| Ky.: W. D. | Walter Evans | Louisville | 1899 |
| " E. D. | A. M. J. Cochran | Covington | 1901 |
| La.: E. D. | Rufus E. Foster | New Orleans | 1909 |
| " W. D. | George W. Jack | Shreveport | 1917 |
| Maine | John A. Peters | Portland | 1902 |
| Maryland | John C. Rose | Baltimore | 1910 |
| Mass. | Jas. M. Morton, Jr. | Boston | 1912 |
| " | J. A. Lowell | Boston | 1922 |
| " | E. H. Brewster | Springfield | 1922 |
| Mich.: E. D. | Arthur J. Tuttle | Detroit | 1912 |
| " W. D. | C. W. Sessions | Grand Rapids | 1911 |
| Minnesota | Wilbur F. Booth | Minneapolis | 1914 |
| " | Page Morris | Duluth | 1903 |
| Miss. | E. R. Holmes | Jackson | 1918 |
| Mo.: E. D. | Chas. B. Faris | St. Louis | 1919 |
| " W. D. | A. S. V'nV'lk'nb'gh. | Kansas City | 1910 |
| Montana | G. M. Bourquin | Butte | 1912 |
| Nebraska | Jas. W. Woodrough | Omaha | 1916 |
| " | Thos. C. Munger | Lincoln | 1907 |
| Nevada | E. S. Farrington | Carson City | 1907 |
| N. Hamp. | Geo. F. Morris | Littleton | 1921 |
| New Jersey | John Rellstab | Trenton | 1919 |
| " | Chas. F. Lynch | Newark | 1919 |
| " | Joseph L. Bodine | Trenton | 1920 |
| New Mexico | Colin Neblett | Sante Fe | 1917 |
| N. Y.: N. D. | George W. Ray | Binghamton | 1902 |
| " N. D. | Frank Cooper | Albany | 1920 |
| " W. D. | John R. Hazel | Buffalo | 1900 |
| " S. D. | Augustus N. Hand | N. Y. City | 1914 |
| " S. D. | John C. Knox | N. Y. City | 1918 |
| " S. D. | Learned Hand | N. Y. City | 1909 |
| " E. D. | T. I. Chatfield | Brooklyn | 1907 |
| " E. D. | Edwin L. Garvin | Brooklyn | 1918 |
| N. C.: E. D. | H. G. Conner | Wilson | 1909 |
| " W. D. | Edwin Y. Webb | Charlotte | 1919 |
| " W. D. | James E. Boyd | Greensboro | 1900 |
| N. Dakota | Chas. F. Amidon | Fargo | 1896 |
| " | Andrew Miller | Bismarck | 1922 |
| Ohio: N. D. | John M. Killits | Toledo | 1910 |
| " N. D. | D. C. Westenhaver | Cleveland | 1917 |
| " S. D. | John W. Peck | Cincinnati | 1919 |
| " S. D. | John E. Sater | Columbus | 1907 |
| Okla.: E. D. | R. L. Williams | Muskogee | 1919 |
| " W. D. | John H. Cotteral | Guthrie | 1907 |
| Oregon | C. E. Wolverton | Portland | 1905 |
| " | Robert S. Bean | Portland | 1909 |
| Pa.: E. D. | J. W. Thompson | Philadelphia | 1912 |
| " E. D. | O. B. Dickinson | Philadelphia | 1914 |
| " M. D. | Chas. B. Witmer | Sunbury | 1911 |
| W. D. | W. H. S. Thomson | Pittsburgh | 1914 |
| " W. D. | R. M. Gibson | Pittsburgh | 1922 |
| Rhode Island | A. L. Brown | Providence | 1896 |
| S. Car.: E. D. | H. A. M. Smith | Charleston | 1911 |
| " W. D. | Hy. H. Watkins | Anderson | 1919 |
| So. Dakota | Jas. D. Elliott | Sioux Falls | 1911 |
| Tenn.: E. & M. | E. T. Sanford | Knoxville | 1908 |
| " W. D. | J. W. Ross | Jackson | 1921 |
| Tex.: E. D. | W. Lee Estes | Texarkana | 1920 |
| " W. D. | Du Val West | San Antonio | 1916 |
| " W. D. | W. R. Smith | El Paso | 1917 |
| " N. D. | James C. Wilson | Ft. Worth | 1919 |
| " N. D. | Edw. R. Meek | Dallas | 1898 |
| " S. D. | J. C. Hutcheson, Jr. | Houston | 1918 |
| Utah | Till. D. Johnson | Salt Lake City | 1915 |
| Vermont | Harland B. Howe | Burlington | 1915 |
| Va.: E. D. | D. L. Groner | Norfolk | 1921 |
| " W. D. | H. C. McDowell | Lynchburg | 1901 |
| Wash.: W. D. | Ed. E. Cushman | Tacoma | 1912 |
| " W. D. | J. Neterer | Seattle | 1913 |
| " E. D. | F. H. Rudkin | Spokane | 1911 |
| W. Va.: N. D. | W. E. Baker | Elkins | 1921 |
| " S. D. | B. F. Keller | Charleston | 1901 |
| " S. D. | G. W. McClintic | Charleston | 1921 |
| Wis.: E. D. | F. A. Geiger | Milwaukee | 1912 |
| " W. D. | C. Z. Luse | Superior | 1921 |
| Wyoming | T. B. Kennedy | Cheyenne | 1921 |

Judge Rose of Maryland was nominated by the President, Nov. 27, 1922 to be an additional U. S. Circuit Judge, fourth circuit.

## U. S. CIRCUIT COURTS OF APPEAL.

The U. S. Circuit Courts of Appeal consist of the District and Circuit Judges in the respective Circuits, together with a Justice of the Supreme Court assigned to that Circuit. The Justices so assigned are, by Circuits—1st, Holmes; 2d, Brandeis; 3d, Pitney; 4th, Chief Justice Taft; 5th, McReynolds; 6th, ; 7th, Sutherland; 8th, Van Devanter; 9th, McKenna.

## UNITED STATES ATTORNEYS.

| *District.* | *Name.* | *Address.* |
|---|---|---|
| Alabama, north. | Charles B. Kennamer | Birmingham. |
| Alabama, mid. | Thomas D. Samford | Montgomery. |
| Alabama, south. | Aubrey Boyles | Mobile. |
| Alaska— | | |
| Div. No. 1 | Arthur G. Shoup | Juneau. |
| Div. No. 2 | Wm. Fred. Harrison | Nome. |
| Div. No. 3 | Sherman Duggan | Valdez. |
| Div. No. 4 | Guy B. Erwin | Fairbanks. |
| Arizona | Frederic H. Bernard | Tucson. |
| Arkansas, east. | Charles F. Cole | Little Rock. |
| Arkansas, west. | Samuel S. Langley | Fort Smith. |
| California, nor. | J. T. Williams | San Francisco. |
| California, sou. | Joseph C. Burke | Los Angeles. |
| Canal Zone | A. C. Hindman | Ancon. |
| Colorado | Granby Hillyer | Denver. |
| Connecticut | Edward L. Smith | Hartford. |
| Delaware | Jas. H. Hughes, Jr. | Wilmington. |
| Dist. of Col. | Peyton Gordon | Washington. |
| Florida, north. | Fred C. Cubberly | Pensacola. |
| Florida, south. | William M. Gober | Tampa. |
| Georgia, north. | Clint W. Hager | Atlanta. |
| Georgia, south. | F. G. Boatright | Savannah. |
| Hawaii (6 years) | Wm. T. Carden | Honolulu. |
| Idaho | Edwin G. Davis | Boise. |
| Illinois, north. | Charles F. Clyne | Chicago. |
| Illinois, eastern | W. O. Potter | East St. Louis. |
| Illinois, south. | Thos. Williamson | Springfield. |
| Indiana | Homer Elliott | Indianapolis. |
| Iowa, northern. | G. P. Linville | Cedar Rapids. |
| Iowa, southern. | Ralph Pringle | Red Oak. |
| Kansas | Al. F. Williams | Topeka. |
| Kentucky, east. | Sawyer A. Smith | Covington. |
| Kentucky, west. | W. Sherman Ball | Louisville. |
| Louisiana, east. | Louis H. Burns | New Orleans. |
| Louisiana, west. | Philip H. Mecom | Shreveport. |
| Maine | Frederick R. Dyer | Portland. |
| Maryland | Amos W. W. Woodcock | Baltimore. |
| Massachusetts. | Robert O. Harris | Boston. |
| Michigan, east. | Earl J. Davis | Detroit. |
| Michigan, west. | Edward J. Bowman | Grand Rapids. |
| Minnesota | Lafayette French, Jr. | St. Paul. |
| Mississippi, nor. | Lemuel E. Oldham | Oxford. |
| Mississippi, sou. | E. E. Hindman | Jackson. |
| Missouri, east. | James E. Carroll | St. Louis. |
| Missouri, west. | Charles C. Madison | Kansas City. |
| Montana | John L. Slattery | Helena. |
| Nebraska | James C. Kinsler | Omaha. |
| Nevada | George Springmeyer | Reno. |
| New Hampshire | Raymond U. Smith | Concord. (P.O., Woodsville.) |
| New Jersey | Walter G. Winne | Trenton. |
| New Mexico | Geo. R. Craig | Albuquerque. |
| New York, nor. | Earl H. Gallup | Albany. |
| New York, sou. | William Hayward | N. Y. City. |
| New York, east. | Ralph C. Green | Brooklyn. |
| New York, west | William J. Donovan | Buffalo. |
| No. Car., east. | Irvin B. Tucker | Raleigh. |
| No. Car., west. | Frank A. Linney | Charlotte. |
| North Dakota | Melvin A. Hildreth | Fargo. |
| Ohio, northern. | Edwin S. Wertz | Cleveland. |
| Ohio, southern. | D. Q. Morrow | Cincinnati. |
| Oklahoma, east. | Frank Lee | Muskogee. |
| Oklahoma, west. | W. A. Maurer | Okla. City. |
| Oregon | Lester W. Humphreys | Portland. |
| Pennsylv'a, east. | George W. Coles | Philadelphia. |
| Pennsylv'a, mid. | Andrew B. Dunsmore | Sunbury. |
| P'nnsylv'a, west. | Walter Lyon | Pittsburgh. |
| Porto Rico | Ira K. Wells | San Juan. |
| Rhode Island | Norman S. Case | Providence. |
| So. Car., east. | J. D. Ernest Meyer | Charleston. |
| So. Car., west. | Ernest F. Cochran | Anderson. |
| South Dakota | S. Wesley Clark | Redfield. |
| Tennessee, east. | George C. Taylor | Knoxville. |
| Tennessee, mid. | A. V. McLane | Nashville. |
| Tennessee, west. | S. E. Murray | Memphis. |
| Texas, northern. | Henry Zweifel | Fort Worth. |
| Texas, southern. | Henry M. Holden | Houston. |
| Texas, eastern. | Randolph Bryant | Sherman. |
| Texas, western. | John D. Hartman | San Antonio. |
| Utah | Charles M. Morris | Salt Lake City |
| Vermont | Vernon A. Bullard | Burlington. |
| Virginia, eastern | Paul W. Kear | Norfolk. |
| Virginia, west | Lewis P. Summers | Abingdon. |
| Wash'gton, east. | Frank R. Jeffrey | Spokane. |
| Wash'gton, west. | Thomas P. Revelle | Seattle. |
| West Va., north. | Thomas A. Brown | Parkersburg. |
| West Va., south. | Elliott Northcott | Huntington. |
| Wisconsin, east. | H. A. Sawyer | Milwaukee. |
| Wisconsin, west. | Wm. H. Dougherty | Madison. |
| Wyoming | A. D. Walton | Cheyenne. |

## UNITED STATES MARSHALS.

| *District.* | *Name.* | *Address.* |
|---|---|---|
| Alabama, north. | Thos. J. Kennamer | Birmingham. |
| Alabama, mid. | McDuffie Cain | Montgomery. |
| Alabama, south. | Christopher C. Gewin | Mobile. |
| Alaska— | | |
| Div. No. 1 | George D. Beaumont | Juneau. |
| Div. No. 2 | Morris Griffith | Nome. |
| Div. No. 3 | Harvey Sullivan | Valdez. |
| Div. No. 4 | Gilbert B. Stevens | Fairbanks. |
| Arizona | Thomas J. Sparks | Phoenix. |
| Arkansas, east. | Geo. L. Mallory | Little Rock. |
| Arkansas, west. | Andrew J. Russell | Fort Smith. |
| Calif'nia, north. | James B. Holohan | San Francisco. |
| Calif'nia, south. | Albert C. Sittel | Los Angeles. |
| Canal Zone | Horace D. Ridenour | Ancon. |
| Colorado | Samuel J. Burris | Denver. |
| Connecticut | Jacob D. Walter | New Haven. |
| Delaware | Walter S. Money | Wilmington. |
| Dist. of Col. | Edgar C. Snyder | Washington. |
| Florida, north. | Peter H. Miller | Pensacola. |
| Florida, south. | Benjamin E. Dyson | Jacksonville. |
| Georgia, north. | Walter Akerman | Atlanta. |
| Georgia, south. | Geo. B. McLeod | Macon. |
| Hawaii (6 years) | Oscar P. Cox | Honolulu. |
| Idaho | Frank M. Breshears | Boise. |
| Illinois, north. | Robert R. Levy | Chicago. |
| Illinois, eastern. | James A. White | Danville. |
| Illinois, south. | James E. McClure | Springfield. |
| Indiana | Linus P. Meredith | Indianapolis. |
| Iowa, northern. | Fred Davis | Sioux City. |
| Iowa, southern. | Guy S. Brewer | Des Moines. |
| Kansas | Fred R. Fitzpatrick | Topeka. |
| Kentucky, east. | Roy B. Williams | Covington. |
| Kentucky, west. | Thomas N. Hazelip | Louisville. |
| Louisiana, east. | Victor Loisel | New Orleans. |
| Louisiana, west. | John Hugh Kirkpat'k | Shreveport. |
| Maine | Stillman E. Woodman | Portland. |
| Maryland | William W. Stockham | Baltimore. |
| Massachusetts. | William J. Keville | Boston. |
| Michigan, east. | Frank T. Newton | Detroit. |
| Michigan, west. | Herman O'Connor | Grand Rapids. |
| Minnesota | Edward Rustad | St. Paul. |
| Mississippi, nor. | John H. Cook | Oxford. |
| Mississippi, sou. | James C. Tyler | Jackson. |
| Missouri, east. | John E. Lynch | St. Louis. |
| Missouri, west. | I. K. Parshall | Kansas City. |
| Montana | Joseph L. Asbridge | Helena. |
| Nebraska | Dennis H. Cronin | Omaha. |
| Nevada | J. H. Fulmer | Carson City. |
| New Hampshire | Thomas B. Donnelly | Concord. |
| New Jersey | James H. Mulheron | Trenton. |
| New Mexico | Secundino Romero | Santa Fe. |
| New York, nor. | Daniel F. Breitenstein | Utica. |
| New York, sou. | William C. Hechtz | N. Y. City. |
| New York, east. | Jesse D. Moore | Brooklyn. |
| New York, west | John D. Lynn | Rochester. |
| No. Car., east. | Rippon W. Ward | Raleigh. |
| No. Car., west. | Brownlow Jackson | Asheville. |
| North Dakota | James F. Shea | Fargo. |
| Ohio, northern. | Geo. A. Stauffer | Cleveland. |
| Ohio, southern. | Michael Devanney | Cincinnati. |
| Oklahoma, east. | Henry F. Cooper | Muskogee. |
| Oklahoma, west. | Alva McDonald | Okla. City. |
| Oregon | Clarence R. Hotchkiss | Portland. |
| Pennsylv'a, east | W. Frank Mathues | Philadelphia. |
| Pennsylv'a, mid. | John H. Glass | Scranton. |
| P'nnsylv'a, west. | James C. McGregor | Pittsburgh. |
| Porto Rico | Harry S. Hubbard | San Juan. |
| Rhode Island | Wm. Robt. Rodman | Providence. |
| So. Car., east. | Samuel J. Leaphart | Charleston. |
| So. Car., west. | Joseph W. Tolbert | Greenville. |
| South Dakota | W. H. King | Sioux Falls. |
| Tennessee, east. | Inslee C. King | Knoxville. |
| Tennessee, mid. | Edward Albright | Nashville. |
| Tennessee, west. | W. F. Appleby | Memphis. |
| Texas, northern. | A. R. Eldredge | Dallas. |
| Texas, southern. | Richard A. Harvin | Houston. |
| Texas, eastern. | Phil F. Baer | Paris. |
| Texas, western. | David A. Walker | San Antonio. |
| Utah | J. Ray Ward | Salt Lake City. |
| Vermont | Albert W. Harvey | Rutland. |
| Virginia, eastern | Clarence G. Smithers | Norfolk. |
| Virginia, west | S. Green Proffit | Roanoke. |
| Wash'gton, east. | Arthur Franklin Kees | Spokane. |
| Wash'gton, west. | E. B. Benn | Tacoma. |
| West Va., north. | Louis Buchwald | Wheeling. |
| West Va., south. | Siegel Workman | Charleston. |
| Wisconsin, east. | Samuel W. Randolph | Milwaukee. |
| Wisconsin, west. | Wm. R. Chellis | Madison. |
| Wyoming | Hugh L. Patton | Cheyenne. |

## FEDERAL TERRITORIAL JUDGES.

| *Dis. and Office.* | *Name.* | *Address.* |
|---|---|---|
| Alaska: | | |
| Dis. judge— | | |
| Div. No. 1 | Thomas M. Reed | Juneau. |
| Div. No. 2 | G. J. Lomen | Nome. |
| Div. No. 3 | Elmer E. Ritchie | Valdez. |
| Div. No. 4 | Cecil H. Clegg | Fairbanks. |
| Canal Zone: | | |
| Dis. judge | J. D. Wallingford | Ancon. |
| Hawaii: | | |
| Sup. court— | | |
| Ch. justice | Emil C. Peters | Honolulu. |
| As. justices | A. M. Perry | " |
| | Alex. Lindsay | " |
| Circuit Court— | | |
| First cir | Frank Andrade | " |
| | R. J. O'Brien | " |
| | James J. Banks | " |
| | J. R. Desha | " |
| Circuit Court (*Continued*). | | |
| Second cir. | Daniel H. Case | Wailuku, Maui |
| Third cir. | J. Wesley Thompson | Kailua. |
| Fourth cir. | Homer L. Ross | Hilo. |
| Fifth cir. | Wm. C. Achi, Jr. | Lihue. |
| U. S. district judges (term 6 years) | John T. De Bolt | Honolulu. |
| | Joseph B. Poindexter | " |
| Porto Rico: | | |
| Sup. court— | | |
| Ch. justice | Emilio del Toro | San Juan. |
| As. justices | Adolph Grant Wolf | " |
| | Pedro De Aldrey | " |
| | H. M. Hutchinson | " |
| | C. F. Soto | " |
| U. S. dis. jdge | Arthur F. Odlin | " |

## FEDERAL JUDGES IN DISTRICT OF COLUMBIA.

*COURT OF APPEALS—Chief Justice*, Constantine J. Smyth, of Nebr. *Associate Justices*—Charles H. Robb, of Vermont; Josiah A. Van Orsdel, of Wyoming.

*SUPREME COURT OF THE DISTRICT—Chief Justice*, Walter I. McCoy, of New Jersey. *Associate Justices*—Wendell P. Stafford, of Vermont; Frederick L. Siddons, Adolph A. Hoehling and William Hitz, of the District of Columbia; Thomas J. Bailey, of Tennessee.

## HIGHEST RANKING OFFICERS IN THE UNITED STATES ARMY.

The list is as of October, 1922, and includes both staff and line. Retirement age is sixty-four years.

### GENERAL OF THE ARMIES.

John J. Pershing, (Chief of Staff), 1860, 1882, 1919.

### MAJOR GENERALS.

| | *Born* | *Appt* | *R'k.* | | *Born* | *Appt* | *R'k.* | | *Born* | *Appt* | *R'k.* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chas. G. Morton, | 1861, | 1879, | 1917 | Chas. T. Menoher, | 1862, | 1882, | 1921 | William H. Hart, | 1864, | 1884, | 1922 |
| Robt. L. Bullard, | 1861, | 1881, | 1918 | George Bell, Jr., | 1859, | 1876, | 1921 | M. W. Ireland, | 1867, | 1891, | 1918 |
| James G. Harbord, | 1866, | 1889, | 1919 | Chas. J. Bailey, | 1859, | 1877, | 1921 | Lansing H. Beach, | 1860, | 1878, | 1920 |
| Francis J. Kernan, | 1859, | 1877, | 1919 | Samuel D. Sturgis, | 1861, | 1880, | 1921 | Clar. C. Williams, | 1869, | 1890, | 1918 |
| Chas. P. Summerall, | 1867, | 1888, | 1920 | Harry C. Hale, | 1861, | 1879, | 1921 | George O. Squier, | 1865, | 1883, | 1917 |
| John L. Hines | 1868, | 1887, | 1921 | Omar Bundy, | 1861, | 1879, | 1921 | Frank McIntyre, | 1865, | 1882, | 1917 |
| Henry T. Allen, | 1859, | 1878, | 1921 | E. F. McGlachlin, Jr. | 1868, | 1885, | 1922 | W. A. Holbrook, | 1860, | 1881, | 1920 |
| David C. Shanks, | 1861, | 1880, | 1921 | James H. McRae, | 1863, | 1882, | 1922 | W. J. Snow, | 1868, | 1886, | 1920 |
| Adelb't Cronkhite, | 1861, | 1878, | 1921 | Robert C. Davis, | 1876, | 1894, | 1922 | Frank W. Coe, | 1870, | 1888, | 1918 |
| Wm. M. Wright, | 1863, | 1882, | 1921 | Eli A. Helmick, | 1863, | 1884, | 1921 | C. S. Farnsworth, | 1862, | 1883, | 1920 |
| George W. Read, | 1860, | 1879, | 1921 | Enoch H. Crowder, | 1859, | 1877, | 1917 | Mason M. Patrick, | 1863, | 1882, | 1921 |
| Charles H. Muir, | 1860, | 1881, | 1921 | | | | | | | | |

(Additions to the above list.)

President Harding sent to the Senate, Nov. 23, 1922, the following nominations of Brigadier Generals to be Major Generals:

Brig. Gen. Andre Walker Brewster, from December 1, 1922, vice Major Gen. George Bell, Jr., to be retired from active service November 30, 1922.

Brig. Gen. Edward Mann Lewis, from December 2, 1922, vice Major Gen. Clarence R. Edwards, to be retired from active service December 1, 1922.

Brig. Gen. Edgar Russel, from December 2, 1922, vice Major Gen. Charles J. Bailey, to be retired from active service December 1, 1922.

Brig. Gen. Frank Long Winn, from December 2, 1922, vice Major Gen. Francis J. Kernan, to be retired from active service December 1, 1922.

Brig. Gen. George Brand Duncan, vice Major Gen. Edgar Russel, to be retired from active service.

Brig. Gen. Ernest Hinds vice Major Gen. Frank L. Winn, to be retired from active service.

Brig. Gen. Robert Lee Howze, vice Major Gen. William M. Wright, to be retired from active service.

Major Gen. Harbord announced, Nov. 18, 1922, that he intended to retire on Dec. 29, 1922, to become President of a radio corporation.

### BRIGADIER GENERALS.

| | *Born* | *Appt* | *R'k.* | | *Born* | *Appt* | *R'k.* | | *Born* | *Appt* | *R'k.* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Joseph E. Kuhn, | 1864, | 1881, | 1917 | H. H. Bandholtz, | 1864, | 1886, | 1921 | Benj. A. Poore, | 1863, | 1882, | 1921 |
| Chase W. Kennedy, | 1859, | 1879, | 1917 | Hanson E. Ely, | 1867, | 1887, | 1921 | G. V. H. Moseley, | 1874, | 1895, | 1921 |
| R. M. Blatchford, | 1859, | 1883, | 1917 | William R. Smith, | 1868, | 1888, | 1921 | William H. Hay, | 1860, | 1882, | 1922 |
| Edwin B. Babbitt, | 1862, | 1880, | 1918 | Dwight E. Aultman, | 1872, | 1890, | 1921 | Ed'md Wittenmyer, | 1862, | 1883, | 1922 |
| John D. Barrette, | 1832, | 1881, | 1918 | Johnson Hagood, | 1872, | 1892, | 1921 | Paul B. Malone, | 1872, | 1890, | 1922 |
| Wm. S. Graves, | 1865, | 1884, | 1920 | Dennis E. Nolan, | 1873, | 1892, | 1921 | Harry A. Smith, | 1866, | 1886, | 1922 |
| Andre W. Brewster, | 1862, | 1885, | 1920 | Wm. D. Connor, | 1874, | 1883, | 1921 | Samson L. Faison, | 1860, | 1878, | 1922 |
| Edward M. Lewis, | 1863, | 1881, | 1920 | Fox Conner, | 1874, | 1897, | 1921 | Benjamin Alvord, | 1860, | 1877, | 1922 |
| Doug. MacArthur, | 1880, | 1899, | 1920 | Preston Brown, | 1872, | 1894, | 1921 | Chas. R. Krauthoff, | 1863, | 1884, | 1919 |
| Grote Hutcheson, | 1862, | 1878, | 1921 | Malin Craig, | 1875, | 1894, | 1921 | John M. Carson, | 1864, | 1881, | 1920 |
| Walter H. Gordon, | 1863, | 1882, | 1921 | Henry D. Todd, Jr., | 1866, | 1886, | 1921 | George F. Downey, | 1866, | 1898, | 1921 |
| George B. Duncan, | 1861, | 1892, | 1921 | Albert J. Bowley, | 1875, | 1893, | 1921 | W. D. McCaw, | 1863, | 1884, | 1919 |
| Ernest Hinds, | 1864, | 1883, | 1921 | Wm. H. Johnston, | 1861, | 1883, | 1921 | Robert E. Noble, | 1870, | 1901, | 1919 |
| William Weigel, | 1863, | 1883, | 1921 | Robert Alexander, | 1863, | 1886, | 1921 | Kenzie W. Walker, | 1870, | 1888, | 1922 |
| U. G. McAlexander, | 1864, | 1883, | 1921 | Robert E. Callan, | 1874, | 1892, | 1921 | Harry Taylor, | 1862, | 1880, | 1920 |
| Mark L. Hersey, | 1863, | 1883, | 1921 | Frank L. Winn, | 1864, | 1882, | 1921 | William S. Peirce, | 1864, | 1884, | 1920 |
| Robert L. Howze, | 1864, | 1883, | 1921 | Charles H. Martin, | 1863, | 1882, | 1921 | George W. Burr, | 1865, | 1884, | 1920 |
| William Lassiter, | 1867, | 1885, | 1921 | Edgar Russel, | 1862, | 1883, | 1921 | Amos A. Fries, | 1873, | 1894, | 1920 |
| Fred W. Sladen, | 1867, | 1885, | 1921 | Joseph C. Castner, | 1869, | 1891, | 1921 | William Mitchell, | 1879, | 1898, | 1920 |

## PAY IN THE ARMY AND MARINE CORPS.

Base pay of enlisted men ranges from $21 to $126 a month, according to which of the seven grades, due chiefly to length of service, they are in. There are bonuses of $25 and up, for re-enlistments.

Base pay of warrant officers varies from $120 to $148 a month, according to grade and service.

Base pay of commissioned officers below the grade of Brigadier General ranges from $1,500 to $4,000 a year, according to grade and service.

Base yearly pay of a Brigadier General is $6,000; of a Major General, $8,000.

Female nurses receive from $840 to $1,560 a year, according to length of service.

## REAR ADMIRALS IN THE AMERICAN NAVY.

(In the order of seniority, as of Nov. 24, 1922. First year is that of birth; second, that of appointment to the navy. The retirement age is sixty-four years.)

William Ledyard Rodgers, 1860-1874; Harry McL. Pinckney Huse, 1858-1874; Hugh Rodman, 1859-1875; Henry B. Wilson, 1861-1876; Albert P. Niblack, 1859-1876; John A. Hoogewerff, 1860-1877; Marbury Johnston, 1860-1878; Edwin A. Anderson, 1860-1878; Charles W. Dyson, 1861-1879; Clarence S. Williams, 1863-1880; John D. McDonald, 1863-1880; Hilary P. Jones, 1863-1880; Charles P. Plunkett, 1864-1879; Joseph Strauss, 1861-1881; Edward Simpson, 1860-1876; Alexander S. Halstead, 1861-1879; Roger Welles, 1862-1880; William R. Shoemaker, 1863-1880; Edward W. Eberle, 1864-1881; Robert E. Coontz, 1864-1881; Philip Andrews, 1866-1882; Josiah S. McKean, 1864-1889; Newton A. McCully, 1867-1883; Andrew T. Long, 1866-1883; Thomas Washington, 1865-1883; Guy H. Burrage, 1867-1883; Ashley H. Robertson, 1867-1884; Samuel S. Robison, 1867-1884; Charles F. Hughes, 1866-1884; Henry A. Wiley, 1867-1885; Mark L. Bristol, 1868-1883; Archibald H. Scales, 1868-1883; Richard H. Jackson, 1866-1890; Nathan C. Twining, 1869-1885; Benjamin F. Hutchison, 1868-1885; Thomas P. Magruder, 1867-1885; Sumner E. W. Kittelle, 1867-1885; William V. Pratt, 1869-1885; Louis McC. Nulton, 1869-1885; Louis R. de Steiguer, 1867-1885; William W. Phelps, 1869-1885; William C. Cole, 1868-1885; Jehu V. Chase, 1869-1886; George R. Marvell, 1869-1885; Henry J. Ziegemeier, 1869-1886; George W. Williams, 1869-1886; Montgomery M. Taylor, 1869-1886; Carl T. Vogelgesang, 1869-1886.

### REAR ADMIRALS (Staff).

*Medical Corps.*

Cary T. Grayson, 1878-1904; Edward R. Stitt, 1867-1889; George H. Barber, 1864-1889; Albert M. D. McCormick, 1866-1888.

*Supply Corps.*

Christian J. Peoples, 1876-1900; John S. Carpenter, 1860-1881; Livingston Hunt, 1859-1881.

*Construction Corps.*

Washington L. Capps, 1864-1888; David W. Taylor, 1864-1886.

*Civil Engineer Corps.*

Harry H. Rousseau, 1870-1898; Frederic R. Harris, 1875-1903.

## PAY IN THE NAVY AND COAST GUARD.

Base pay of enlisted men ranges from $21 to $126 a month, according to which of the seven grades, due chiefly to length of service, they are in. There are bonuses of $25 and up, for re-enlistment.

Base sea pay of warrant officers varies from $153 to $189 a month, according to length of service.

Base pay of commissioned officers below the grade of Rear Admiral ranges from $1,500 to $4,000 a year, according to periods of service.

Base yearly pay of a Rear Admiral (upper half) is $8,000.

Female nurses in the navy get $840 to $1,560 a year, according to length of service.

## AMERICAN AND FOREIGN ENVOYS.

(A, for Ambassador; M, for Minister.)

| COUNTRIES. | Envoys From United States, to | Envoys to United States, From |
|---|---|---|
| Albania | Ulysses Grant-Smith (Penn.), M | |
| Argentina | John W. Riddle (Conn.), A | Tomas A. Le Breton, A. |
| Austria | Albert Henry Washburn (Mass.), M | E. A. G. Prochnik, (Charge d'A.) |
| Belgium | Henry P. Fletcher (Penn.), M | Baron de Cartier de Marchienne, A. |
| Bolivia | Jesse S. Cottrell (Tenn.), M | Senor Adolfo Ballivian, M. |
| Brazil | Edwin V. Morgan (N. Y.), A | Mr. Augusto C. de Alencar, A. |
| Bulgaria | Charles S. Wilson (Me.), M | Mr. Stephan Panaretoff, M. |
| Chile | Wm. M. Collier (N. Y.), A | Senor Don Beltran Mathieu, A. |
| China | Jacob Gould Schurman (N. Y.), M | Mr. Sao-Ke Alfred Sze, M. |
| Colombia | Samuel H. Piles (Wash.), M | Dr. Enrique Olaya, M. |
| Costa Rica | Roy T. Davis (Mo.), M | Senor Dr. Don Octavio Beeche, M. |
| Cuba | | Dr. Carlos M. de Cespedes, M. |
| Czechoslovakia | Lewis Einstein (N. Y.), M | Dr. Bedrich Stepanek, M. |
| Denmark | Dr. John D. Prince (N. J.), M | Mr. Constantin Brun, M. |
| Dominica | William W. Russell (D. of C.), M | Liedo Emilio C. Joubert, M. |
| Ecuador | Gerhard A. Baeting (Wis.), M | Senor Dr. Don Rafael H. Elizalde, M. |
| Egypt | J. Morton Howell (Ohio), M | |
| Esthonia | Frederick W. B. Coleman (Minn.), M | |
| Finland | Charles G. Kagey (Kan.), M | Axel L. Astrom, M. |
| France | Myron T. Herrick (Ohio), A | M. J. J. Jusserand, A. |
| Germany | Alanson B. Houghton (N. Y.), A | Dr. Otto Wiedfeldt, A. |
| Great Britain | George B. M. Harvey (N. J.), A | The Right Hon. Sir Auckland Geddes, A. |
| Greece | | Mr. Geo. Dracopoulos (Charge d'A.) |
| Guatemala | Roy T. Davis (Mo.), M | Senor Dos F. S. Latour, M. |
| Haiti | Arthur Bailly-Blanchard (La.), M | Mr. Albert Blanchet, M. |
| Honduras | Franklin E. Morales (N. J.), M | Dr. R. C. Diaz (Charge d'A.) |
| Hungary | Theodore Brentano (Ill.), M | Count Laszlo Szechenyi, M. |
| Italy | Richard W. Child (Mass.), A | Prince Gelesio Caetani, A. |
| Japan | Charles B. Warren (Mich.), A | Baron Kiluro Shidehara, A. |
| Latvia | Frederick W. B. Coleman (Minn.), M | Mr. C. L. Seyu (Charge d'A.) |
| Liberia | Solomon Porter Hood (N. J.), M | |
| Lithuania | Frederick W. B. Coleman (Minn.) M | Mr. V. Carneckis (Charge d'A.) |
| Luxemburg | | Baron Raymond de Waha (Charge d'A.) |
| Mexico | George Summerlin (Charge d'A.) | Senor Don Salvador Diego-Fernandez, M. |
| Netherlands | Louis T. Sussdorf, Jr. (Charge d'A.) | Dr. J. C. A. Everwijn, M. |
| Nicaragua | John E. Ramer (Col.), M | Senor Don Emiliano Chamorro, M. |
| Norway | Laurits S. Swenson (Minn.), M | Mr. H. H. Bryn, M. |
| Panama | John G. South (Ky.), M | Dr. R. J. Alfaro, M. |
| Paraguay | William J. O'Toole (W. Va.), M | Mr. W. W. White (Charge d'A.) |
| Persia | Rev. Joseph S. Kornfeld (Ohio), M | Hussein Khan Alai, M. |
| Peru | Fredericka Sterling (Charge d'A.) | Senor Don Federico A. Pezet, A. |
| Poland | Hugh S. Gibson (Cal.), M | Prince Casimir Lubomirski, M. |
| Portugal | Fred Morris Dearing (Mo.), M | Viscount d'Alte, M. |
| Roumania | Peter A. Jay (R. I.), M | Prince A. Bibesco, M. |
| Russia | | Serge Ughet, Financial Attache. |
| Salvador | Montgomery Schuyler (N. Y.), M | Senor Don Salvador Sol, M. |
| Serbs, Croats, etc. | H. Percival Dodge (Mass.), M | A. T. Pavichich, M. |
| Siam | Edward E. Brodie (Ore.), M | Phya Prabha Karavongse, M. |
| Spain | Cyrus C. Woods (Pa.), A | Senor Don Juan R. y Gayangos, A. |
| Sweden | Ira N. Morris (Ill.), M | Capt. Axel F. Wallenberg, M. |
| Switzerland | Jos. C. Grew (Mass.), M | Mr. Marc Peter, M. |
| Turkey | Rear Adm. M. L. Bristol, U. S. N., High Comr. | |
| Uruguay | Hoffman Philip (N. Y.), M | Dr. Jacobo Varela, M. |
| Venezuela | Willis C. Cook (S. D.), M | Dr. P. M. Arcaya, M. |

## THE SIXTY-SEVENTH CONGRESS.

TERMS of Representatives began March 4, 1921, and end March 4, 1923. *First* session began April 11, 1921; recessed Aug. 24 to Sept. 21, 1921; adjourned Nov. 23, 1921. *Second* session began Dec. 5, 1921; recessed June 30, 1922 to Aug. 15, 1922; adjourned Sept. 22, 1922. *Third* session began Nov. 20, 1922. *Fourth* session began Dec. 4, 1922, and will end March 4, 1923.

### SENATE.

*President*.....Calvin Coolidge, R., of Mass.

| *Terms Expire.* | *Senators.* | *P. O. Address.* |
|---|---|---|
| | ALABAMA. | |
| 1927 | Oscar W. Underwood, D. | Birmingham. |
| 1925 | J. Thos. Heflin, D. | Lafayette. |
| | ARIZONA. | |
| 1923 | Henry F. Ashurst, D. | Prescott. |
| 1927 | Ralph H. Cameron, R. | Phoenix. |
| | ARKANSAS. | |
| 1927 | Thad. H. Caraway, D. | Jonesboro. |
| 1925 | Joe T. Robinson, D. | Lonoke. |
| | CALIFORNIA. | |
| 1923 | Hiram W. Johnson, R. | San Francisco. |
| 1927 | Sam'l M. Shortridge, R. | Menlo Park. |
| | COLORADO. | |
| 1927 | Sam'l D. Nicholson, R. | Leadville. |
| 1925 | L. C. Phipps, R. | Denver. |
| | CONNECTICUT. | |
| 1923 | George P. McLean, R. | Simsbury. |
| 1927 | Frank B. Brandegee, R. | New London. |
| | DELAWARE. | |
| 1923 | Thos. F. Bayard, D. | Wilmington. |
| 1925 | L. H. Ball, R. | Marshallton. |
| | FLORIDA. | |
| 1923 | Park Trammell, D. | Lakeland. |
| 1927 | Duncan U. Fletcher, D. | Jacksonville. |
| | GEORGIA (See note). | |
| 1927 | Walter F. George, D. | Thomson. |
| 1925 | W. J. Harris, D. | Cedartown. |
| | IDAHO. | |
| 1927 | Frank R. Gooding, R. | Gooding. |
| 1925 | William E. Borah, R. | Boise. |
| | ILLINOIS. | |
| 1927 | Wm. B. McKinley, R. | Champaign. |
| 1925 | Medill McCormick, R. | Chicago. |
| | INDIANA. | |
| 1923 | Harry S. New, R. | Indianapolis. |
| 1927 | James E. Watson, R. | Rushville. |
| | IOWA. | |
| 1927 | Albert B. Cummins, R. | Des Moines. |
| 1925 | Smith W. Brookheart, R. | Fort Dodge. |
| | KANSAS. | |
| 1927 | Charles Curtis, R. | Topeka. |
| 1925 | Arthur Capper, R. | Topeka. |
| | KENTUCKY. | |
| 1927 | Rich. P. Ernst, R. | Covington. |
| 1925 | A. O. Stanley, D. | Henderson. |
| | LOUISIANA. | |
| 1927 | Edwin S. Broussard, D. | New Iberia. |
| 1925 | Joseph E. Ransdell, D. | L. Providence |
| | MAINE. | |
| 1923 | Frederick Hale, R. | Portland. |
| 1925 | Bert M. Fernald, R. | West Poland. |
| | MARYLAND. | |
| 1923 | Joseph I. France, R. | Port Deposit. |
| 1927 | O. E. Weller, R. | Baltimore. |
| | MASSACHUSETTS. | |
| 1923 | Henry C. Lodge, R. | Nahant. |
| 1925 | D. I. Walsh, D. | Fitchburg. |
| | MICHIGAN (See Note). | |
| 1923 | Charles E. Townsend, R. | Jackson. |
| 1925 | James C. Couzens, R. | Detroit. |
| | MINNESOTA. | |
| 1923 | Frank B. Kellogg, R. | St. Paul. |
| 1925 | Knute Nelson, R. | Alexandria. |
| | MISSISSIPPI. | |
| 1923 | John S. Williams, D. | Yazoo City. |
| 1925 | B. P. Harrison, D. | Gulfport. |
| | MISSOURI. | |
| 1923 | James A. Reed, D. | Kansas City. |
| 1927 | S. P. Spencer, R. | St. Louis. |
| | MONTANA. | |
| 1923 | Henry L. Myers, D. | Hamilton. |
| 1925 | Thomas J. Walsh, D. | Helena. |
| | NEBRASKA. | |
| 1923 | Gilbert M. Hitchcock, D. | Omaha. |
| 1925 | George W. Norris, R. | McCook. |
| | NEVADA. | |
| 1923 | Key Pittman, D. | Tonopah. |
| 1927 | Tasker L. Oddie, R. | Reno. |
| | NEW HAMPSHIRE. | |
| 1925 | Henry W. Keyes, R. | Haverhill. |
| 1927 | George H. Moses, R. | Concord. |
| | NEW JERSEY. | |
| 1923 | Joseph S. Frelinghuysen, R. | Raritan. |
| 1925 | Walter E. Edge, R. | Atlantic City. |
| | NEW MEXICO. | |
| 1923 | Andrieus A. Jones, D. | E. Las Vegas. |
| 1925 | Holm O. Bursum, R. | Socorro. |
| | NEW YORK. | |
| 1923 | Wm. M. Calder, R. | Brooklyn. |
| 1927 | Jas. W. Wadsworth, Jr., R. | Groveland. |
| | NORTH CAROLINA. | |
| 1927 | Lee S. Overman, D. | Salisbury. |
| 1925 | Furnifold McL. Simmons, D. | Newbern. |
| | NORTH DAKOTA. | |
| 1923 | Porter J. McCumber, R. | Wahpeton. |
| 1927 | E. F. Ladd, R. | Fargo. |
| | OHIO. | |
| 1923 | Atlee Pomerene, D. | Canton. |
| 1927 | Frank B. Willis, R. | Delaware. |
| | OKLAHOMA. | |
| 1927 | J. W. Harreld, R. | Okla. City. |
| 1925 | Robert L. Owen, D. | Muskogee. |
| | OREGON. | |
| 1927 | Rob't N. Stanfield, R. | Portland. |
| 1925 | Charles L. McNary, R | Salem. |
| | PENNSYLVANIA. | |
| 1923 | David A. Reed, R. | Pittsburgh. |
| 1927 | George W. Pepper, R. | Philadelphia. |
| | RHODE ISLAND. | |
| 1923 | Peter G. Gerry, D. | Warwick. |
| 1925 | Le Baron B. Colt, R. | Bristol. |
| | SOUTH CAROLINA. | |
| 1927 | Ellison D. Smith, D. | Florence. |
| 1925 | Nath. B. Dial, D. | Laurens. |
| | SOUTH DAKOTA. | |
| 1927 | Peter Norbeck, R. | Redfield. |
| 1925 | Thomas Sterling, R. | Vermilion. |
| | TENNESSEE. | |
| 1923 | Kenneth D. McKellar, D. | Memphis. |
| 1925 | John K. Shields, D. | Knoxville. |
| | TEXAS. | |
| 1923 | Charles A. Culberson, D. | Dallas. |
| 1925 | Morris Sheppard, D. | Texarkana. |
| | UTAH. | |
| 1923 | Wm. H. King, D. | Salt Lake City. |
| 1927 | Reed Smoot, R. | Provo. |
| | VERMONT. | |
| 1923 | Carroll S. Page, R. | Hyde Park. |
| 1927 | William P. Dillingham, R. | Montpelier. |
| | VIRGINIA. | |
| 1923 | Claude A. Swanson, D. | Chatham. |
| 1925 | Carter Glass, D. | Lynchburg. |
| | WASHINGTON. | |
| 1923 | Miles Poindexter, R. | Spokane. |
| 1927 | Wesley L. Jones, R. | Seattle. |
| | WEST VIRGINIA. | |
| 1923 | Howard Sutherland, R. | Elkins. |
| 1925 | Davis Elkins, R. | Morgantown. |
| | WISCONSIN. | |
| 1923 | Robert M. La Follette, R. | Madison. |
| 1927 | Irvine L. Lenroot, R. | Superior. |
| | WYOMING. | |
| 1923 | John B. Kendrick, D. | Sheridan. |
| 1925 | Francis E. Warren, R. | Cheyenne. |

The whole number of Senators is 96. Democrats, 36; Republicans, 60. The salary of a Senator is $7,500 per annum and 20 cents per mile for travelling from and to the seat of Government.

NOTE—Mrs. (W. H.) Rebecca Latimer Felton, of Cartersville, was appointed, temporarily, to fill the place of Thomas E. Watson, deceased, and she was sworn in Nov. 21, and served one day in the Senate, then giving way to her successor, Walter F. George.

Senator Newberry (Mich.) on Nov. 19, 1922, resigned and was succeeded by Couzens.

## HOUSE OF REPRESENTATIVES.

### ALABAMA.

| Dist. | Representatives. | Politics. | P. O. Address. |
|---|---|---|---|
| 1 | John McDuffie* | Dem. | Monroeville. |
| 2 | John R. Tyson | Dem. | Montgomery. |
| 3 | Henry B. Steagall* | Dem. | Ozark. |
| 4 | Lamar Jeffers | Dem. | Anniston. |
| 5 | W. B. Bowling* | Dem. | Lafayette. |
| 6 | William B. Oliver* | Dem. | Tuscaloosa. |
| 7 | L. B. Rainey* | Dem. | Gadsden. |
| 8 | Edward B. Almon* | Dem. | Tuscumbia. |
| 9 | George Huddleston* | Dem. | Birmingham. |
| 10 | W. B. Bankhead | Dem. | Jasper. |

### ARIZONA.

*At Large.*

| | | | |
|---|---|---|---|
| | Carl Hayden* | Dem. | Phoenix. |

### ARKANSAS.

| | | | |
|---|---|---|---|
| 1 | W. J. Driver | Dem. | Osceola. |
| 2 | William A. Oldfield* | Dem. | Batesville. |
| 3 | John N. Tillman* | Dem. | Fayetteville. |
| 4 | Otis Wingo* | Dem. | De Queen. |
| 5 | Hence M. Jacoway* | Dem. | Dardanelle. |
| 6 | Chester W. Taylor | Dem. | Pine Bluff. |
| 7 | Tilman B. Parks | Dem. | Hope. |

### CALIFORNIA.

| | | | |
|---|---|---|---|
| 1 | Clarence F. Lea* | Dem. | Santa Rosa. |
| 2 | John E. Raker* | Dem. | Alturas. |
| 3 | Charles F. Curry* | Rep. | Sacramento. |
| 4 | Julius Kahn* | Rep. | San Francisco. |
| 5 | ..... | | San Francisco. |
| 6 | J. H. MacLafferty | Rep. | Oakland. |
| 7 | H. E. Barbour* | Rep. | Fresno. |
| 8 | Arthur M. Free | Rep. | San Jose. |
| 9 | W. F. Lineberger | Rep. | Long Beach. |
| 10 | Henry Z. Osborne* | Rep. | Los Angeles. |
| 11 | Phil D. Swing | Rep. | El Centro. |

### COLORADO.

| | | | |
|---|---|---|---|
| 1 | William N. Vaile* | Rep. | Denver. |
| 2 | Charles B. Timberlake* | Rep. | Sterling. |
| 3 | Guy U. Hardy* | Rep. | Canyon City. |
| 4 | Edward T. Taylor* | Dem. | Glenwood Sp'gs |

### CONNECTICUT.

| | | | |
|---|---|---|---|
| 1 | E. Hart Fenn | Rep. | Wethersfield. |
| 2 | Richard P. Freeman* | Rep. | New London. |
| 3 | John Q. Tilson* | Rep. | New Haven. |
| 4 | Schuyler Merritt* | Rep. | Stamford. |
| 5 | James P. Glynn* | Rep. | Winsted. |

### DELAWARE.

*At Large.*

| | | | |
|---|---|---|---|
| | Caleb R. Layton* | Rep. | Georgetown. |

### FLORIDA.

| | | | |
|---|---|---|---|
| 1 | H. J. Drane* | Dem. | Lakeland. |
| 2 | Frank Clark* | Dem. | Gainesville. |
| 3 | J. H. Smithwick* | Dem. | Pensacola. |
| 4 | William J. Sears* | Dem. | Kissimmee. |

### GEORGIA.

| | | | |
|---|---|---|---|
| 1 | J. W. Overstreet* | Dem. | Sylvania. |
| 2 | Frank Park* | Dem. | Sylvester. |
| 3 | Charles R. Crisp* | Dem. | Americus. |
| 4 | W. C. Wright* | Dem. | Newman. |
| 5 | Wm. D. Upshaw* | Dem. | Atlanta. |
| 6 | James W. Wise* | Dem. | Fayetteville. |
| 7 | Gordon Lee* | Dem. | Chickamauga. |
| 8 | Charles Hillyer Brand* | Dem. | Athens. |
| 9 | Thomas M. Bell* | Dem. | Gainesville |
| 10 | Carl Vinson* | Dem. | Milledgeville. |
| 11 | W. C. Lankford* | Dem. | Douglas. |
| 12 | W. W. Larsen* | Dem. | Dublin. |

### IDAHO.

*At Large.*

| | | | |
|---|---|---|---|
| 1 | Burton L. French* | Rep. | Moscow. |
| 2 | Addison T. Smith* | Rep. | Twin Falls. |

### ILLINOIS.

| | | | |
|---|---|---|---|
| 1 | Martin B. Madden* | Rep. | Chicago. |
| 2 | ..... | | Chicago. |
| 3 | Elliott W. Sproul | Rep. | Chicago. |
| 4 | John W. Rainey* | Dem. | Chicago. |
| 5 | Adolph J. Sabath* | Dem. | Chicago. |
| 6 | John J. Gorman | Rep. | Chicago. |
| 7 | M. A. Michaelson | Rep. | Chicago. |
| 8 | Stanley H. Kunz | Dem. | Chicago. |
| 9 | Fred. A. Britten* | Rep. | Chicago. |
| 10 | C. R. Chindbloom* | Rep. | Chicago. |
| 11 | Ira C. Copley* | Rep. | Aurora. |
| 12 | Charles E. Fuller* | Rep. | Belvidere. |
| 13 | John C. McKenzie* | Rep. | Elizabeth. |
| 14 | William J. Graham* | Rep. | Aledo. |
| 15 | Edward J. King* | Rep. | Galesburg. |
| 16 | Clifford Ireland* | Rep. | Peoria. |
| 17 | Frank H. Funk | Rep. | Bloomington. |
| 18 | Joseph G. Cannon* | Rep. | Danville. |
| 19 | Allen F. Moore | Rep. | Monticello. |
| 20 | Guy L. Shaw | Rep. | Beardstown. |
| 21 | Loren E. Wheeler* | Rep. | Springfield. |
| 22 | William A. Rodenberg* | Rep. | East St. Louis. |

### ILLINOIS—*Continued.*

| Dist. | Representatives. | Politics. | P. O. Address. |
|---|---|---|---|
| 23 | E. B. Brooks* | Rep. | Newton. |
| 24 | Thomas S. Williams* | Rep. | Louisville. |
| 25 | Edward E. Denison* | Rep. | Marion. |

*At Large.*

| | | | |
|---|---|---|---|
| | Richard Yates* | Rep. | Springfield. |
| | Winnifred M. Huck | Rep. | Chicago. |

### INDIANA.

| | | | |
|---|---|---|---|
| 1 | Oscar R. Luhring* | Rep. | Evansville. |
| 2 | Oscar E. Bland* | Rep. | Linton. |
| 3 | J. W. Dunbar* | Rep. | New Albany. |
| 4 | J. S. Benham* | Rep. | Benham. |
| 5 | Everett Sanders* | Rep. | Terre Haute |
| 6 | Richard N. Elliott* | Rep. | Connersville. |
| 7 | Merrill Moores* | Rep. | Indianapolis. |
| 8 | A. H. Vestal* | Rep. | Anderson. |
| 9 | Fred. S. Purnell* | Rep. | Attica. |
| 10 | William R. Wood* | Rep. | Lafayette. |
| 11 | Milton Kraus* | Rep. | Peru. |
| 12 | L. W. Fairfield* | Rep. | Angola. |
| 13 | A. J. Hickey* | Rep. | Laporte. |

### IOWA.

| | | | |
|---|---|---|---|
| 1 | W. F. Kopp | Rep. | Mt. Pleasant. |
| 2 | Harry E. Hull* | Rep. | Williamsburg. |
| 3 | Burton E. Sweet* | Rep. | Waverly. |
| 4 | Gilbert N. Haugen* | Rep. | Northwood. |
| 5 | Cyrenus Cole | Rep. | Cedar Rapids. |
| 6 | C. William Ramseyer* | Rep. | Bloomfield. |
| 7 | Cassius C. Dowell* | Rep. | Des Moines. |
| 8 | Horace M. Towner* | Rep. | Corning. |
| 9 | William R. Green* | Rep. | Audubon. |
| 10 | J. L. Dickinson* | Rep. | Algona. |
| 11 | W. D. Boies* | Rep. | Sheldon. |

### KANSAS.

| | | | |
|---|---|---|---|
| 1 | Dan'l R. Anthony, Jr.* | Rep. | Leavenworth. |
| 2 | E. C. Little* | Rep. | Kansas City. |
| 3 | Philip P. Campbell* | Rep. | Pittsburg. |
| 4 | Homer Hoch* | Rep. | Marion. |
| 5 | Jas. G. Strong* | Rep. | Blue Rapids. |
| 6 | Hays B. White* | Rep. | Mankato. |
| 7 | J. N. Tincher* | Rep. | Medicine Lodge. |
| 8 | Richard E. Bird | Rep. | Wichita. |

### KENTUCKY.

| | | | |
|---|---|---|---|
| 1 | Alben W. Barkley* | Dem. | Paducah. |
| 2 | David H. Kincheloe* | Dem. | Madisonville. |
| 3 | R. Y. Thomas, Jr.* | Dem. | Central City. |
| 4 | Ben Johnson* | Dem. | Bardstown. |
| 5 | Charles F. Ogden* | Rep. | Louisville. |
| 6 | Arthur B. Rouse* | Dem. | Burlington. |
| 7 | James C. Cantrill* | Dem. | Georgetown. |
| 8 | Ralph Gilbert | Dem. | Shelbyville. |
| 9 | William J. Fields* | Dem. | Olive Hill. |
| 10 | John W. Langley* | Rep. | Pikeville. |
| 11 | J. M. Robsion | Rep. | Barbourville. |

### LOUISIANA.

| | | | |
|---|---|---|---|
| 1 | James O'Connor* | Dem. | New Orleans. |
| 2 | H. Garland Dupre* | Dem. | New Orleans. |
| 3 | Whitmell P. Martin* | Dem. | Thibodaux. |
| 4 | John N. Sandlin | Dem. | Minden. |
| 5 | Riley J. Wilson* | Dem. | Harrisonburg. |
| 6 | Geo. K. Favrot | Dem. | Baton Rouge. |
| 7 | Ladislas Lazaro* | Dem. | Washington. |
| 8 | James B. Aswell* | Dem. | Natchitoches. |

### MAINE.

| | | | |
|---|---|---|---|
| 1 | Carroll L. Beedy | Rep. | Portland. |
| 2 | Wallace H. White, Jr.* | Rep. | Lewiston. |
| 3 | John E. Nelson | Rep. | Augusta. |
| 4 | Ira G. Hersey* | Rep. | Houlton. |

### MARYLAND.

| | | | |
|---|---|---|---|
| 1 | Thos. A. Goldsborough | Dem. | Denton. |
| 2 | Albert A. Blakeney† | Rep. | Catonsville. |
| 3 | John P. Hill | Rep. | Baltimore. |
| 4 | J. Charles Linthicum* | Dem. | Baltimore. |
| 5 | Sydney E. Mudd* | Rep. | La Plata. |
| 6 | Frederick N. Zihlman* | Rep. | Cumberland. |

### MASSACHUSETTS.

| | | | |
|---|---|---|---|
| 1 | Allen T. Treadway* | Rep. | Stockbridge. |
| 2 | Frederick H. Gillett* | Rep. | Springfield. |
| 3 | Calvin D. Paige* | Rep. | Southbridge. |
| 4 | Samuel E. Winslow* | Rep. | Worcester. |
| 5 | John Jacob Rogers* | Rep. | Lowell. |
| 6 | A. Piatt Andrew | Rep. | Gloucester. |
| 7 | Rob't S. Maloney | Rep. | Lawrence. |
| 8 | Frederick W. Dallinger* | Rep. | Cambridge. |
| 9 | Chas. L. Underhill | Rep. | Somerville. |
| 10 | Peter F. Tague* | Dem. | Boston. |
| 11 | Geo. Holden Tinkham* | Rep. | Boston. |
| 12 | James A. Gallivan* | Dem. | Boston. |
| 13 | Robert Luce* | Rep. | Waltham. |
| 14 | L. A. Frothingham | Rep. | Easton. |
| 15 | William S. Greene* | Rep. | Fall River. |
| 16 | Chas. L. Gifford | Rep. | Barnstable. |

MICHIGAN.

| *Dist.* | *Representatives.* | *Politics.* | *P. O. Address.* |
|---|---|---|---|
| 1 | Geo. P. Codd | Rep. | Detroit. |
| 2 | Earl C. Michener* | Rep. | Adrian. |
| 3 | J. M. C. Smith* | Rep. | Charlotte. |
| 4 | John C. Ketcham | Rep. | Hastings. |
| 5 | Carl E. Mapes* | Rep. | Grand Rapids. |
| 6 | Patrick H. Kelley* | Rep. | Lansing. |
| 7 | Louis C. Cramton* | Rep. | Lapeer. |
| 8 | Joseph W. Fordney* | Rep. | Saginaw. |
| 9 | James C. McLaughlin* | Rep. | Muskegon. |
| 10 | Roy O. Woodruff† | Rep. | Bay City. |
| 11 | Frank D. Scott* | Rep. | Alpena. |
| 12 | W. Frank James* | Rep. | Hancock. |
| 13 | Vincent M. Brennan | Rep. | Detroit. |

MINNESOTA.

| | | | |
|---|---|---|---|
| 1 | Sydney Anderson* | Rep. | Lanesboro. |
| 2 | Frank Clague | Rep. | Redwood Falls. |
| 3 | Charles R. Davis* | Rep. | St. Peter. |
| 4 | Oscar E. Keller* | Rep. | St. Paul. |
| 5 | W. H. Newton* | Rep. | Minneapolis. |
| 6 | Harold Knutson* | Rep. | St. Cloud. |
| 7 | Andrew J. Volstead* | Rep. | Granite Falls. |
| 8 | Oscar J. Larson | Rep. | Duluth. |
| 9 | Halvor Steenerson* | Rep. | Crookston. |
| 10 | Thomas D. Schall* | Rep. | Minneapolis. |

MISSISSIPPI.

| | | | |
|---|---|---|---|
| 1 | John E. Rankin | Dem. | Tupelo. |
| 2 | B. G. Lowrey | Dem. | Blue M'tain. |
| 3 | Benj. G. Humphreys* | Dem. | Greenville. |
| 4 | Thomas U. Sisson* | Dem. | Winona. |
| 5 | Ross A. Collins | Dem. | Meridian. |
| 6 | Paul B. Johnson* | Dem. | Hattiesburg. |
| 7 | Percy E. Quin* | Dem. | McComb City. |
| 8 | James W. Collier* | Dem. | Vicksburg. |

MISSOURI.

| | | | |
|---|---|---|---|
| 1 | F. C. Millspaugh | Rep. | Canton. |
| 2 | William W. Rucker* | Dem. | Keytesville. |
| 3 | H. F. Lawrence | Rep. | Cameron. |
| 4 | Chas. L. Faust | Rep. | St. Joseph. |
| 5 | Edgar C. Ellis† | Rep. | Kansas City. |
| 6 | W. O. Atkeson | Rep. | Butler. |
| 7 | R. C. Patterson | Rep. | Springfield. |
| 8 | Sid C. Roach | Rep. | Linn Creek. |
| 9 | Theo. W. Hukriede | Rep. | Warrenton. |
| 10 | Cleveland A. Newton* | Rep. | St. Louis. |
| 11 | Harry B. Hawes | Dem. | St. Louis. |
| 12 | L. C. Dyer* | Rep. | St. Louis. |
| 13 | Marion E. Rhodes* | Rep. | Potosi. |
| 14 | Ed. D. Hays* | Rep. | Cape Girardeau |
| 15 | Isaac V. McPherson | Rep. | Aurora. |
| 16 | S. A. Shelton | Rep. | Marshfield. |

MONTANA.

*At Large.*

| | | | |
|---|---|---|---|
| | Wash. J. McCormick | Rep. | Missoula. |
| | Carl W. Riddick* | Rep. | Lewiston. |

NEBRASKA.

| | | | |
|---|---|---|---|
| 1 | R. H. Thorpe | Rep. | Lincoln. |
| 2 | Albert W. Jefferis* | Rep. | Omaha. |
| 3 | Robert E. Evans* | Rep. | Dakota City. |
| 4 | M. O. McLaughlin* | Rep. | York. |
| 5 | Wm. E. Andrews* | Rep. | Hastings. |
| 6 | A. R. Humphrey | Rep. | Broken Bow. |

NEVADA.

*At Large.*

| | | | |
|---|---|---|---|
| | Sam'l S. Arentz | Rep. | Simpson. |

NEW HAMPSHIRE.

| | | | |
|---|---|---|---|
| 1 | Sherman E. Burroughs* | Rep. | Manchester. |
| 2 | Edward H. Wason* | Rep. | Nashua. |

NEW JERSEY.

| | | | |
|---|---|---|---|
| 1 | F. F. Patterson, Jr* | Rep. | Camden. |
| 2 | Isaac Bacharach* | Rep. | Atlantic City. |
| 3 | T. F. Appleby | Rep. | Asbury Park. |
| 4 | Elijah C. Hutchinson* | Rep. | Trenton. |
| 5 | Ernest R. Ackerman* | Rep. | Plainfield. |
| 6 | Randolph Perkins | Rep. | Woodcliff Lake. |
| 7 | Amos H. Ratcliffe* | Rep. | Paterson. |
| 8 | Herbert W. Taylor | Rep. | Newark. |
| 9 | R. Wayne Parker† | Rep. | Orange. |
| 10 | Frederick R. Lehlbach* | Rep. | Newark. |
| 11 | Arch. E. Olpp | Rep. | W. Hoboken. |
| 12 | C. F. X. O'Brien | Dem. | Jersey City. |

NEW MEXICO.

*At Large.*

| | | | |
|---|---|---|---|
| | Nestor Montoya | Rep. | Albuquerque. |

NEW YORK.

| | | | |
|---|---|---|---|
| 1 | Frederick C. Hicks* | Rep. | Port Wash'ton. |
| 2 | John J. Kindred† | Dem. | Astoria. |
| 3 | John Kissel | Rep. | Brooklyn. |
| 4 | Thos. H. Cullen* | Dem. | Brooklyn. |
| 5 | Ardolph L. Kline | Rep. | Brooklyn. |
| 6 | Warren I. Lee | Rep. | Brooklyn. |
| 7 | Mich. J. Hogan | Rep. | Brooklyn. |
| 8 | Chas. G. Bond | Rep. | Brooklyn. |
| 9 | Andrew N. Peterson | Rep. | Brooklyn. |
| 10 | Lester D. Volk* | Rep. | Brooklyn. |

NEW YORK—*Continued.*

| *Dist.* | *Representatives.* | *Politics.* | *P. O. Address.* |
|---|---|---|---|
| 11 | Daniel J. Riordan* | Dem. | New York City. |
| 12 | Meyer London† | Soc. | New York City. |
| 13 | Chris. D. Sullivan* | Dem. | New York City. |
| 14 | Nath. D. Perlman* | Rep. | New York City. |
| 15 | Thos. J. Ryan | Rep. | New York City. |
| 16 | W. Bourke Cockran† | Dem. | New York City. |
| 17 | Ogden L. Mills | Rep. | New York City. |
| 18 | John F. Carew* | Dem. | New York City. |
| 19 | W. M. Chandler† | Rep. | New York City. |
| 20 | Isaac Siegel* | Rep. | New York City. |
| 21 | M. C. Ansorge | Rep. | New York City. |
| 22 | Anthony J. Griffin* | Dem. | New York City. |
| 23 | A. B. Rossdale | Rep. | Bronx. |
| 24 | B. L. Fairchild† | Rep. | Pelham. |
| 25 | James W. Husted* | Rep. | Peekskill. |
| 26 | Ham. Fish, Jr* | Rep. | Garrison. |
| 27 | Charles B. Ward* | Rep. | De Bruce. |
| 28 | Peter G. Ten Eyck† | Dem. | Albany. |
| 29 | James S. Parker* | Rep. | Salem. |
| 30 | Frank Crowther* | Rep. | Schenectady. |
| 31 | Bertrand H. Snell* | Rep. | Potsdam. |
| 32 | Luther W. Mott* | Rep. | Oswego. |
| 33 | Homer P. Snyder* | Rep. | Little Falls. |
| 34 | John D. Clarke | Rep. | Fraser. |
| 35 | Walter W. Magee* | Rep. | Syracuse. |
| 36 | Norman J. Gould* | Rep. | Seneca Falls. |
| 37 | Lewis Henry | Rep. | Elmira. |
| 38 | Thomas B. Dunn* | Rep. | Rochester. |
| 39 | Archie D. Sanders* | Rep. | Stafford. |
| 40 | S. Wallace Dempsey* | Rep. | Lockport. |
| 41 | Clarence McGregor* | Rep. | Bufalo. |
| 42 | Jas. M. Mead* | Dem. | Lackawanna. |
| 43 | Daniel A. Reed* | Rep. | Dunkirk. |

NORTH CAROLINA.

| | | | |
|---|---|---|---|
| 1 | Hallet S. Ward | Dem. | Washington. |
| 2 | Claude Kitchin* | Dem. | Scotland Neck. |
| 3 | C. L. Abernethy | Dem. | Newbern. |
| 4 | Edward W. Pou* | Dem. | Smithfield. |
| 5 | Charles M. Stedman* | Dem. | Greensboro. |
| 6 | Homer L. Lyon | Dem. | Whiteville. |
| 7 | Wm. C Hammer | Dem. | Asheboro. |
| 8 | Robert L. Doughton* | Dem. | Laurel Springs. |
| 9 | A. L. Bulwinkle | Dem. | Gastonia. |
| 10 | Zeb. Weaver* | Dem. | Hendersonville. |

NORTH DAKOTA.

| | | | |
|---|---|---|---|
| 1 | O. B. Burtness | Rep. | Grand Forks. |
| 2 | George M. Young* | Rep. | Valley City. |
| 3 | J. H. Sinclair* | Rep. | Kenmare. |

OHIO.

| | | | |
|---|---|---|---|
| 1 | Nicholas Longworth* | Rep. | Cincinnati. |
| 2 | A. E. B. Stephens* | Rep. | North Bend. |
| 3 | R. G. Fitzgerald | Rep. | Dayton. |
| 4 | John L. Cable | Rep. | Lima. |
| 5 | C. J. Thompson* | Rep. | Defiance. |
| 6 | Charles C. Kearns* | Rep. | Batavia. |
| 7 | Simeon D. Fess* | Rep. | Yellow Springs. |
| 8 | R. C. Cole* | Rep. | Findlay. |
| 9 | W. W. Chalmers | Rep. | Toledo. |
| 10 | I. M. Foster* | Rep. | Athens. |
| 11 | Edward D. Ricketts* | Rep. | Logan. |
| 12 | John C. Speaks | Rep. | Columbus. |
| 13 | J. T. Begg* | Rep. | Sandusky. |
| 14 | C. L. Knight | Rep. | Akron. |
| 15 | C. E. Moore* | Rep. | Cambridge. |
| 16 | Jos. H. Himes | Rep. | Canton. |
| 17 | W. M. Morgan | Rep. | Newark. |
| 18 | Frank Murphy* | Rep. | Steubenville. |
| 19 | John G. Cooper* | Rep. | Youngstown. |
| 20 | Miner G. Norton | Rep. | Cleveland. |
| 21 | Harry C. Gahn | Rep. | Cleveland. |
| 22 | Theo. E. Burton† | Rep. | Cleveland. |

OKLAHOMA.

| | | | |
|---|---|---|---|
| 1 | Thos. A. Chandler† | Rep. | Vinita. |
| 2 | Alice M. Robertson | Rep. | Muskogee. |
| 3 | Charles D. Carter* | Dem. | Ardmore. |
| 4 | J. C. Pringey | Rep. | Chandler. |
| 5 | F. B. Swank | Dem. | Norman. |
| 6 | L. M. Gensman | Rep. | Lawton. |
| 7 | James V. McClintic* | Dem. | Snyder. |
| 8 | Manuel Herrick | Rep. | Perry. |

OREGON.

| | | | |
|---|---|---|---|
| 1 | Willis C. Hawley* | Rep. | Salem. |
| 2 | Nicholas J. Sinnott* | Rep. | The Dalles. |
| 3 | C. N. McArthur* | Rep. | Portland. |

PENNSYLVANIA.

| | | | |
|---|---|---|---|
| 1 | William S. Vare* | Rep. | Philadelphia. |
| 2 | George S. Graham* | Rep. | Philadelphia. |
| 3 | Harry C. Ransley* | Rep. | Philadelphia. |
| 4 | George W. Edmonds* | Rep. | Philadelphia. |
| 5 | Jas. J. Connolly | Rep. | Philadelphia. |
| 6 | George P. Darrow* | Rep. | Philadelphia. |
| 7 | Thomas S. Butler* | Rep. | West Chester. |
| 8 | Harry W. Watson* | Rep. | Langhorne. |
| 9 | William W. Griest* | Rep. | Lancaster. |
| 10 | ..... | | Scranton. |
| 11 | Cl. D. Coughlin | Rep. | Wilkes-Barre. |
| 12 | John Reber* | Rep. | Pottsville. |
| 13 | F. B. Gernerd | Rep. | Allentown. |

PENNSYLVANIA—*Continued.*

| Dist. | Representatives. | Politics. | P. O. Address. |
|---|---|---|---|
| 14 | Louis T. McFadden* | Rep. | Canton. |
| 15 | Edgar R. Kiess* | Rep. | Williamsport. |
| 16 | I. C. Kline | Rep. | Sunbury. |
| 17 | Benjamin K. Focht* | Rep. | Lewisburg. |
| 18 | Aaron S. Kreider* | Rep. | Annville. |
| 19 | John M. Rose* | Rep. | Johnstown. |
| 20 | Edw. S. Brooks* | Rep. | York. |
| 21 | Even J. Jones* | Rep. | Bradford. |
| 22 | Adam M. Wyant | Rep. | Greensburg. |
| 23 | S. A. Kendall* | Rep. | Meyersdale. |
| 24 | Henry W. Temple* | Rep. | Washington. |
| 25 | M. M. Shreve*† | Rep. | Erie. |
| 26 | W. H. Kirkpatrick | Rep. | Easton. |
| 27 | Nathan L. Strong* | Rep. | Brookville. |
| 28 | H. J. Bixler | Rep. | Johnsonburg. |
| 29 | Stephen G. Porter* | Rep. | Pittsburgh. |
| 30 | M. Clyde Kelly* | Rep. | Braddock. |
| 31 | John M. Morin* | Rep. | Pittsburgh. |
| 32 | Guy E. Campbell* | Dem. | Crafton. |

*At Large.*

| | | |
|---|---|---|
| Thos. S. Crago* | Rep. | Waynesburg. |
| Jos. McLaughlin | Rep. | Philadelphia. |
| Wm. J. Burke* | Rep. | Pittsburgh. |
| A. H. Walters* | Rep. | Johnstown. |

RHODE ISLAND.

| | | | |
|---|---|---|---|
| 1 | Clark Burdick* | Rep. | Newport. |
| 2 | Walter R. Stiness* | Rep. | Cowesett. |
| 3 | Ambrose Kennedy* | Rep. | Woonsocket. |

SOUTH CAROLINA.

| | | | |
|---|---|---|---|
| 1 | W. T. Logan | Dem. | Charleston. |
| 2 | James F. Byrnes* | Dem. | Aiken. |
| 3 | Fred. H. Dominick* | Dem. | Newberry. |
| 4 | J. J. McSwain | Dem. | Greenville. |
| 5 | William F. Stevenson* | Dem. | Cheraw. |
| 6 | Philip H. Stoll* | Dem. | Kingstree. |
| 7 | H. P. Fulmer | Dem. | Norway. |

SOUTH DAKOTA.

| | | | |
|---|---|---|---|
| 1 | C. A. Christopherson* | Rep. | Sioux Falls. |
| 2 | Royal C. Johnson* | Rep. | Aberdeen. |
| 3 | Wm. Williamson | Rep. | Oacoma. |

TENNESSEE.

| | | | |
|---|---|---|---|
| 1 | B. Carroll Reese | Rep. | Butler. |
| 2 | J. W. Taylor* | Rep. | La Follette. |
| 3 | Joe Brown | Rep. | Chattanooga. |
| 4 | W. F. Clouse | Rep. | Cookeville. |
| 5 | E. L. Davis* | Dem. | Tullahoma. |
| 6 | Joseph W. Byrns* | Dem. | Nashville. |
| 7 | Clarence W. Turner | Dem. | Waverly. |
| 8 | Lon A. Scott | Rep. | Savannah. |
| 9 | Finis J. Garrett* | Dem. | Dresden. |
| 10 | Hubert F. Fisher* | Dem. | Memphis. |

TEXAS.

| | | | |
|---|---|---|---|
| 1 | Eugene Black* | Dem. | Clarksville. |
| 2 | John C. Box* | Dem. | Jacksonville. |
| 3 | M. G. Sanders | Dem. | Canton. |
| 4 | Sam. Rayburn* | Dem. | Bonham. |
| 5 | Hatton W. Sumners* | Dem. | Dallas. |
| 6 | Rufus Hardy* | Dem. | Corsicana. |
| 7 | Clay S. Briggs* | Dem. | Galveston. |
| 8 | D. E. Garrett† | Dem. | Houston. |
| 9 | J. J. Mansfield* | Dem. | Columbus. |
| 10 | James P. Buchanan* | Dem. | Brenham. |
| 11 | Tom Connally* | Dem. | Marlin. |
| 12 | Fritz G. Lanham* | Dem. | Fort Worth. |
| 13 | Guinn Williams | Dem. | Decatur. |

TEXAS—*Continued.*

| Dist. | Representatives. | Politics. | P. O. Address. |
|---|---|---|---|
| 14 | H. M. Wurzbach | Rep. | Seguin. |
| 15 | John N. Garner* | Dem. | Uvalde. |
| 16 | Claude B. Hudspeth* | Dem. | El Paso. |
| 17 | Thos. L. Blanton* | Dem. | Abilene. |
| 18 | Marvin Jones* | Dem. | Amarillo. |

UTAH.

| | | | |
|---|---|---|---|
| 1 | Don B. Colton | Rep. | Vernal. |
| 2 | E. O. Leatherwood | Rep. | Salt Lake City |

VERMONT.

| | | | |
|---|---|---|---|
| 1 | Frank L. Greene* | Rep. | St. Albans. |
| 2 | Porter H. Dale* | Rep. | Island Pond. |

VIRGINIA.

| | | | |
|---|---|---|---|
| 1 | Schuyler O. Bland* | Dem. | Newport News. |
| 2 | Joseph T. Deal | Dem. | Norfolk. |
| 3 | Andrew J. Montague* | Dem. | Richmond. |
| 4 | Pat. H. Drewry* | Dem. | Petersburg. |
| 5 | J. M. Hooker | Dem. | |
| 6 | Jas. P. Woods* | Dem. | Roanoke. |
| 7 | T. W. Harrison* | Dem. | Winchester. |
| 8 | R. Walton Moore* | Dem. | Fairfax. |
| 9 | C. Bascom Slemp* | Rep. | Big Stone Gap. |
| 10 | H. St. George Tucker* | Dem. | Lexington. |

WASHINGTON.

| | | | |
|---|---|---|---|
| 1 | John F. Miller* | Rep. | Seattle. |
| 2 | Lindley H. Hadley* | Rep. | Bellingham. |
| 3 | Albert Johnson* | Rep. | Hoquiam. |
| 4 | J. W. Summers* | Rep. | Walla Walla. |
| 5 | J. S. Webster* | Rep. | Spokane. |

WEST VIRGINIA.

| | | | |
|---|---|---|---|
| 1 | B. L. Rosenbloom | Rep. | Wheeling. |
| 2 | George M. Bowers* | Rep. | Martinsburg. |
| 3 | Stuart F. Reed* | Rep. | Clarksburg. |
| 4 | Harry C. Woodyard* | Rep. | Spencer. |
| 5 | W. Goodykoontz* | Rep. | Williamson. |
| 6 | L. S. Echols* | Rep. | Charleston. |

WISCONSIN.

| | | | |
|---|---|---|---|
| 1 | Henry A. Cooper† | Rep. | Racine. |
| 2 | Edward Voight* | Rep. | Sheboygan. |
| 3 | John M. Nelson† | Rep. | Madison. |
| 4 | John C. Kleczka* | Rep. | Milwaukee. |
| 5 | W. H. Stafford† | Rep. | Milwaukee. |
| 6 | Florin Lampert* | Rep. | Oshkosh. |
| 7 | Jos. D. Beck | Rep. | Viroqua. |
| 8 | Edward E. Browne* | Rep. | Waupaca. |
| 9 | David G. Classon* | Rep. | Oconto. |
| 10 | James A. Frear* | Rep. | Hudson. |
| 11 | A. P. Nelson* | Rep. | Grantsburg. |

WYOMING.

*At Large.*

| | | |
|---|---|---|
| Frank W. Mondell* | Rep. | Newcastle. |

ALASKA.

*Delegate.*

| | | |
|---|---|---|
| Dan A. Sutherland | Rep. | Fairbanks. |

HAWAII.

*Delegate.*

| | | |
|---|---|---|
| Henry A. Baldwin | Rep. | Paia, Maui. |

PHILIPPINES.

*Resident Commissioners.*

Jaime C. De Veyra*, Nationalist, Leyte, P. I.
Isauro Gabaldon, Nationalist, San Isidro.

PORTO RICO.

*Resident Commissioner.*

Felix Cordova Davila*, Unionist, San Juan.

NOTE (as of Dec. 4, 1922)—Dems., 131; Reps., 300; Socialists, 1. Sitting, 432; whole number, 435.
* Served in Sixty-sixth Congress. † Served in previous Congress.
A Representative's salary is $7,500 a year; Speaker, $12,000.

## UNITED STATES EMPLOYEES COMPENSATION COMMISSION.

(Washington, D. C.)

*Commissioners*—Bessie P. Brueggeman (*Chairman*), Charles H. Verrill, John J. Keegan; *Secretary*—S. R. Gollbart, Jr.

## UNITED STATES BUREAU OF EFFICIENCY.

*Chief*—Herbert D. Brown; *Ass't Chief and Senior Accountant*—Harold N. Graves; *Efficiency Ratings*—William H. McReynolds; *Accounting*—V. G. Croissant; *Statistics*—George C. Havenner; *Labor-Saving Devices*—Wilson E. Wilmot; *Duplication of Work*—Herbert H. Rapp; *Chief Clerk and Disbursing Clerk*—Miss D. F. Fridley; *Librarian*—Gladys E. Weaver.

## FEDERAL RESERVE BOARD.

(As of Nov. 4, 1922.)

*Ex-Officio Members*—A. W. Mellon, Secretary of Treasury, *Chairman;* D. R. Crissinger, Comptroller of the Currency. *Members*—(Vacant Nov. 20, 1922), Governor; Edmund Platt, Vice Governor; Adolph C. Miller, Charles S. Hamlin, John R. Mitchell.

W. W. Hoxton, *Secretary*; W. L. Eddy, *Assistant Secretary*; W. M. Imlay, *Fiscal Agent;* J. F. Herson, *Chief Division of Examination and Chief Federal Reserve Examiner;* Walter Wyatt, *General Counsel*; Walter W. Stewart, *Director Division of Analysis and Research;* M. Jacobson, *Statistician;* E. A. Goldenweiser, *Associate Statistician;* E. L. Smead, *Chief Division of Bank Operations.*

## COMMITTEES OF THE SIXTY-SEVENTH CONGRESS.

**Meeting Days of Chief Senate Committees**—*Commerce*, Thursdays; *District of Columbia*, Mondays; *Education and Labor*, Thursdays; *Foreign Relations*, Wednesdays; *Indian Affairs*, Thursdays and Fridays; *Interstate Commerce*, Fridays; *Judiciary*, Mondays; *Military Affairs*, Fridays; *Naval Affairs*, Tuesdays; *Pensions*, Tuesdays; *Public Lands and Surveys*, Wednesdays.

**Meeting Days of Chief House Committees**—*Claims*, Fridays; *Coinage, Weights and Measures*, Fridays; *Education*, Tuesdays; *Immigration and Naturalization*, Thursdays; *Indian Affairs*, Thursdays; *Interstate and Foreign Commerce*, Tuesdays and Fridays; *Judiciary*, Tuesdays and Thursdays; *Labor*, Fridays; *Military Affairs*, Tuesdays and Thursdays; *Naval Affairs*, Tuesdays and Fridays; *Patents*, Wednesdays; *Pensions*, Wednesdays; *Post Offices and Post Roads*, Tuesdays and Fridays; *Reform in the Civil Service*, Wednesdays; *War Claims*, Fridays.

CHAIRMEN OF THE CHIEF SENATE COMMITTEES.

| Committee. | Chairman. | Committee. | Chairman. |
|---|---|---|---|
| Agriculture and Forestry | Norris | Judiciary | Nelson |
| Appropriations | Warren | Library | Brandegee |
| Banking and Currency | McLean | Manufactures | La Follette |
| Civil Service | Sterling | Military Affairs | Wadsworth |
| Claims | Capper | Mines and Mining | Poindexter |
| Commerce | Jones, Wash. | Naval Affairs | Page |
| District of Columbia | Ball | Patents | Johnson |
| Education and Labor | Borah | Pensions | Bursum |
| Enrolled Bills | Sutherland | Post Offices and Post Roads | Townsend |
| Finance | McCumber | Printing | Moses |
| Foreign Relations | Lodge | Privileges and Elections | Dillingham |
| Immigration | Colt | Public Buildings and Grounds | Fernald |
| Indian Affairs | Spencer | Public Lands and Surveys | Smoot |
| Interoceanic Canals | Edge | Revision of the Laws | Ernst |
| Interstate Commerce | Cummins | Rules | Curtis |
| Irrigation and Reclamation | McNary | Territories and Insular Possessions | New |

CHAIRMEN OF THE CHIEF HOUSE COMMITTEES.

| Committee. | Chairman. | Committee. | Chairman. |
|---|---|---|---|
| Ways and Means | Fordney | Election of Pres., Vice Pres and Representatives in Congress | Andrews, Neb. |
| Appropriations | Madden | Alcoholic Liquor Traffic | Schall (acting) |
| Judiciary | Volstead | Irrigation of Arid Lands | Smith, Idaho |
| Banking and Currency | McFadden | Immigration and Naturalization | Johnson, Wash. |
| Coinage, Weights and Measures | Vestal | Expenditures in State Dept. | Elliott |
| Interstate and Foreign Commerce | Winslow | Expenditures in Treasury Dept. | Dale |
| Rivers and Harbors | Dempsey | Expenditures in War Dept. | Johnson, S. Dak. |
| Merchant Marine and Fisheries | Greene, Mass. | Expenditures in Navy Dept. | Echols |
| Agriculture | Haugen | Expenditures in Post Office Dept. | Zihlman |
| Foreign Affairs | Porter | Expenditures in Interior Dept. | Kreider |
| Military Affairs | Kahn | Expenditures in Dept. of Justice | Reed, W. Va. |
| Naval Affairs | Butler | Expenditures in Dept. of Agric. | King |
| Post Offices and Post Roads | Steenerson | Expenditures in Dept. of Commerce | Coughlin |
| Public Lands | Sinnott | Expenditures in Dept. of Labor | Walters |
| Indian Affairs | Snyder | Expenditures on Public Buildings | Benham |
| Territories | Curry | Rules | Campbell, Kan. |
| Insular Affairs | Towner | Accounts | Ireland |
| Railways and Canals | Wheeler | Mileage | Reber |
| Mines and Mining | Rhodes | Census | Siegel |
| Public Buildings and Grounds | Langley | Library | Gould |
| Education | Fess | Printing | Kiess |
| Labor | Zihlman (acting) | Enrolled Bills | Ricketts |
| Patents | Lampert | Industrial Arts and Expositions | Bland, Ind. |
| Invalid Pensions | Fuller | Roads | Dunn |
| Pensions | Knutson | Flood Control | Rodenberg |
| Claims | Edmonds | Disposition of Useless Exec. Papers | Moores, Ind. |
| War Claims | Snell | Woman Suffrage | White, Me. |
| District of Columbia | Focht | Select Committee on Budget | Campbell, Kan. (acting) |
| Revision of the Laws | Little | | |
| Reform in the Civil Service | Lehlbach | | |

## UNITED STATES GEOGRAPHIC BOARD.

*Chairman*—C. Hart Merriam, of the United States Department of Agriculture. *Secretary*—Charles S. Sloane, Bureau of the Census, Department of Commerce. Headquarters, Washington, D. C.

Frank Bond, General Land Office, Department of the Interior.
Lieut. Col. Frederick L. Dengler, General Staff, War Department.
L. N. Morgan, Post Office Department.
J. N. B. Hewitt, Bureau of American Ethnology, Smithsonian Institution.
James McCormick, Geological Survey, Department of the Interior.
Jas. W. McGuire, Coast and Geodetic Survey, Department of Commerce.
Major Lawrence Martin, Div. of Western European Affairs, Department of State.
John S. Mills, Department of the Treasury.
Charles E. Young, Government Printing Office.
George R. Putnam, Bureau of Lighthouses, Department of Commerce.
W. C. Barnes, United States Forest Service, Department of Agriculture.
Capt. Frederic B. Bassett, Hydrographer, Department of the Navy.

By executive order of August 10, 1906, the official title of the United States Board on Geographic Names was changed to United States Geographic Board, and its duties enlarged. The board passes on all unsettled questions concerning geographic names which arise in the departments, as well as determines, changes, and fixes place names within the United States and its insular possessions, and all names hereafter suggested by any officer of the Government shall be referred to the board before publication. The decisions of the board are to be accepted by all the departments of the Government as standard authority.

## SURVEYORS OF CUSTOMS.

| Name. | Place. | Salary. | Name | Place. | Salary. |
|---|---|---|---|---|---|
| Lawrence J. Flaherty | San Francisco, Cal. | $5,000 | Herman Hormel | Boston, Mass. | $5,000 |
| Gaston E. Troseclair | New Orleans, La. | 3,500 | Thomas W. Whittle | New York, N. Y. | 8,000 |
| Edward E. Philbrook | Portland, Me. | 4,500 | J. Howard Reed | Philadelphia, Pa. | 5,000 |
| Guy W. Steele | Baltimore, Md. | 4,500 | | | |

## THE SIXTY-EIGHTH CONGRESS.

Terms of Representatives begin March 4, 1923, and end March 4, 1925. Terms of Senators end on March 4 of the year preceding name.

SENATE.

*President*.....Calvin Coolidge, R., of Mass.

| *Terms Expire.* | *Senators.* | *P. O. Address.* |
|---|---|---|
| | ALABAMA. | |
| 1927. | Oscar W. Underwood, D. | Birmingham. |
| 1925. | J. Thos. Heflin, D. | Lafayette. |
| | ARIZONA. | |
| 1929. | Henry F. Ashurst, D. | Prescott. |
| 1927. | Ralph H. Cameron, R. | Phoenix. |
| | ARKANSAS. | |
| 1927. | Thad. H. Caraway, D. | Jonesboro. |
| 1925. | Joe T. Robinson, D. | Lonoke. |
| | CALIFORNIA. | |
| 1929. | Hiram W. Johnson, R. | San Francisco. |
| 1927. | Sam'l M. Shortridge, R. | Menlo Park. |
| | COLORADO. | |
| 1927. | Sam'l D. Nicholson, R. | Leadville. |
| 1925. | L. C. Phipps, R. | Denver. |
| | CONNECTICUT. | |
| 1929. | George P. McLean, R. | Simsbury. |
| 1927. | Frank B. Brandegee, R. | New London. |
| | DELAWARE. | |
| 1929. | Thomas F. Bayard, D. | Wilmington. |
| 1925. | L. H. Ball, R. | Marshallton. |
| | FLORIDA. | |
| 1929. | Park Trammell, D. | Lakeland. |
| 1927. | Duncan U. Fletcher, D. | Jacksonville. |
| | GEORGIA. | |
| 1927. | Walter F. George, D. | Atlanta. |
| 1925. | W. J. Harris, D. | Cedartown. |
| | IDAHO. | |
| 1927. | Frank R. Gooding, R. | Gooding. |
| 1925. | William E. Borah, R. | Boise. |
| | ILLINOIS. | |
| 1927. | Wm. B. McKinley, R. | Champaign. |
| 1925. | Medill McCormick, R. | Chicago. |
| | INDIANA. | |
| 1929. | Sam'l M. Ralston, D. | Indianapolis. |
| 1927. | James E. Watson, R. | Rushville. |
| | IOWA. | |
| 1927. | Albert B. Cummins, R. | Des Moines. |
| 1925. | Smith W. Brookhart, R. | Des Moines. |
| | KANSAS. | |
| 1927. | Charles Curtis, R. | Topeka. |
| 1925. | Arthur Capper, R. | Topeka. |
| | KENTUCKY. | |
| 1927. | Rich. P. Ernst, R. | Covington. |
| 1925. | A. O. Stanley, D. | Henderson. |
| | LOUISIANA. | |
| 1927. | Edwin S. Broussard, D. | New Iberia. |
| 1925. | Joseph E. Ransdell, D. | L. Providence. |
| | MAINE. | |
| 1929. | Frederick Hale, R. | Portland. |
| 1925 | Bert M. Fernald, R. | West Poland. |
| | MARYLAND. | |
| 1929. | William C. Bruce, D. | Baltimore. |
| 1927. | O. E. Weller, R. | Baltimore. |
| | MASSACHUSETTS. | |
| 1929. | Henry C. Lodge, R. | Nahant. |
| 1925. | D. I. Walsh, D. | Fitchburg. |
| | MICHIGAN. | |
| 1929. | Woodbridge N. Ferris, D. | Big Rapids. |
| 1925. | James C. Couzens, R. | Detroit. |
| | MINNESOTA. | |
| 1929. | Hendrik Shipstead, Farm.-Lab. | Minneapolis. |
| 1925. | Knute Nelson, R. | Alexandria. |
| | MISSISSIPPI. | |
| 1929. | Hubert D. Stephens, D. | New Albany. |
| 1925. | Pat Harrison, D. | Gulfport. |
| | MISSOURI. | |
| 1929. | James A. Reed, D. | Kansas City. |
| 1927. | S. P. Spencer, R. | St. Louis. |
| | MONTANA. | |
| 1929. | B. K. Wheeler, D. | Butte. |
| 1925. | Thomas J. Walsh, D. | Helena. |
| | NEBRASKA. | |
| 1929. | Ralph B. Howell, R. | Omaha. |
| 1925. | George W. Norris, R. | McCook. |
| | NEVADA. | |
| 1929. | Key Pittman, D. | Tonopah. |
| 1927. | Tasker L. Oddie, R. | Reno. |
| | NEW HAMPSHIRE. | |
| 1925. | Henry W. Keyes, R. | Haverhill. |
| 1927. | George H. Moses, R. | Concord. |
| | NEW JERSEY. | |
| 1929. | Edward I. Edwards, D. | Jersey City. |
| 1925. | Walter E. Edge, R. | Atlantic City. |
| | NEW MEXICO. | |
| 1929. | Andrieus A. Jones, D. | E. Las Vegas. |
| 1925. | Holm O. Bursum, R. | Socorro. |
| | NEW YORK. | |
| 1929. | Royal S. Copeland, D. | New York Cy. |
| 1925. | Jas. W. Wadsworth, Jr., R. | Groveland. |
| | NORTH CAROLINA. | |
| 1927. | Lee S. Overman, D. | Salisbury. |
| 1925. | Furnifold McL. Simmons, D. | Newbern. |
| | NORTH DAKOTA. | |
| 1929. | Lynn J. Frazier, R. | Hoopie. |
| 1927. | E. F. Ladd, R. | Fargo. |
| | OHIO. | |
| 1929. | Simeon D. Fess, R. | Yellow Springs |
| 1927. | Frank B. Willis, R. | Delaware. |
| | OKLAHOMA. | |
| 1927. | J. W. Harreld, R. | Oklahoma Cy. |
| 1925. | Robt. L. Owen, D. | Muskogee. |
| | OREGON. | |
| 1927. | Robt. N. Stanfield, R. | Portland. |
| 1925. | Charles L. McNary, R. | Salem. |
| | PENNSYLVANIA. | |
| 1929. | David A. Reed, R. | Pittsburgh. |
| 1927. | George W. Pepper, R. | Philadelphia. |
| | RHODE ISLAND. | |
| 1929. | Peter G. Gerry, D. | Warwick. |
| 1925. | LeBaron B. Colt, R. | Bristol. |
| | SOUTH CAROLINA. | |
| 1927. | Ellison D. Smith, D. | Florence. |
| 1925. | Nath. B. Dial, D. | Laurens. |
| | SOUTH DAKOTA. | |
| 1927. | Peter Norbeck, R. | Redfield. |
| 1925. | Thomas Sterling, R. | Vermilion. |
| | TENNESSEE. | |
| 1929. | Kenneth D. McKellar, D. | Memphis. |
| 1925. | John K. Shields, D. | Knoxville. |
| | TEXAS. | |
| 1929. | Earle B. Mayfield, D. | Austin. |
| 1925. | Morris Sheppard, D. | Texarkana. |
| | UTAH. | |
| 1929. | Wm. H. King, D. | Salt Lake Cy. |
| 1927. | Reed Smoot, R. | Provo. |
| | VERMONT. | |
| 1929. | Frank L. Greene, R. | St. Albans. |
| 1927. | Wm. P. Dillingham, R. | Montpelier. |
| | VIRGINIA. | |
| 1929. | Claude A. Swanson, D. | Chatham. |
| 1925. | Carter Glass, D. | Lynchburg. |
| | WASHINGTON. | |
| 1929. | C. C. Dill, D. | Spokane. |
| 1927. | Wesley L. Jones, R. | Seattle. |
| | WEST VIRGINIA. | |
| 1929. | M. M. Neely, D. | Fairmont. |
| 1925. | Davis Elkins, R. | Morgantown. |
| | WISCONSIN. | |
| 1929. | Robert M. LaFollette, R. | Madison. |
| 1927. | Irvine L. Lenroot, R. | Superior. |
| | WYOMING. | |
| 1929. | John B. Kendrick, D. | Sheridan. |
| 1925. | Francis E. Warren, R. | Cheyenne. |

The whole number of Senators is 96. Republicans, 53; Democrats, 42; Farmer-Labor, 1. (Senator Truman H. Newberry (Rep.), of Michigan, whose term would have expired on March 4, 1925, resigned on Nov. 19, 1922.

The salary of a Senator is $7,500 per annum and 20 cents per mile for travelling from and to the seat of Government.

## HOUSE OF REPRESENTATIVES.

### ALABAMA.

| Dist. | Representatives. | Politics. | P.O. Address. |
|---|---|---|---|
| 1 | John McDuffie* | Dem. | Monroeville. |
| 2 | John R. Tyson* | Dem. | Montgomery. |
| 3 | Henry B Steagall* | Dem. | Ozark. |
| 4 | Lamar Jeffers* | Dem. | Anniston. |
| 5 | William B. Bowling* | Dem. | Lafayette. |
| 6 | William B. Oliver* | Dem. | Tuscaloosa. |
| 7 | M. C. Allgood | Dem. | Allgood. |
| 8 | Edward B. Almon* | Dem. | Tuscumbia. |
| 9 | George Huddleston* | Dem. | Birmingham. |
| 10 | William B. Bankhead* | Dem. | Jasper. |

### ARIZONA.

*At Large.*

| | | | |
|---|---|---|---|
| | Carl Hayden* | Dem. | Phoenix. |

### ARKANSAS.

| | | | |
|---|---|---|---|
| 1 | William J. Driver* | Dem. | Osceola. |
| 2 | William A. Oldfield* | Dem. | Batesville. |
| 3 | John N. Tillman* | Dem. | Fayetteville. |
| 4 | Otis Wingo* | Dem. | De Queen. |
| 5 | Heartsill Ragon | Dem. | Clarkesville. |
| 6 | L. E. Sawyer | Dem. | Hot Springs. |
| 7 | Tilman B. Parks* | Dem. | Hope. |

### CALIFORNIA.

| | | | |
|---|---|---|---|
| 1 | Clarence F. Lea* | Dem. | Santa Rosa. |
| 2 | John E. Raker* | Dem. | Alturas. |
| 3 | Charles F. Curry* | Rep. | Sacramento. |
| 4 | Julius Kahn* | Rep. | San Francisco. |
| 5 | (Vacant) | | |
| 6 | James H. MacLafferty | Rep. | Oakland. |
| 7 | Henry E. Barbour* | Rep. | Fresno. |
| 8 | Arthur M. Free* | Rep. | San Jose. |
| 9 | Walter F. Lineberger* | Rep. | Long Beach. |
| 10 | Henry Z. Osborne* | Rep. | Los Angeles. |
| 11 | Philip D. Swing* | Rep. | El Centro. |

### COLORADO.

| | | | |
|---|---|---|---|
| 1 | William N. Vaile* | Rep. | Denver. |
| 2 | Charles B. Timberlake* | Rep. | Sterling. |
| 3 | Guy U. Hardy* | Rep. | Canon City. |
| 4 | Edward T. Taylor* | Dem. | GlenwoodSprings. |

### CONNECTICUT.

| | | | |
|---|---|---|---|
| 1 | E. Hart Fenn* | Rep. | Wethersfield. |
| 2 | Richard P. Freeman* | Rep. | New London. |
| 3 | John Q. Tilson* | Rep. | New Haven. |
| 4 | Schuyler Merritt* | Rep. | Stamford. |
| 5 | Patrick B. O'Sullivan | Dem. | Derby. |

### DELAWARE.

*At Large.*

| | | | |
|---|---|---|---|
| | William H. Boyce | Dem. | Dover. |

### FLORIDA.

| | | | |
|---|---|---|---|
| 1 | Herbert J. Drane* | Dem. | Lakeland. |
| 2 | Frank Clark* | Dem. | Gainesville. |
| 3 | John H. Smithwick* | Dem. | Pensacola. |
| 4 | William J. Sears* | Dem. | Kissimmee. |

### GEORGIA.

| | | | |
|---|---|---|---|
| 1 | R. Lee Moore | Dem. | Statesboro. |
| 2 | Frank Park* | Dem. | Sylvester. |
| 3 | Charles R. Crisp* | Dem. | Americus. |
| 4 | William C. Wright* | Dem. | Newnan. |
| 5 | William D. Upshaw* | Dem. | Atlanta. |
| 6 | James W. Wise* | Dem. | Fayetteville. |
| 7 | Gordon Lee* | Dem. | Chickamauga. |
| 8 | Charles H. Brand* | Dem. | Athens. |
| 9 | Thomas M. Bell* | Dem. | Gainesville. |
| 10 | Carl Vinson* | Dem. | Milledgeville. |
| 11 | William C. Lankford* | Dem. | Douglas. |
| 12 | William W. Larsen* | Dem. | Dublin. |

### IDAHO.

| | | | |
|---|---|---|---|
| 1 | Burton L. French* | Rep. | Moscow. |
| 2 | Addison T. Smith* | Rep. | Twin Falls. |

### ILLINOIS.

| | | | |
|---|---|---|---|
| 2 | Martin B. Madden* | Rep. | Chicago. |
| 2 | (Vacant) | | |
| 3 | Elliott W. Sproul* | Rep. | Chicago. |
| 4 | John W. Rainey* | Dem. | Chicago. |
| 5 | Adolph J. Sabath* | Dem. | Chicago. |
| 6 | James R. Buckley | Dem. | Chicago. |
| 7 | M. Alfred Michaelson* | Rep. | Chicago. |
| 8 | Stanley H. Kunz* | Dem. | Chicago. |
| 9 | Fred A. Britten* | Rep. | Chicago. |
| 10 | Carl R. Chindblom* | Rep. | Chicago. |
| 11 | Frank R. Reid | Rep. | Aurora. |
| 12 | Charles E. Fuller* | Rep. | Belvidere. |
| 13 | John C. McKenzie* | Rep. | Elizabeth. |
| 14 | William J. Graham* | Rep. | Aledo. |
| 15 | Edward J. King* | Rep. | Galesburg. |
| 16 | William E. Hull | Rep. | Peoria. |
| 17 | Frank H. Funk* | Rep. | Bloomington. |
| 18 | William P. Holaday | Rep. | Georgetown. |
| 19 | Allen F. Moore* | Rep. | Monticello. |
| 20 | Henry T. Rainey† | Dem. | Carrollton. |
| 21 | J. Earl Major | Dem. | Hillsboro. |
| 22 | Edward E. Miller | Rep. | East St. Louis. |

### ILLINOIS—*Continued.*

| Dist. | Representatives. | Politics. | P.O. Address. |
|---|---|---|---|
| 23 | William W. Arnold | Dem. | Robinson. |
| 24 | Thomas S. Williams* | Rep. | Louisville. |
| 25 | Edward E. Denison* | Rep. | Marion. |

*At Large.*

| | | | |
|---|---|---|---|
| | Richard Yates* | Rep. | Springfield. |
| | Henry R. Rathbone | Rep. | Kenilworth. |

### INDIANA.

| | | | |
|---|---|---|---|
| 1 | William E. Wilson | Dem. | Evansville. |
| 2 | Arthur H. Greenwood | Dem. | Washington. |
| 3 | John W. Ewing | Dem. | New Albany. |
| 4 | Harry C. Canfield | Dem. | Batesville. |
| 5 | Everett Sanders* | Rep. | Terre Haute. |
| 6 | Richard N. Elliott* | Rep. | Connersville. |
| 7 | Merrill Moores* | Rep. | Indianapolis. |
| 8 | Albert H. Vestal* | Rep. | Anderson. |
| 9 | Fred S. Purnell* | Rep. | Attica. |
| 10 | William R. Wood* | Rep. | Lafayette. |
| 11 | Samuel E. Cook | Dem. | Huntington. |
| 12 | Louis W. Fairfield* | Rep. | Angola. |
| 13 | Andrew J. Hickey* | Rep. | Laporte. |

### IOWA.

| | | | |
|---|---|---|---|
| 1 | William F. Kopp* | Rep. | Mount Pleasant. |
| 2 | Harry E. Hull* | Rep. | Williamsburg. |
| 3 | T. J. B. Robinson | Rep. | Hampton. |
| 4 | Gilbert N. Haugen* | Rep. | Northwood. |
| 5 | Cyrenus Cole* | Rep. | Cedar Rapids. |
| 6 | C. William Ramseyer* | Rep. | Bloomfield. |
| 7 | Cassius C. Dowell* | Rep. | Des Moines. |
| 8 | Horace M. Towner* | Rep. | Corning. |
| 9 | William R. Green* | Rep. | Audubon. |
| 10 | L. J. Dickinson* | Rep. | Algona. |
| 11 | William D. Boies* | Rep. | Sheldon. |

### KANSAS.

| | | | |
|---|---|---|---|
| 1 | Daniel R. Anthony, Jr* | Rep. | Leavenworth. |
| 2 | Edward C. Little* | Rep. | Kansas City. |
| 3 | W. H. Sproul | Rep. | Sedan. |
| 4 | Homer Hoch* | Rep. | Marion. |
| 5 | James G. Strong* | Rep. | Blue Rapids. |
| 6 | Hays B. White* | Rep. | Mankato. |
| 7 | J. N. Tincher* | Rep. | Medicine Lodge. |
| 8 | William A. Ayres | Dem. | Wichita. |

### KENTUCKY.

| | | | |
|---|---|---|---|
| 1 | Alben W. Barkley* | Dem. | Paducah. |
| 2 | David H. Kincheloe* | Dem. | Madisonville. |
| 3 | Robert Y. Thomas, Jr.* | Dem. | Central City. |
| 4 | Ben Johnson* | Dem. | Bardstown. |
| 5 | Maurice H. Thatcher | Rep. | Louisville. |
| 6 | Arthur B. Rouse* | Dem. | Burlington. |
| 7 | James C. Cantrill* | Dem. | Georgetown. |
| 8 | Ralph Gilbert* | Dem. | Shelbyville. |
| 9 | William J. Fields* | Dem. | Olive Hill. |
| 10 | John W. Langley* | Rep. | Pikeville. |
| 11 | John M. Robsion* | Rep. | Barbourville. |

### LOUISIANA.

| | | | |
|---|---|---|---|
| 1 | James O'Connor* | Dem. | New Orleans. |
| 2 | H. Garland Dupre* | Dem. | New Orleans. |
| 3 | Whitemell P. Martin* | Dem. | Thibodaux. |
| 4 | John N. Sandlin* | Dem. | Minden. |
| 5 | Riley J. Wilson* | Dem. | Harrisonburg. |
| 6 | George K. Favrot | Dem. | Baton Rouge. |
| 7 | Ladislas Lazaro* | Dem. | Washington. |
| 8 | James B. Aswell* | Dem. | Natchitoches. |

### MAINE.

| | | | |
|---|---|---|---|
| 1 | Carroll L. Beedy* | Rep. | Portland. |
| 2 | Wallace H. White, Jr.* | Rep. | Lewiston. |
| 3 | John E. Nelson* | Rep. | Augusta. |
| 4 | Ira G. Hersey* | Rep. | Houlton. |

### MARYLAND.

| | | | |
|---|---|---|---|
| 1 | T. Alan Goldsborough* | Dem. | Denton. |
| 2 | Millard E. Tydings | Dem. | Havre de Grace. |
| 3 | John Philip Hill* | Rep. | Baltimore. |
| 4 | J. Charles Linthicum* | Dem. | Baltimore. |
| 5 | Sydney E. Mudd* | Rep. | La Plata. |
| 6 | Frederick N. Zihlman* | Rep. | Cumberland. |

### MASSACHUSETTS.

| | | | |
|---|---|---|---|
| 1 | Allen T. Treadway* | Rep. | Stockbridge. |
| 2 | Frederick H. Gillett* | Rep. | Springfield. |
| 3 | Calvin D. Paige* | Rep. | Southbridge. |
| 4 | Samuel E. Winslow* | Rep. | Worcester. |
| 5 | John Jacob Rogers* | Rep. | Lowell. |
| 6 | A. Piatt Andrew* | Rep. | Gloucester. |
| 7 | William P. Connery, Jr. | Dem. | Lynn. |
| 8 | Frederick W. Dallinger* | Rep. | Cambridge. |
| 9 | Charles L. Underhill* | Rep. | Somerville. |
| 10 | Peter F. Tague* | Dem. | Boston. |
| 11 | Geo. Holden Tinkham* | Rep. | Boston. |
| 12 | James A. Gallivan* | Dem. | Boston. |
| 13 | Robert Luce* | Rep. | Waltham. |
| 14 | Louis A. Frothingham* | Rep. | Easton. |
| 15 | William S. Greene* | Rep. | Fall River. |
| 16 | Charles L. Gifford* | Rep. | Barnstable. |

MICHIGAN.

| Dist. | Representatives. | Politics. | P.O. Address. |
|---|---|---|---|
| 1 | Robert H. Clancy | Dem. | Detroit. |
| 2 | Earl C. Michener* | Rep. | Adrian. |
| 3 | J. M. C. Smith* | Rep. | Charlotte. |
| 4 | John C. Ketcham* | Rep. | Hastings. |
| 5 | Carl E. Mapes* | Rep. | Grand Rapids. |
| 6 | Grant M. Hudson | Rep. | East Lansing. |
| 7 | Louis C. Cramton* | Rep. | Lapeer. |
| 8 | Bird J. Vincent | Rep. | Saginaw. |
| 9 | James C. McLaughlin* | Rep. | Muskegon. |
| 10 | Roy O. Woodruff* | Rep. | Bay City. |
| 11 | Frank D. Scott* | Rep. | Alpena. |
| 12 | W. Frank James* | Rep. | Hancock. |
| 13 | Clarence J. McLeod† | Rep. | Detroit. |

MINNESOTA.

| | | | |
|---|---|---|---|
| 1 | Sydney Anderson* | Rep. | Lanesboro. |
| 2 | Frank Clague* | Rep. | Redwood Falls. |
| 3 | Charles R. Davis* | Rep. | St. Peter. |
| 4 | Oscar E. Keller* | Rep. | St. Paul. |
| 5 | Walter H. Newton* | Rep. | Minneapolis. |
| 6 | Harold Knutson* | Rep. | St. Cloud. |
| 7 | O. J. Kvale | Ind. | Benson. |
| 8 | Oscar J. Larson* | Rep. | Duluth. |
| 9 | Knud Wefald | F.-L. | Hawley. |
| 10 | Thomas D. Schall* | Rep. | Minneapolis. |

MISSISSIPPI.

| | | | |
|---|---|---|---|
| 1 | John E. Rankin* | Dem. | Tupelo. |
| 2 | B.(Ill) G. Lowrey* | Dem. | Blue Mountain. |
| 3 | Benj. G. Humphreys* | Dem. | Greenville. |
| 4 | Jeff Busby | Dem. | Houston. |
| 5 | Ross A. Collins* | Dem. | Meridian. |
| 6 | T. Webber Wilson | Dem. | Laurel. |
| 7 | Percy E. Quin* | Dem. | McComb City. |
| 8 | James W. Collier* | Dem. | Vicksburg. |

MISSOURI.

| | | | |
|---|---|---|---|
| 1 | M. A. Romjuet† | Dem. | Macon. |
| 2 | Ralph F. Lozier | Dem. | Carrollton. |
| 3 | Jacob L. Milligan† | Dem. | Richmond. |
| 4 | Charles L. Faust* | Rep. | St. Joseph. |
| 5 | Henry L. Jost | Dem. | Kansas City. |
| 6 | C. C. Dickinson† | Dem. | Clinton. |
| 7 | Samuel C. Major† | Dem. | Fayette. |
| 8 | Sidney C. Roach* | Rep. | Linn Creek. |
| 9 | Clarence Cannon | Dem. | Troy. |
| 10 | Cleveland A. Newton* | Rep. | St. Louis. |
| 11 | Harry B. Hawes* | Dem. | St. Louis. |
| 12 | Leonidas C. Dyer* | Rep. | St. Louis. |
| 13 | J. Scott Wolff | Dem. | Festus. |
| 14 | James F. Fulbright | Dem. | Doniphan. |
| 15 | Joe J. Manlove | Rep. | Joplin. |
| 16 | Thomas L. Rubey† | Dem. | Lebanon. |

MONTANA.

| | | | |
|---|---|---|---|
| 1 | John M. Evans† | Dem. | Missoula. |
| 2 | Scott Leavitt | Rep. | Great Falls. |

NEBRASKA.

| | | | |
|---|---|---|---|
| 1 | John H. Morehead | Dem. | Falls City. |
| 2 | W. G. Sears | Rep. | Omaha. |
| 3 | Edgar Howard | Dem. | Columbus. |
| 4 | Melvin O. McLaughlin* | Rep. | York. |
| 5 | A. C. Shallenberger† | Dem. | Alma. |
| 6 | Robert G. Simmons | Rep. | Scottsbluff. |

NEVADA.

*At Large.*

| | | | |
|---|---|---|---|
| | Charles F. Richards | Dem. | Reno. |

NEW HAMPSHIRE.

| | | | |
|---|---|---|---|
| 1 | William N. Rogers | Dem. | Sanbornville. |
| 2 | Edward H. Wason* | Rep. | Nashua. |

NEW JERSEY.

| | | | |
|---|---|---|---|
| 1 | F. F. Patterson, Jr.* | Rep. | Camden. |
| 2 | Isaac Bacharach* | Rep. | Atlantic City. |
| 3 | Elmer H. Geran | Dem. | Matawan. |
| 4 | Charles Browne | Dem. | Princeton. |
| 5 | Ernest R. Ackerman* | Rep. | Plainfield. |
| 6 | Randolph Perkins* | Rep. | Woodcliff Lake. |
| 7 | George N. Seger | Rep. | Passaic. |
| 8 | Frank J. McNulty | Dem. | Newark. |
| 9 | Daniel F. Minahan† | Dem. | Orange. |
| 10 | Frederick R. Lehlbach* | Rep. | Newark. |
| 11 | John J. Eagan† | Dem. | Weehawken. |
| 12 | Charles F. X. O'Brien* | Dem. | Jersey City. |

NEW MEXICO.

*At Large.*

| | | | |
|---|---|---|---|
| | John Morrow | Dem. | Raton. |

NEW YORK.

| | | | |
|---|---|---|---|
| 1 | Robert L. Bacon | Rep. | Westbury. |
| 2 | John J. Kindred* | Dem. | Astoria. |
| 3 | George W. Lindsay | Dem. | Brooklyn. |
| 4 | Thomas H. Cullen* | Dem. | Brooklyn. |
| 5 | Loring M. Black, Jr. | Dem. | Brooklyn. |
| 6 | Charles I. Stengle | Dem. | Brooklyn. |
| 7 | John F. Quayle | Dem. | Brooklyn. |
| 8 | William E. Cleary† | Dem. | Brooklyn. |
| 9 | David J. O'Connell | Dem. | Brooklyn. |
| 10 | Emanuel Celler | Dem. | Brooklyn. |
| 11 | Daniel J. Riordan* | Dem. | New York City. |
| 12 | Samuel Dickstein | Dem. | New York City. |

NEW YORK—*Continued.*

| Dist. | Representatives. | Politics. | P.O. Address. |
|---|---|---|---|
| 13 | Chris. D. Sullivan* | Dem. | New York City. |
| 14 | Nathan D. Perlman* | Rep. | New York City. |
| 15 | John J. Boylan | Dem. | New York City. |
| 16 | W. Bourke Cockran* | Dem. | New York City. |
| 17 | Ogden L. Mills* | Rep. | New York City. |
| 18 | John F. Carew* | Dem. | New York City. |
| 19 | (Vacant) | | New York City. |
| 20 | Fiorello H. La Guardia† | Rep. | New York City. |
| 21 | Royal H. Weller | Dem. | New York City. |
| 22 | Anthony J. Griffin* | Dem. | New York City. |
| 23 | Frank Oliver | Dem. | Bronx. |
| 24 | James V. Ganly† | Dem. | Bronx. |
| 25 | J. Mayhew Wainwright | Rep. | Rye. |
| 26 | Hamilton Fish, Jr.* | Rep. | Garrison. |
| 27 | Charles B. Ward* | Rep. | Debruce. |
| 28 | Parker Corning | Dem. | Bethlehem. |
| 29 | James S. Parker* | Rep. | Salem. |
| 30 | Frank Crowther* | Rep. | Schenectady. |
| 31 | Bertrand H. Snell* | Rep. | Potsdam. |
| 32 | Luther W. Mott* | Rep. | Oswego. |
| 33 | Homer P. Snyder* | Rep. | Little Falls. |
| 34 | John D. Clarke* | Rep. | Fraser. |
| 35 | Walter W. Magee* | Rep. | Syracuse. |
| 36 | John Taber | Rep. | Auburn. |
| 37 | Gale H. Stalker | Rep. | Elmira. |
| 38 | Meyer Jacobstein | Dem. | Rochester. |
| 39 | Archie D. Sanders* | Rep. | Stafford. |
| 40 | S. Wallace Dempsey* | Rep. | Lockport. |
| 41 | Clarence MacGregor* | Rep. | Buffalo. |
| 42 | James M. Mead* | Dem. | Buffalo. |
| 43 | Daniel A. Reed* | Rep. | Dunkirk. |

NORTH CAROLINA.

| | | | |
|---|---|---|---|
| 1 | Hallett S. Ward* | Dem. | Washington. |
| 2 | Claude Kitchin* | Dem. | Scotland Neck. |
| 3 | Charles L. Abernethy* | Dem. | New Bern. |
| 4 | Edward W. Pou* | Dem. | Smithfield. |
| 5 | Charles M. Stedman* | Dem. | Greensboro. |
| 6 | Homer L. Lyon* | Dem. | Whiteville. |
| 7 | William C. Hammer* | Dem. | Ashsboro. |
| 8 | Robert L. Doughton* | Dem. | Laurel Springs. |
| 9 | Alfred L. Bulwinkle* | Dem. | Gastonia. |
| 10 | Zebulon Weaver* | Dem. | Asheville. |

NORTH DAKOTA.

| | | | |
|---|---|---|---|
| 1 | Olger B. Burtness* | Rep. | Grand Forks. |
| 2 | George M. Young* | Rep. | Valley City. |
| 3 | James H. Sinclair* | Rep. | Kenmare. |

OHIO.

| | | | |
|---|---|---|---|
| 1 | Nicholas Longworth* | Rep. | Cincinnati. |
| 2 | A. E. B. Stephens* | Rep. | North Bend. |
| 3 | Roy G. Fitzgerald* | Rep. | Dayton. |
| 4 | John L. Cable* | Rep. | Lima. |
| 5 | Charles J. Thompson* | Rep. | Defiance. |
| 6 | Charles C. Kearns* | Rep. | Batavia. |
| 7 | Charles Brand | Rep. | Urbana. |
| 8 | R. Clint Cole* | Rep. | Findlay. |
| 9 | Isaac R. Sherwood† | Dem. | Toledo. |
| 10 | Israel M. Foster* | Rep. | Athens. |
| 11 | Mell G. Underwood | Dem. | New Lexington. |
| 12 | John C. Speaks* | Rep. | Columbus. |
| 13 | James T. Begg* | Rep. | Sandusky. |
| 14 | Martin L. Davey† | Dem. | Kent. |
| 15 | C. Ellis Moore* | Rep. | Cambridge. |
| 16 | John McSweeney | Dem. | Wooster. |
| 17 | W. M. Morgan* | Rep. | Newark. |
| 18 | Frank Murphy* | Rep. | Steubenville. |
| 19 | John G. Cooper* | Rep. | Youngstown. |
| 20 | Charles A. Mooney† | Dem. | Cleveland. |
| 21 | Robert Crosser† | Dem. | Cleveland. |
| 22 | Theodore E. Burton* | Rep. | Cleveland. |

OKLAHOMA.

| | | | |
|---|---|---|---|
| 1 | Everett B. Howard | Dem. | Tulsa. |
| 2 | William W. Hastings† | Dem. | Tahlequah. |
| 3 | Charles D. Carter* | Dem. | Ardmore. |
| 4 | Tom McKeown† | Dem. | Ada. |
| 5 | F. B. Swank* | Dem. | Norman. |
| 6 | Elmer Thomas | Dem. | Medicine Park. |
| 7 | James V. McClintic* | Dem. | Snyder. |
| 8 | M. C. Garber | Rep. | Enid. |

OREGON.

| | | | |
|---|---|---|---|
| 1 | Willis C. Hawley* | Rep. | Salem. |
| 2 | Nicholas J. Sinnott* | Rep. | The Dalles. |
| 3 | Elton Watkins | Dem. | Portland. |

PENNSYLVANIA.

(*State redistricted.*)

| | | | |
|---|---|---|---|
| 1 | William S. Vare* | Rep. | Philadelphia. |
| 2 | George S. Graham* | Rep. | Philadelphia. |
| 3 | Harry C. Ransley* | Rep. | Philadelphia. |
| 4 | George W. Edmonds* | Rep. | Philadelphia. |
| 5 | James J. Connolly* | Rep. | Philadelphia. |
| 6 | George A. Welsh | Rep. | Philadelphia. |
| 7 | George P. Darrow* | Rep. | Philadelphia. |
| 8 | Thomas S. Butler* | Rep. | West Chester. |
| 9 | Henry W. Watson* | Rep. | Langhorne. |
| 10 | William W. Griest* | Rep. | Lancaster. |
| 11 | Laurence H. Watres | Rep. | Scranton. |
| 12 | John J. Casey† | Dem. | Wilkes-Barre. |
| 13 | George F. Brumm | Rep. | Minersville. |

PENNSYLVANIA—*Continued.*

| *Dist.* | *Representatives.* | *Politics.* | *P.O. Address.* |
|---|---|---|---|
| 14 | William M. Croll | Dem. | Reading. |
| 15 | Louis T. McFadden* | Rep. | Canton. |
| 16 | Edgar R. Kiess* | Rep. | Williamsport. |
| 17 | Herbert W. Cummings | Dem. | Sunbury. |
| 18 | Edward M. Beers | Rep. | Mount Union. |
| 19 | Frank C. Sites | Dem. | Harrisburg. |
| 20 | George M. Wertz | Rep. | Johnstown. |
| 21 | J. Banks Kurtz | Rep. | Altoona. |
| 22 | Samuel F. Glatfelter | Dem. | York. |
| 23 | William I. Swoope | Rep. | Clearfield. |
| 24 | Samuel A. Kendall* | Rep. | Meyersdale. |
| 25 | Henry W. Temple* | Rep. | Washington. |
| 26 | Thomas W. Phillips, Jr. | Rep. | Butler. |
| 27 | Nathan L. Strong* | Rep. | Brookville. |
| 28 | Harris J. Bixler* | Rep. | Johnsonburg. |
| 29 | Milton W. Shreve* | Rep. | Erie. |
| 30 | Everett Kent | Dem. | Bangor. |
| 31 | Adam M. Wyant* | Rep. | Greensburg. |
| 32 | Stephen G. Porter* | Rep. | Pittsburgh. |
| 33 | M. Clyde Kelly* | Rep. | Swissvale. |
| 34 | John M. Morin* | Rep. | Pittsburgh. |
| 35 | James M. Magee | Rep. | Pittsburgh. |
| 36 | Guy E. Campbell* | Rep. | Crafton. |

RHODE ISLAND.

| | | | |
|---|---|---|---|
| 1 | Clark Burdick* | Rep. | Newport. |
| 2 | Richard S. Aldrich | Rep. | Warwick. |
| 3 | Jeremiah E. O'Connell | Dem. | Providence. |

SOUTH CAROLINA.

| | | | |
|---|---|---|---|
| 1 | W. Turner Logan* | Dem. | Charleston. |
| 2 | James F. Byrnes* | Dem. | Aiken. |
| 3 | Fred H. Dominick* | Dem. | Newberry. |
| 4 | John J. McSwain* | Dem. | Greenville. |
| 5 | William F. Stevenson* | Dem. | Cheraw. |
| 6 | A. H. Gasque | Dem. | Florence. |
| 7 | Hampton P. Fulmer* | Dem. | Norway. |

SOUTH DAKOTA.

| | | | |
|---|---|---|---|
| 1 | C. A. Christopherson* | Rep. | Sioux Falls. |
| 2 | Royal C. Johnson* | Rep. | Aberdeen. |
| 3 | William Williamson* | Rep. | Oacoma. |

TENNESSEE.

| | | | |
|---|---|---|---|
| 1 | B. Carroll Reece* | Rep. | Butler. |
| 2 | J. Will Taylor* | Rep. | La Follette. |
| 3 | S. D. McReynolds | Dem. | Chattanooga. |
| 4 | Cordell Hull† | Dem. | Carthage. |
| 5 | Ewin L. Davis* | Dem. | Tullahoma. |
| 6 | Joseph W. Byrns* | Dem. | Nashville. |
| 7 | W. C. Salmon* | Dem. | Columbia. |
| 8 | Gordon Browning | Dem. | Huntingdon. |
| 9 | Finis J. Garrett* | Dem. | Dresden. |
| 10 | Hubert F. Fisher* | Dem. | Memphis. |

TEXAS.

| | | | |
|---|---|---|---|
| 1 | Eugene Black* | Dem. | Clarksville. |
| 2 | John C. Box* | Dem. | Jacksonville. |
| 3 | Morgan G. Sanders* | Dem. | Canton. |
| 4 | Sam Rayburn* | Dem. | Bonham. |
| 5 | Hatton W. Sumners* | Dem. | Dallas. |
| 6 | Luther A. Johnson | Dem. | Corsicana. |
| 7 | Clay Stone Briggs* | Dem. | Galveston. |

TEXAS—*Continued.*

| *Dist.* | *Representatives.* | *Politics.* | *P.O. Address.* |
|---|---|---|---|
| 8 | Daniel E. Garrett* | Dem. | Houston. |
| 9 | Joseph J. Mansfield* | Dem. | Columbus. |
| 10 | James P. Buchanan* | Dem. | Brenham. |
| 11 | Tom Connally* | Dem. | Marlin. |
| 12 | Fritz G. Lanham* | Dem. | Fort Worth. |
| 13 | Guinn Williams* | Dem. | Decatur. |
| 14 | Harry M. Wurzbach* | Rep. | Seguin. |
| 15 | John N. Garner* | Dem. | Uvalde. |
| 16 | C. B. Hudspeth* | Dem. | El Paso. |
| 17 | Thomas L. Blanton* | Dem. | Abilene. |
| 18 | Marvin Jones* | Dem. | Amarillo. |

UTAH.

| | | | |
|---|---|---|---|
| 1 | Don B. Colton* | Rep. | Vernal. |
| 2 | Elmer O. Leatherwood* | Rep. | Salt Lake City |

VERMONT.

| | | | |
|---|---|---|---|
| 1 | Frederick G. Fleetwood | Rep. | Morrisville. |
| 2 | Porter H. Dale* | Rep. | Island Pond. |

VIRGINIA.

| | | | |
|---|---|---|---|
| 1 | Schuyler Otis Bland* | Dem. | Newport News. |
| 2 | Joseph T. Deal* | Dem. | Norfolk. |
| 3 | Andrew J. Montague* | Dem. | Richmond. |
| 4 | Patrick Henry Drewry* | Dem. | Petersburg. |
| 5 | J. M. Hooker* | Dem. | Stuart. |
| 6 | Clifton A. Woodrum | Dem. | Roanoke. |
| 7 | Thomas W. Harrison* | Dem. | Winchester. |
| 8 | R. Walton Moore* | Dem. | Fairfax. |
| 9 | George C. Peery | Dem. | Tazewell. |
| 10 | Harry St. George Tucker* | Dem. | Lexington. |

WASHINGTON.

| | | | |
|---|---|---|---|
| 1 | John F. Miller* | Rep. | Seattle. |
| 2 | Lindley H. Hadley* | Rep. | Bellingham. |
| 3 | Albert Johnson* | Rep. | Hoquiam. |
| 4 | John W. Summers* | Rep. | Walla Walla. |
| 5 | J. Stanley Webster* | Rep. | Spokane. |

WEST VIRGINIA.

| | | | |
|---|---|---|---|
| 1 | Benj. L. Rosenbloom† | Rep. | Wheeling. |
| 2 | R. E. L. Allen | Dem. | Morgantown. |
| 3 | Stuart F. Reed* | Rep. | Clarksburg. |
| 4 | G. W. Johnson | Dem. | Parkersburg. |
| 5 | Thomas J. Lilly | Dem. | Hinton. |
| 6 | J. Alfred Taylor | Dem. | Fayetteville. |

WISCONSIN.

| | | | |
|---|---|---|---|
| 1 | Henry Allen Cooper* | Rep. | Racine. |
| 2 | Edward Voigt* | Rep. | Sheboygan. |
| 3 | John M. Nelson* | Rep. | Madison. |
| 4 | John C. Schafer | Rep. | Wauwatosa. |
| 5 | Victor L. Berger | Soc. | Milwaukee. |
| 6 | Florian Lampert* | Rep. | Oshkosh. |
| 7 | Joseph D. Beck* | Rep. | Viroqua. |
| 8 | Edward E. Browne* | Rep. | Waupaca. |
| 9 | George J. Schneider | Rep. | Appleton. |
| 10 | James A. Frear | Rep. | Hudson. |
| 11 | Hubert H. Peavey | Rep. | Washburn. |

WYOMING.

| | | | |
|---|---|---|---|
| | *At Large.* | | |
| | Charles E. Winter | Rep. | Casper. |

*Served in the Sixty-seventh Congress.

†Served in a previous Congress.

NOTE (as of Dec. 5, 1922)—The House of Representatives of the Sixty-eighth Congress, elected Nov. 7, 1922, consists of 435 members. There are 3 vacancies caused by the death of Representatives John I. Nolan, Rep. (Nov. 18, 1922), re-elected in the Fifth District of California; James R. Mann, Rep. (Nov. 30, 1922), re-elected in the Second District of Illinois; and Samuel Marx, Dem. Nov. 30, elected in the Nineteenth District of New York. The composition of the House is: Republicans, 223; Democrats, 206; Independent, 1; Farmer-Labor, 1; Socialist, 1; vacant, 3. Salary of a Representative is $7,500 a year; of the Speaker, $12,000.

## FEDERAL TRADE COMMISSION.

(Washington, D. C.)

*Commissioners* — (Chairman) Victor Murdock, John F. Nugent, Huston Thompson, Vernon W. Van Fleet, Nelson B. Gaskill.

*Secretary*—Otis B. Johnson.

*Legal Division*—(Chief Counsel) Wm. H. Fuller; (Chief Examiner) Millard F. Hudson.

*Economic Division*—(Chief Economist) Francis Walker.

*Export Trade Division*—(Chief) W. F. Notz.

*Administrative Division*—(Assistant Secretary) C. G. Duganne; (Chief of Personnel) Luther H. Waring; (Chief, Publications) J. W. Burdette.

## UNITED STATES RAILROAD ADMINISTRATION.

*Director Gen. and Agent of the President*—James C. Davis; *Ass't to the Dir. Gen. and Dir. of Div., Liq. and Claims*—Everett M. Alvord; *Dir. of Fin.*—Douglas C. Porteous; *Compt.*—L. J. Tracy; *Gen. Sol.*—A. A. McLaughlin.

It is expected that the Railroad Administration will be in operation the greater part of the year 1923.

## UNITED STATES RAILROAD LABOR BOARD.

(Established April 13, 1920, under the Transportation Act; Headquarters, Chicago.)

*For the Public Group*—Ben W. Hooper (Chairman), ex-Governor of Tennessee; R. M. Barton, of Tennessee, formerly a member of the Court of Appeals; G. Wallace W. Hanger (Vice Chairman), of the District of Columbia, formerly Chief Clerk of what is now the United States Bureau of Labor Statistics, and since 1913 Assistant Commissioner of the United States Board of Mediation and Conciliation.

*For the Labor Group*—Albert Phillips, of California, Vice President Brotherhood of Locomotive Firemen and Enginemen, of group 1; A. O. Wharton, of Missouri, of the Railway Employes Department of the American Federation of Labor, and Walter L. McMenimen, of Massachusetts, ex-President Brotherhood of Railroad Trainmen.

*For the Management*—Horace Baker, of Ohio, formerly General Manager of the Cincinnati, New Orleans & Texas Pacific Railway Co.; J. H. Elliott, formerly General Manager of the Texas & Pacific Railway Co.; and Samuel Higgins, of New York, ex-General Manager New Haven Road.

*Secretary*—L. M. Parker.

## DEMOCRATIC NATIONAL COMMITTEE.

(As of Dec. 1, 1922.)

Permanent Headquarters, 441 Woodward Building, Washington, D. C.

*Chairman*—Cordell Hull. *Treas.*—Wilbur W. Marsh. *Exec. Sec.*—Burt New. *Vice Chairmen*—J. Bruce Kremer, Samuel B. Amidon, Miss Charl Williams, Mrs. Emily N. Blair. *Chairman Fin. Com.*—Harrison Nesbit. *Director of Publicity*—Richard Linthicum.

Alabama—Walter L. Moore, Birmingham; Mrs. John D. McNeel, 1490 Milner Crescent, Birmingham.

Arizona—W. L. Barnum, Phoenix; Mrs. B. J. McKinney, Tucson.

Arkansas—Vincent M. Miles, Fort Smith; Mrs. James D. Head, Texarkana.

California—Isidore B. Dockweiler, Los Angeles; Mrs. Chas. F. Donohoe, Oakland.

Colorado—Miles G. Saunders, Pueblo; Mrs. Gertrude A. Lee, Denver.

Connecticut—Homer S. Cummings, Stamford; Miss Caroline Ruutz-Rees, Greenwich.

Delaware—Andrew C. Gray, Wilmington; Miss Lena Evans, Newark.

Florida—J. T. G. Crawford, Jacksonville; Mrs. Lois E. Mayes, Pensacola.

Georgia—Clark Howell, Atlanta; Mrs. F. I. McIntyre, Savannah.

Idaho—Robert H. Elder, Coeur d'Alene; Theresa M. Graham, Coeur d'Alene.

Illinois—Charles Boeschenstein, Edwardsville; Mrs. A. L. Smith, Chicago.

Indiana—Chas. A. Greathouse, Indianapolis; Mrs. Bessie L. Riggs, Sullivan.

Iowa—Wilbur W. Marsh, Waterloo; Miss A. B. Lawther, Dubuque.

Kansas—Samuel B. Amidon, Wichita; Mrs. Florence G. Farley, Wichita.

Kentucky—Johnson N. Camden, Versailles; Mrs. Campbell Cantrill, Washington, D. C.

Louisiana—Samuel B. Hicks, Shreveport; Mrs. J. E. Friend, New Orleans.

Maine—D. J. McGillicuddy, Lewiston; Mrs. G. M. Pattangall, Augusta.

Maryland—John W. Smith, Snow Hill; Mrs. Julia Hamilton Briscoe, Hagerstown.

Massachusetts—Edward W. Quinn, Cambridge; Mrs. M. F. Sullivan, Fall River.

Michigan—Judge William F. Connolly, Detroit; Mrs. L. C. Boltwood, Grand Rapids.

Minnesota—Howard Everett, St. Paul; Mrs. Peter Olesen, Cloquet.

Mississippi—O. G. Johnson, Clarksdale; Miss Henrietta Mitchell, Jackson.

Missouri—Edward F. Goltra, St. Louis; Mrs. Emily Newell Blair Joplin.

Montana—J. Bruce Kremer, Butte; Mrs. R. R. Purcell, Helena.

Nebraska—W. H. Thompson, Grand Island; Dr. Jennie Callfas, Omaha.

Nevada—Samuel Pickett, Reno; Mrs. James D. Finch, Reno.

New Hampshire—Robert C. Murchie, Concord; Dorothy B. Jackson, Concord.

New Jersey—Robert S. Hudspeth, Jersey City; Mrs. Jas J. Billington, Jersey City.

New Mexico—Arthur Seligman, Santa Fe; Mrs. W. F. Kirby, Tucumcari.

New York—Norman E. Mack, Buffalo; Miss Elisabeth Marbury, New York City.

N. Carolina—Angus W. McLean, Lamberton; Miss Mary O. Graham, Raleigh.

North Dakota—H. H. Perry, Ellendale; Mrs. S. Johnson, Grand Forks.

Ohio—George White, Marietta; Mrs. Bernice S. Pyke, Cleveland.

Oklahoma—George L. Bowman, Kingfisher; Mrs. D. A. McDougal, Sapulpa.

Oregon—Dr. J. W. Morrow, Portland; Mrs. Rose G. Schieffelin, Medford.

Pennsylvania—Joseph F. Guffey, Pittsburgh; Miss Mary Archer, Reading.

Rhode Island—Patrick H. Quinn, Providence; Mrs. Robert E. Newton, Providence.

S. Carolina—John Gary Evans, Spartanburg; Mrs. Leroy Springs, Lancaster.

S. Dakota—James Mee, Centerville; Mrs. William Hickey, Sioux Falls.

Tennessee—Cordell Hull, Carthage; Miss Charl Williams, Memphis.

Texas—Thomas B. Love, Dallas.

Utah—James H. Moyle, Salt Lake; Mrs. Weston Vernon, Logan.

Vermont—Frank H. Duffey, Rutland; Mrs. C. M. Brislin, Rutland.

Virginia—Carter Glass, Lynchburg; Mrs. Beverly H. Munford, Richmond.

Washington—A. R. Titlow, Tacoma; Mrs. E. D. Christian, Spokane.

W. Virginia—C. W. Osenton, Fayetteville; Mrs. Rose McGraw de Berriz, Grafton.

Wisconsin—Joseph Martin, Green Bay; Mrs. Gertrude Bowler, Sheboygan.

Wyoming—P. J. Quealy, Kemmerer; Mrs. R. D. Hawley, Douglas.

Alaska—L. J. Donohoe, Cordova; Mrs. John W. Troy, Juneau.

Dis. of Col.—John F. Costello, Washington, D. C.; Mrs. T. F. Walsh, Washington, D. C.

Hawaii—John H. Wilson, Honolulu; Mrs. L. L. McCandless, Honolulu.

Philippines—Robert E. Manly, Nega Camerines.

Porto Rico—Henry W. Dooley, San Juan; Miss Edmonia Martin, San Juan.

Canal Zone—M. A. Otero, Ancon; Mrs. D. F. Reeder, Ancon.

## DEMOCRATIC STATE CHAIRMEN.

Alabama—James H. Webb, Mobile, Antwerp Bldg.

Arizona—Vernon, Vaughn, Phoenix.

Arkansas—William V. Tompkins, Prescott.

California—Claude F. Birkitt, San Francisco.

Colorado—Raymond Miller, Denver, Albany Hotel.

Connecticut—Edward M. Yoemans, Hartford.

Delaware—Dr. W. F. Hoey, Frederica.

Florida—Robert E. Davis, Gainesville.

Georgia—W. J. Vereen, Moultrie.

Idaho—William Hornibrook, Boise, 316-318 Yates Bldg.

Illinois—Thomas F. Donovan, Joliet (Hdqs. Rm. 304, Sherman Hotel, Chicago).

Indiana—Walter S. Chambers, Newcastle (Hdqs. Hotel Denison, Indianapolis).

Iowa—E. J. Feuling, Des Moines, 309 Polk Bldg.

Kansas—J. J. Wilson, Moran (Hdqs. 107 W. 6th St., Topeka).

Kentucky—Charles A. Hardin, Harrodsburg (Hdqs. Hotel Seelbach, Louisville).

Louisiana—Frank J. Looney, Shreveport.

Maine—Dan. W. Cony, Augusta, 259 Water St.

Maryland—J. Hubert Wade, Baltimore, Royal Arcanum Bldg.

Massachusetts—Arthur Lyman, Boston, Rm. 41, 75 State St.

Michigan—William A. Comstock, Detroit, 604 Farwell Bldg.

Minnesota—Joseph Wolf, Staples (Hdqs. West Hotel, Minneapolis).

Mississippi—Robert Powell, Jackson.

Missouri—William L. Igoe, St. Louis (Hdqs. 616 Central Trust Bldg., Jefferson City).

Montana—J. E. Erickson, Kalispell.

Nebraska—T. S. Allen, Lincoln.

Nevada—William McKnight, Reno, Fordonia Bldg.

New Hampshire—Robert Jackson, Concord.

New Jersey—Harry Heher, Trenton, Commonwealth Bldg.

New Mexico—George H. Hunker, East Las Vegas.

New York—Herbert C. Pell, Jr., New York, 617 Fifth Avenue.

North Carolina—J. D. Norwood, Salisbury.

North Dakota—G. S. Wooledge, Minot.

Ohio—W. W. Durbin, Kenton (Hdqs. 709 Hartman Bldg., Columbus).

Oklahoma—Ed. L. Semans, Oklahoma City, Skirvin Hotel.

Oregon—Dr. C. J. Smith, Portland, 707 Broadway Bldg.

Pennsylvania—Austin E. McCullough, Lancaster (Hdqs. 6 Market Sq., Harrisburg).

Rhode Island—George Hurley, Providence, 908 Union Trust Bldg.

South Carolina—Willie Jones, Columbia, Palmetto Nat'l Bank Bldg.

South Dakota—W. W. Howes, Wolsey.

Tennessee—Joseph W. Byrns, Nashville, Maxwell House.

Texas—Frank C. Davis, San Antonio, Hicks Bldg.

Utah—David C. Dunbar, Salt Lake City.

Vermont—Park H. Pollard, Proctorville.

Virginia—H. F. Byrd, Winchester.

Washington—Geo. F. Christensen, Stevenson.

West Virginia—R. F. Dunlap, Hinton.

Wisconsin—John P. Hume, Milwaukee, 510 Trust Company Bldg.

Wyoming—Dr. J. R. Hylton, Douglas.

## REPUBLICAN NATIONAL COMMITTEE.

(Headquarters—New York and Chicago.)

*Chairman*—John T. Adams, Iowa. *Vice Chairman*—Ralph E. Williams, Ore. *Ass't. Vice Chairman*—Mrs. Leonard Woods, Penn. *Sec.*—George B. Lockwood, Ind. *Ass't. Sec*—Mrs. Christine Bradley Smith, Ky. *Treas.*—Fred W. Upham, Ill. *Asst. Treas.*—James G. Blaine, Jr., N. Y. *Sergt.-at-Arms*—Edward B. Thayer, Ind.

EXECUTIVE COMMITTEE. *Chairman*—John T. Adams, Iowa. *Vice Chairman*—Mrs. Harriet Taylor, Upton, O.; Harry M. Daugherty, O.; Mrs. Katherine Philips, Edson, Calif.; Mrs. Manley L. Fossen, Minn.; John W. Hart, Idaho; Will H. Hays, Ind.; Charles D. Hilles, N. Y. C.; R. B. Howell, Neb.; Mrs. Jeannette A. Hyde, Utah; Mrs. Henrietta L. Livermore, N. Y.; George B. Lockwood, Ind.; Mrs. Medill McCormick, Ill.; Raymond Robins, Ill.; Mrs. Corinne Roosevelt Robinson, N. Y.; Mrs. Christine Bradley South, Ky.; Fred W. Upham, Ill.; John W. Weeks, Mass.; Ralph E. Williams, Ore.

### NATIONAL COMMITTEEMEN.

Alabama—Oliver D. Street, Guntersville.
Arizona—Andrew Baumert, Jr., Phoenix.
Arkansas—H. L. Remmel, Little Rock.
California—Wm. H. Crocker, San Francisco.
Colorado—John F. Vivian, Golden.
Connecticut—J. Henry Roraback, Hartford.
Delaware—T. Coleman du Pont, Wilmington.
Florida—George W. Bean, Tampa.
Georgia—Henry Lincoln Johnson, Atlanta.
Idaho—John W. Hart, Rigby.
Illinois—Lawrence Y. Sherman, Springfield.
Indiana—Joseph B. Kealing, Indianapolis.
Iowa—John T. Adams, Dubuque.
Kansas—David W. Mulvane, Topeka.
Kentucky—Chesley H. Searcy, Louisville.
Louisiana—Emile Kuntz, New Orleans.
Maine—Guy P. Gannett, Augusta.
Maryland—William P. Jackson, Salisbury.
Massachusetts—John W. Weeks, West Newton.
Michigan—Fred M. Warner, Farmington.
Minnesota—I. A. Caswell, Anoka.
Mississippi—M. J. Mulvihill, Vicksburg.
Missouri—Jacob L. Babler, St. Louis.
Montana—O. H. P. Shelley, Helena.
Nebraska—R. B. Howell, Omaha.
Nevada—George Wingfield, Reno.
New Hampshire—Fred. W. Estabrook, Nashua.
New Jersey—Hamilton F. Kean, Elizabeth.
New Mexico—H. O. Bursum, Socorro.
New York—Charles D. Hilles, New York City.
North Carolina—Ch. A. Reynolds, Winston-Salem.
North Dakota—Gunder Olson, Grafton.
Ohio—R. K. Hynica, Cincinnati.
Oklahoma—J. A. Harris, Wagoner.
Oregon—R. E. Williams, Portland.
Pennsylvania—Geo. N. Pepper, Philadelphia.
Rhode Island—Frederick S. Peck, Providence.
South Carolina—Joseph W. Tolbert, Greenwood.
South Dakota—Willis C. Cook, Sioux Falls.
Tennessee—John W. Overall, Nashville.
Texas—H. F. MacGregor, Houston.
Utah—Ernest Bamberger, Salt Lake City.
Vermont—Earle S. Kinsley, Rutland.
Virginia—C. B. Slemp, Big Stone Gap.
Washington—Guy E. Kelly, Tacoma.
West Virginia—Virgil L. Highland, Clarksburg.
Wisconsin—Alfred T. Rogers, Madison.
Wyoming—Patrick Sullivan, Casper.
Dist. of Columbia—E. F. Colladay, Washington.
Alaska—J. C. McBride, Juneau.
Philippine Islands—Henry B. McCoy, Manila.
Porto Rico—Robert H. Todd, San Juan.
Hawaii—Robert W. Shingle, Honolulu.

### REPUBLICAN STATE CHAIRMEN.

Alabama—James M. Atkin, Heflin.
Arizona—Judge P. D. Overfield, Casa Grande.
Arkansas—Harmon L. Remmel, Little Rock.
California—Albert E. Boynton, Palace Hotel, San Francisco.
Colorado—George H. Shaw, Fort Collins.
Connecticut—J. Henry Roraback, Canaan.
Delaware—A. R. Benson, Dover.
Florida—Daniel T. Gerow, Jacksonville.
Georgia—J. L. Philips, Thomasville.
Idaho—I. H. Nash, Boise.
Illinois—Walter Rosenfield, Rock Island.
Indiana—Lawrence Lyons, Severin Hotel, Indianapolis.
Iowa—B. B. Burnquist, Fort Dodge.
Kansas—Wilbur Hawk, Atchison.
Kentucky—R. W. Hunter, Louisville.
Louisiana—Dr. David A. Lines, 1940 No. Rampart St., New Orleans.
Maine—Robert J. Peacock, Lubec.
Maryland—Galen L. Tait, Federal Building, Baltimore.
Massachusetts—Frank H. Foss, Fitchburg.
Michigan—Burt D. Cady, Port Huron.
Minnesota—Charles R. Adams, Minneapolis.
Mississippi—M. H. Daily, Jackson.
Missouri—Dr. E. B. Clements, Macon.
Montana—J. D. Scanlon, Miles City.
Nebraska—E. B. Perry, Lincoln.
Nevada—S. E. Ross, Reno.
New Hampshire—Dwight Hall, Dover.
New Jersey—E. C. Stokes, Trenton.
New Mexico—O. L. Philips, Albuquerque.
New York—George K. Morris, Amsterdam.
North Carolina—Wm. G. Bramham, Durham.
North Dakota—Burleigh F. Spalding, Fargo.
Ohio—Charles W. Montgomery, Newark.
Ohio (Exec.)—W. H. Miller, Columbus.
Oklahoma—A. C. Alexander, Oklahoma City.
Oregon—Walter L. Tooze, Jr., McMinnville.
Pennsylvania—W. Harry Baker, 506 So. Broad St., Philadelphia.
Rhode Island—J. P. Burlingame, Providence.
South Carolina—Joseph W. Tolbert, Greenwood.
South Dakota—George Wright, Huron.
Tennessee—Joe Brown, Cookeville.
Texas—R. B. Creager, Brownsville.
Utah—Carl Marcusen, Salt Lake City.
Vermont—J. E. Piddock, Saxtons River.
Virginia—Joseph L. Crupper, Falls Church.
Washington—Charles Hebbard, Spokane.
West Virginia—M. Z. White, Williamson.
Wisconsin—Robert M. LaFollette, Jr., Madison.
Wyoming—P. C. Spencer, Cheyenne.
District of Columbia—William T. Galliher, American Nat'l Bank, Washington.

## BOARD OF U. S. GENERAL APPRAISERS.

(641 Washington Street, New York City.)

Jerry B. Sullivan, *President*; DeWitt P. Dutcher, *Chief Clerk*.

**Board 1**—Chas. P. McClelland of New York, *Chairman*; Jerry B. Sullivan of Iowa and Geo. Stewart Brown of Maryland.

**Board 2**—I. F. Fischer of New York, *Chairman*; William B. Howell of New Jersey and George E. Weller of New York.

**Board 3**—Byron S. Waite of Michigan, *Chairman*; Eugene G. Hay of Minnesota and William C. Adamson of Georgia.

## FEDERAL BOARD FOR VOCATIONAL EDUCATION.

This board is composed of the Secretaries of Labor (Chairman), Agriculture, and Commerce, the United States Commissioner of Education, Harry L. Fidler (Vice Chairman) representing labor, Calvin F. McIntosh representing agriculture, E. T. Franks, representing commerce and manufactures. Director, J. C. Wright; Secretary and Chief Clerk, E. Jos. Aronoff. Headquarters, Washington, D. C. There are no district offices.

## ALIEN PROPERTY CUSTODIAN.

(16th and P Sts., N. W., Washington.)

In the correspondence of the Alien Property Custodian the word "enemy" is used as meaning "enemy" or "ally of enemy," as defined by the Trading With the Enemy Act.

*Alien Prop. Cus.*—Col. Thomas W. Miller; *Gen. Coun.*—Wm. W. Wilson; *Ass't Gen. Coun.*—Sewell W. Abbott; *Man. Dir.*—George E. Williams; *Sec.*—Fred H. Wilson.

## PUBLIC DEBT OF THE UNITED STATES.

(000 omitted in all except per capita columns.)

| YEAR (Fiscal) | Public Debt, Less Cash in Treasury July 1. Total. | Per Cap. | Interest Bearing Debt July 1. | Annual Interest Charge. | YEAR (Fiscal) | Public Debt, Less Cash in Treasury July 1. Total. | Per Cap. | Interest Bearing Debt July 1 | Annual Interest Charge. |
|---|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dolls.* | *Dollars.* | *Dollars.* | | *Dollars.* | *Dolls.* | *Dollars.* | *Dollars.* |
| 1800.... | 82,976 | 15.63 | 82,976 | 3,403 | 1906.... | 964,436 | 11.25 | 895,159 | 23,248 |
| 1810.... | 53,173 | 7.34 | 53,173 | 3,164 | 1907.... | 878,597 | 10.06 | 894,834 | 21,629 |
| 1820.... | 91,015 | 9.44 | 91,015 | 5,151 | 1908.... | 938,132 | 10.55 | 897,504 | 21,101 |
| 1830.... | 48,565 | 3.77 | 48,565 | 1,912 | 1909.... | 1,023,861 | 11.31 | 913,317 | 21,276 |
| 1840.... | 3,575 | .21 | 3,573 | 174 | 1910.... | 1,046,449 | 11.35 | 913,317 | 21,276 |
| 1850.... | 63,453 | 2.74 | 63,153 | 3,782 | 1911.... | 1,015,784 | 10.83 | 915,353 | 21,337 |
| 1860.... | 59,964 | 1.91 | 64,641 | 3,444 | 1912.... | 1,027,575 | 10.77 | 963,777 | 22,787 |
| 1865.... | 2,674,815 | 76.98 | 2,221,312 | 137,742 | 1913.... | 1,028,564 | 10.60 | 965,707 | 22,835 |
| 1870.... | 2,331,179 | 60.46 | 2,046,456 | 118,785 | 1914.... | 1,027,257 | 10.41 | 967,953 | 22,891 |
| 1880.... | 1,919,327 | 38.27 | 1,723,993 | 79,634 | 1915.... | 1,090,148 | 10.87 | 969,759 | 22,937 |
| 1890.... | 800,784 | 14.15 | 725,313 | 29,417 | 1916.... | 1,006,281 | 9.88 | 971,562 | 23,085 |
| 1900.... | 1,107,711 | 14.58 | 1,023,479 | 33,545 | 1917.... | 1,908,635 | 18.44 | 2,712,549 | 83,625 |
| 1901.... | 1,044,739 | 13.46 | 987,141 | 29,789 | 1918.... | 10,924,281 | 103.92 | 11,985,882 | 466,257 |
| 1902.... | 969,457 | 12.24 | 931,070 | 27,543 | 1919.... | 24,479,302 | 229.34 | 25,234,496 | 1,052,334 |
| 1903.... | 925,012 | 11.44 | 914,541 | 25,541 | 1920.... | 24,330,890 | 228.64 | 24,061,095 | 1,016,592 |
| 1904.... | 967,232 | 11.73 | 895,157 | 24,177 | 1921.... | 23,427,772 | 216.75 | 23,738,900 | 1,017,500 |
| 1905.... | 989,867 | 11.77 | 895,158 | 24,177 | 1922.... | 22,691,276 | 206.77 | 22,710,338 | 989,485,410 |

For years 1800 to 1850 the figures for interest-bearing debt include the total public debt as of January 1.

Interest charges and interest per capita are for fiscal years.

## REDUCTION IN THE UNITED STATES PUBLIC DEBT.

In a statement on Nov. 3 dealing with the status of the debt of the United States on Oct. 31, 1922, Secretary of the Treasury Mellon shows that except for the temporary increase of $265,000,000 in the debt during October, uninterrupted progress has been made in reducing the debt from the peak registered on Aug. 31, 1919, viz., $26,596,701,648. The following is Secretary Mellon's statement:

"The preliminary statement of the public debt on Oct. 31, 1922, shows the results of the refunding issue of Treasury bonds on Oct. 16, 1922, and at the same time emphasizes the progress which has been made by the Treasury in the orderly funding and gradual liquidation of the public debt, particularly the short-dated debt.

"Ever since the war debt reached its peak, on Aug. 31, 1919, the Treasury has made almost uninterrupted progress in its reduction, though, necessarily, there are fluctuations from time to time as a result of borrowings for refunding purposes and temporary deficiencies in the current revenues. This was the case, for example, in October, when there was a temporary increase in the public debt as a result of the refunding operations on Oct. 16 and the excess of current expenditures, arising chiefly from heavy payments of interest on the public debt.

"Income and profits taxes, which constitute the Government's heaviest receipts, are paid quarterly, in March, June, September and December of each year, while interest payments, which constitute the largest single item of Government expense, fall chiefly in March, April, May, June, September, October, November, December. In these circumstances one month's operations necessarily give a distorted picture, and it takes at least a full quarter, or even a full year, in order to get a correct view of the Government's finances.

"The following table shows the gross public debt (cents omitted) on the basis of daily Treasury statements for each quarter from Aug. 31, 1919, when the debt reached its peak, to Oct. 31, 1922, and indicates how regularly the debt reduction has progressed:

| | *Total Gross Debt.* | *Total Gross Debt, Less Net Balance in General Fund.* |
|---|---|---|
| 1919—Aug. 31.... | $26,596,701,648 | $25,478,592,113 |
| Dec. 31.... | 25,837,078,807 | 24,849,663,347 |
| 1920—Mar. 31.... | 24,698,671,584 | 24,447,049,046 |
| June 30.... | 24,299,321,467 | 23,941,619,784 |
| Sept. 30.... | 24,087,356,128 | 23,652,395,078 |
| Dec. 31.... | 23,982,224,168 | 23,477,272,773 |
| 1921—Mar. 31.... | 23,980,104,397 | 23,365,510,971 |
| June 30.... | 23,977,450,552 | 23,427,772,446 |
| Sept. 30.... | 23,924,108,125 | 23,166,432,894 |
| 1922—Dec. 31.... | 23,438,984,351 | 22,951,216,822 |
| Mar. 31.... | 23,144,616,493 | 22,773,214,705 |
| June 30.... | 22,963,381,708 | 22,691,276,195 |
| Sept. 30.... | 22,812,407,791 | 22,555,568,061 |
| Oct. 31.... | 23,077,783,935 | 22,665,438,396 |

"The progress made in dealing with the short-dated debt has been still more striking. On April 30, 1921, when the Treasury first announced its refunding program, there was over $7,500,000,000 of debt maturing before the end of the present fiscal year. By Oct. 31, 1922, that is to say, eighteen months later, about $4,500,000,000 had already been retired or refunded, leaving about $3,000,000,000 to be refinanced during the balance of the year.

"Treasury certificates outstanding all have tax maturities, and the total is now less than $1,000,000,000, the lowest figure for several years back.

"As for the Dec. 15 maturities of certificates and called Victory notes, the refunding operations have already reduced them to manageable proportions, and there will be further retirements between now and Dec. 15 out of existing Treasury balances, pursuant to general offers already made to redeem called Victory notes and Dec. 15 certificates before maturity.

"Against its December maturities, the Treasury will receive, it is estimated, about $275,000,000 in income and profits taxes, which will still further reduce the amount requiring to be refunded. There is every assurance that the refunding which remains to be accomplished will be completed without strain on the country's financial machinery and without disturbance of the market for outstanding securities."

The United States Treasury Department on Oct. 16, 1922, offered for public subscription 4¼ per cent. United States Treasury bonds of 1947-52. The cash subscriptions totalled $1,899,851,900. Subscriptions aggregating $252,060,900 were also received in the form of exchanges of 4¾ per cent. Victory notes and Dec. 15 Treasury certificates, making the total subscription for the offering in excess of $1,651,900,000. The exchange subscriptions were allotted in full. All cash subscriptions for amounts not exceeding $10,000 were also allotted in full. The others were scaled; subscriptions for over $10,000 but not exceeding $50,000, 40 per cent.; over $50,000 but not exceeding $100,000, 30 per cent.; over $100,000 but not exceeding $500,000, 20 per cent.; over $500,000 but not exceeding $1,000,000, 15 per cent.; over $1,000,000, 10 per cent.

The successful consummation of this large financial operation marks the second phase in the execution of the loan refunding policy inaugurated in 1921 by the present Administration. The first phase may be said to cover the period from April 30, 1921, when the Treasury first announced its refunding program to the close of September of the present year, during which the short-term debt, *i. e.*, the debt maturing within the next two years from the beginning of the period, was reduced from about $7,500,000,000 to about $3,500,000,000 through refunding of about $2,743,000,000 into Treasury notes, with maturities spread over the period from June 15, 1924, to Sept. 15, 1926, and the retirement of the balance. The second phase of the refunding program may be said to have been entered with the placing of the present long-term refunding loan, which matures in October, 1952, but may be redeemed on or after Oct. 15, 1947, on four months' notice.

## UNITED STATES BUDGETS, 1923 AND 1924.

EXPENDITURES.

| By Fiscal Years. | Estimated, 1924 | Estimated, 1923 | Actual, 1922. |
|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* |
| Expenditures (ordinary): Legislative | 14,139,128.00 | 14,289,364.00 | 16,725,922.69 |
| Executive office | 378,280.00 | 364,360.00 | 216,534.74 |
| Independent offices—Alien Property Custodian | 275,000.00 | 300,000.00 | 363,965.02 |
| Alaska relief funds | 20,000.00 | 20,000.00 | 14,877.22 |
| Anthracite and Bituminous Coal Commission | 10,000.00 | 190,000.00 | .68 |
| Arlington Memorial Bridge Commission | 10,000.00 | 12,000.00 | ..... |
| Board of Mediation and Conciliation | ..... | ..... | 6,657.29 |
| Bureau of Efficiency | 141,850.00 | 149,050.00 | 139,667.78 |
| Civil Service Commission | 864,197.00 | 760,000.00 | 665,978.64 |
| Commission of Fine Arts | 5,937.00 | 6,417.00 | 10,544.95 |
| Committee on Public Information | ..... | ..... | 1,248.69 |
| Council of National Defense | ..... | ..... | 2,689,005.88 |
| Employees' Compensation Commission | 3,160,000.00 | 3,075,000.00 | 18,567,989.79 |
| Federal Board for Vocational Education | 6,146,187.00 | 5,604,530.00 | ..... |
| Federal Fuel Distribution | ..... | 100,000.00 | ..... |
| Federal Narcotic Control Board | ..... | 2,500.00 | ..... |
| Federal Power Commission | 59,903.00 | 60,000.00 | 36,992.53 |
| Federal Reserve Board | ..... | ..... | 4,456,034.14 |
| Federal Trade Commission | 940,000.00 | 900,000.00 | 953,537.94 |
| General Accounting Office | 2,994,000.00 | 3,500,000.00 | 2,537,374.25 |
| Grant Memorial Commission | 1,800.00 | ..... | ..... |
| Lincoln Memorial Commission | 3,600.00 | ..... | ..... |
| Perry's Victory Memorial Commission | 75,000.00 | ..... | ..... |
| United States Housing Corporation | 814,250.00 | 971,900.00 | 1,387,240.06 |
| Interdepartmental Social Hygiene Board | ..... | ..... | 412,468.16 |
| Interstate Commerce Commission | 4,468,000.00 | 5,200,000.00 | 5,391,271.55 |
| Interstate Governmental Commission, Colorado Riv | ..... | 10,000.00 | ..... |
| National Advisory Committee for Aeronautics | 250,000.00 | 215,000.00 | 175,034.55 |
| Railroads | 40,183,847.00 | 234,960,000.00 | *125,232,444.02* |
| Railroad Labor Board | 330,000.00 | 335,000.00 | 402,611.91 |
| Smithsonian Institution | 620,000.00 | 736,000.00 | 835,497.54 |
| State, War, and Navy Dept. Buildings | 2,196,000.00 | 2,705,000.00 | 1,639,607.86 |
| Tariff Commission | 650,000.00 | 340,000.00 | 318,612.55 |
| U. S. Geographic Board | 2,000.00 | 1,000.00 | ..... |
| U. S. Shipping Board | 30,388,000.00 | 38,508,515.00 | 86,145,816.32 |
| U. S. Veterans' Bureau | 451,573,000.00 | 464,184,959.00 | 408,149,678.86 |
| War Finance Corporation | *60,000,000.00* | *125,000,000.00* | ..... |
| Miscellaneous items | ..... | ..... | 1,570,715.77 |
| District of Columbia | 23,800,000.00 | 24,800,000.00 | 23,739,685.60 |
| Departmental—Dept. of Agriculture | 154,100,440.00 | 156,586,899.00 | 143,984,462.69 |
| Dept. of Commerce | 18,678,000.00 | 21,495,000.00 | 21,170,146.99 |
| Interior Dept.—Civil | 35,996,953.00 | 38,375,511.00 | 38,295,629.54 |
| Indian Service | 32,920,000.00 | 32,132,000.00 | 38,500,413.08 |
| Pensions (includes examining fees) | 250,924,000.00 | 275,758,000.00 | 252,576,847.70 |
| Dept. of Justice | 18,329,000.00 | 18,364,484.00 | 17,850,283.55 |
| Dept. of Labor | 5,983,775.00 | 6,770,120.00 | 6,229,602.39 |
| Navy Dept.—Pay of the Navy | 119,000,000.00 | 120,800,000.09 | 170,660,523.38 |
| Increase of the Navy | 29,000,000.00 | 53,200,000.00 | 143,028,025.57 |
| Marine Corps | 24,990,000.00 | 25,749,748.00 | 35,448,401.92 |
| All other | 149,030,637.00 | 149,442,521.00 | 109,657,861.75 |
| Post Office Dept., incl. postal deficiencies, but excl. postal service payable from postal revenue | *952,440.00* | 31,517,170.00 | 67,824,070.61 |
| State Dept. | 15,245,724.00 | 15,960,089.00 | 10,359,591.47 |
| Treasury Dept.—Refunds of revenue | 37,709,093.00 | 141,421,090.00 | 87,663,614.67 |
| Collecting the revenue | 48,978,933.00 | 50,238,623.00 | 44,051,906.93 |
| Public bldgs., construct'n, repairs, equip., operat'n | 11,031,360.00 | 22,289,620.00 | 21,077,036.02 |
| All other | 56,837,148.00 | 69,989,794.00 | 109,264,966.15 |
| War Dept.—Pay of the army | 123,748,830.00 | 128,000,000.00 | 50,692,348.10 |
| Panama Canal, operation and maintenance | 6,340,000.00 | 6,900,000.00 | 2,791,035.40 |
| Rivers and harbors | 40,000,000.00 | 48,000,000.00 | 43,262,427.26 |
| All other | 146,737,802.00 | 150,038,598.00 | 305,312,638.86 |
| Interest on the public debt | 950,000,000.00 | 1,100,000,000.00 | 989,485,409.93 |
| Investment of trust funds: Gov't life insurance fund | 30,417,000.00 | 27,183,000.00 | 24,578,319.36 |
| Civil service retirement and disability fund | 6,000,000.00 | 6,000,000.00 | 9,283,138.54 |
| District of Columbia teachers' retirement fund | 200,000.00 | 200,000.00 | 249,500.00 |
| Federal control of telephone and telegraph systems | ..... | ..... | 613.20 |
| Total | 2,835,746,234.00 | 3,373,712,871.00 | 3,195,622,729.96 |
| Adjustments to the general fund—Decrease of uncov'd repayments on June 30, 1922, under such amount on June 30, 1921 | ..... | ..... | 62,117.45 |
| Decrease in book credits of disbursing officers and agencies with the Treasurer on June 30, 1922, under such amount on June 30, 1921 | ..... | ..... | 144,892,612.09 |
| Decrease in amount of unpaid warrants on June 30, 1922, under such amount of June 30, 1921 | ..... | ..... | 19,618,905.14 |
| Total ordinary cash expenditures | 2,835,746,234.00 | 3,373,712,871.00 | 3,360,196,364.64 |
| Pub. debt retirem'ts chargeable against ordinary rec'pts: | | | |
| Sinking fund | 298,872,000.00 | 283,838,800.00 | 275,896,000.00 |
| Purchases of Liberty Bonds from foreign repayments | 31,225,000.00 | 31,250,000.00 | 64,837,900.00 |
| Bonds and notes received for Federal estate taxes | 5,000,000.00 | 5,000,000.00 | 20,893,200.00 |
| Redemptions from Fed. Res. B'k franchise tax receipts | 10,000,000.00 | 10,000,000.00 | 60,333,000.00 |
| Forfe tures, gifts, etc | ..... | ..... | 392,850.00 |
| Tot. pub. debt retirem't s chargeable against ord. rec'pts | 345,097,000.00 | 330,088,800.00 | 422,352,950.00 |
| Total expenditures chargeable against ordinary receipts | 3,180,843,234.00 | 3,703,801,671.00 | 3,782,549,314.64 |
| Excess of ordinary receipts over total expenditures chargeable against ordinary receipts | 180,969,125.00 | ..... | 321,047,216.40 |
| Excess of total expenditures chargeable against ordinary receipts over ordinary receipts | ..... | 273,938,712.00 | ..... |

Figures in italics are excess payments, to be deducted. The item "all other," in 1922 column includes expenditures of $17,970,972.84 under Bureau of War Risk Insurance (now U. S. Veterans' Bureau) to Aug. 9, 1921.

## RECEIPTS.

| By Fiscal Years. | Estimated, 1924 | Estimated, 1923 | Actual, 1922. |
|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* |
| Receipts (ordinary): Customs | 425,000,000.00 | 450,000,000.00 | 357,544,712.40 |
| Internal revenue—Income and profits taxes | 1,500,000,000.00 | 1,500,000,000.00 | 2,086,918,464.85 |
| Miscellaneous internal revenue | 925,000,000.00 | 900,000,000.00 | 1,121,239,843.45 |
| Sales of public lands | 600,000.00 | 725,000.00 | 895,391.22 |
| Miscellaneous receipts—Assessments on Federal Reserve and national banks | 2,000,000.00 | 2,000,000.00 | 5,079,769.36 |
| Consular fees | 4,600,000.00 | 4,600,000.00 | 6,712,979.11 |
| District of Columbia | 17,256,500.00 | 17,985,315.00 | 14,777,218.19 |
| Federal Reserve Bank franchise tax | 10,000,000.00 | 10,000,000.00 | 59,974,465.64 |
| Farm loan bonds—Principal | 25,000,000.00 | 25,000,000.00 | 44,400,000.00 |
| Interest | 3,909,825.00 | 5,034,825.00 | 8,611,170.08 |
| Foreign loans—Principal repayments | 31,225,000.00 | 31,250,000.00 | 49,114,107.46 |
| Interest | 222,761,045.00 | 224,737,965.00 | 6,607,723.54 |
| Int. on for. obligat'ns, sale surplus prop. by War Dept. | ..... | ..... | 21,107,317.25 |
| Interest on public deposits (Treasury) | 3,000,000.00 | 3,972,500.00 | 7,388,278.07 |
| Naval hospital fund, fines, forfeitures, etc | 1,378,000.00 | 1,378,000.00 | 12,547,632.58 |
| Oil leasing act receipts | 9,000,000.00 | 9,000,000.00 | 8,337,480.25 |
| Panama Canal tolls, etc | 14,224,000.00 | 13,924,000.00 | 12,049,660.75 |
| Profits on coinage, bullion deposits, etc | 10,000,000.00 | 17,000,000.00 | 21,660,921.07 |
| Sale of war supplies—War Department | 25,800,000.00 | 70,000,000.00 | 78,268,106.20 |
| Navy Department | 1,000,000.00 | 12,000,000.00 | 11,648,530.93 |
| Sale of Government property | 7,592,410.00 | 12,345,325.00 | 22,838,951.33 |
| Tax on circulation of national banks | 3,877,773.00 | 4,111,523.00 | 4,537,773.70 |
| Trust fund rec'pts—Indian moneys, proceeds of labor | 20,000,000.00 | 20,000,000.00 | 22,294,874.18 |
| Premiums on converted war risk insurance | 33,733,848.00 | 31,183,640.00 | 26,007,398.63 |
| Other trust fund receipts | 11,585,331.00 | 10,012,882.00 | 9,637,308.51 |
| Other miscellaneous receipts | 53,268,627.00 | 53,601,984.00 | 84,141,848.04 |
| | 3,361,812,359.00 | 3,429,862,959.00 | 4,103,741,926.79 |
| Adjustm't to gen. fund: Decrease in uncov'd moneys on June 30, 1922, under such amount on June 30, 1921. | ..... | ..... | 145,395.75 |
| Total ordinary receipts, exclusive of postal revenues. | 3,361,812,359.00 | 3,429,862,959.00 | 4,103,596,531.04 |

## U. S. GOVERNMENT RECEIPTS AND DISBURSEMENTS.

| Year (Fiscal). | Total Ordinary Receipts. | R'pts. Per Capita | Total Ordinary Disb'rs'ments. | Disb'rs. Per Capita. | Year (Fiscal). | Total Ordinary Receipts. | R'pts. Per Capita | Total Ordinary Disb'rs'ments. | Disb'rs. Per Capita. |
|---|---|---|---|---|---|---|---|---|---|
| 1789-91 | $4,409,951 | ..... | $3,097,452 | ..... | 1905.. | $544,606,759 | $6.54 | $563,360,094 | $6.77 |
| 1800.. | 10,848,749 | $2.04 | 10,813,971 | $2.04 | 1906.. | 594,717,942 | 7.02 | 549,405,425 | 6.49 |
| 1810.. | 9,384,214 | 1.30 | 8,474,753 | 1.17 | 1907.. | 663,125,660 | 7.70 | 551,705,129 | 6.41 |
| 1820.. | 17,840,670 | 1.85 | 18,285,535 | 1.90 | 1908.. | 601,060,723 | 6.87 | 621,102,391 | 7.10 |
| 1830.. | 24,844,117 | 1.93 | 15,142,108 | 1.18 | 1909.. | 603,589,490 | 6.79 | 662,324,445 | 7.45 |
| 1840.. | 19,480,115 | 1.14 | 24,314,518 | 1.42 | 1910.. | 675,511,715 | 7.48 | 659,705,391 | 7.30 |
| 1850.. | 43,592,889 | 1.88 | 40,948,383 | 1.77 | 1911.. | 701,372,375 | 7.46 | 654,137,998 | 6.96 |
| 1855.. | 65,350,575 | 2.40 | 58,630,663 | 2.15 | 1912.. | 691,778,465 | 7.23 | 654,553,963 | 6.84 |
| 1860.. | 56,054,600 | 1.78 | 63,200,876 | 2.01 | 1913.. | 724,111,230 | 7.44 | 682,770,706 | 7.01 |
| 1865.. | 322,031,158 | 9.26 | 1,295,099,290 | 37.27 | 1914.. | 734,673,167 | 7.42 | 700,254,490 | 7.07 |
| 1870.. | 395,959,834 | 10.26 | 393,657,005 | 7.61 | 1915.. | 697,910,827 | 6.93 | 731,399,750 | 7.26 |
| 1880.. | 333,526,501 | 6.65 | 264,847,637 | 5.28 | 1916.. | 779,664,552 | 7.62 | 724,492,999 | 7.08 |
| 1890.. | 403,080,983 | 6.43 | 297,736,487 | 4.75 | 1917.. | 1,118,174,126 | 10.78 | 1,147,898,991 | 11.06 |
| 1900.. | 567,240,852 | 7.43 | 487,713,792 | 6.39 | 1918.. | 4,174,010,586 | 39.74 | 8,966,532,260 | 85.38 |
| 1901.. | 587,685,338 | 7.56 | 509,967,353 | 6.56 | 1919.. | 4,647,603,852 | 43.79 | 15,365,362,742 | 144.77 |
| 1902.. | 562,478,233 | 7.11 | 471,190,858 | 5.96 | 1920.. | 6,704,414,438 | 63.00 | 6,141,745,240 | 57.72 |
| 1903.. | 560,396,675 | 6.93 | 506,089,022 | 6.26 | 1921.. | 5,624,932,961 | 52.05 | 5,115,927,689 | 47.33 |
| 1904.. | 539,716,914 | 6.59 | 532,237,821 | 6.50 | 1922.. | 4,109,104,151 | 37.35 | 3,372,607,900 | 30.73 |

"Ordinary receipts" include receipts from customs, internal revenue, direct tax, public lands, and miscellaneous; but do not include postal revenues, or receipts from loans, premiums, or Treasury notes. The figures cover actual receipts as of Treasury accounts.

"Ordinary disbursements" cover disbursements for War, Navy, Indians, pensions, interest payments, and civil and miscellaneous items; but do not include payments for postal service, Panama Canal, public debt, or special purposes.

Total of all U. S. Government receipts—(1919) $34,072,559,783; (1920) $22,976,838,612; (1921) $11,489,931,283; $10,126,261,804.

Total of all U. S. Government disbursements—(1919) $35,129,566,707; (1920) $23,579,839,819; (1921) $14,297,954,860; $10,403,834,397.

## U. S. MILITARY AND NAVAL EXPENDITURES.

| Year (Fisc.) | War. | Navy. | Year (Fisc.) | War. | Navy. | Year (Fisc.) | War. | Navy. |
|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* |
| 1800.. | 2,560,879 | 3,448,716 | 1882.. | 43,570,494 | 15,032,046 | 1903.. | 118,619,520 | 82,618,034 |
| 1810.. | 2,294,324 | 1,654,244 | 1883.. | 48,911,383 | 15,283,437 | 1904.. | 115,035,411 | 102,956,102 |
| 1820.. | 2,630,392 | 4,387,990 | 1884.. | 39,429,603 | 17,292,601 | 1905.. | 122,175,074 | 117,550,308 |
| 1830.. | 4,767,129 | 3,239,429 | 1885.. | 42,670,578 | 16,021,080 | 1906.. | 117,946,692 | 110,474,264 |
| 1840.. | 7,095,267 | 6,113,897 | 1886.. | 34,324,153 | 13,907,888 | 1907.. | 122,576,465 | 97,128,469 |
| 1850.. | 9,687,025 | 7,904,725 | 1887.. | 38,561,026 | 15,141,127 | 1908.. | 137,746,524 | 118,037,097 |
| 1855.. | 14,648,074 | 13,327,095 | 1888.. | 38,522,436 | 16,926,438 | 1909.. | 161,667,462 | 115,546,011 |
| 1860.. | 16,472,203 | 11,514,650 | 1889.. | 44,435,271 | 21,378,809 | 1910.. | 155,911,706 | 123,173,717 |
| 1865.. | 1,030,690,400 | 122,617,434 | 1890.. | 44,582,838 | 22,006,206 | 1911.. | 160,135,976 | 119,937,644 |
| 1870.. | 57,655,675 | 21,780,230 | 1891.. | 48,720,065 | 26,113,896 | 1912.. | 148,795,422 | 135,591,956 |
| 1871.. | 35,799,992 | 19,431,027 | 1892.. | 46,895,456 | 29,174,139 | 1913.. | 160,387,453 | 133,262,862 |
| 1872.. | 35,372,157 | 21,249,810 | 1893.. | 49,641,773 | 30,136,084 | 1914.. | 173,522,804 | 139,682,186 |
| 1873.. | 46,323,138 | 23,526,257 | 1894.. | 54,567,930 | 31,701,294 | 1915.. | 172,973,092 | 141,835,654 |
| 1874.. | 42,313,927 | 30,932,587 | 1895.. | 51,804,579 | 28,797,796 | 1916.. | 164,635,577 | 155,029,426 |
| 1875.. | 41,120,646 | 21,497,626 | 1896.. | 50,830,921 | 27,147,732 | 1917.. | 440,276,880 | 257,166,437 |
| 1876.. | 38,070,889 | 18,963,310 | 1897.. | 48,950,268 | 34,561,546 | 1918.. | 5,684,348,624 | 1,368,642,794 |
| 1877.. | 37,082,736 | 14,959,935 | 1898.. | 91,922,000 | 58,823,104 | 1919.. | 9,253,059,384 | 2,009,272,389 |
| 1878.. | 32,154,148 | 17,365,301 | 1899.. | 229,841,254 | 63,942,985 | 1920.. | 1,094,834,212 | 629,893,116 |
| 1879.. | 40,425,661 | 15,125,127 | 1900.. | 134,774,768 | 55,953,078 | 1921.. | 557,168,810 | 644,278,809 |
| 1880.. | 38,116,916 | 13,536,985 | 1901.. | 144,615,697 | 60,506,978 | 1922.. | 454,730,718 | 476,775,194 |
| 1881.. | 40,466,461 | 15,686,572 | 1902.. | 112,272,216 | 67,803,128 | | | |

The figures cover the military and naval establishments only.

## APPROPRIATIONS BY CONGRESS.

(Covering 12-month period ending June 30 of year named.)

| YEAR. | Ap'priations. | YEAR. | Ap'priations. | YEAR. | Ap'priations. | YEAR. | Ap'priations. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| 1876..... | 147,714,941 | 1888..... | 193,035,861 | 1900..... | 462,509,750 | 1912..... | 634,549,561 |
| 1877..... | 124,122,011 | 1889..... | 245,020,173 | 1901..... | 457,152,143 | 1913..... | 617,382,178 |
| 1878..... | 88,356,983 | 1890..... | 218,115,440 | 1902..... | 479,365,657 | 1914..... | 684,757,276 |
| 1879..... | 172,016,809 | 1891..... | 287,722,489 | 1903..... | 486,439,307 | 1915..... | 674,497,625 |
| 1880..... | 162,414,648 | 1892..... | 323,783,079 | 1904..... | 464,846,770 | 1916..... | 678,677,859 |
| 1881..... | 154,118,213 | 1893..... | 304,710,197 | 1905..... | 467,159,617 | 1917..... | 1,178,908,963 |
| 1882..... | 177,889,214 | 1894..... | 319,011,847 | 1906..... | 489,241,777 | 1918..... | 18,144,861,745 |
| 1883..... | 251,428,117 | 1895..... | 301,788,820 | 1907..... | 549,434,246 | 1919..... | 25,598,967,518 |
| 1884..... | 187,911,566 | 1896..... | 293,057,105 | 1908..... | 555,739,444 | 1920..... | 4,850,169,029 |
| 1885..... | 137,451,397 | 1897..... | 302,786,386 | 1909..... | 627,316,247 | 1921..... | 4,789,300,920 |
| 1886..... | 170,608,114 | 1898..... | 311,179,557 | 1910..... | 648,191,676 | 1922..... | 4,066,316,367 |
| 1887..... | 209,659,383 | 1899..... | 673,050,294 | 1911..... | 663,725,795 | 1923..... | 3,747,035,383 |

## MONETARY SYSTEM OF THE UNITED STATES.

(Revised by the Director of the Mint.)

GOLD COIN—Weight, 25.8 grains to the dollar; fineness, 900-1000, unlimited as to issue, denominations, $2.50, $5, $10, $20; legal tender, unlimited; receivable for all public dues; exchangeable for gold certificates and subsidiary and minor coin.

STANDARD SILVER DOLLARS—Weight, 412.5 grains; fineness, 900-1000; ratio to gold, 15.988 to 1; coinage ceased in 1905, resumed in 1921; legal tender, unlimited, unless otherwise contracted; receivable for all public dues; exchangeable for silver certificates and smaller ones.

SUBSIDIARY SILVER COIN—Weight, 385.8 grains to the dollar; fineness, 900-1000; ratio to gold 14,953 to 1. Limit of issue, needs of the people. Denominations 10 cents, 25 cents, 50 cents; legal tender not to exceed $10; receivable for all dues up to $10; exchangeable for minor coin; redeemable in "lawful money" at the Treasury in sums or multiples of $20.

MINOR COIN—Weight 5 cent piece, 77.16 grains, 75 per cent. copper, 25 per cent. nickel; 1 cent piece, 48 grains, 95 per cent. copper, 5 per cent. tin and zinc; limit of issue, needs of the people; legal tender not to exceed 25 cents; receivable for all dues up to 25 cents; redeemable in "lawful money" at the Treasury in sums or multiples of $20.

GOLD CERTIFICATES—Limit of issue for gold bullion to two-thirds of the amount of gold certificates outstanding; for gold coin, unlimited, unless gold coin reserve against United States notes (greenbacks) falls below $100,000,000; denominations, $10, $20, $50, $100, $500, $1,000, $5,000, $10,000; made legal tender by ac Dec. 24, 1919; receivable for all public dues; redeemable in gold coin at the Treasury.

SILVER CERTIFICATES—Unlimited as to issue for standard silver dollars; denominations, $1, $2, $5, $10, $20 $50, $100; not a legal tender; receivable for all public dues; redeemable in silver dollars at the Treasury.

UNITED STATES NOTES—Limit of issue, $346,681,016; denominations, $1, $2, $5, $10, $20, $50, $100, $500, $1,000; legal tender for all debts, public and private, except customs and interest on the public debt; receivable for all public dues; redeemable in gold at the Treasury.

TREASURY NOTES OF 1890—No further issues; volume steadily diminishing by redemption in silver dollars; denominations, $1, $2, $5, $10, $20, $50, $100, $500, $1,000; legal tender, unlimited, unless otherwise contracted; receivable for all public dues; redeemable in gold or silver dollars at the Treasury.

NATIONAL BANK NOTES—Limit of issue not to exceed capital of banks; denominations, $5, $10, $20, $50, and $100; notes of denominations of $1, $2, $500 and $1,000 authorized, but none issued or available for issue; not a legal tender; receivable for all public dues except customs; redeemable in "lawful money" at the Treasury or at bank of issue.

FEDERAL RESERVE BANK NOTES—Issue unlimited, except that issue of $1 and $2 notes is subject to the limitations imposed by the Pittman Act, the deposit of the required security, and by the discretion of the Federal Reserve Board; denominations $1, $2, $5, $10, $20, $50, $100, $500, $1,000; not a legal tender; receivable for all public dues except customs; redeemable in "lawful money" at the Treasury or at bank of issue.

FEDERAL RESERVE NOTES—Limit of issue same as Federal Reserve Bank notes; denominations, $5, $10, $20, $50, $100, $500, $1,000, $ ,000, $10,000; not a legal tender; receivable for all public dues; redeemable in gold at the Treasury, and in gold or "lawful money" at any Federal Reserve Bank.

## MONEY IN CIRCULATION IN THE UNITED STATES.

(United States Treasury statement of the coin and paper circulation of the United States since 1860, with amount of circulation per capita.)

| FISCAL YEAR. | Coin, including bullion in Treasury. | United States notes and bank notes. | Total money. | Coin, bullion, and paper money in Treasury as assets. | Circulation, less money in Treasury as assets. | Circulation per capita. |
|---|---|---|---|---|---|---|
| 1860..... | $235,000,000 | $207,102,477 | $442,102,477 | $6,695,225 | $435,407,252 | $13.85 |
| 1870..... | 28,000,000 | 698,940,094 | 723,940,094 | 47,655,667 | 676,284,427 | 17.51 |
| 1880..... | 494,363,884 | 691,186,443 | 1,185,550,327 | 212,168,099 | 973,382,228 | 19.41 |
| 1890..... | 1,152,471,638 | 532,651,791 | 1,685,123,429 | 255,872,159 | 1,429,251,270 | 22.82 |
| 1900..... | 1,607,352,213 | 732,348,460 | 2,339,700,673 | 284,549,675 | 2,055,150,998 | 26.93 |
| 1901..... | 1,734,861,774 | 748,206,203 | 2,483,067,977 | 307,760,015 | 2,175,307,962 | 27.98 |
| 1902..... | 1,829,913,551 | 733,353,107 | 2,563,266,658 | 313,876,107 | 2,249,390,551 | 28.43 |
| 1903..... | 1,905,116,321 | 779,594,666 | 2,684,710,987 | 317,018,818 | 2,367,692,169 | 29.42 |
| 1904..... | 1,994,610,024 | 808,894,111 | 2,803,504,135 | 284,361,275 | 2,519,142,860 | 30.77 |
| 1905..... | 2,031,296,042 | 851,813,822 | 2,883,109,864 | 295,227,211 | 2,587,882,653 | 31.03 |
| 1906..... | 2,154,797,215 | 915,179,376 | 3,069,976,591 | 333,329,963 | 2,736,646,628 | 32.32 |
| 1907..... | 2,159,103,301 | 956,457,706 | 3,115,561,007 | 342,60[illegible],552 | 2,772,956,455 | 32.22 |
| 1908..... | 2,328,767,087 | 1,049,996,933 | 3,378,764,020 | 340,748,532 | 3,038,015,488 | 34.72 |
| 1909..... | 2,365,512,264 | 1,040,816,090 | 3,406,328,354 | 300,087,697 | 3,106,240,657 | 34.93 |
| 1910..... | 2,355,807,734 | 1,063,783,749 | 3,419,591,483 | 317,235,878 | 3,102,355,605 | 34.33 |
| 1911..... | 2,477,837,453 | 1,078,121,524 | 3,555,958,977 | 341,956,381 | 3,214,002,596 | 34.20 |
| 1912..... | 2,554,125,643 | 1,094,745,008 | 3,648,870,651 | 364,357,557 | 3,284,513,094 | 34.34 |
| 1913..... | 2,611,571,094 | 1,108,498,922 | 3,720,070,016 | 356,331,567 | 3,363,738,449 | 34.56 |
| 1914..... | 2,638,496,956 | 1,099,791,915 | 3,738,288,871 | 336,273,444 | 3,402,015,427 | 34.35 |
| 1915..... | 2,739,241,077 | 1,250,215,109 | 3,989,456,186 | 420,236,612 | 3,569,219,574 | 35.44 |
| 1916..... | 3,206,867,812 | 1,276,024,126 | 4,482,891,938 | 458,761,371 | 4,024,130,567 | 39.29 |
| 1917..... | 3,785,690,795 | 1,622,299,231 | 5,407,990,026 | 268,435,844 | 5,763,575,632 | 55.74 |
| 1918..... | 3,807,161,348 | 2,933,910,946 | 6,741,072,294 | 360,341,745 | 5,379,427,424 | 50.81 |
| 1919..... | 3,577,607,287 | 3,941,181,713 | 7,518,789,000 | 584,159,827 | 5,766,029,973 | 54.33 |
| 1920..... | 3,221,676,433 | 4,672,821,666 | 7,894,498,099 | 489,673,476 | 6,087,555,087 | 56.81 |
| 1921..... | 3,786,221,846 | 4,241,173,650 | 8,027,395,496 | 461,196,455 | 5,776,437,473 | 53.44 |
| 1922..... | 4,538,162,305 | 3,740,440,106 | 8,278,602,411 | ..... | 4,375,555,653 | 39.87 |

## NATIONAL BANK CAPITAL, DEPOSITS, EARNINGS, RESOURCES.

| YEAR. | No. of Banks. | Capital. | Deposits. | Net Earnings. | Total Resources. |
|---|---|---|---|---|---|
| | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1870 | 1,526 | 409,008,896 | 542,261,563 | 58,218,118 | 1,565,756,910 |
| 1871 | 1,602 | 427,008,134 | 602,110,758 | 54,507,047 | 1,703,415,336 |
| 1872 | 1,721 | 448,346,485 | 618,801,619 | 54,817,850 | 1,770,837,269 |
| 1873 | 1,882 | 473,097,353 | 641,121,775 | 62,499,369 | 1,851,234,860 |
| 1874 | 1,961 | 488,805,637 | 622,863,154 | 62,666,120 | 1,851,840,914 |
| 1875 | 1,989 | 491,753,557 | 686,478,630 | 59,172,818 | 1,913,239,201 |
| 1876 | 2,061 | 501,037,162 | 641,432,886 | 51,898,138 | 1,825,760,967 |
| 1877 | 2,080 | 498,566,925 | 636,267,529 | 40,133,194 | 1,774,352,834 |
| 1878 | 2,073 | 480,967,305 | 621,632,160 | 32,220,724 | 1,750,464,707 |
| 1879 | 2,015 | 467,322,946 | 648,934,141 | 28,337,553 | 2,019,884,549 |
| 1880 | 2,045 | 454,606,073 | 833,701,034 | 38,025,984 | 2,035,493,280 |
| 1881 | 2,079 | 455,529,963 | 1,031,731,043 | 48,485,271 | 2,325,832,701 |
| 1882 | 2,118 | 459,644,485 | 1,066,707,249 | 56,254,141 | 2,344,342,687 |
| 1883 | 2,232 | 478,519,528 | 1,043,137,763 | 52,670,569 | 2,364,833,122 |
| 1884 | 2,420 | 501,304,720 | 979,020,350 | 55,568,978 | 2,282,598,743 |
| 1885 | 2,616 | 520,752,720 | 1,106,376,517 | 45,969,221 | 2,421,852,016 |
| 1886 | 2,686 | 527,777,898 | 1,146,246,911 | 49,551,961 | 2,474,544,482 |
| 1887 | 2,819 | 542,959,709 | 1,285,076,979 | 59,611,513 | 2,629,314,022 |
| 1888 | 2,993 | 567,840,644 | 1,292,342,471 | 65,409,368 | 2,731,448,016 |
| 1889 | 3,120 | 588,391,497 | 1,442,137,979 | 67,869,081 | 2,937,976,370 |
| 1890 | 3,214 | 607,428,365 | 1,521,745,665 | 69,756,914 | 3,061,770,826 |
| 1891 | 3,477 | 643,680,165 | 1,535,058,569 | 76,952,998 | 3,113,415,254 |
| 1892 | 3,641 | 671,493,123 | 1,753,339,680 | 69,980,730 | 3,493,794,587 |
| 1893 | 3,730 | 682,975,512 | 1,556,761,230 | 68,386,632 | 3,213,261,732 |
| 1894 | 3,764 | 681,129,704 | 1,677,801,201 | 52,422,069 | 3,422,096,423 |
| 1895 | 3,735 | 664,712,365 | 1,736,922,107 | 45,566,309 | 3,470,553,307 |
| 1896 | 3,698 | 655,960,855 | 1,668,413,508 | 48,566,791 | 3,353,797,076 |
| 1897 | 3,659 | 647,402,875 | 1,770,480,563 | 48,612,927 | 3,563,408,054 |
| 1898 | 3,589 | 628,885,895 | 2,023,357,160 | 45,568,032 | 3,977,675,445 |
| 1899 | 3,572 | 610,426,625 | 2,522,157,509 | 49,315,441 | 4,708,833,905 |
| 1900 | 3,571 | 603,396,550 | 2,458,092,758 | 69,981,810 | 4,944,165,624 |
| 1901 | 3,765 | 622,366,094 | 2,941,837,429 | 87,674,175 | 5,675,910,043 |
| 1902 | 4,131 | 659,608,169 | 3,098,875,722 | 99,103,168 | 6,008,754,976 |
| 1903 | 4,451 | 688,817,835 | 3,200,993,509 | 102,743,721 | 6,286,935,106 |
| 1904 | 4,914 | 746,365,438 | 3,312,439,842 | 116,475,135 | 6,655,988,687 |
| 1905 | 5,336 | 768,114,231 | 3,783,658,494 | 105,196,154 | 7,327,805,875 |
| 1906 | 5,685 | 779,544,247 | 4,055,873,637 | 113,662,529 | 7,784,228,113 |
| 1907 | 6,017 | 837,002,528 | 4,322,880,141 | 219,195,801 | 8,476,501,435 |
| 1908 | 6,562 | 901,384,244 | 4,374,551,208 | 132,254,329 | 8,714,064,400 |
| 1909 | 6,788 | 919,143,825 | 4,898,576,696 | 131,185,750 | 9,471,732,663 |
| 1910 | 6,984 | 963,457,519 | 5,287,216,312 | 154,167,489 | 9,896,624,697 |
| 1911 | 7,163 | 1,008,180,225 | 5,477,991,156 | 156,985,513 | 10,383,048,694 |
| 1912 | 7,307 | 1,031,383,425 | 5,825,461,163 | 149,056,603 | 10,861,763,877 |
| 1913 | 7,404 | 1,051,720,675 | 5,953,461,551 | 160,980,084 | 10,036,919,757 |
| 1914 | 7,453 | 1,063,978,175 | 6,268,692,430 | 149,270,171 | 11,482,190,771 |
| 1915 | 7,500 | 1,068,577,080 | 6,611,281,822 | 127,094,709 | 11,795,685,157 |
| 1916 | 7,571 | 1,066,208,875 | 8,143,048,000 | 157,543,547 | 13,926,868,000 |
| 1917 | 7,589 | 1,081,670,000 | 9,521,648,000 | 194,321,000 | 16,151,040,000 |
| 1918 | 7,691 | 1,098,264,000 | 10,437,433,000 | 212,332,000 | 17,839,502,000 |
| 1919 | 7,762 | 1,115,507,000 | 15,924,865,000 | 240,366,000 | 20,799,550,000 |
| 1920 | 8,019 | 1,224,166,000 | 17,155,421,000 | 372,726,000 | 23,411,253,000 |
| 1921 | 8,154 | 1,273,880,000 | 15,142,331,000 | 372,013,000 | 20,517,862,000 |
| 1922 | 8,249 | 1,307,216,000 | 16,320,564,000 | ..... | 20,706,010,000 |

In the year ended June 30, 1922, the net addition to profits of national banks was $183,670,000.

## NATIONAL BANK ASSETS AND RESOURCES.

| STATE. | Banks. | Capital. | Reso'rces. | Deposits. | STATE. | Banks. | Capital. | Reso'rces. | Deposits. |
|---|---|---|---|---|---|---|---|---|---|
| | *No.* | *Thous. of Dollars.* | *Thous. of Dollars.* | *Thous. of Dollars.* | | *No.* | *Thous. of Dollars.* | *Thous. of Dollars.* | *Thous. of Dollars.* |
| Ala. | 107 | 12,840 | 132,427 | 85,590 | N. Hamp. | 56 | 5,365 | 62,229 | 39,163 |
| Ariz. | 22 | 1,900 | 30,788 | 22,841 | N. J. | 228 | 29,449 | 593,968 | 475,573 |
| Ark. | 84 | 7,548 | 74,726 | 48,663 | N. Mex. | 47 | 3,285 | 42,579 | 28,731 |
| Cal. | 295 | 65,125 | 956,900 | 616,996 | N. Y. | 507 | 233,477 | 5,170,198 | 3,094,573 |
| Colo. | 143 | 12,275 | 226,847 | 166,305 | N. C. | 80 | 13,290 | 163,561 | 105,169 |
| Conn. | 64 | 21,607 | 225,500 | 152,042 | N. D. | 182 | 7,220 | 93,865 | 63,469 |
| Del. | 18 | 1,660 | 21,067 | 14,615 | Ohio | 373 | 63,150 | 857,476 | 583,653 |
| D. C. | 15 | 7,677 | 118,249 | 82,768 | Okla. | 447 | 28,810 | 377,713 | 267,658 |
| Fla. | 62 | 7,795 | 130,566 | 95,231 | Ore. | 96 | 11,315 | 165,029 | 121,566 |
| Ga. | 97 | 14,798 | 167,740 | 100,542 | Penn. | 866 | 134,749 | 2,426,341 | 1,601,306 |
| Idaho | 79 | 5,240 | 65,704 | 42,549 | R. Isl. | 17 | 5,570 | 66,753 | 42,563 |
| Ill. | 500 | 90,615 | 1,448,300 | 965,209 | S. C. | 82 | 12,140 | 120,681 | 73,980 |
| Ind. | 250 | 30,713 | 379,251 | 254,787 | S. D. | 133 | 6,215 | 95,538 | 62,866 |
| Iowa | 349 | 25,825 | 363,828 | 225,529 | Tenn. | 101 | 15,409 | 192,183 | 124,411 |
| Kansas | 267 | 17,847 | 226,201 | 151,436 | Texas | 555 | 68,192 | 730,617 | 456,661 |
| Ky. | 136 | 17,858 | 233,807 | 148,533 | Utah | 24 | 4,130 | 49,045 | 31,866 |
| La. | 34 | 8,700 | 115,037 | 73,783 | Vt. | 49 | 5,410 | 54,983 | 36,406 |
| Me. | 60 | 7,045 | 113,386 | 88,155 | Va. | 179 | 28,643 | 368,275 | 232,782 |
| Md. | 87 | 18,429 | 264,712 | 171,419 | Wash. | 108 | 16,030 | 255,421 | 196,139 |
| Mass. | 159 | 63,517 | 1,025,910 | 678,392 | W. Va. | 122 | 12,092 | 179,884 | 130,280 |
| Mich. | 119 | 23,075 | 404,301 | 309,744 | Wis. | 155 | 24,885 | 346,906 | 246,670 |
| Minn. | 343 | 37,901 | 565,089 | 378,087 | Wyo. | 47 | 3,195 | 56,022 | 40,270 |
| Miss. | 32 | 4,535 | 54,270 | 36,837 | Alas. | 3 | 150 | 2,169 | 1,823 |
| Mo. | 135 | 42,800 | 528,797 | 279,997 | Hawaii | 2 | 600 | 5,973 | 4,073 |
| Mont. | 132 | 8,115 | 92,682 | 60,406 | | | | | |
| Neb. | 183 | 17,345 | 246,127 | 146,480 | Total. | 8,249 | 1,307,216 | 20,706,010 | 13,367,740 |
| Nev. | 11 | 1,460 | 16,389 | 10,703 | | | | | |

Deposits in the above table include only "demand," "time," "postal savings" and "United States Government." The Treasury Department's balance sheet of national banks, as of June 30, 1922, covering the 8,249 institutions, shows total deposits of $16,320,564, and includes other items classified as deposits not shown in the table above.

## CONDITION OF NATIONAL BANKS, JUNE 30, 1922.

(Data by the Comptroller of the Currency, made public, Aug. 22.)

| RESOURCES. | Thousands of Dollars. |
|---|---|
| Loans and discounts | 11,248,214 |
| Overdrafts | 9,198 |
| Customers' liability account of acceptances | 176,238 |
| United States Government securities owned | 2,285,459 |
| Other bonds, stocks, securities, etc | 2,277,866 |
| Banking house, furniture and fixtures | 452,434 |
| Other real estate owned | 64,383 |
| Lawful reserve with Federal Reserve Banks | 1,151,605 |
| Items with Federal Reserve Banks in process of collection | 355,666 |
| Cash in vaults | 320,181 |
| Amount due from National Banks | 974,975 |
| Amount due from other banks, bankers, and trust companies | 267,050 |
| Exchanges for clearing house | 767,096 |
| Checks on other banks in the same place | 63,394 |
| Outside checks and other cash items | 64,928 |
| Redemption fund and due from U. S. Treasurer | 36,767 |
| Other assets | 184,556 |
| TOTAL | 20,706,010 |
| *Reserves.* | |
| Amount of reserve required | 1,124,026 |
| Amount of reserve held | 1,152,833 |
| Excess reserve held | 28,807 |

| LIABILITIES. | Thousands of Dollars. |
|---|---|
| Capital stock paid in | 1,307,216 |
| Surplus fund | 1,048,806 |
| Undivided profits, less expenses and taxes paid | 492,434 |
| National bank notes outstanding | 725,748 |
| Due to Federal Reserve Banks | 19,852 |
| Amount due to National Banks | 916,740 |
| Amount due to other banks, bankers, and trust companies | 1,565,459 |
| Certified checks outstanding | 205,682 |
| Cashier's checks outstanding | 245,091 |
| Demand deposits | 9,152,415 |
| Time deposits (including postal savings) | 4,111,951 |
| United States Deposits | 103,374 |
| TOTAL DEPOSITS | 16,320,564 |
| United States Government securities borrowed | 42,475 |
| Bonds and securities (other than United States) borrowed | 2,897 |
| Bills payable (including all obligations representing borrowed money other than rediscounts) | 228,481 |
| Notes and bills rediscounted (including acceptances of other banks and foreign bills of exchange or drafts sold with indorsement) | 280,271 |
| Letters of credit and travellers' checks outstanding | 8,256 |
| Acceptances executed for customers and to furnish dollar exchange less those purchased or discounted | 172,887 |
| Acceptances executed by other banks | 16,494 |
| Liabilities other than those stated above | 59,481 |
| TOTAL | 20,706,010 |

## SAVINGS BANKS IN THE UNITED STATES.

(Data by the Comptroller of the Currency.)

| YEAR. | Banks. | Depositors. | Deposits. |
|---|---|---|---|
| | *No.* | *No.* | *Dollars.* |
| 1825 | 15 | 16,931 | 2,537,082 |
| 1830 | 36 | 38,035 | 6,973,304 |
| 1835 | 52 | 60,058 | 10,613,726 |
| 1840 | 61 | 78,701 | 14,051,520 |
| 1845 | 70 | 145,206 | 24,506,677 |
| 1846 | 74 | 158,709 | 27,374,325 |
| 1847 | 76 | 187,739 | 31,627,479 |
| 1848 | 83 | 199,764 | 33,087,488 |
| 1849 | 90 | 217,318 | 36,973,924 |
| 1850 | 108 | 251,354 | 43,431,130 |
| 1851 | 128 | 277,148 | 50,457,913 |
| 1852 | 141 | 308,863 | 59,467,453 |
| 1853 | 159 | 365,538 | 72,313,696 |
| 1854 | 190 | 396,173 | 77,823,906 |
| 1855 | 215 | 431,602 | 84,290,076 |
| 1856 | 222 | 487,986 | 95,598,230 |
| 1857 | 231 | 490,428 | 98,512,968 |
| 1858 | 245 | 538,840 | 108,438,287 |
| 1859 | 259 | 622,556 | 128,657,901 |
| 1860 | 278 | 693,870 | 149,277,504 |
| 1861 | 285 | 694,487 | 146,729,882 |
| 1862 | 289 | 787,943 | 169,434,540 |
| 1863 | 293 | 887,096 | 206,235,202 |
| 1864 | 305 | 976,025 | 236,280,401 |
| 1865 | 317 | 980,844 | 242 619.382 |
| 1866 | 336 | 1,067,061 | 282,453,794 |
| 1867 | 371 | 1,188,202 | 327,009,452 |
| 1868 | 406 | 1,310,144 | 392,781,813 |
| 1869 | 476 | 1,466,684 | 457,675,050 |
| 1870 | 517 | 1,630,846 | 549,874,358 |
| 1871 | 577 | 1,902,047 | 650,745,442 |
| 1872 | 647 | 1,992,925 | 735,046,805 |
| 1873 | 669 | 2,185,832 | 802,363,609 |
| 1874 | 693 | 2,293,401 | 864,556,902 |
| 1875 | 771 | 2,359,864 | 924,037,304 |
| 1876 | 781 | 2,368,630 | 941,350,255 |
| 1877 | 675 | 2,395,314 | 866,218,306 |
| 1878 | 663 | 2,400,785 | 879,897 425 |
| 1879 | 639 | 2,268,707 | 802,490,298 |
| 1880 | 629 | 2,335,582 | 819,106,973 |
| 1881 | 629 | 2,528,749 | 891,961,142 |
| 1882 | 629 | 2,710,354 | 966,797,081 |
| 1883 | 630 | 2,876,438 | 1,024,856,787 |
| 1884 | 636 | 3,015,151 | 1,073,294,955 |
| 1885 | 646 | 3,071,495 | 1,095,172,147 |
| 1886 | 638 | 3,158,950 | 1,141,530,578 |
| 1887 | 684 | 3,418,013 | 1,235,247,371 |
| 1888 | 801 | 3,838,291 | 1,364,196,550 |
| 1889 | 849 | 4,021,523 | 1,425 230,349 |
| 1890 | 921 | 4,258,893 | 1,524,844,506 |
| 1891 | 1,011 | 4,533,217 | 1,623,079,749 |
| 1892 | 1,059 | 4,781,605 | 1,712,769,026 |
| 1893 | 1,030 | 4,830,599 | 1,785,150,957 |
| 1894 | 1,024 | 4,777,687 | 1,747,961,280 |
| 1895 | 1,017 | 4,875,519 | 1,810,597,023 |
| 1896 | 988 | 5,065,.94 | 1,907,156,277 |
| 1897 | 980 | 5,201,132 | 1,939,376,035 |
| 1898 | 979 | 5,385,746 | 2,065,631,298 |
| 1899 | 987 | 5,687,818 | 2,230,366,954 |
| 1900 | 1,002 | 6,107,083 | 2,449,547,885 |
| 1901 | 1,007 | 6,358,723 | 2,597,094,580 |
| 1902 | 1,036 | 6,666,672 | 2,750,177,290 |
| 1903 | 1,078 | 7,035,228 | 2,935,204,845 |
| 1904 | 1,157 | 7,305,443 | 3,060,178,611 |
| 1905 | 1,237 | 7,696,229 | 3,261,236,119 |
| 1906 | 1,319 | 8,027,192 | 3,482,137,198 |
| 1907 | 1,415 | 8,588,811 | 3,690,078 945 |
| 1908 | 1,453 | 8,705,848 | 3,660,553,945 |
| 1909 | 1,703 | 8,831,863 | 3,713,405,710 |
| 1910 | 1,759 | 9,142,908 | 4,070,486,246 |
| 1911 | 1,884 | 9,794,647 | 4,212,583,598 |
| 1912 | 1,922 | 10,010,304 | 4,451,818,522 |
| 1913 | 1,978 | 10,766,936 | 4,727,403,950 |
| 1914 | 2,100 | 11,109,499 | 4,936,591,849 |
| 1915 | 2,159 | 11,285,755 | 4,997,706,013 |
| 1916 | 1,864 | 11,148,392 | 5,088,587,294 |
| 1917 | 1,807 | 11,427,013 | 5,418,022,274 |
| 1918 | 1,819 | 11,379,553 | 5,471,579,948 |
| 1919 | 1,719 | 11,434,881 | 5,906,082,000 |
| 1920 | 1,707 | 11,427,566 | 6,536,470,000 |
| 1921 | 1,601 | 10,737,843 | 6,018,258,000 |
| 1922 | .... | 12,538,997 | 7,181,248,000 |

In the foregoing table the figures for 1890 to 1908, inclusive, but not subsequently, include the number of depositors and the amount of deposits in the State banks of Illinois having savings departments but not the number of such banks, by reason of the fact that general returns from these institutions are incorporated in State banks' returns.

## FEDERAL INCOME TAX CHART.

(Compiled by the Guaranty Trust Co., of N. Y., and based on the U. S. Revenue Act of Nov. 23, 1921.)

Chart shows the tax payable by a married person or head of a family, but does not take cognizance of any exemption for dependents.

| Net Income (See Note). | Rate of Normal Tax. | Rate of Surtax 1921. | Rate of Surtax 1922 & Thereafter. | Amount Subject to Surtax Between Change of Rates. | Amount of Normal Tax. | Amount of Surtax 1921. | Amount of Surtax 1922 and Thereafter. | Total Tax 1921. | Total Tax 1922 and Thereafter. |
|---|---|---|---|---|---|---|---|---|---|
| *Dollars.* | *Pct.* | *Pct.* | *Pct.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 3,000.. | 4 | ..... | ..... | ..... | 20 | ..... | ..... | 20 | 20 |
| 4,000.. | 4 | ..... | ..... | ..... | 60 | ..... | ..... | 60 | 60 |
| 5,000.. | 4 | ..... | ..... | ..... | 100 | ..... | ..... | 100 | 100 |
| 6,000.. | 4 | 1 | ..... | ..... | 160 | 10 | ..... | 170 | 160 |
| 8,000.. | 8 | 2 | 1 | 6,000 to 8,000 | 320 | 50 | 20 | 370 | 340 |
| 10,000.. | 8 | 3 | 1 | 8,000 to 10,000 | 480 | 110 | 40 | 590 | 520 |
| 12,000.. | 8 | 4 | 2 | 10,000 to 12,000 | 640 | 190 | 80 | 830 | 720 |
| 14,000.. | 8 | 5 | 3 | 12,000 to 14,000 | 800 | 290 | 140 | 1,090 | 940 |
| 16,000.. | 8 | 6 | 4 | 14,000 to 16,000 | 960 | 410 | 220 | 1,370 | 1,180 |
| 18,000.. | 8 | 7 | 5 | 16,000 to 18,000 | 1,120 | 550 | 320 | 1,670 | 1,440 |
| 20,000.. | 8 | 8 | 6 | 18,000 to 20,000 | 1,280 | 710 | 440 | 1,990 | 1,720 |
| 22,000.. | 8 | 9 | 8 | 20,000 to 22,000 | 1,440 | 890 | 600 | 2,330 | 2,040 |
| 24,000.. | 8 | 10 | 9 | 22,000 to 24,000 | 1,600 | 1,090 | 780 | 2,690 | 2,380 |
| 26,000.. | 8 | 11 | 10 | 24,000 to 26,000 | 1,760 | 1,310 | 980 | 3,070 | 2,740 |
| 28,000.. | 8 | 12 | 11 | 26,000 to 28,000 | 1,920 | 1,550 | 1,200 | 3,470 | 3,120 |
| 30,000.. | 8 | 13 | 12 | 28,000 to 30,000 | 2,080 | 1,810 | 1,440 | 3,890 | 3,520 |
| 32,000.. | 8 | 14 | 13 | 30,000 to 32,000 | 2,240 | 2,090 | 1,700 | 4,330 | 3,940 |
| 34,000.. | 8 | 15 | 15 | 32,000 to 34,000 | 2,400 | 2,390 | 2,000 | 4,790 | 4,400 |
| 36,000.. | 8 | 16 | 15 | 34,000 to 36,000 | 2,560 | 2,710 | 2,300 | 5,270 | 4,860 |
| 38,000.. | 8 | 17 | 16 | 36,000 to 38,000 | 2,720 | 3,050 | 2,620 | 5,770 | 5,340 |
| 40,000.. | 8 | 18 | 17 | 38,000 to 40,000 | 2,880 | 3,410 | 2,960 | 6,290 | 5,840 |
| 42,000.. | 8 | 19 | 18 | 40,000 to 42,000 | 3,040 | 3,790 | 3,320 | 6,830 | 6,360 |
| 44,000.. | 8 | 20 | 19 | 42,000 to 44,000 | 3,200 | 4,190 | 3,700 | 7,390 | 6,900 |
| 46,000.. | 8 | 21 | 20 | 44,000 to 46,000 | 3,360 | 4,610 | 4,100 | 7,970 | 7,460 |
| 48,000.. | 8 | 22 | 21 | 46,000 to 48,000 | 3,520 | 5,050 | 4,520 | 8,570 | 8,040 |
| 50,000.. | 8 | 23 | 22 | 48,000 to 50,000 | 3,680 | 5,510 | 4,960 | 9,190 | 8,640 |
| 52,000.. | 8 | 24 | 23 | 50,000 to 52,000 | 3,840 | 5,990 | 5,420 | 9,830 | 9,260 |
| 54,000.. | 8 | 25 | 24 | 52,000 to 54,000 | 4,000 | 6,490 | 5,900 | 10,490 | 9,900 |
| 56,000.. | 8 | 26 | 25 | 54,000 to 56,000 | 4,160 | 7,010 | 6,400 | 11,170 | 10,560 |
| 58,000.. | 8 | 27 | 26 | 56,000 to 58,000 | 4,320 | 7,550 | 6,920 | 11,870 | 11,240 |
| 60,000.. | 8 | 28 | 27 | 58,000 to 60,000 | 4,480 | 8,110 | 7,460 | 12,590 | 11,940 |
| 62,000.. | 8 | 29 | 28 | 60,000 to 62,000 | 4,640 | 8,690 | 8,020 | 13,330 | 12,660 |
| 64,000.. | 8 | 30 | 29 | 62,000 to 64,000 | 4,800 | 9,290 | 8,600 | 14,090 | 13,400 |
| 66,000.. | 8 | 31 | 30 | 64,000 to 66,000 | 4,960 | 9,910 | 9,200 | 14,870 | 14,160 |
| 68,000.. | 8 | 32 | 31 | 66,000 to 68,000 | 5,120 | 10,550 | 9,820 | 15,670 | 14,940 |
| 70,000.. | 8 | 33 | 32 | 68,000 to 70,000 | 5,280 | 11,210 | 10,460 | 16,490 | 15,740 |
| 72,000.. | 8 | 34 | 33 | 70,000 to 72,000 | 5,440 | 11,890 | 11,120 | 17,330 | 16,560 |
| 74,000.. | 8 | 35 | 34 | 72,000 to 74,000 | 5,600 | 12,590 | 11,800 | 18,190 | 17,400 |
| 76,000.. | 8 | 36 | 35 | 74,000 to 76,000 | 5,760 | 13,310 | 12,500 | 19,070 | 18,260 |
| 78,000.. | 8 | 37 | 36 | 76,000 to 78,000 | 5,920 | 14,050 | 13,220 | 19,970 | 19,140 |
| 80,000.. | 8 | 38 | 37 | 78,000 to 80,000 | 6,080 | 14,810 | 13,960 | 20,890 | 20,040 |
| 82,000.. | 8 | 39 | 38 | 80,000 to 82,000 | 6,240 | 15,590 | 14,720 | 21,830 | 20,960 |
| 84,000.. | 8 | 40 | 39 | 82,000 to 84,000 | 6,400 | 16,390 | 15,500 | 22,790 | 21,900 |
| 86,000.. | 8 | 41 | 40 | 84,000 to 86,000 | 6,560 | 17,210 | 16,300 | 23,770 | 22,860 |
| 88,000.. | 8 | 42 | 41 | 86,000 to 88,000 | 6,720 | 18,050 | 17,120 | 24,770 | 23,840 |
| 90,000.. | 8 | 43 | 42 | 88,000 to 90,000 | 6,880 | 18,910 | 17,960 | 25,790 | 24,840 |
| 92,000.. | 8 | 44 | 43 | 90,000 to 92,000 | 7,040 | 19,790 | 18,820 | 26,830 | 25,860 |
| 94,000.. | 8 | 45 | 44 | 92,000 to 94,000 | 7,200 | 20,690 | 19,700 | 27,890 | 26,900 |
| 96,000.. | 8 | 46 | 45 | 94,000 to 96,000 | 7,360 | 21,610 | 20,600 | 28,970 | 27,960 |
| 98,000.. | 8 | 47 | 46 | 96,000 to 98,000 | 7,520 | 22,550 | 21,520 | 30,070 | 29,040 |
| 100,000.. | 8 | 48 | 47 | 98,000 to 100,000 | 7,680 | 23,510 | 22,460 | 31,190 | 30,140 |
| 150,000.. | 8 | 52 | 48 | 100,000 to 150,000 | 11,680 | 49,510 | 46,460 | 61,190 | 58,140 |
| 200,000.. | 8 | 56 | 49 | 150,000 to 200,000 | 15,680 | 77,510 | 70,960 | 93,100 | 86,640 |
| 300,000.. | 8 | 60 | 50 | 200,000 to 300,000 | 23,680 | 137,510 | 120,960 | 161,190 | 144,640 |
| 500,000.. | 8 | 63 | 50 | 300,000 to 500,000 | 39,680 | 263,510 | 220,960 | 303,190 | 260,640 |
| 1,000,000.. | 8 | 64 | 50 | 500,000 to 1,000,000 | 79,680 | 583,510 | 470,960 | 663,190 | 550,640 |
| Over 1,000,000.. | 8 | 65 | 50 | ..... | ..... | ..... | ..... | ..... | ..... |

Amount of surtax is the total of the instalments for the income considered.

In computing the tax in the above chart a personal exemption of $2,500 is allowed on incomes not in excess of $5,000. On incomes of $6,000 and over, $2,000 is allowed.

Many changes are made in the former law by this act, among which are the repeal of the excess-profits tax and the taxes on transportation, as of Jan. 1, 1922, and the reduction of the surtax to 50 per centum on individual income in excess of $200,000 for the year 1922 and thereafter.

For 1922 and thereafter an individual deriving gains from the sale or exchange of capital assets, may elect to have the gains taxed at the rate of 12½ per cent., the remainder of his net income being taxed in the usual manner for normal tax and surtax. If he elects to be so taxed, the total tax shall not be less than 12½ per cent. of the total net income.

For 1922 and thereafter, corporations are subject to income tax at the rate of 12½ per cent.

### ESTATE TAX.

| Net Estate. | | Rate of Tax. | Tax on Separate Amounts in First Column. | Tax on Totals of Amounts in First Column. | Net Estate. | Rate of Tax. | Tax on Separate Amounts in First Column. | Tax on Totals of Amounts in First Column. |
|---|---|---|---|---|---|---|---|---|
| First | *$50,000 | Ex'm't | ..... | ..... | $500,000 | 12% | $60,000 | $161,500 |
| Next | 50,000 | 1% | $500 | $500 | 1,000,000 | 14% | 140,000 | 301,500 |
| | 100,000 | 2% | 2,000 | 2,500 | 1,000,000 | 16% | 160,000 | 461,500 |
| | 100,000 | 3% | 3,000 | 5,500 | 1,000,000 | 18% | 180,000 | 641,500 |
| | 200,000 | 4% | 8,000 | 13,500 | 3,000,000 | 20% | 600,000 | 1,241,500 |
| | 300,000 | 6% | 18,000 | 31,500 | 2,000,000 | 22% | 440,000 | 1,681,500 |
| | 250,000 | 8% | 20,000 | 51,500 | In excess of 10,000,000 | 25% | ..... | ..... |
| | 500,000 | 10% | 50,000 | 101,500 | | | | |

* Not allowed estates of non-residents.

## OTHER TAXES.

Telegraph or telephone messages—Leased wire service, 10 per cent.; commercial messages costing 14 to 50 cents, 5 cents; 50 cents or more, 10 cents.,

Beverages—Distilled spirits used for beverage purposes, $6.40 a gallon; cereal and fruit and other soft drinks containing less than ½ of 1 per cent. of alcohol, 2 cents a gallon; soda fountain syrups, 5 to 9 cents a gallon.

Theatre admissions of over 10 cents, 10 per cent., with excess tax of 5 to 50 per cent. on tickets above the regular price; cabaret admissions, 1½ per cent.

Special taxes (mostly covering one year)—Passenger autos, $10 to $20; bowling and billiard rooms, $10; brewers, distillers and liquor dealers, $1,000; custom house brokers, $50; pawnbrokers, $100; ship brokers, $50; stock brokers, $100 to $150; corporation stock, $1 per $1,000; cigar and tobacco manufacturers, $4 to $24; circus, $100; theatres, $50 to $200; shooting galleries, $20; yachts, $1 to $4 a running foot; opium dealers, etc., $6 to $24; riding academies, $100.

Among the stamp taxes are: On real estate conveyances under $500, 50 cents, and 50 cents on each $500; on drafts or checks, 2 cents per $100; on ocean passenger tickets over $10, $1 to $5; on insurance policies 3 cents per $1 of premium.

Wilful employers of child labor under the lawful age are taxed 10 per cent. of their year's net profits.

## U. S. CUSTOMS REVENUES AND INTERNAL REV. RECEIPTS SINCE 1800.

| Year (Fiscal) | Customs. | Internal Revenue. | Year (Fiscal) | Customs. | Internal Revenue. | Year (Fiscal) | Customs. | Internal Revenue. |
|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* |
| 1800.... | 9,080,933 | 809,397 | 1901.... | 238,585,456 | 306,871,669 | 1912.... | 311,321,672 | 321,615,894 |
| 1810.... | 8,583,309 | 7,431 | 1902.... | 254,444,708 | 271,867,990 | 1913.... | 318,891,396 | 344,424,453 |
| 1820.... | 15,005,612 | 106,261 | 1903.... | 284,479,582 | 230,740,925 | 1914.... | 292,320,015 | 380,008,893 |
| 1830.... | 21,922,391 | 12,161 | 1904.... | 261,274,565 | 232,903,781 | 1915.... | 209,786,672 | 415,681,023 |
| 1840.... | 13,499,502 | 1,682 | 1905.... | 261,798,857 | 234,187,976 | 1916.... | 213,185,846 | 512,723,287 |
| 1850.... | 39,668,686 | ..... | 1906.... | 300,251,878 | 249,102,738 | 1917.... | 225,962,393 | 809,393,640 |
| 1855.... | 53,025,794 | ..... | 1907.... | 332,233,363 | 269,664,022 | 1918.... | 179,998,383 | 3,698,955,821 |
| 1860.... | 53,187,512 | ..... | 1908.... | 286,113,130 | 251,665,850 | 1919.... | 184,457,867 | 3,850,150,078 |
| 1870.... | 194,538,374 | 184,302,828 | 1909.... | 300,711,934 | 246,212,719 | 1920.... | 322,902,650 | 5,407,580,252 |
| 1880.... | 186,522,065 | 123,981,916 | 1910.... | 333,683,445 | 289,957,220 | 1921.... | 308,564,391 | 4,595,357,062 |
| 1890.... | 229,668,585 | 142,594,696 | 1911.... | 314,497,071 | 322,526,299 | 1922.... | 356,443,387 | 3,197,451,083 |
| 1900.... | 233,164,871 | 295,316,107 | | | | | | |

## CORPORATION NET INCOMES IN THE U. S. IN 1920.

| States and Territories. | Net Income. | | | Tax. | |
|---|---|---|---|---|---|
| | Corporation. | Personal and Corporation. | Per Cent. for Each State. | Personal and Corporation. | Per Cent. for Each State. |
| | *Dollars.* | *Dollars.* | *Per Cent.* | *Dollars.* | *Per Cent.* |
| Alabama | 39,003,402 | 195,608,335 | 0.62 | 12,666,686 | 0.47 |
| Alaska | 524,184 | 19,924,959 | .06 | 316,993 | .01 |
| Arizona | 6,687,885 | 73,968,371 | .23 | 2,391,070 | .09 |
| Arkansas | 19,704,635 | 137,765,345 | .44 | 6,859,339 | .25 |
| California | 282,825,053 | 1,611,831,647 | 5.09 | 110,021,520 | 4.08 |
| Colorado | 66,034,834 | 285,312,018 | .90 | 19,568,766 | .72 |
| Connecticut | 99,993,495 | 551,731,197 | 1.74 | 34,139,327 | 1.26 |
| Delaware | 25,227,425 | 80,860,746 | .26 | 5,785,028 | .21 |
| District of Columbia | 24,366,573 | 232,754,747 | .74 | 12,213,301 | .45 |
| Florida | 22,417,123 | 163,522,247 | .52 | 9,161,761 | .34 |
| Georgia | 61,718,452 | 290,338,168 | .92 | 21,202,031 | .79 |
| Hawaii | 58,284,660 | 113,857,556 | .36 | 23,304,284 | .86 |
| Idaho | 9,783,905 | 77,175,544 | .24 | 2,464,536 | .09 |
| Illinois | 677,180,274 | 2,514,117,216 | 7.94 | 234,457,801 | 8.68 |
| Indiana | 128,164,213 | 684,226,204 | 2.16 | 43,243,514 | 1.60 |
| Iowa | 59,945,718 | 691,506,507 | 2.19 | 28,191,557 | 1.04 |
| Kansas | 104,600,732 | 411,014,161 | 1.30 | 24,989,163 | .93 |
| Kentucky | 74,869,079 | 318,748,309 | 1.01 | 24,257,337 | .90 |
| Louisiana | 67,291,639 | 304,400,784 | .97 | 25,054,198 | .93 |
| Maine | 43,835,668 | 187,291,213 | .59 | 13,701,193 | .51 |
| Maryland | 76,902,019 | 559,097,467 | 1.77 | 35,068,720 | 1.30 |
| Massachusetts | 402,527,511 | 1,770,934,159 | 5.60 | 157,216,067 | 5.82 |
| Michigan | 402,047,385 | 1,297,726,623 | 4.10 | 143,114,046 | 5.30 |
| Minnesota | 148,473,971 | 601,686,212 | 1.90 | 38,508,358 | 1.43 |
| Mississippi | 17,374,055 | 101,328,407 | .32 | 5,776,136 | .21 |
| Missouri | 226,302,500 | 774,432,678 | 2.45 | 70,027,575 | 2.59 |
| Montana | 11,531,723 | 120,879,917 | .38 | 3,277,161 | .12 |
| Nebraska | 31,690,995 | 338,053,701 | 1.07 | 13,577,346 | .50 |
| Nevada | 2,032,080 | 27,370,014 | .09 | 622,543 | .02 |
| New Hampshire | 17,061,850 | 117,493,389 | .37 | 6,028,752 | .22 |
| New Jersey | 190,785,595 | 1,168,639,222 | 3.69 | 76,576,597 | 2.84 |
| New Mexico | 3,985,982 | 40,909,102 | .13 | 1,107,961 | .04 |
| New York | 1,958,629,723 | 5,989,253,419 | 18.93 | 639,799,964 | 23.69 |
| North Carolina | 102,277,769 | 266,077,606 | .84 | 33,590,927 | 1.25 |
| North Dakota | 6,867,604 | 73,056,038 | .23 | 1,837,356 | .07 |
| Ohio | 560,556,917 | 1,967,944,920 | 6.22 | 182,547,719 | 6.76 |
| Oklahoma | 56,880,894 | 352,671,685 | 1.12 | 23,102,480 | .86 |
| Oregon | 39,521,816 | 233,174,097 | .74 | 15,152,541 | .56 |
| Pennsylvania | 971,581,884 | 3,183,759,913 | 10.06 | 327,521,835 | 12.13 |
| Rhode Island | 55,944,450 | 236,248,440 | .75 | 23,309,052 | .87 |
| South Carolina | 53,342,402 | 162,589,059 | .51 | 18,917,619 | .70 |
| South Dakota | 7,703,223 | 111,281,259 | .35 | 3,271,198 | .12 |
| Tennessee | 52,402,287 | 265,002,392 | .84 | 19,247,944 | .71 |
| Texas | 127,546,820 | 848,266,982 | 2.68 | 48,665,244 | 1.81 |
| Utah | 15,513,096 | 97,791,485 | .31 | 4,014,003 | .15 |
| Vermont | 11,268,793 | 70,572,095 | .22 | 4,365,308 | .16 |
| Virginia | 96,353,038 | 369,588,267 | 1.17 | 25,614,986 | .95 |
| Washington | 79,194,723 | 455,174,616 | 1.44 | 24,414,571 | .91 |
| West Virginia | 134,304,029 | 422,033,489 | 1.33 | 46,425,333 | 1.72 |
| Wisconsin | 163,938,038 | 600,374,848 | 1.90 | 51,619,928 | 1.91 |
| Wyoming | 5,652,692 | 68,897,221 | .22 | 1,979,654 | .07 |
| Total | 7,902,654,813 | 31,638,283,996 | 100.00 | 2,700,288,329 | 100.00 |

Net income of personal service corporations is included in personal net income returns.

## CORPORATION CAPITAL, INCOME, TAX, 1920.

| Industrial Groups. | Number. | Invested Capital. | Net Income. | Income Tax. |
|---|---|---|---|---|
| Agriculture and related industries | 3,497 | $607,624,791 | $70,901,113 | $5,416,017 |
| Mining and quarrying: | | | | |
| Coal mining | 2,897 | 1,353,996,610 | 352,583,764 | 26,001,694 |
| Metal mining | 357 | 715,974,393 | 34,682,972 | 2,930,921 |
| Gas and oil | 1,075 | 1,664,112,244 | 204,718,193 | 17,826,140 |
| All other mining and quarrying | 2,011 | 1,133,103,853 | 106,306,293 | 9,743,490 |
| Total mining and quarrying | 6,340 | 4,867,187,100 | 698,291,222 | 56,501,345 |
| Manufacturing: | | | | |
| Food products, liquors and tobacco | 7,194 | 3,120,854,594 | 402,424,046 | 32,342,343 |
| Textile and textile products | 5,341 | 2,575,306,970 | 457,731,417 | 35,493,256 |
| Leather and leather products | 1,189 | 412,631,382 | 60,808,241 | 4,818,184 |
| Rubber and rubber goods | 264 | 401,821,927 | 26,642,869 | 2,316,609 |
| Lumber and wood products | 5,153 | 1,788,434,001 | 320,836,497 | 25,589,928 |
| Paper and pulp products | 1,309 | 841,169,380 | 241,449,961 | 18,473,229 |
| Printing and publishing | 5,955 | 728,093,919 | 160,980,890 | 13,121,743 |
| Chemicals and allied substances | 2,859 | 2,759,325,717 | 440,992,961 | 37,821,908 |
| Stone, clay and glass products | 2,545 | 876,115,194 | 148,765,735 | 12,303,763 |
| Metal and metal products | 9,805 | 10,985,722,382 | 1,309,201,134 | 115,992,150 |
| All other manufacturing industries | 5,649 | 2,980,261,576 | 428,980,969 | 36,198,524 |
| Total manufacturing | 47,263 | 27,469,737,042 | 3,998,814,720 | 334,471,637 |
| Construction | 6,458 | 630,374,307 | 112,502,170 | 7,482,702 |
| Transportation and other public utilities: | | | | |
| Steam railroads | 255 | 6,773,418,909 | 330,037,447 | 31,050,721 |
| Electric railroads | 198 | 546,441,133 | 26,516,826 | 2,554,916 |
| Ocean lines, transoceanic and coastal | 58 | 118,763,542 | 14,483,339 | 1,199,699 |
| All other transportation | 5,430 | 1,494,974,255 | 143,637,580 | 12,632,637 |
| Electric light and power companies | 1,066 | 791,851,952 | 48,701,222 | 4,598,984 |
| Gas companies | 270 | 298,745,120 | 17,401,657 | 1,598,923 |
| Telephone and telegraph companies | 2,209 | 1,093,235,450 | 79,313,276 | 7,478,692 |
| All other public utilities | 2,133 | 1,720,228,638 | 146,825,975 | 14,272,496 |
| Total transportation and other public utilities | 11,619 | 12,837,658,999 | 806,917,022 | 75,387,068 |
| Trade | 49,565 | 5,756,965,509 | 905,276,928 | 69,512,238 |
| Public service—Professional, amusements, hotels, etc | 10,527 | 858,180,151 | 142,992,383 | 10,696,225 |
| Finance, banking, insurance, etc: | | | | |
| National banks | 6,684 | 2,405,657,697 | 280,032,636 | 20,452,719 |
| State banks | 15,237 | 1,408,119,905 | 158,362,834 | 10,407,468 |
| All other banking | 25,905 | 4,958,579,673 | 354,058,311 | 27,139,637 |
| Life insurance, stock and mutual companies | 129 | 3,750,125,824 | 37,658,385 | 2,004,966 |
| Acci., fire and marine, stock and mutual cos | 229 | 231,204,825 | 12,498,505 | 1,003,527 |
| All other insurance companies | 1,759 | 1,683,022,483 | 60,409,976 | 4,656,893 |
| Total finance, banking, insurance, etc | 49,943 | 14,436,710,407 | 903,020,647 | 65,665,210 |
| Combinations, predominant industry not ascertainable | 1,219 | 743,154,562 | 66,529,695 | 5,951,322 |
| Concerns in liquidation | 1,585 | 217,223,867 | 12,553,646 | 819,346 |
| Inactive concerns | 17 | 2,256,553 | 101,309 | 5,286 |
| Total reporting invested capital | 187,833 | 68,427,073,288 | 7,717,901,155 | 631,908,396 |

## DISTRIBUTION OF CORPORATION INCOME, BY INDUSTRIAL GROUPS AND BY NATURE OF DEDUCTIONS, CALENDAR YEAR 1920.

| Industrial Groups. | Exhaustion, Amortization, and Depletion. | Miscellaneous Expense. | Total Deductions. | Net Income Before Deducting Tax. | Income Tax, War Profits, and Excess Profits Tax. | Net Income After Deducting Tax. |
|---|---|---|---|---|---|---|
| Agric., related indus | $29,936,467 | $250,214,429 | $719,709,322 | $5,340,596 | $17,170,264 | *$11,829,668* |
| Min. & quarrying | 574,648,948 | 1,691,796,656 | 5,625,651,684 | 525,568,712 | 174,595,972 | 350,972,740 |
| Manufacturing: | | | | | | |
| Food prod., liq., tob. | 147,915,396 | 1,722,203,589 | 12,064,132,174 | 220,951,607 | 90,537,701 | 130,413,906 |
| Tex. & tex. prod's. | 106,531,553 | 1,019,293,005 | 7,913,447,806 | 291,966,510 | 121,769,525 | 170,196,985 |
| Leath & leath prod. | 14,101,547 | 235,958,646 | 1,936,629,191 | *42,393,754* | 14,811,371 | *57,705,125* |
| Rub. & rub. goods. | 12,474,950 | 185,163,772 | 1,043,214,002 | *4,397,103* | 3,748,472 | *8,645,575* |
| Lum. & wood prod. | 109,212,616 | 465,362,364 | 3,017,935,595 | 294,100,484 | 78,959,959 | 215,140,525 |
| Pap., pulp, & prod. | 41,461,250 | 223,870,039 | 1,561,798,807 | 237,581,554 | 72,302,006 | 165,279,548 |
| Printing & publish. | 34,724,236 | 673,694,188 | 1,611,613,879 | 149,450,528 | 42,249,644 | 107,200,884 |
| Chem. & allied sub. | 165,273,794 | 940,526,769 | 5,220,195,702 | 344,929,904 | 98,163,376 | 246,766,528 |
| Stone, clay and glass products | 41,515,156 | 242,845,725 | 1,173,253,839 | 142,885,940 | 37,359,624 | 105,526,316 |
| Metal & met. prod. | 385,748,064 | 2,374,172,039 | 13,829,239,958 | 1,274,899,410 | 293,857,794 | 981,032,616 |
| All oth. mfg. indus. | 95,549,878 | 940,758,240 | 3,995,494,184 | 373,311,789 | 91,201,101 | 282,110,688 |
| Total manufactur'g. | 1,154,508,440 | 9,023,848,376 | 53,366,955,137 | 3,282,277,869 | 944,960,573 | 2,337,317,296 |
| Construction | 46,113,271 | 580,257,229 | 2,152,311,483 | 85,342,621 | 33,179,762 | 52,162,859 |
| Transp. and other public utilities | 336,794,040 | 6,041,379,523 | 8,474,156,223 | 678,625,720 | 98,623,106 | 580,002,614 |
| Trade | 144,427,137 | 4,081,517,304 | 30,941,425,182 | 571,691,321 | 192,612,920 | 379,078,401 |
| Public serv—profes. amusem'ts, hot., etc | 58,472,726 | 1,034,626,657 | 1,836,282,366 | 116,291,494 | 31,547,536 | 84,743,958 |
| Fin., bank., ins., etc | 133,470,961 | 4,503,843,924 | 7,750,206,592 | 639,367,923 | 119,001,606 | 520,366,317 |
| Comb'at'ns—Pred. indus. not ascert | 29,665,570 | 447,061,777 | 1,100,586,096 | 32,375,830 | 11,266,153 | 21,109,677 |
| Concerns in liquida. | 5,870,874 | 122,808,422 | 359,459,992 | *59,566,861* | 2,268,972 | *61,834,833* |
| Inactive concerns | 206,239 | 4,664,386 | 5,587,103 | *4,085,156* | 7,779 | *4,092,935* |
| Total | 2,514,114,673 | 27,782,018,683 | 112,332,331,180 | 5,873,231,069 | 1,625,234,643 | 4,247,996 426 |

Gross income and total deductions are incomplete as to transportation and public utilitity concerns. Figures in italic show deficit.

## CORPORATION PROFITS AND TAX RATIOS, 1920.

| Industrial Groups. | War Profits and Excess Profits Tax. | Total Tax. | Per Cent. of Net Income to Invested Capital. | Per Cent. of Total Tax to Net Income. |
|---|---|---|---|---|
| Agriculture and related industries | $11,726,327 | $17,142,344 | 11.67 | 24.18 |
| Mining and quarrying: | | | | |
| Coal mining | 80,733,791 | 106,735,485 | 26.04 | 30.27 |
| Metal mining | 2,982,893 | 5,912,914 | 4.84 | 17.05 |
| Gas and oil | 22,357,480 | 40,183,620 | 12.29 | 19.63 |
| All other mining and quarrying | 11,352,806 | 21,096,296 | 9.38 | 19.84 |
| Total mining and quarrying | 117,426,970 | 173,928,315 | 14.35 | 24.91 |
| Manufacturing: | | | | |
| Food products, liquors, and tobacco | 57,783,589 | 90,125,932 | 12.89 | 22.40 |
| Textile and textile products | 86,131,240 | 121,624,496 | 17.77 | 26.57 |
| Leather and leather products | 9,988,020 | 14,806,204 | 14.74 | 24.35 |
| Rubber and rubber goods | 1,429,688 | 3,746,297 | 6.63 | 14.06 |
| Lumber and wood products | 53,335,574 | 78,925,502 | 17.94 | 24.59 |
| Paper and pulp products | 53,826,538 | 72,299,767 | 28.70 | 29.94 |
| Printing and publishing | 28,741,090 | 41,862,833 | 22.11 | 26.00 |
| Chemicals and allied substances | 60,298,118 | 98,120,026 | 15.98 | 22.25 |
| Stone, clay, and glass products | 24,718,109 | 37,021,872 | 16.98 | 24.89 |
| Metal and metal products | 177,293,688 | 293,285,838 | 11.91 | 22.40 |
| All other manufacturing industries | 53,995,262 | 90,193,786 | 14.39 | 21.02 |
| Total manufacturing | 607,540,916 | 942,012,553 | 14.56 | 23.56 |
| Construction | 25,640,092 | 33,122,794 | 17.85 | 29.44 |
| Transportation and other public utilities: | | | | |
| Steam railroads | 1,725,611 | 32,776,332 | 4.87 | 9.93 |
| Electric railroads | 412,463 | 2,967,379 | 4.85 | 11.19 |
| Ocean lines, transoceanic and coastal | 1,641,965 | 2,841,664 | 12.19 | 19.62 |
| All other transportation | 11,637,709 | 24,270,346 | 9.61 | 16.90 |
| Electric light and power companies | 829,311 | 5,428,295 | 6.15 | 11.15 |
| Gas companies | 701,398 | 2,300,321 | 5.82 | 13.21 |
| Telephone and telegraph companies | 1,086,874 | 8,565,566 | 7.26 | 10.81 |
| All other public utilities | 4,686,737 | 18,959,233 | 5.39 | 12.91 |
| Total transportation and other public utilities | 22,722,068 | 98,109,136 | 6.29 | 12.16 |
| Trade | 122,624,930 | 192,137,168 | 15.72 | 21.22 |
| Public service—Professional, amusements, hotels, etc | 20,603,083 | 31,299,308 | 16.66 | 21.89 |
| Finance, banking, insurance, etc.: | | | | |
| National banks | 19,306,740 | 39,759,459 | 11.64 | 14.20 |
| State banks | 8,841,759 | 19,249,227 | 11.25 | 12.15 |
| All other banking | 20,940,925 | 48,080,562 | 7.14 | 13.58 |
| Life insurance, stock and mutual companies | 146,00[illegible] | 2,150,970 | 1.00 | 5.71 |
| Accident, fire & marine, stk. & mutual companies | 247,033 | 1,250,560 | 5.41 | 10.01 |
| All other insurance companies | 2,025,769 | 6,682,662 | 3.59 | 11.06 |
| Total finance, banking, insurance, etc | 51,508,230 | 117,173,440 | 6.25 | 12.98 |
| Combinations, predominant industry not ascertainable | 5,298,644 | 11,249,966 | 8.95 | 16.91 |
| Concerns in liquidation | 1,427,461 | 2,246,807 | 5.78 | 17.90 |
| Inactive concerns | 1,572 | 6,858 | 4.49 | 6.77 |
| Total reporting invested capital | 986,520,293 | 1,618,428,68[illegible] | 11.28 | 20.97 |

## DISTRIBUTION OF CORPORATION INCOME, BY INDUSTRIAL GROUPS AND BY NATURE OF DEDUCTIONS, CALENDAR YEAR 1920.

| Industrial Groups. | Total No. of Ret'ns. | Total Gross Income. | Cost of Goods. | Compensation of Officers. | Interest Paid. | Domestic Tax. |
|---|---|---|---|---|---|---|
| Agri. and related indus... | 9,186 | $725,049,918 | $375,188,436 | $21,117,431 | $26,690,450 | $16,562,109 |
| Mining and quarrying... | 17,534 | 6,151,220,396 | 3,090,907,336 | 86,740,852 | 94,898,816 | 86,659,076 |
| Manufacturing: | | | | | | |
| Food prod., liq. and tob.. | 13,718 | 12,285,083,781 | 9,838,242,761 | 116,932,154 | 157,474,228 | 81,364,046 |
| Textile & textile prod.... | 10,121 | 8,205,414,316 | 6,491,778,317 | 165,572,272 | 80,004,050 | 50,268,609 |
| Leather & leather prod... | 2,162 | 1,893,735,437 | 1,610,054,938 | 37,428,583 | 28,638,559 | 10,446,918 |
| Rubber and rub. goods.. | 671 | 1,038,316,899 | 813,002,263 | 9,390,001 | 16,904,478 | 6,278,538 |
| Lumber and wood prod.. | 7,265 | 3,312,036,079 | 2,288,176,063 | 82,749,447 | 39,806,322 | 32,628,783 |
| Paper, pulp & products.. | 1,693 | 1,799,380,361 | 1,234,124,575 | 34,609,373 | 15,043,715 | 12,689,855 |
| Printing and publishing.. | 8,088 | 1,761,064,407 | 796,740,262 | 81,985,225 | 11,963,161 | 12,506,807 |
| Chemicals and allied sub. | 5,826 | 5,565,125,606 | 3,951,464,900 | 69,757,426 | 56,816,619 | 36,356,194 |
| Stone, clay & glass prod.. | 3,662 | 1,316,139,779 | 834,931,187 | 35,043,940 | 10,912,414 | 8,005,417 |
| Metal and metal prod.... | 15,131 | 15,104,130,368 | 10,513,239,800 | 245,970,242 | 162,741,650 | 147,368,163 |
| All oth. manuf. industries | 9,834 | 4,368,805,973 | 2,747,403,330 | 117,590,735 | 52,939,915 | 41,252,086 |
| Total manufacturing... | 78,171 | 56,649,233,006 | 41,119,158,396 | 997,029,398 | 633,245,111 | 439,165,416 |
| Construction | 9,960 | 2,237,654,104 | 1,407,779,164 | 84,091,559 | 24,173,277 | 9,896,983 |
| Transp. & oth. pub. util.. | 20,599 | 9,152,781,943 | 1,051,986,809 | 91,516,985 | 701,604,036 | 250,874,830 |
| Trade | 78,885 | 31,513,116,503 | 25,688,400,149 | 667,223,601 | 244,656,242 | 115,200,749 |
| Public service—profes., amusements, hotels, etc. | 17,490 | 1,952,573,860 | 593,019,603 | 95,487,050 | 26,193,662 | 28,482,668 |
| Finance, bank., ins., etc.. | 78,902 | 8,389,574,515 | 1,495,308,305 | 364,899,903 | 1,025,568,584 | 227,114,915 |
| Combinations—predom. indus. not ascertainable. | 3,108 | 1,132,961,926 | 537,763,725 | 19,573,605 | 47,721,198 | 18,800,221 |
| Concerns in liquidation... | 6,293 | 299,894,131 | 205,465,831 | 9,256,702 | 10,424,528 | 5,633,835 |
| Inactive concerns..... | 25,467 | 1,501,947 | 511,175 | 69,676 | 94,230 | 41,397 |
| Total..... | 345,595 | 118,205,562,249 | 75,565,488,929 | 2,437,006,762 | 2,835,269,934 | 1,198,432,199 |

Gross income and total deductions are incomplete as to transportation and public utilities concerns.

## CORPORATION RETURNS BY SIZE OF NET INCOME, 1920.

| Income Classes. | Number. | Net Income. | Income Tax. | Income Classes. | Number. | Net Income. | Income Tax. |
|---|---|---|---|---|---|---|---|
| | | *Thous. of Dollars.* | *Thous. of Dollars.* | | | *Thous. of Dollars.* | *Thous. of Dollars.* |
| Reporting net income: | | | | $1,000,000 to $5,000,000 | 836 | 1,626,705 | 136,151 |
| $0 to $2,000 | 75,905 | 65,835 | ..... | $5,000,000 and over | 160 | 2,203,332 | 186,727 |
| $2,000 to $5,000 | 46,868 | 151,338 | 5,901 | | | | |
| $5,000 to $10,000 | 27,615 | 194,776 | 13,129 | Total | 203,238 | 7,902,654 | 636,508 |
| $10,000 to $50,000 | 35,994 | 786,538 | 62,810 | Reporting no net inc. | 142,362 | *2,029,423* | ..... |
| $50,000 to $100,000 | 7,092 | 496,550 | 40,383 | | | | |
| $100,000 to $250,000 | 5,497 | 851,989 | 68,486 | Grand total | 345,595 | 5,873,231 | 636,508 |
| $250,000 to $500,000 | 2,124 | 737,217 | 59,163 | Figures in italic show deficit. | | | |
| $500,000 to $1,000,000 | 1,142 | 788,372 | 63,754 | | | | |

| Income Classes. | War Profits, Excess Profits Tax. | Total Tax. | Pct. of Tot. Tax to Net Income. | Income Classes. | War Profits, Excess Profits Tax. | Total Tax. | Pct. of Tot. Tax to Net Income. |
|---|---|---|---|---|---|---|---|
| | *Thous. of Dollars.* | *Thous. of Dollars.* | | | *Thous. of Dollars.* | *Thous. of Dollars.* | |
| Reporting net income: | | | | | | | |
| $2,000 to $5,000 | 975 | 6,877 | 4.54 | $1,000,000 to $5,000,000 | 222,801 | 358,952 | 22.07 |
| $5,000 to $10,000 | 6,360 | 19,490 | 10.01 | $5,000,000 and over | 231,524 | 418,252 | 18.98 |
| $10,000 to $50,000 | 73,842 | 136.653 | 17.37 | | | | |
| $50,000 to $100,000 | 69,493 | 109,877 | 22.13 | Total | 988,726 | 1,625,234 | 20.74 |
| $100,000 to $250,000 | 133,565 | 202,051 | 23.72 | Reporting no net inc. | ..... | ..... | ..... |
| $250,000 to $500,000 | 120,135 | 179,298 | 24.32 | | | | |
| $500,000 to $1,000,000 | 130,026 | 193,781 | 24.58 | Grand total | 988,726 | 1,625,234 | ..... |

## PERSONAL INCOMES IN THE UNITED STATES.

(Data by Internal Revenue Bureau, calendar years.)

The incomes are net, after deductions allowed by the law.

| States and Territories. | 1920. | 1919. | 1918. | 1917. | 1916. |
|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Alabama | 156,604,933 | 133,470,965 | 121,250,953 | 73,508,562 | 18,469,010 |
| Alaska | 19,400,775 | 18,862,034 | 15,434,087 | 10,549,506 | 1,878,419 |
| Arizona | 67,280,486 | 61,434,347 | 41,579,450 | 39,635,508 | 11,777,241 |
| Arkansas | 118,060,710 | 123,704,361 | 76,354,037 | 68,296,287 | 17,683,678 |
| California | 1,329,006,594 | 981,170,941 | 701,850,380 | 632,608,546 | 228,324,945 |
| Colorado | 219,277,184 | 191,001,999 | 159,487,951 | 137,853,875 | 53,854,130 |
| Connecticut | 451,737,702 | 347,929,674 | 295,617,840 | 249,186,724 | 133,858,341 |
| Delaware | 55,633,321 | 62,901,249 | 48,358,031 | 56,459,176 | 57,798,410 |
| District of Columbia | 208,388,174 | 166,399,104 | 138,966,315 | 104,357,892 | 67,334,621 |
| Florida | 141,105,124 | 107,362,976 | 63,681,401 | 54,378,496 | 17,401,202 |
| Georgia | 228,619,716 | 219,471,959 | 148,366,439 | 137,775,612 | 32,992,965 |
| Hawaii | 55,572,896 | 33,164,366 | 20,054,940 | 21,888,755 | 20,362,022 |
| Idaho | 67,391,639 | 65,472,540 | 55,954,296 | 46,465,514 | 7,927,064 |
| Illinois | 1,836,956,942 | 1,662,796,441 | 1,256,309,485 | 1,119,960,600 | 484,290,833 |
| Indiana | 556,061,991 | 417,323,251 | 325,549,440 | 261,265,426 | 74,637,683 |
| Iowa | 631,560,789 | 527,163,054 | 450,267,585 | 337,283,861 | 65,604,874 |
| Kansas | 306,413,429 | 264,971,649 | 218,524,054 | 202,159,002 | 39,638,465 |
| Kentucky | 243,879,230 | 215,977,422 | 166,350,127 | 124,826,244 | 38,506,976 |
| Louisiana | 237,109,145 | 201,753,808 | 137,261,983 | 134,349,180 | 51,274,633 |
| Maine | 143,455,545 | 112,562,525 | 84,033,212 | 66,950,710 | 30,435,945 |
| Maryland | 483,195,448 | 398,672,772 | 303,421,092 | 253,433,289 | 121,009,054 |
| Massachusetts | 1,368,406,048 | 1,090,508,058 | 868,460,461 | 717,512,002 | 474,292,762 |
| Michigan | 895,679,238 | 665,475,193 | 415,313,164 | 387,824,910 | 162,533,104 |
| Minnesota | 453,212,241 | 383,920,683 | 291,074,629 | 275,510,103 | 93,210,384 |
| Mississippi | 85,954,352 | 101,262,053 | 70,323,185 | 61,763,713 | 14,831,796 |
| Missouri | 548,130,178 | 470,443,311 | 409,013,021 | 362,026,687 | 147,069,303 |
| Montana | 109,348,194 | 108,380,657 | 90,091,830 | 81,207,992 | 19,467,019 |
| Nebraska | 306,362,706 | 287,457,592 | 306,053,565 | 251,988,895 | 36,559,607 |
| Nevada | 25,337,934 | 20,887,132 | 17,826,669 | 16,423,316 | 2,799,775 |
| New Hampshire | 100,431,539 | 78,565,318 | 56,889,284 | 42,843,296 | 19,557,542 |
| New Jersey | 977,853,627 | 828,428,672 | 653,112,589 | 521,042,424 | 254,068,880 |
| New Mexico | 36,923,120 | 31,587,990 | 36,591,416 | 31,644,721 | 7,486,732 |
| New York | 4,030,623,696 | 3,436,343,179 | 2,719,713,784 | 2,774,035,148 | 1,922,864,651 |
| North Carolina | 163,799,837 | 161,613,467 | 89,748,811 | 84,220,131 | 24,825,826 |
| North Dakota | 66,188,434 | 80,190,946 | 89,586,415 | 61,233,723 | 9,219,055 |
| Ohio | 1,407,388,003 | 1,075,115,926 | 993,314,432 | 740,406,422 | 318,822,511 |
| Oklahoma | 295,790,791 | 242,184,301 | 163,678,297 | 170,751,358 | 66,811,462 |
| Oregon | 193,652,281 | 166,240,606 | 111,601,050 | 84,746,023 | 24,968,572 |
| Pennsylvania | 2,212,178,029 | 1,838,002,395 | 1,770,848,133 | 1,360,802,293 | 643,243,991 |
| Rhode Island | 180,303,990 | 146,109,811 | 129,630,322 | 112,129,569 | 65,257,163 |
| South Carolina | 109,246,657 | 142,688,832 | 73,855,345 | 70,917,349 | 9,882,947 |
| South Dakota | 103,578,036 | 133,174,792 | 151,725,486 | 109,794,860 | 7,474,252 |
| Tennessee | 212,600,105 | 193,909,353 | 139,173,691 | 111,964,540 | 39,867,675 |
| Texas | 720,720,162 | 643,172,301 | 392,975,557 | 350,297,337 | 113,278,037 |
| Utah | 82,278,389 | 61,913,436 | 52,454,404 | 45,044,946 | 14,281,206 |
| Vermont | 59,303,302 | 46,204,506 | 34,063,265 | 29,540,804 | 14,628,955 |
| Virginia | 273,235,229 | 247,658,373 | 173,104,495 | 130,682,859 | 42,216,464 |
| Washington | 375,979,893 | 325,920,733 | 266,096,746 | 169,727,615 | 49,697,247 |
| West Virginia | 287,729,460 | 147,949,092 | 156,557,747 | 106,061,550 | 30,170,809 |
| Wisconsin | 436,436,810 | 337,851,344 | 290,199,685 | 228,190,253 | 87,614,595 |
| Wyoming | 63,244,529 | 52,463,959 | 26,413,937 | 28,855,603 | 6,523,787 |
| Non-resident aliens and citizens residing abroad | ..... | ..... | 56,473,942 | ..... | ..... |
| Total | 23,735,629,183 | 19,859,491,448 | 15,924,639,355 | 13,652,383,207 | 6,298,577,620 |

## TAX LEVIED BY U. S. ON PERSONAL INCOMES.

(By classes and by calendar years.)

| INCOME CLASSES. | 1920. | 1919. | 1918. | 1917. | 1916. |
|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| $1,000 to $2,000 | 36,859,732 | 24,696,200 | 26,481,602 | 16,243,504 | ..... |
| $2,000 to $3,000 | 45,507,821 | 28,257,861 | 35,415,344 | 9,097,378 | ..... |
| $3,000 to $5,000 | 83,496,116 | 75,914,847 | 82,928,720 | 18,283,457 | 775,804 |
| $5,000 to $10,000 | 97,886,033 | 91,537,910 | 93,057,963 | 44,066,389 | 6,301,183 |
| $10,000 to $25,000 | 172,259,321 | 164,832,523 | 142,448,679 | 80,695,149 | 11,637,014 |
| $25,000 to $50,000 | 154,265,276 | 154,946,343 | 130,240,648 | 76,593,344 | 11,602,681 |
| $50,000 to $100,000 | 163,717,719 | 186,357,608 | 147,428,655 | 85,027,556 | 16,298,587 |
| $100,000 to $150,000 | 86,587,694 | 118,705,303 | 95,680,064 | 55,766,236 | 12,423,481 |
| $150,000 to $300,000 | 92,604,423 | 163,095,349 | 136,155,916 | 86,718,157 | 24,007,267 |
| $300,000 to $500,000 | 47,043,461 | 86,031,032 | 79,164,847 | 50,227,598 | 17,951,410 |
| $500,000 to $1,000,000 | 45,641,005 | 76,228,132 | 69,834,148 | 59,349,187 | 20,901,911 |
| $1,000,000 and over | 49,185,085 | 99,026,996 | 88,885,249 | 109,424,999 | 51,487,356 |
| Total | 1,075,053,686 | 1,269,630,104 | 1,127,721,835 | 691,492,954 | 173,386,694 |

## TAX LEVIED BY U. S. ON PERSONAL INCOMES.

(By States and by calendar years.)

| STATES AND TERRITORIES. | 1920. | 1919. | 1918. | 1917. | 1916. |
|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Alabama | 4,482,805 | 4,668,465 | 4,431,563 | 2,023,984 | 175,989 |
| Alaska | 248,605 | 357,783 | 316,859 | 132,769 | 17,022 |
| Arizona | 1,325,905 | 1,816,899 | 1,724,116 | 1,019,262 | 191,519 |
| Arkansas | 3,268,450 | 4,237,673 | 3,269,477 | 1,848,177 | 157,513 |
| California | 50,447,505 | 48,983,856 | 36,070,926 | 20,355,424 | 3,595,636 |
| Colorado | 6,766,900 | 7,196,593 | 5,844,925 | 5,184,948 | 1,055,758 |
| Connecticut | 15,774,598 | 16,833,829 | 17,690,343 | 10,595,737 | 2,824,846 |
| Delaware | 2,122,025 | 7,495,453 | 7,158,522 | 9,350,461 | 3,695,605 |
| District of Columbia | 8,536,632 | 8,170,833 | 8,669,100 | 4,446,620 | 1,068,644 |
| Florida | 5,242,705 | 4,363,089 | 2,367,463 | 1,584,917 | 322,636 |
| Georgia | 7,697,693 | 9,134,092 | 7,077,184 | 3,250,342 | 378,062 |
| Hawaii | 4,075,539 | 2,145,194 | 1,857,352 | 1,174,831 | 366,802 |
| Idaho | 1,086,614 | 1,475,023 | 1,493,518 | 839,646 | 140,496 |
| Illinois | 85,409,203 | 99,398,236 | 84,560,942 | 49,103,261 | 10,947,250 |
| Indiana | 15,780,124 | 13,541,245 | 11,456,898 | 5,978,782 | 1,165,961 |
| Iowa | 18,776,990 | 15,807,707 | 15,928,158 | 5,445,816 | 518,845 |
| Kansas | 8,351,393 | 9,138,315 | 7,880,244 | 5,428,495 | 555,943 |
| Kentucky | 7,292,098 | 7,595,384 | 7,918,960 | 2,943,196 | 384,497 |
| Louisiana | 9,626,591 | 12,888,655 | 9,353,518 | 4,936,825 | 778,693 |
| Maine | 4,892,419 | 4,468,876 | 4,263,003 | 2,467,852 | 371,367 |
| Maryland | 21,189,233 | 22,630,984 | 20,415,237 | 12,378,724 | 2,405,523 |
| Massachusetts | 69,368,994 | 86,566,938 | 81,307,340 | 44,478,907 | 10,892,685 |
| Michigan | 40,493,261 | 55,958,378 | 22,336,385 | 15,159,388 | 3,340,682 |
| Minnesota | 15,169,869 | 15,696,465 | 15,262,760 | 8,356,172 | 1,553,282 |
| Mississippi | 2,495,207 | 5,634,901 | 3,542,849 | 2,252,612 | 195,054 |
| Missouri | 21,877,701 | 22,146,510 | 20,716,692 | 10,880,241 | 2,373,327 |
| Montana | 2,033,190 | 2,413,463 | 3,012,902 | 1,548,582 | 304,448 |
| Nebraska | 8,363,305 | 8,639,003 | 9,373,582 | 5,285,238 | 347,778 |
| Nevada | 390,077 | 435,002 | 412,342 | 241,944 | 18,505 |
| New Hampshire | 2,720,793 | 2,811,830 | 2,827,724 | 1,517,183 | 258,173 |
| New Jersey | 43,275,477 | 47,321,422 | 43,109,648 | 25,710,042 | 5,545,231 |
| New Mexico | 613,573 | 774,470 | 989,825 | 713,829 | 83,935 |
| New York | 286,607,280 | 399,792,351 | 354,263,417 | 251,785,795 | 77,970,521 |
| North Carolina | 9,620,675 | 10,010,348 | 5,575,001 | 2,747,673 | 560,970 |
| North Dakota | 1,105,801 | 1,360,509 | 2,219,954 | 936,862 | 66,344 |
| Ohio | 56,285,168 | 56,505,315 | 55,170,252 | 31,928,937 | 7,722,306 |
| Oklahoma | 13,548,211 | 12,207,129 | 7,649,280 | 5,682,493 | 4,347,797 |
| Oregon | 6,649,011 | 8,232,437 | 6,049,987 | 3,298,630 | 337,051 |
| Pennsylvania | 118,750,989 | 128,195,161 | 137,781,370 | 79,454,848 | 17,612,739 |
| Rhode Island | 11,685,163 | 11,234,132 | 13,512,766 | 8,805,953 | 1,915,104 |
| South Carolina | 3,236,875 | 5,192,020 | 2,732,593 | 1,815,909 | 77,198 |
| South Dakota | 2,228,187 | 3,124,066 | 4,139,239 | 1,171,328 | 48,563 |
| Tennessee | 7,565,009 | 9,082,054 | 6,795,268 | 2,794,197 | 413,078 |
| Texas | 25,400,849 | 32,302,280 | 21,575,479 | 13,447,453 | 2,643,697 |
| Utah | 1,506,781 | 1,270,543 | 1,347,780 | 1,364,652 | 167,688 |
| Vermont | 2,259,129 | 2,074,804 | 1,821,823 | 1,459,253 | 365,004 |
| Virginia | 7,404,201 | 9,020,237 | 7,674,725 | 3,929,273 | 593,304 |
| Washington | 9,094,764 | 11,615,795 | 9,743,163 | 4,377,754 | 776,470 |
| West Virginia | 8,517,268 | 5,319,197 | 5,709,295 | 3,303,285 | 416,386 |
| Wisconsin | 13,232,531 | 10,901,097 | 11,382,127 | 5,716,256 | 1,253,257 |
| Wyoming | 1,161,320 | 1,444,063 | 1,272,692 | 838,196 | 67,510 |
| Non-resident aliens & citizens residing abroad | ..... | ..... | 8,665,567 | ..... | ..... |
| Total | 1,075,053,686 | 1,269,630,104 | 1,127,721,835 | 691,492,954 | 173,386,694 |

Personal net income exempt from normal tax in 1920 totalled $15,632,079,896.

For the year 1918 the returns of non-resident aliens and citizens residing abroad were segregated and reported as such in the statistics for that year, whereas in subsequent years it was considered advisable to credit each State with such returns filed therein.

## NUMBER OF TAXABLE PERSONAL INCOMES IN THE U. S.

(By States and by calendar years.)

The table shows the number of returns filed.

| States and Territories. | 1920. | 1919. | 1918. | 1917. | 1916. |
|---|---|---|---|---|---|
| Alabama | 52,984 | 40,789 | 38,988 | 21,844 | 2,097 |
| Alaska | 9,899 | 9,427 | 7,606 | 4,570 | 245 |
| Arizona | 24,812 | 20,495 | 13,701 | 12,264 | 994 |
| Arkansas | 38,113 | 33,556 | 20,612 | 17,839 | 2,255 |
| California | 396,973 | 266,720 | 206,471 | 182,232 | 21,208 |
| Colorado | 74,198 | 57,526 | 54,160 | 40,627 | 4,435 |
| Connecticut | 148,195 | 110,409 | 86,489 | 64,472 | 9,713 |
| Delaware | 18,937 | 16,059 | 10,239 | 8,032 | 1,346 |
| District of Columbia | 69,730 | 58,616 | 43,776 | 29,737 | 6,808 |
| Florida | 42,210 | 31,107 | 19,102 | 15,336 | 1,779 |
| Georgia | 73,325 | 58,930 | 39,073 | 38,252 | 3,444 |
| Hawaii | 13,715 | 8,136 | 4,242 | 3,131 | 1,144 |
| Idaho | 25,755 | 21,448 | 19,249 | 16,414 | 756 |
| Illinois | 542,467 | 422,229 | 366,918 | 319,497 | 37,525 |
| Indiana | 189,587 | 130,383 | 104,581 | 85,021 | 7,004 |
| Iowa | 183,398 | 133,796 | 118,933 | 114,970 | 8,497 |
| Kansas | 99,255 | 76,451 | 64,794 | 63,065 | 4,290 |
| Kentucky | 78,258 | 59,332 | 47,098 | 34,692 | 3,887 |
| Louisiana | 69,340 | 52,871 | 33,432 | 32,317 | 4,517 |
| Maine | 47,717 | 34,578 | 25,104 | 17,112 | 2,823 |
| Maryland | 148,000 | 116,373 | 87,085 | 60,954 | 9,674 |
| Massachusetts | 401,770 | 268,307 | 209,786 | 156 111 | 32,291 |
| Michigan | 305,075 | 181,662 | 135,349 | 111,562 | 11,448 |
| Minnesota | 154,118 | 123,914 | 84,515 | 80,009 | 7,556 |
| Mississippi | 28,022 | 23,804 | 19,949 | 15,382 | 1,440 |
| Missouri | 162,199 | 125,248 | 110,890 | 91,608 | 12,956 |
| Montana | 45,557 | 42,593 | 34,464 | 28,646 | 1,801 |
| Nebraska | 97,729 | 87,344 | 96,049 | 82,472 | 4,286 |
| Nevada | 10,381 | 8,740 | 7,097 | 6,623 | 364 |
| New Hampshire | 35,983 | 25,601 | 17,317 | 10,809 | 1,735 |
| New Jersey | 296,989 | 231,757 | 185,706 | 134,960 | 19,701 |
| New Mexico | 13,656 | 10,757 | 13,084 | 11,616 | 813 |
| New York | 1,047,634 | 683,085 | 559,753 | 489,089 | 93,155 |
| North Carolina | 47,342 | 37,185 | 21,738 | 22,977 | 2,207 |
| North Dakota | 24,209 | 27,375 | 29,120 | 20,941 | 1,176 |
| Ohio | 447,998 | 308,309 | 306,918 | 190,273 | 21,774 |
| Oklahoma | 81,785 | 61,500 | 46,818 | 48,758 | 2,539 |
| Oregon | 67,640 | 49,663 | 34,592 | 25,071 | 2,800 |
| Pennsylvania | 672,746 | 539,172 | 518,729 | 328,171 | 40,289 |
| Rhode Island | 53,128 | 39,936 | 32,921 | 23,927 | 3,745 |
| South Carolina | 33,044 | 37,296 | 20,239 | 22,321 | 1,204 |
| South Dakota | 34,670 | 38,614 | 45,505 | 39,654 | 971 |
| Tennessee | 65,054 | 50,789 | 38,232 | 31,451 | 4,414 |
| Texas | 224,617 | 176,547 | 114,500 | 95,416 | 10,514 |
| Utah | 30,510 | 21,164 | 18,517 | 14,636 | 1,259 |
| Vermont | 19,205 | 13,569 | 9,965 | 7,258 | 1,100 |
| Virginia | 92,576 | 75,966 | 51,207 | 37,951 | 4,190 |
| Washington | 148,067 | 114,322 | 95,422 | 56,322 | 5,360 |
| West Virginia | 96,326 | 45,168 | 48,876 | 28,281 | 2,575 |
| Wisconsin | 150,452 | 105,793 | 94,704 | 70,554 | 8,261 |
| Wyoming | 24,594 | 18,349 | 7,821 | 7,663 | 673 |
| Non-resident aliens and citizens residing abroad | ..... | ..... | 3,678 | ..... | ..... |
| Total | 7,259,944 | 5,332,760 | 4,425,114 | 3,472,890 | 437,036 |

Of the returns filed in 1920, there were 77,558 from wives who had $534,840,405 independent net income.

### CLASSIFICATION OF PERSONAL INCOMES IN THE U. S., CALENDAR YEARS.

| Income Classes. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
|---|---|---|---|---|---|---|---|
| $1,000 to $2,000 | ..... | ..... | ..... | 1,640,758 | 1,516,938 | 1,924,872 | 2,671,950 |
| $2,000 to $3,000 | ..... | ..... | ..... | 838,707 | 1,496,878 | 1,569,741 | 2,569,316 |
| $3,000 to $4,000 | 82,754 | 69,045 | 85,122 | 374,958 | 610,095 | 742,334 | 894,559 |
| $4,000 to $5,000 | 66,525 | 58,949 | 72,027 | 185,805 | 322,241 | 438,154 | 442,557 |
| $5,000 to $10,000 | 127,448 | 120,402 | 150,553 | 270,666 | 319,356 | 438,851 | 455,442 |
| $10,000 to $15,000 | 34,141 | 34,102 | 45,309 | 65,800 | 69,992 | 97,852 | 103,570 |
| $15,000 to $20,000 | 15,790 | 16,475 | 22,618 | 29,896 | 30,227 | 42,028 | 44,531 |
| $20,000 to $25,000 | 8,672 | 9,707 | 12,953 | 16,806 | 16,350 | 22,605 | 23,729 |
| $25,000 to $30,000 | 5,483 | 6,196 | 8,055 | 10,571 | 10,205 | 13,769 | 14,471 |
| $30,000 to $40,000 | 6,008 | 7,005 | 10,088 | 12,733 | 11,887 | 15,410 | 15,808 |
| $40,000 to $50,000 | 3,185 | 4,100 | 5,611 | 7,087 | 6,440 | 8,298 | 8,269 |
| $50,000 to $100,000 | 5,161 | 6,847 | 10,452 | 12,439 | 9,996 | 13,320 | 12,093 |
| $100,000 to $150,000 | 1,189 | 1,793 | 2,900 | 3,302 | 2,358 | 2,983 | 2,191 |
| $150,000 to $200,000 | 406 | 724 | 1,284 | 1,302 | 866 | 1,092 | 590 |
| $200,000 to $250,000 | 233 | 386 | 726 | 703 | 401 | 522 | 307 |
| $250,000 to $300,000 | 130 | 216 | 427 | 342 | 247 | 250 | 166 |
| $300,000 to $400,000 | 147 | 254 | 469 | 380 | 260 | 285 | 169 |
| $400,000 to $500,000 | 69 | 122 | 245 | 179 | 122 | 140 | 70 |
| $500,000 to $1,000,000 | 114 | 209 | 376 | 315 | 178 | 189 | 123 |
| $1,000,000 and over | 60 | 120 | 206 | 141 | 67 | 65 | 33 |
| Total | 357,515 | 336,652 | 429,401 | 3,472,890 | 4,425,114 | 5,332,760 | 7,259,944 |
| Married women making separate returns from husbands | ..... | ..... | 7,635 | ..... | ..... | ..... | ..... |
| Total number of returns filed | 357.515 | 336.652 | 437,036 | 3,472,890 | 4,425,114 | 5,332,760 | 7,259,944 |

## INTERNAL REVENUE RECEIPTS, YEAR ENDED JUNE 30, 1922.

| States. | Inc. & Prof. Tax. | Miscel'eous Taxes. | States. | Inc. & Prof. Tax. | Miscel'eous Taxes. |
|---|---|---|---|---|---|
| Alabama | $9,009,980 | $2,454,200 | Nebraska | $9,215,553 | $6,045,837 |
| Alaska | 173,787 | 90,444 | Nevada | 564,023 | 273,522 |
| Arizona | 1,427,375 | 713,859 | New Hampshire | 4,311,758 | 1,598,240 |
| Arkansas | 5,336,259 | 1,642,785 | New Jersey | 67,766,027 | 39,383,311 |
| California | 92,251,113 | 39,401,742 | New Mexico | 811,595 | 419,104 |
| Colorado | 14,545,632 | 5,411,017 | New York | 527,695,268 | 252,077,508 |
| Connecticut | 27,245,128 | 22,979,517 | North Carolina | 23,179,559 | 99,233,769 |
| Delaware | 3,986,808 | 1,902,457 | North Dakota | 1,163,686 | 748,052 |
| District of Columbia | 10,521,286 | 7,333,400 | Ohio | 128,898,272 | 63,403,407 |
| Florida | 8,433,602 | 5,886,255 | Oklahoma | 14,276,549 | 4,125,903 |
| Georgia | 14,270,049 | 6,718,656 | Oregon | 14,934,997 | 3,857,192 |
| Hawaii | 14,632,590 | 882,472 | Pennsylvania | 245,798,087 | 90,909,954 |
| Idaho | 1,372,658 | 739,232 | Rhode Island | 19,992,123 | 15,751,583 |
| Illinois | 179,633,973 | 90,698,593 | South Carolina | 9,699,041 | 1,748,343 |
| Indiana | 30,715,323 | 22,317,076 | South Dakota | 1,643,613 | 921,830 |
| Iowa | 17,046,762 | 6,612,026 | Tennessee | 14,174,092 | 7,620,584 |
| Kansas | 22,242,152 | 8,137,469 | Texas | 34,978,009 | 17,369,665 |
| Kentucky | 16,285,993 | 16,836,202 | Utah | 2,971,391 | 2,159,096 |
| Louisiana | 15,477,826 | 7,276,131 | Vermont | 2,997,106 | 1,160,190 |
| Maine | 10,989,939 | 3,814,268 | Virginia | 18,577,380 | 28,018,268 |
| Maryland | 29,070,268 | 16,901,667 | Washington | 18,733,630 | 4,877,151 |
| Massachusetts | 136,180,292 | 39,633,201 | West Virginia | 27,961,834 | 5,490,603 |
| Michigan | 112,258,181 | 89,616,002 | Wisconsin | 36,879,538 | 13,609,067 |
| Minnesota | 30,297,828 | 15,956,114 | Wyoming | 1,547,897 | 531,661 |
| Mississippi | 3,405,262 | 1,235,235 | Philippine Islands | ..... | 457,430 |
| Missouri | 55,035,012 | 32,421,475 | | | |
| Montana | 2,302,331 | 1,129,830 | Total | 2,086,918,465 | 1,110,532,618 |

Maryland and the District of Col. comprise the district of Maryland, and Washington and the Territory of Alaska the district of Washington.

## SUMMARY OF CHIEF MISCELLANEOUS TAXES, 1922, (1921 FIGURES IN PARENTHESES).

Inheritance tax, $139,418,846 ($154,043,260); distilled spirits, $45,563,350 ($82,598,065); fermented liquors, $46,086 ($825,364); tobacco, $270,759,384 ($255,219,385); stock and bond stamps, $26,730,794 ($32,670,622); freight transportation, $85,292,665 ($140,019,200); passenger transportation, $58,042,231 ($97,481,976); messages, wire and radio, $28,086,886 ($27,360,361); autos and motorcycles, $56,684,530 ($64,388,184); auto tires and parts, $39,344,665 ($39,518,009); candy, $13,593,754 ($20,436,700); jewelry, $19,514,465 ($24,303,937); soft drinks, $33,504,284 ($58,675,973) corporation capital stock, $80,612,240 ($81,525,653); amusement tickets, $73,384,956 ($89,730,833).

## NARCOTIC DRUG ACT.

Registrants under the Narcotic Drug Act number 268,258, of whom 25,312 are in New York State. Doctors registered (included in total) number 147,677, of whom 13,495 are in New York. In the year ended June 30, 1922, there were withdrawn from customs authorities, for consumption 2,629,269 ounces of narcotic drugs.

## THE FOUR RICHEST MEN IN THE UNITED STATES—WHO?

Four persons in the United States reported incomes for the year ended Dec. 31, 1920, of $5,000,000 or over, two residing in New York and two in Michigan. The net income of the four was $29,919,977, or an average of $7,479,994.

The two net incomes of New Yorkers of $5,000,000 or more totalled $16,463,642 and the total tax paid on them was $10,568,387. The two incomes reported by residents of Michigan totalled $13,456,335 and the total tax paid was $8,617,997.

The 33 persons who filed returns showing an income of $1,000,000 or more resided as follows: California, 1; Illinois, 3; Maryland, 1; Massachusetts, 1; Michigan, 2; New Jersey, 2; New York, 19; North Carolina, 2; Pennsylvania, 2.

## GENERAL SOURCES OF PERSONAL INCOMES IN THE U. S., IN 1920.

| General Sources of Income. | Amount. | Pct. of Total Income. | General Sources of Income. | Amount. | Pct. of Total Income. |
|---|---|---|---|---|---|
| | *Dollars.* | | | *Dollars.* | |
| Personal service: | | | Dividends | 2,735,845,795 | 10.25 |
| Salar., wages, direct. fees, etc. | 15,270,373,354 | 57.21 | | | |
| Business, farming, profes sions, from stocks, etc. | 5,927,327,538 | 22.21 | Total | 5,492,568,961 | 20.58 |
| Total | 21,197,700,892 | 79.42 | Total income | 26,690,269,853 | 100.00 |
| | | | General deductions | 2,954,640,670 | 11.07 |
| Property: Rents, royalties | 1,047,423,738 | 3.92 | | | |
| Inter't on bonds, notes, etc. | 1,709,299,428 | 6.41 | Net income | 23,735,629,183 | 88.93 |

## SPECIFIC SOURCES OF PERSONAL INCOMES IN 1920.

| Industrial Groups. | No. of Businesses Rep't'd | Net Income. | Industrial Groups. | No. of Businesses Rep't'd | Net Income. |
|---|---|---|---|---|---|
| | | *Dollars.* | | | *Dollars.* |
| Agric. and related industries | 271,805 | 637,425,239 | | | |
| Mining and quarrying | 5,276 | 36,849,969 | Total manufacturing | 60,729 | 261,900,552 |
| Manufacturing: | | | | | |
| Food prod., liquors, tobacco | 12,056 | 45,699,342 | Construction | 32,618 | 117,316,807 |
| Textile, textile products | 10,937 | 49,503,274 | Transp., other public utilities | 18,978 | 58,355,144 |
| Leather, leather products | 4,420 | 14,238,415 | Trade | 223,931 | 840,755,663 |
| Rubber, rubber goods | 785 | 1,793,299 | Pub. serv.—prof., amus., hotels, etc | 269,045 | 952,773,878 |
| Lumber, wood products | 3,330 | 21,106,509 | | | |
| Paper, pulp, and products | 268 | 3,158,938 | Finance, bank'g, insur., etc | 45,082 | 182,417,786 |
| Printing and publishing | 8,017 | 32,828,875 | Spec. cases—bus. not suff. def'd | | |
| Chemicals, allied substances | 813 | 8,102,049 | to be clas'd with oth. division | 36,659 | 117,760,349 |
| Stone, clay, glass products | 2,566 | 12,173,942 | | | |
| Metal and metal products | 8,574 | 39,140,709 | Grand total | 964,123 | 3,205,555,387 |
| All oth. manufact'r'g indust. | 8,963 | 34,155,200 | | | |

## RAILROAD AND PUBLIC SERVICE COMMISSIONERS.

(As of Sept. 1, 1922.)

### INTERSTATE COMMERCE COMMISSION.

Charles C. McChord, Chairman; Balthasar H. Meyer, Henry C. Hall, Winthrop M. Daniels, Clyde B. Aitchison, Joseph B. Eastman, Mark W. Potter, John J. Esch, Johnston B. Campbell, Ernest I. Lewis. Frederick I. Cox; George B. McGinty, Secretary.

ALABAMA Public Service Commission—A. G. Patterson, President; B. H. Cooper, S. P. Gaillard; Hugh White, Secretary.

ARIZONA Corporation Commission—D. F. Johnson, Chairman; Amos A. Betts, Loren Vaughn; F. J. K. McBride, Secretary.

ARKANSAS Railroad Commission—W. E. Floyd, Chairman; Joe Hardage, Joseph G. Walker; Harvey G. Combs, Secretary.

CALIFORNIA Railroad Commission—Harley W. Brundiage, President; Irvin Martin, Chester H. Rowell, H. Stanley Benedict; H. G. Mathewson, Secretary.

COLORADO Public Utilities Commission—Grant E. Halderman, Chairman; A. P. Anderson, F. P. Lannon; Charles H. Small, Secretary.

CONNECTICUT Public Utilities Commission—Richard T. Higgins, Chairman; C. C. Elwell, Joseph W. Alsop; Henry F. Billings, Secretary.

DISTRICT OF COLUMBIA Public Utilities Commission—Cuno H. Rudolph, President; James F. Oyster. Col. Charles Keller; Walter C. Allen, Secretary.

FLORIDA Railroad Commission—R. Hudson Burr, Chairman; A. D. Campbell, A. S. Wells; Lewis G. Thompson, Secretary.

GEORGIA Railroad Commission—Chas. Murphey Candler, Chairman; Paul B. Trammell, Vice-Chairman; James Perry, John T. Boifeuillet, J. D. Price; Albert Collier, Secretary.

IDAHO Public Utilities Commission—Geo. E. Erb, President; E. M. Sweeley, J. M. Thompson; C. J. Callahan, Secretary.

ILLINOIS Commerce Commission—Frank L. Smith, Chairman; Cicero J. Lindly, Hal W. Trovillion, P. H. Moynihan, James F. Sullivan, Alex. J. Johnson; Julius Johnson, Secretary.

INDIANA Public Service Commission—J. W. McCardle, Chairman; Glenn Van Auken, Oscar Ratts, Maurice Douglass, Edgar M. Blessing; L. C. Loughry, Secretary.

IOWA Board of Railroad Commissioners—Charles Webster, Chairman; Dwight N. Lewis, Fred P. Woodruff; Geo. L. McCaughan, Secretary.

KANSAS Public Utilities Commission—Clyde M. Reed, Chairman; H. A. Russell, J. W. Greenleaf; R. C. Dellinger, Secretary.

KENTUCKY Railroad Commission—J. S. Cooper, Chairman; Frank N. Burns, E. C. Kash; W. W. Jesse, Secretary.

LOUISIANA Public Service Commission—Hue P. Long Jr., Chairman; Shelby Taylor, Francis Williams; Henry Jastremski, Secretary.

MAINE Public Utilities Commission—Charles E. Gurney, Chairman; Herbert W. Trafton, Albert Greenlaw; George F. Giddings, Clerk.

MARYLAND Public Service Commission—William M. Maloy, Chairman; J. Frank Harper, Ezra B. Whitman; Benj. T. Fendall, Secretary.

MASSACHUSETTS Department of Public Utilities—Henry C. Attwill, Chairman; Everett E. Stone, Alonzo R. Weed, David A. Ellis, Henry G. Wells; A. A. Highlands, Secretary.

MICHIGAN Public Utilities Commission—Samuel Odell, Chairman; Earl R. Stewart, William M. Smith, William W. Potter, Sherman T. Handy; Peter Fagan, Secretary.

MINNESOTA Railroad and Warehouse Commission—O. P. B. Jacobson, Fred W. Putnam, Ivan Bowen; Thomas Yapp, Secretary.

MISSISSIPPI RAILROAD COMMISSION—C. M. Morgan, President; W. B. Wilson, S. B. Alexander; J. W. Williams, Secretary.

MISSOURI Public Service Commission—John A. Kurtz, Chairman; Edwin J. Bean, Noah W. Simpson, A. J. O'Reilly, Hugh McIndoe; L. H. Breuer, Secretary.

MONTANA Board of Railroad Commissioners—Lee Dennis, Chairman; Daniel Boyle, S. M. Ross; E. G. Toomey, Secretary and Counsel

NEBRASKA State Railway Commission—H. G. Taylor, Chairman; T. A. Browne, H. L. Cook, Hugh LaMaster; John E. Curtiss, Secretary.

NEVADA Public Service Commission—J. F. Shaughnessy, Chairman; W. H. Simmons, J. G. Scrugham; Benson Wright, Secretary.

NEW HAMPSHIRE Public Service Commission—William T. Gunnison, Chairman; Thomas W. D. Worthen, John W. Storrs; Walter H. Timm, Clerk.

NEW JERSEY Board of Public Utility Commissioners—Harry V. Osborne, President; Harry Bacharach, Joseph F. Autenreith; Alfred N. Barber, Secretary.

NEW MEXICO State Corporation Commission—Bonifacio Montoya, Chairman; Hugh H. Williams, J. M. Luna; A. L. Morrison, Clerk.

NEW YORK Public Service Commission—William A. Pendergast, Chairman; Wm. R. Pooley, Chas. Van Voorhis, Oliver C. Semple, Chas. G. Blakeslee; Francis E. Roberts, Secretary.

NEW YORK Transit Commission — George McAneny, Chairman; Le Roy T. Harkness, John F. O'Ryan; James B. Walker, Secretary.

NORTH CAROLINA Corporation Commission—William T. Lee, Chairman; Geo. P. Pell, A. J. Maxwell; R. O. Self, Clerk.

NORTH DAKOTA Board of Railroad Commissioners—Frank Milhollan, President; C. W. McDonnell, W. H. Stutsman; J. H. Calderhead, Secretary.

OHIO Public Utilities Commission—Geo. T. Poor, Chairman; Charles C. Marshall, Elisha A. Tinker; Jos. E. Baird, Secretary.

OKLAHOMA Corporation Commission—Campbell Russell, Chairman; Art. L. Walker, E. R. Hughes; G. F. Smith, Secretary.

OREGON Public Service Commission—Newton McCoy, Chairman; Hylen H. Corey, T. M. Kerrigan; Wm. P. Ellis, Secretary.

PENNSYLVANIA Public Service Commission—William D. B. Ainey, Chairman; S. Ray Shelby, John W. Reed, John S. Rilling, Samuel M. Clement Jr., Milton J. Brecht, James S. Benn; John G. Hopwood, Secretary.

RHODE ISLAND Public Utilities Commission—Wm. C. Bliss, Chairman; Samuel E. Hudson, Robt. F. Rodman; George A. Carmichael, Secretary.

SOUTH CAROLINA Railroad Commission—Frank W. Shealy, Chairman; James Cansler, H. H. Arnold, John C. Coney, Earle R. Ellerbe, James N. Pearman, R. J. Wade; J. P. Darby, Secretary.

SOUTH DAKOTA Board of Railroad Commissioners—J. W. Raish, Chairman; D. E. Brisbine, Vice-Chairman; J. J. Murphy; E. F. Norman, Secretary.

TENNESSEE Railroad and Public Utilities Commission—B. A. Enloe, Chairman; H. H. Hannah, Julian H. Campbell; J. Hessey Corbitt, Secretary.

TEXAS Railroad Commission—Allison Mayfield, Chairman; Earle B. Mayfield, Clarence E. Gilmore; E. R. McLean, Secretary.

UTAH Public Utilities Commission—Abbot R. Heywood, President; Warren Stoutnour, Joshua Greenwood; T. E. Banning, Secretary.

VERMONT Public Service Commission—Walter A. Dutton, Chairman; William R. Warner, Eli Porter; Neil D. Clawson, Clerk.

VIRGINIA State Corporation Commission—Wm. F. Rhea, Chairman; Alexander Forward, Berkley D. Adams; R. T. Wilson, Secretary and Clerk.

WASHINGTON Department of Public Works—E. V. Kuykendall, Director; Hance H. Cleland, Supervisor of Public Utilities; Frank R. Spinning, Supervisor of Transportation (Common Carriers), James Allen, Supervisor of Highways; J. H. Brown, Secretary

WEST VIRGINIA Public Service Commission—J. J. Divine, Chairman; Ernest D. Lewis, Edgar G. Rider; R. B. Bernheim, Secretary

WISCONSIN Railroad Commission—Carl D. Jackson, Chairman. Henry R. Trumbower, Lewis E. Gettle; C. D. Le Cheverell, Secretary

WYOMING State Board of Equalization and Public Service Commission—Claude L. Draper, Chairman. Maurice Groshon, H. M. Huntington; E. N. Crowley, Secretary.

### *CANADIAN BOARD OF RAIL COMMISSIONERS.*

BOARD OF RAILWAY COMMISSIONERS FOR CANADA—Hon. F. B. Carvell, K. C., LL. D.; Chief Commissioner; S. J. McLean, Ph. D., Assistant Chief Commissioner; Hon. W. D. Nantel, K. C., Deputy Chief Commissioner. A. C. Boyce, K. C., Commissioner; Dr. J. G. Rutherford, C. M. G., Commissioner; C. Lawrence, Commissioner; A. D. Cartwright, Secretary. Ottawa, Ontario.

## SUMMARY OF AMERICAN RAILWAY OPERATIONS.

(Interstate Commerce Commission's figures. They cover calendar years.)

OPERATING REVENUES (STATED IN DOLLARS).

| YEAR. | District. | Freight. | Passenger. | Mail. | Express. | Other and Total. | Miles of Road. |
|---|---|---|---|---|---|---|---|
| 1921.. | Eastern | 1,718,107,906 | 539,111,966 | 34,900,335 | 36,976,717 | 2,485,011,865 | 59,116 |
| | Pocahontas | 155,418,665 | 26,353,428 | 2,197,262 | 1,908,099 | 192,471,049 | 5,416 |
| | Southern | 488,720,844 | 145,786,707 | 14,431,751 | 12,998,104 | 684,992,888 | 38,442 |
| | Western | 1,556,452,555 | 442,499,901 | 44,281,027 | 52,750,678 | 2,200,756,413 | 131,939 |
| | Total U. S. | 3,918,699,970 | 1,153,752,002 | 95,810,375 | 104,633,598 | 5,563,232,215 | 234,912 |
| 1920.. | Eastern | 1,919,933,438 | 565,033,090 | 53,740,438 | 65,003,953 | 2,775,157,192 | 59,057 |
| | Pocahontas | 167,328,778 | 26,957,033 | 3,256,146 | 2,719,789 | 207,888,836 | 5,361 |
| | Southern | 530,826,105 | 169,395,859 | 22,300,341 | 16,729,507 | 766,679,098 | 38,386 |
| | Western | 1,705,561,756 | 526,037,461 | 70,520,050 | 59,405,023 | 2,475,692,119 | 131,619 |
| | Total U. S. | 4,323,650,077 | 1,287,423,443 | 150,816,975 | 143,858,272 | 6,225,417,245 | 234,424 |
| 1919.. | Eastern | 1,559,383,222 | 513,144,751 | 24,680,027 | 62,820,955 | 2,307,024,800 | 59,702.09 |
| | Pocahontas | 131,205,132 | 31,323,694 | 1,046,015 | 2,662,713 | 172,751,938 | 5,234.66 |
| | Southern | 427,596,957 | 161,326,033 | 7,426,812 | 14,993,766 | 633,584,705 | 38,107.47 |
| | Western | 1,438,733,401 | 474,215,788 | 24,303,305 | 47,231,173 | 2,070,702,778 | 131,384.63 |
| | Total U. S. | 3,556,918,712 | 1,180,010,266 | 57,456,159 | 127,708,607 | 5,184,064,221 | 234,428.79 |
| 1918.. | Eastern | 1,561,270,808 | 447,417,367 | 20,630,519 | 61,855,604 | 2,237,706,256 | 60,197.57 |
| | Southern | 545,681,263 | 188,586,632 | 8,582,764 | 16,625,310 | 785,782,446 | 43,335.69 |
| | Western | 1,351,238,555 | 396,667,430 | 24,349,879 | 45,750,925 | 1,903,105,255 | 130,771.88 |
| | Total U. S. | 3,458,190,626 | 1,032,671,429 | 53,563,162 | 126,231,839 | 4,926,593,957 | 234,305.44 |

OPERATING EXPENSES AND OPERATING INCOME (STATED IN DOLLARS).

| YEAR. | District. | Maintenance of Way. | Maintenance of Equip. | On Traffic. | On Transportation. | Other and Total. | Operating Income. |
|---|---|---|---|---|---|---|---|
| 1921.. | Eastern | 311,211,251 | 600,913,611 | 32,033,753 | 1,058,487,266 | 2,099,476,340 | 272,056,521 |
| | Pocahontas | 28,094,682 | 44,816,213 | 1,862,534 | 71,138,522 | 150,915,793 | 32,762,361 |
| | Southern | 104,165,647 | 152,902,922 | 15,085,930 | 293,437,845 | 590,136,419 | 64,144,559 |
| | Western | 320,007,988 | 455,588,553 | 35,204,046 | 862,980,197 | 1,756,950,689 | 314,369,467 |
| | Total U. S. | 763,479,568 | 1,254,221,299 | 84,186,263 | 2,286,043,830 | 4,597,479,241 | 683,332,908 |
| 1920.. | Eastern | 413,315,375 | 788,545,698 | 29,899,391 | 1,396,788,919 | 2,734,325,125 | d65,264,416 |
| | Pocahontas | 29,101,141 | 59,831,971 | 1,651,727 | 88,220,196 | 184,032,396 | 14,865,800 |
| | Southern | 139,930,687 | 187,286,870 | 12,995,860 | 355,136,772 | 718,054,729 | 17,860,996 |
| | Western | 452,156,354 | 557,817,352 | 29,250,554 | 1,061,437,386 | 2,193,914,436 | 145,381,795 |
| | Total U. S. | 1,030,503,557 | 1,593,481,891 | 73,797,532 | 2,901,583,273 | 5,830,326,686 | 112,844,175 |
| 1919.. | Eastern | 315,921,275 | 597,601,717 | 20,330,079 | 1,028,765,657 | 2,041,346,419 | 186,250,016 |
| | Pocahontas | 25,141,569 | 45,461,113 | 1,054,427 | 65,570,059 | 141,048,516 | 25,692,001 |
| | Southern | 108,964,904 | 151,681,828 | 8,417,183 | 272,161,969 | 560,243,301 | 49,918,265 |
| | Western | 328,312,471 | 438,215,454 | 17,733,002 | 826,273,152 | 1,676,803,713 | 303,038,154 |
| | Total U. S. | 778,340,219 | 1,232,960,112 | 47,534,691 | 2,192,770,837 | 4,419,441,949 | 564,898,436 |
| 1918.. | Eastern | 288,745,353 | 540,625,912 | 20,950,997 | 1,001,635,300 | 1,920,272,501 | 243,340,513 |
| | Southern | 99,275,981 | 175,390,779 | 9,165,623 | 306,344,563 | 609,988,333 | 147,904,860 |
| | Western | 268,579,174 | 394,263,009 | 18,624,136 | 748,499,086 | 1,486,947,667 | 330,558,198 |
| | Total U. S. | 656,600,508 | 1,110,279,700 | 48,740,756 | 2,056,478,949 | 4,017,209,501 | 721,803,571 |

*d* Deficit. Operating income is the difference between operating revenues and operating expenses plus taxes and uncollectable revenues.

Net operating income (1920) $58,151,863; (1921) $614,810,531, including a net credit of $6,857,000 for adjustments on guaranty period reserves.

### SUMMARY FIRST SIX MONTHS OF 1922 FOR RAILWAYS.

Revenue tons of freight carried, 802,491,000; freight revenue, $1,859,121,583; revenue passengers carried. 475,016,000; passenger revenue, $502,763,758. Number of employees, 1,593,165; aggregate compensation in the six months, $1,259,424,262.

### RAILROAD DIVIDENDS AND INTEREST ON FUNDED DEBT.

(Excluding switching and terminal companies.)

| YEAR (Fiscal.) | Stock Paying Dividends. | Proportion to All Stock. | Rate on All Stock. | Rate on Dividend Stock. | Paid in Dividends. | Interest on Debt. | Total Interest and Dividends. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Per Cent.* | *Per Cent.* | *Per Cent.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1912 | 5,581,289,249 | 64.73 | 4.64 | 7.17 | 400,315,313 | 454,436,418 | 854,751,731 |
| 1913 | 5,780,982,416 | 66.14 | 4.22 | 6.37 | 369,077,546 | a465,947,020 | 835,024,566 |
| 1914 | 5,667,072,956 | 64.39 | 5.13 | 7.97 | 451,653,346 | a485,852,400 | 937,505,746 |
| 1915 | 5,219,846,562 | 60.45 | 3.80 | 6.29 | 328,477,938 | 498,732,475 | 827,210,413 |
| 1916 | 5,279,427,954 | 60.38 | 3.91 | 6.48 | 342,109,396 | 494,785,239 | 836,894,635 |
| Calendar. | | | | | | | |
| 1916 | 5,430,123,235 | 62.02 | 4.19 | 6.75 | 366,561,494 | 501,236,053 | 867,797,547 |
| 1917 | 5,610,774,033 | 62.32 | 4.24 | 6.81 | 381,851,548 | 494,163,650 | 876,015,198 |
| 1918 | 5,138,851,230 | 58.09 | 3.83 | 6.60 | 339,185,658 | 503,295,627 | 842,481,285 |
| 1919 | 5,298,320,617 | 59.64 | 3.77 | 6.33 | 335,241,935 | 524,095,460 | 859,337,395 |
| 1920 | 5,075,039,642 | 57.30 | 3.74 | 6.52 | 331,102,938 | 553,641,078 | 884,744,016 |

*a* Covers only railways of Classes I. and II. and their non-operating subsidiaries.

Railroad taxes and assessments in 1920 totalled $282,750,533, excluding $1,064,545 Canadian taxes, $447 Cuban, and $1,596 not localized by States. These amounts were charged to income.

REVENUES AND EXPENSES OF CHIEF RAILWAYS.
(Calendar year 1921.)

| Road. | Operat'g Rev. | Operat'g Exp. | Road. | Operat'g Rev. | Operat'g Exp. |
|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* |
| *Eastern District.* | | | Seaboard Air Line | 42,844,933 | 37,024,801 |
| Baltimore & Ohio | 198,622,373 | 166,457,024 | Southern Railway | 128,715,150 | 105,829,007 |
| Boston & Maine | 78,477,418 | 73,168,885 | Yazoo & Miss. Valley | 20,759,409 | 18,527,525 |
| Central R. R. of N. J. | 52,660,998 | 43,621,696 | *Western District.* | | |
| C. C. C. & St. L. | 79,793,593 | 64,406,122 | Atch., Top. & Santa Fe. | 189,217,520 | 130,774,167 |
| Delaware & Hudson | 45,723,398 | 38,497,586 | Chicago & Alton | 30,994,209 | 26,417,685 |
| Del., Lack. & Western | 85,977,815 | 67,872,058 | Chicago & Northwest'n. | 144,775,476 | 129,091,428 |
| Erie | 102,835,507 | 94,893,209 | Chi., Burl. & Quincy | 168,712,268 | 128,216,290 |
| Lehigh Valley | 74,997,799 | 67,238,068 | Chicago Great Western | 24,228,611 | 21,426,165 |
| Long Island | 28,720,910 | 23,181,985 | Chi., Milw. & St. Paul (Incl. C. T. H. & S. E.) | 149,152,533 | 130,383,553 |
| Maine Central | 20,590,064 | 19,533,352 | Chi., Rock Is. & Pac. | 131,766,858 | 107,170,334 |
| Michigan Central | 72,911,852 | 52,551,945 | Chi., St. P., Minn. & O. | 28,137,408 | 24,392,314 |
| New York Central | 322,819,569 | 248,296,701 | Denver & Rio Grande | 32,621,419 | 27,746,090 |
| N. Y., Chi. & St. L. | 27,030,663 | 20,613,594 | Gal., Har. & San Anton. | 25,063,536 | 21,897,286 |
| N. Y., N. H. & H. | 116,405,233 | 106,402,295 | Great Northern | 101,317,204 | 80,496,913 |
| Pennsylvania R.R. | 500,175,084 | 430,758,629 | Gulf, Col. & Santa Fe. | 20,209,224 | 21,364,113 |
| Pere Marquette | 38,303,029 | 30,036,300 | M., St. P. & S. S. Marie | 42,745,440 | 39,755,399 |
| Philadelphia & Reading | 84,924,228 | 70,521,240 | Mo., Kan. & Tex. | 33,488,591 | 26,764,368 |
| Pittsburgh & Lake Erie | 23,226,059 | 20,340,436 | Mo., Kan. & Tex. of Tex. | 26,797,515 | 21,470,711 |
| P., C., C. & St. L. | 96,717,043 | 91,304,583 | Missouri Pacific | 109,785,950 | 91,693,856 |
| Wabash | 59,217,692 | 50,506,169 | Northern Pacific | 94,538,059 | 77,630,867 |
| *Southern District.* | | | Oregon Short Line | 36,843,202 | 27,412,139 |
| Atlantic Coast Line | 66,730,768 | 58,005,833 | O.-Wash. R. R. & N. Co. | 29,818,741 | 26,577,579 |
| Central of Georgia | 22,057,499 | 20,020,843 | St. Louis-San Francisco. | 81,851,289 | 60,175,585 |
| Chesapeake & Ohio | 83,687,958 | 66,603,077 | Southern Pacific | 200,652,819 | 151,731,342 |
| Illinois Central | 141,127,066 | 109,997,791 | Texas & Pacific | 35,600,474 | 30,138,445 |
| Louisville & Nashville | 117,138,367 | 108,667,628 | Union Pacific | 114,783,971 | 77,612,030 |
| Nash., Chatt. & St. L. | 20,924,602 | 19,607,276 | | | |
| Norfolk & Western | 80,718,802 | 64,346,857 | | | |

The Interstate Commerce Commission has been engaged for several years on plans for consolidating the railways of the United States into a small number of big, regional systems.

REVENUE PER TON-MILE AND REVENUE PER PASSENGER-MILE RAILWAYS OF THE UNITED STATES.
(1882 to 1921.)

| Year. | Rev. Per Ton-Mile. | | Rev. Per Pass.-Mile. | | Year. | Rev. Per Ton-Mile. | | Rev. Per Pass.-Mile. | | Year. | Rev. Per Ton-Mile. | | Rev. Per Pass.-Mile. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All R'ds. | Class I. R'ds. | All R'ds. | Class I. R'ds. | | All R'ds. | Class I. R'ds. | All R'ds. | Class I. R'ds. | | All R'ds. | Class I. R'ds. | All R'ds. | Class I. R'ds. |
| Fiscal. | *Cents* | *Cents* | *Cents* | *Cents* | Fiscal. | *Cents* | *Cents* | *Cents* | *Cents* | Fiscal. | *Cents* | *Cents* | *Cents* | *Cents* |
| 1882*a* | 1.236 | * | 2.514 | * | 1896 | .806 | * | 2.019 | * | 1910 | .753 | * | 1.938 | * |
| 1883*a* | 1.236 | * | 2.422 | * | 1897 | .798 | * | 2.022 | * | 1911 | .757 | .743 | 1.974 | 1.964 |
| 1884*a* | 1.124 | * | 2.356 | * | 1898 | .753 | * | 1.973 | * | 1912 | .744 | .730 | 1.987 | 1.978 |
| 1885*a* | 1.057 | * | 2.198 | * | 1899 | .724 | * | 1.925 | * | 1913 | * | .719 | * | 2.002 |
| 1886*a* | 1.042 | * | 2.181 | * | 1900 | .729 | * | 2.003 | * | 1914 | * | .723 | * | 1.976 |
| 1887*a* | 1.063 | * | 2.276 | * | 1901 | .750 | * | 2.013 | * | 1915 | * | .722 | * | 1.979 |
| 1888 | 1.001 | * | 2.349 | * | 1902 | .757 | * | 1.986 | * | 1916 | * | .707 | * | 2.002 |
| 1889 | .922 | * | 2.165 | * | 1903 | .763 | * | 2.006 | * | Calendar | | | | |
| 1890 | .941 | * | 2.167 | * | 1904 | .780 | * | 2.006 | * | 1916 | * | .707 | * | 2.042 |
| 1891 | .895 | * | 2.142 | * | 1905 | .766 | * | 1.962 | * | 1917 | * | .715 | * | 2.090 |
| 1892 | .898 | * | 2.126 | * | 1906 | .748 | * | 2.003 | * | 1918 | * | .849 | * | 2.414 |
| 1893 | .878 | * | 2.108 | * | 1907 | .759 | * | 2.014 | * | 1919 | * | .973 | * | 2.540 |
| 1894 | .860 | * | 1.986 | * | 1908 | .754 | * | 1.937 | * | 1920 | * | 1.052 | * | 2.745 |
| 1895 | .839 | * | 2.040 | * | 1909 | .763 | * | 1.928 | * | 1921 | * | 1.274 | * | 3.088 |

*a* Data for the years 1882 to 1887, inclusive, from Poor's Manual of Railroads. Data for other years from summaries of the Interstate Commerce Commission.
* Not available.

SUMMARY OF RATIOS OF OPERATION—CLASS I. RAILWAYS.

| Item. | 1917 | 1918 | 1919 | 1920 | 1921 | Item. | 1917 | 1918 | 1919 | 1920 | 1921 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Car-miles per day | 26.1 | 24.9 | 23.1 | 24.9 | 22.4 | Pct. unserv. freight cars | 5.6 | 5.7 | 7.1 | 7.0 | 13.2 |
| Tons per car (revenue and non-revenue) | 27.0 | 29.1 | 27.8 | 29.3 | 27.6 | Pct. loaded to tot. car-mi. | 70.2 | 67.7 | 68.7 | 67.9 | 63.0 |
| | | | | | | Pct. unserv. locomotives | .... | .... | 26.9 | 24.5 | 23.7 |

STOCKS, BONDS, ETC., OF RAILROADS, INCLUDING AMOUNTS NOMINALLY OUTSTANDING.
(Excludes returns for switching and terminal companies.)

| Year (Fiscal.) | Common Stock. | Preferred Stock. | Mortgage Bonds. | Total Funded Debt. | Total Railway Capital. |
|---|---|---|---|---|---|
| 1912*a* | $7,248,749,515 | $1,373,651,305 | $8,015,943,172 | $11,130,135,443 | $19,752,536,264 |
| 1913*a* | 7,231,515,045 | 1,379,096,282 | 8,186,366,426 | 11,185,514,385 | 19,796,125,712 |
| 1914*a* | 7,304,479,846 | 1,376,279,858 | 8,496,370,538 | 11,566,541,553 | 20,247,301,257 |
| 1915 | 7,599,937,801 | 1,394,956,920 | 9,047,182,748 | 12,133,064,357 | 21,127,959,078 |
| 1916 | 7,602,923,972 | 1,455,758,761 | 9,254,546,150 | 12,033,389,512 | 21,092,072,245 |
| Calendar. | | | | | |
| 1916 | 7,593,731,500 | 1,455,141,559 | 9,176,656,024 | 12,000,435,523 | 21,049,308,582 |
| 1917 | 7,454,610,000 | 1,847,920,981 | 9,227,377,055 | 11,946,826,260 | 21,249,357,241 |
| 1918 | 7,249,307,281 | 1,805,809,755 | 9,115,919,638 | 11,729,715,805 | 20,784,832,841 |
| 1919 | 7,193,405,278 | 1,897,727,699 | 9,408,275,495 | 11,859,042,168 | 20,950,175,145 |
| 1920 | 7,215,861,540 | 1,897,823,599 | 9,760,652,784 | 12,777,765,646 | 21,891,450,785 |

*a* Covers only roads of Class I. and II. and their non-operating subsidiaries. These two classes comprise over 98 per cent. of all the roads.

## RAILWAY INVESTMENT AND NET CAPITALIZATION IN THE UNITED STATES.

(Excluding switching and terminal companies.)

| Year (Fiscal.) | Property Investment. | Capital Securities Outstanding in the Hands of the Public | Capital Stock. | Bonds (Funded Debt.) |
|---|---|---|---|---|
| 1912 | $16,004,744,966 | $15,087,600,650 | $5,766,093,888 | $9,321,506,762 |
| 1913*a* | 16,351,639,266 | 15,330,131,446 | 5,810,231,391 | 9,519,900,055 |
| 1914*a* | 16,936,697,840 | 15,719,696,925 | 6,011,404,923 | 9,708,292,002 |
| 1915 | 17,441,420,382 | 16,307,502,580 | 6,125,570,387 | 10,181,932,193 |
| 1916 | 17,689,425,438 | 16,336,300,429 | 6,314,570,354 | 10,021,730,075 |
| Calendar. | | | | |
| 1916 | 17,842,776,668 | 16,332,578,328 | 6,415,963,044 | 9,916,615,284 |
| 1917 | 18,574,297,873 | 16,401,786,017 | 6,582,809,245 | 9,818,976,772 |
| 1918 | 18,984,756,478 | 16,454,339,035 | 6,732,278,684 | 9,722,060,351 |
| 1919 | 19,300,120,717 | 16,550,310,683 | 6,777,071,214 | 9,773,239,469 |
| 1920 | 19,839,276,119 | 16,993,930,263 | 6,706,530,562 | 10,287,399,701 |

*a* Covers only railways of Class I. and II. and their non-operating subsidiaries.

### MILES OF ROAD COMPLETED IN THE U. S. SINCE 1832.

| Year. | Mileage | Year. | Mileage | Year. | Mileage | Year. | Mileage | Year. | Mileage | Year. | Mileage |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1832 | 134 | 1847 | 668 | 1862 | 834 | 1877 | 2,280 | 1892 | 4,428 | 1907 | 5,212 |
| 1833 | 151 | 1848 | 398 | 1863 | 1,050 | 1878 | 2,679 | 1893 | 3,024 | 1908 | 3,214 |
| 1834 | 253 | 1849 | 1,369 | 1864 | 738 | 1879 | 4,817 | 1894 | 1,760 | 1909 | 3,748 |
| 1835 | 465 | 1850 | 1,656 | 1865 | 1,177 | 1880 | 6,712 | 1895 | 1,420 | 1910 | 4,122 |
| 1836 | 175 | 1851 | 1,961 | 1866 | 1,716 | 1881 | 9,847 | 1896 | 1,692 | 1911 | 3,066 |
| 1837 | 224 | 1852 | 1,926 | 1867 | 2,249 | 1882 | 11,569 | 1897 | 2,109 | 1912 | 2,997 |
| 1838 | 416 | 1853 | 2,452 | 1868 | 2,979 | 1883 | 6,743 | 1898 | 3,265 | 1913 | 3,071 |
| 1839 | 389 | 1854 | 1,360 | 1869 | 4,615 | 1884 | 3,924 | 1899 | 4,569 | 1914 | 1,532 |
| 1840 | 516 | 1855 | 1,654 | 1870 | 6,078 | 1885 | 2,982 | 1900 | 4,894 | 1915 | 933 |
| 1841 | 717 | 1856 | 3,642 | 1871 | 7,379 | 1886 | 8,018 | 1901 | 5,368 | 1916 | 1,098 |
| 1842 | 491 | 1857 | 2,487 | 1872 | 5,878 | 1887 | 12,878 | 1902 | 6,026 | 1917 | 979 |
| 1843 | 159 | 1858 | 2,465 | 1873 | 4,097 | 1888 | 6,912 | 1903 | 5,652 | 1918 | 721 |
| 1844 | 192 | 1859 | 1,821 | 1874 | 2,117 | 1889 | 5,184 | 1904 | 3,832 | 1919 | 686 |
| 1845 | 256 | 1860 | 1,837 | 1875 | 1,711 | 1890 | 5,353 | 1905 | 4,388 | 1920 | 314 |
| 1846 | 297 | 1861 | 660 | 1876 | 2,712 | 1891 | 4,089 | 1906 | 5,623 | 1921 | 475 |

Railway construction, which was retarded during the World War, has begun to undergo a revival.

### RAILWAY MILEAGE BY STATES.

| State or Territory. | Miles. | State or Territory. | Miles. | State or Territory. | Miles. | State or Territory. | Miles. |
|---|---|---|---|---|---|---|---|
| Alabama | 5,377.95 | Kansas | 9,388.37 | New Hamps'e. | 1,252.10 | Tennessee | 4,078.28 |
| Arizona | 2,477.75 | Kentucky | 3,929.40 | New Jersey | 2,351.77 | Texas | 16,124.98 |
| Arkansas | 5,051.79 | Louisiana | 5,223.41 | New Mexico | 2,972.18 | Utah | 2,160.69 |
| California | 8,356.19 | Maine | 2,294.59 | New York | 8,390.00 | Vermont | 1,076.56 |
| Colorado | 5,518.60 | Maryland | 1,435.66 | No. Carolina | 5,522.23 | Virginia | 4,703.14 |
| Connecticut | 1,000.69 | Massachus'ts. | 2,105.92 | No. Dakota | 5,311.33 | Washington | 5,586.80 |
| Delaware | 335.39 | Michigan | 8,733.92 | Ohio | 9,001.52 | W. Virginia | 3,995.99 |
| Florida | 5,212.46 | Minnesota | 9,113.93 | Oklahoma | 6,571.85 | Wisconsin | 7,553.86 |
| Georgia | 7,326.08 | Mississippi | 4,369.31 | Oregon | 3,305.42 | Wyoming | 1,930.74 |
| Idaho | 2,877.06 | Missouri | 8,116.73 | Pennsylvania | 11,550.57 | Dist. of Col. | 36.42 |
| Illinois | 12,188.49 | Montana | 5,072.49 | Rhode Island | 211.12 | | |
| Indiana | 7,426.15 | Nebraska | 6,166.45 | So. Carolina | 3,814.41 | Total | 252,844.99 |
| Iowa | 9,808.45 | Nevada | 2,160.03 | So. Dakota | 4,275.77 | | |

Total railway mileage in the United States—(1830) 23; (1840) 2,818; (1850) 9,021; (1860) 30,626; (1870) 52,922; (1880) 93,267; (1890) 167,191; (1900) 198,964; (1910) 249,992; (1920) 253,152.

### GROWTH OF AMERICAN RAILWAY EQUIPMENT AND TRAFFIC.

(Excludes returns of switching and terminal companies.)

| Year. | Locomotives. | Equipment. | | Traffic. | |
|---|---|---|---|---|---|
| | | Freight Train Cars. | Passenger Train Cars. | Freight (Revenue Tons One Mile). | Passenger (Passengers One Mile). |
| Fiscal | | | | | |
| 1907 | 55,388 | 1,991,557 | 43,973 | 236,601,390,103 | 27,718,554,030 |
| 1908 | 56,733 | 2,089,302 | 45,117 | 218,381,554,802 | 29,082,836,944 |
| 1909 | 57,212 | 2,073,606 | 45,584 | 218,802,986,929 | 29,109,322,589 |
| 1910 | 58,947 | 2,135,121 | 47,095 | 255,016,910,451 | 32,338,496,329 |
| 1911 | 61,327 | 2,195,511 | 49,818 | 253,783,701,839 | 33,201,694,699 |
| 1912 | 62,262 | 2,215,549 | 51,490 | 264,080,745,058 | 33,132,354,783 |
| 1913 | 63,378 | 2,273,564 | 51,700 | 301,730,000,000 | 34,673,000,000 |
| 1914 | 64,760 | 2,325,647 | 53,466 | 288,637,000,000 | 35,357,000,000 |
| 1915 | 65,099 | 2,356,338 | 55,705 | 277,135,000,000 | 32,475,000,000 |
| 1916 | 63,862 | 2,326,987 | 54,664 | 343,477,000,000 | 34,309,000,000 |
| Calendar. | | | | | |
| 1916 | 64,073 | 2,342,699 | 55,081 | 366,174,000,000 | 35,220,000,000 |
| 1917 | 64,508 | 2,391,165 | 55,823 | 398,263,061,787 | 40,099,757,819 |
| 1918 | 66,334 | 2,411,973 | 56,505 | 408,778,061,079 | 43,212,458,079 |
| 1919 | 67,319 | 2,441,125 | 56,183 | 367,161,370,571 | 46,838,165,980 |
| 1920 | 67,242 | 2,403,082 | 55,994 | 413,698,748,713 | 47,369,905,886 |
| 1921* | 67,386 | 2,402,192 | 56,821 | 310,124,000,000 | 37,846,000,000 |

* Partially estimated to include returns of small carriers.

Note—Foregoing traffic data for the years 1913 to 1916, inclusive, reported by Interstate Commerce Commission in round millions.

RAILWAY PASSENGER AND FREIGHT TRAFFIC, 1890-1921.

| Yr. (fis.) | Passengers Carried. | Freight Tons. | Yr. (fis.) | Passengers Carried. | Freight Tons. | Yr. (fis.) | Passengers Carried. | Freight Tons. |
|---|---|---|---|---|---|---|---|---|
| 1890 | 492,430,865 | 636,541,617 | 1901 | 607,278,121 | 1,089,226,440 | 1912 | 1,004,081,346 | 1,844,977,673 |
| 1891 | 531,183,998 | 675,608,323 | 1902 | 649,878,505 | 1,200,315,787 | 1913 | 1,033,679,680 | 2,058,035,487 |
| 1892 | 560,958,211 | 706,555,471 | 1903 | 694,891,535 | 1,304,394,323 | 1914 | 1,053,138,718 | 1,976,138,155 |
| 1893 | 593,560,612 | 745,119,482 | 1904 | 715,419,682 | 1,309,809,165 | 1915 | 976,303,602 | 1,802,018,177 |
| 1894 | 540,688,199 | 638,186,553 | 1905 | 738,334,667 | 1,427,531,905 | (cal) | | |
| 1895 | 507,421,362 | 696,761,171 | 1906 | 797,946,116 | 1,631,374,219 | 1916 | 1,039,012,308 | 2,316,088,894 |
| 1896 | 511,772,737 | 765,891,385 | 1907 | 873,905,133 | 1,796,336,659 | 1917 | 1,109,943,226 | 2,388,023,904 |
| 1897 | 489,445,198 | 741,705,946 | 1908 | 890,009,574 | 1,532,981,790 | 1918 | 1,122,962,887 | 2,419,325,739 |
| 1898 | 501,066,681 | 879,006,307 | 1909 | 891,472,425 | 1,556,559,741 | 1919 | 1,211,021,934 | 2,136,883,697 |
| 1899 | 523,176,508 | 959,763,583 | 1910 | 971,683,199 | 1,849 900,101 | 1920 | 1,269,912,881 | 2,267,561,580 |
| 1900 | 576,865,230 | 1,101,680,238 | 1911 | 997,409,882 | 1,781,638,043 | 1921 | *1,069,365,000 | *1,749,829,000 |

* Partially estimated to include returns of small carriers.

NUMBER KILLED AND INJURED BY RAILROADS.

| Year (Fiscal.) | Employees. | | Passengers. | | All Others and Total. | | Year (Fiscal.) | Employees. | | Passengers. | | All Others and Total. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Killed | Injured. | Kil'd. | Injur'd | Killed. | Injured. | | Killed | Injured. | Kil'd. | Injur'd | Killed. | Injured. |
| 1893. | 2,727 | 31,729 | 299 | 3,229 | 7,346 | 40,393 | 1909. | 2,610 | 75,006 | 253 | 10,311 | 8,722 | 95,626 |
| 1894. | 1,823 | 23,422 | 324 | 3,034 | 6,447 | 31,889 | 1910. | 3,382 | 95,671 | 324 | 12,451 | 9,682 | 119,507 |
| 1895. | 1,811 | 25,696 | 170 | 2,375 | 6,136 | 33,748 | 1911. | 3,602 | 126,039 | 356 | 13,433 | 10,396 | 150,159 |
| 1896. | 1,861 | 29,969 | 181 | 2,873 | 6,448 | 38,687 | 1912. | 3,635 | 142,442 | 318 | 16,386 | 10,585 | 169,538 |
| 1897. | 1,693 | 27,667 | 222 | 2,795 | 6,437 | 36,731 | 1913. | 3,715 | 171,417 | 403 | 16,539 | 10,964 | 200,308 |
| 1898. | 1,958 | 31,761 | 221 | 2,945 | 6,859 | 40,882 | 1914. | 3,259 | 165,212 | 265 | 15,121 | 10,302 | 192,662 |
| 1899. | 2,210 | 34,923 | 239 | 3,442 | 7,123 | 44,620 | 1915. | 2,152 | 138,092 | 222 | 12,110 | 8,621 | 162,040 |
| 1900. | 2,550 | 39,643 | 249 | 4,128 | 7,865 | 50,320 | 1916. | 2,687 | 160,663 | 283 | 8,379 | 9,364 | 180,375 |
| 1901. | 2,675 | 41,142 | 282 | 4,988 | 8,455 | 53,339 | (Cal.) | | | | | | |
| 1902. | 2,969 | 50,524 | 345 | 6,683 | 8,588 | 64,662 | 1916. | 2,941 | 176,923 | 291 | 8,008 | 10,001 | 196,722 |
| 1903. | 3,606 | 60,481 | 355 | 8,231 | 9,840 | 76,553 | 1917. | 3,348 | 174,454 | 343 | 8,374 | 10,087 | 194,805 |
| 1904. | 3,632 | 67,067 | 441 | 9,111 | 10,046 | 84,155 | 1918. | 3,493 | 156,211 | 519 | 8,082 | 9,286 | 174,575 |
| 1905. | 3,361 | 66,833 | 537 | 10,457 | 9,703 | 86,008 | 1919. | 2,271 | 131,211 | 301 | 8,147 | 6,978 | 149,053 |
| 1906. | 3,929 | 76,701 | 359 | 10,764 | 10,618 | 97,706 | 1920. | 2,667 | 149,602 | 264 | 8,456 | 6,958 | 168,309 |
| 1907. | 4,534 | 87,644 | 610 | 13,041 | 11,839 | 111,016 | 1921. | 1,481 | 103,328 | 226 | 6,144 | 5,996 | 120,685 |
| 1908. | 3,405 | 82,847 | 381 | 11,556 | 10,188 | 104,230 | | | | | | | |

RAILWAY EMPLOYEES AND WAGES—CLASS I. RAILWAYS.

| Year. | Average Number of Employees. | Total Salaries and Wages. | Average Compensation Per Employee | Year. | Average Number of Employees. | Total Salaries and Wages. | Average Compensation Per Employee |
|---|---|---|---|---|---|---|---|
| 1916..... | 1,647,097 | $1,468,576,394 | $891.62 | 1919..... | 1,913,422 | $2,843,128,432 | $1,485.89 |
| 1917..... | 1,732,876 | 1,739,482,142 | 1,003.81 | 1920..... | 2,022,832 | 3,681,801,193 | 1,820.12 |
| 1918..... | 1,841,575 | 2,613,813,351 | 1,419.34 | 1921*..... | 1,661,301 | 2,800,896,614 | 1,685.97 |

* Includes returns for large switching and terminal companies.

## ELECTRIC RAILWAYS IN THE UNITED STATES.

(Data by the U. S. Census Bureau.)

| | 1917. | 1912. | 1907. | 1902. | 1890. |
|---|---|---|---|---|---|
| Number of companies | 1,307 | 1,260 | 1,236 | 987 | 789 |
| Miles of line | 32,547.58 | 30,437.86 | 25,547.19 | 16,645.34 | 5,783.47 |
| Miles of single track | 44,835.37 | 41,064.82 | 34,381.51 | 22,576.99 | 8,123.02 |
| Operated by electricity | 44,676.51 | 40,808.39 | 34,037.64 | 21,901.53 | 1,261.97 |
| Cable | 45.32 | 56.41 | 61.71 | 240.69 | 488.31 |
| Animal traction | 11.16 | 57.52 | 136.11 | 259.10 | 5,661.44 |
| Steam | 41.03 | 76.34 | 105.06 | 169.61 | 711.30 |
| Gasoline-engine cars | 55.61 | 66.16 | 40.99 | 6.06 | ..... |
| Cost of road equipment | $5,136,441,599 | $4,596,563,292 | $3,637,668,708 | $2,167,634,077 | $389,357,289 |
| Number of employees | 294,826 | 282,461 | 221,429 | 140,769 | 70,764 |
| Number of passenger cars | 79,914 | 76,162 | 70,016 | 60,290 | 32,505 |
| Number of revenue passengers | 11,304,660,462 | 9,545,554,667 | 7,441,114,508 | 4,774,211,904 | 2,023,010,202 |
| Operating revenues | $709,825,092 | $567,511,704 | $418,187,858 | $247,553,999 | $90,617,211 |
| Operating expenses | $452,594,654 | $332,896,356 | $251,309,252 | $142,312,597 | $62,011,185 |

Other 1917 data: "L" tracks, 497.29 miles; subway and tube tracks, 218.79 miles. "L" and subway capital, $653,277,287; surface trolley capital, $4,878,946,531.

## CABLE AND WIRELESS SYSTEMS IN UNITED STATES.

(By the Bureau of the Census.)

| Ocean Cable Telegraph Systems. | 1917. | 1912. | Wireless Telegraph Systems. | 1917. | 1912. |
|---|---|---|---|---|---|
| No. companies or systems. | 6 | 6 | No. companies or systems. | 3 | 4 |
| Nautical miles ocean cable | 46,950 | 44,860 | No. of messages | 122,244 | 285,091 |
| No. of messages | 2,913,250 | 2,845,168 | Income, total | $1,385,060 | $669,158 |
| Income, total | $16,749,058 | $8,469,374 | Expenses, total | $775,534 | $664,420 |
| Net income | $5,706,869 | $2,952,847 | Net income | $609,526 | $4,738 |
| Expenses, total | $11,042,189 | $5,516,527 | Assets, total | $14,483,638 | $10,377,197 |
| Assets, total | $136,610,271 | $107,583,153 | Plant and equipment | $9,275,261 | $1,205,770 |
| Plant and equipment | $79,870,795 | $78,136,115 | Capital stock | $10,399,500 | $9,602,570 |
| Capital stock | $60,900,000 | $55,489,400 | Float. debt, mortgage | $989,173 | $18,483 |
| Funded debt | $28,000,000 | $28,000,000 | Employees, No | 586 | 958 |
| Employees, No | 1,966 | 1,656 | Salaries and wages | $461,402 | $393,606 |
| Salaries and wages | $1,764,351 | $1,167,014 | | | |

Does not include statistics for the ocean cable systems operated by the Western Union Telegraph Co., as no segregation could be obtained of the financial statistics for the cable business of this company.

## BELL TELEPHONE STATISTICS.

(Compiled by Chief Statistician, American Telephone and Telegraph Co., N. Y. City.)

| Jan. 1. | Stations in Bell System. | | | Employees. | Miles of Wire. | Average Daily Messages. |
|---|---|---|---|---|---|---|
| | Bell Owned Stations. | Bell Connected Stations. | Total. | | | |
| 1906 | 2,284,587 | 246,337 | 2,530,924 | 89,661 | 5,779,918 | 13,911,551 |
| 1907 | 2,773,547 | 297,218 | 3,070,765 | 104,646 | 7,468,905 | 16,939,577 |
| 1908 | 3,012,511 | 826,489 | 3,839,000 | 100,884 | 8,610,592 | 18,624,578 |
| 1909 | 3,176,394 | 1,188,235 | 4,364,629 | 98,533 | 9,830,718 | 18,962,397 |
| 1910 | 3,522,079 | 1,620,613 | 5,142,692 | 104,956 | 10,480,026 | 20,442,535 |
| 1911 | 3,933,056 | 1,949,663 | 5,882,719 | 120,311 | 11,642,212 | 22,284,010 |
| 1912 | 4,351,837 | 2,280,788 | 6,632,625 | 128,439 | 12,932,615 | 24,128,688 |
| 1913 | 4,803,803 | 2,652,271 | 7,456,074 | 140,789 | 14,610,813 | 26,310,168 |
| 1914 | 5,254,808 | 2,878,209 | 8,133,017 | 156,928 | 16,111,011 | 27,237,161 |
| 1915 | 5,584,853 | 3,064,140 | 8,648,993 | 142,527 | 17,475,594 | 27,848,174 |
| 1916 | 5,968,110 | 3,183,111 | 9,151,221 | 156,294 | 18,505,545 | 26,002,829 |
| 1917 | 6,545,490 | 3,301,702 | 9,847,192 | 179,032 | 19,850,315 | 29,419,933 |
| 1918 | 7,031,530 | 3,444,148 | 10,475,678 | 192,364 | 22,610,487 | 31,854,000 |
| 1919 | 7,201,757 | 3,790,568 | 10,992,325 | 199,914 | 23,281.150 | 32,309,500 |
| 1920 | 7,739,159 | 4,056,588 | 11,795,747 | 209,860 | 24,162,999 | 30,800,000 |
| 1921 | 8,333,979 | 4,267,956 | 12,601,935 | 231,316 | 25,377,404 | 33,162,000 |
| 1922 | 8,914,155 | 4,466,064 | 13,380,219 | 224,288 | 27,819,821 | 35,027,000 |

"Bell Connected Stations" are independently owned, but are connected with Bell lines and exchanges for the interchange of local and long distance service. "Average Daily Messages" represents the number of messages during the year preceding the Jan. 1 date shown, and includes local, toll and long distance messages. Figures for employees, miles of wire, and average daily messages do not include statistics for the independently owned companies which connect with the Bell Telephone System.

Under date of 1919, figures for employees are as of July 31, 1918; figures for messages are for the first seven months of 1918. Under date of 1920, figures for messages are for the last five months of 1919. In the calendar year, 1915 and thereafter, all incomplete messages were rigidly excluded from the statistics.

The total number of telephones, without regard to ownership, in use in the United States on Jan. 1, 1922, was 13,847,752—one to every eight persons or every two families.

## UNITED STATES MERCHANT MARINE TONNAGE BY KINDS.

(Data by the U. S. Commissioner of Navigation.)

| Year (Fiscal.) | Sailing and Unrigged. | | Steam Vessels. | | Gas Vessels. | | Total. | |
|---|---|---|---|---|---|---|---|---|
| | Number. | Gross Tons. | Number. | Gross Tons. | Number. | Gross Tons. | Number. | Gross Tons. |
| 1892 | 17,991 | 2,690,504 | 6,392 | 2,074,417 | ..... | ..... | 24,383 | 4,764,921 |
| 1893 | 17,951 | 2,641,799 | 6,561 | 2,183,272 | ..... | ..... | 24,512 | 4,825,071 |
| 1894 | 17,060 | 2,494,599 | 6,526 | 2,189,430 | ..... | ..... | 23,586 | 4,684,029 |
| 1895 | 16,686 | 2,423,159 | 6,554 | 2,212,801 | ..... | ..... | 23,240 | 4,635,960 |
| 1896 | 16,313 | 2,396,672 | 6,595 | 2,307,208 | ..... | ..... | 22,908 | 4,703,880 |
| 1897 | 16,034 | 2,410,462 | 6,599 | 2,358,558 | ..... | ..... | 22,633 | 4,769,020 |
| 1898 | 15,993 | 2,377,815 | 6,712 | 2,371,923 | ..... | ..... | 22,705 | 4,749,738 |
| 1899 | 15,891 | 2,388,227 | 6,837 | 2,476,011 | ..... | ..... | 22,728 | 4,864,238 |
| 1900 | 16,280 | 2,507,042 | 7,053 | 2,657,797 | ..... | ..... | 23,333 | 5,164,839 |
| 1901 | 16,643 | 2,603,265 | 7,414 | 2,920,953 | ..... | ..... | 24,057 | 5,524,218 |
| 1902 | 16,546 | 2,621,028 | 7,727 | 3,176,874 | ..... | ..... | 24,273 | 5,797,902 |
| 1903 | 16,371 | 2,679,257 | 8,054 | 3,408,088 | ..... | ..... | 24,425 | 6,087,345 |
| 1904 | 16,095 | 2,696,117 | 8,463 | 3,595,418 | ..... | ..... | 24,558 | 6,291,535 |
| 1905 | 15,784 | 2,715,049 | 8,897 | 3,741,494 | ..... | ..... | 24,681 | 6,456,543 |
| 1906 | 15,506 | 2,699,682 | 9,500 | 3,975,287 | ..... | ..... | 25,006 | 6,674,969 |
| 1907 | 14,861 | 2,659,426 | 10,050 | 4,279,368 | ..... | ..... | 24,911 | 6,938,794 |
| 1908 | 14,499 | 2,654,271 | 10,926 | 4,711,174 | ..... | ..... | 25,425 | 7,365,445 |
| 1909 | 14,047 | 2,639,531 | 11,641 | 4,749,224 | ..... | ..... | 25,688 | 7,388,755 |
| 1910 | 13,288 | 2,607,721 | 12,452 | 4,900,361 | ..... | ..... | 25,740 | 7,508,082 |
| 1911 | 12,684 | 2,564,721 | 13,307 | 5,074,069 | ..... | ..... | 25,991 | 7,638,790 |
| 1912 | 12,263 | 2,534,325 | 14,265 | 5,179,858 | ..... | ..... | 26,528 | 7,714,183 |
| 1913 | 11,998 | 2,550,977 | 15,084 | 5,335,574 | ..... | ..... | 27,072 | 7,886,551 |
| 1914 | 11,452 | 2,501,162 | 15,491 | 5,427,526 | ..... | ..... | 26,943 | 7,928,688 |
| 1915 | 10,753 | 2,445,619 | 6,952 | 5,781,416 | 8,996 | 162,394 | 26,701 | 8,389,429 |
| 1916 | 10,383 | 2,399,586 | 6,824 | 5,895,095 | 9,237 | 174,968 | 26,444 | 8,469,649 |
| 1917 | 10,155 | 2,437,676 | 6,736 | 6,196,535 | 9,506 | 236,826 | 26,397 | 8,871,037 |
| 1918 | 10,053 | 2,453,204 | 6,767 | 7,137,513 | 9,891 | 333,801 | 26,711 | 9,924,518 |
| 1919 | 9,862 | 2,491,673 | 7,397 | 10,057,400 | 10,254 | 358,227 | 27,513 | 12,907,300 |
| 1920 | 9,369 | 2,500,575 | 8,103 | 13,466,400 | 10,711 | 357,049 | 28,183 | 16,324,024 |
| 1921 | 8,941 | 2,537,021 | 8,321 | 15,370,900 | 10,750 | 374,215 | 28,012 | 18,282,136 |
| 1922 | 8,398 | 2,480,867 | 8,177 | 15,606,726 | 10,783 | 375,374 | 27,358 | 18,462,967 |

### U. S. MERCHANT MARINE TONNAGE, BY GEOGRAPHICAL SECTIONS.

| Year (Fiscal.) | Atlantic and Gulf. | Pacific. | North Lakes. | Other and Total. | Year (Fiscal.) | Atlantic and Gulf. | Pacific. | North Lakes. | Other and Total. |
|---|---|---|---|---|---|---|---|---|---|
| | G. Tons. | G. Tons. | G. Tons. | G. Tons. | | G. Tons. | G. Tons. | G. Tons. | G. Tons. |
| 1902 | 2,985,056 | 774,211 | 1,816,511 | 5,797,902 | 1913 | 3,751,128 | 1,049,296 | 2,939,786 | 7,886,551 |
| 1903 | 3,157,373 | 812,179 | 1,902,698 | 6,087,345 | 1914 | 3,803,354 | 1,100,976 | 2,882,922 | 7,928,688 |
| 1904 | 3,252,366 | 806,577 | 2,019,208 | 6,291,535 | 1915 | 4,309,996 | 1,122,620 | 2,818,009 | 8,389,429 |
| 1905 | 3,398,367 | 821,710 | 2,062,147 | 6,456,543 | 1916 | 4,443,024 | 1,131,058 | 2,760,815 | 8,469,649 |
| 1906 | 3,432,545 | 840,035 | 2,234,432 | 6,674,969 | 1917 | 4,749,739 | 1,209,533 | 2,779,087 | 8,871,037 |
| 1907 | 3,440,697 | 886,840 | 2,439,741 | 6,938,794 | 1918 | 5,356,976 | 1,646,697 | 2,797,503 | 9,924,518 |
| 1908 | 3,506,551 | 962,214 | 2,729,169 | 7,365,445 | 1919 | 6,945,260 | 2,816,481 | 3,023,762 | 12,907,300 |
| 1909 | 3,509;134 | 934,477 | 2,782,481 | 7,388,755 | 1920 | 9,738,819 | 3,326,285 | 3,138,690 | 16,324,024 |
| 1910 | 3,522,673 | 936,591 | 2,895,102 | 7,508,082 | 1921 | 11,852,435 | 3,467,872 | 2,839,514 | 18,282,136 |
| 1911 | 3,570,138 | 973,605 | 2,943,523 | 7,638,790 | 1922 | 12,130,682 | 3,473,581 | 2,723,857 | 18,462,967 |
| 1912 | 3,633,466 | 984,813 | 2,949,924 | 7,714,183 | | | | | |

Total includes Western rivers.

## VESSELS BUILT IN THE U. S. BY GEOGRAPHIC DISTRICTS.

(Data by the U. S. Commissioner of Navigation.)

| Year (Fiscal.) | On New England Coast. | | On Entire Seaboard. | | On Miss. River and Tributaries. | | On Great Lakes. | | Total. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *No.* | *Gross tons.* | *No.* | *Gross tons.* | *No.* | *Gross tons.* | *No.* | *Gross tons.* | *No.* | *Gross tons.* |
| 1899..... | 144 | 68,761 | 937 | 196,120 | 214 | 23,552 | 122 | 80,366 | 1,273 | 300,038 |
| 1900..... | 199 | 72,179 | 1,107 | 249,006 | 215 | 14,173 | 125 | 130,611 | 1,447 | 393,790 |
| 1901..... | 201 | 82,971 | 1,094 | 261,516 | 311 | 22,888 | 175 | 169,085 | 1,580 | 483,489 |
| 1902..... | 225 | 75,851 | 1,197 | 290,122 | 161 | 9,836 | 133 | 168,873 | 1,491 | 468,831 |
| 1903..... | 203 | 66,973 | 1,038 | 288,196 | 150 | 11,112 | 123 | 136,844 | 1,311 | 436,152 |
| 1904..... | 170 | 51,417 | 878 | 208,288 | 187 | 10,821 | 119 | 159,433 | 1,184 | 378,542 |
| 1905..... | 192 | 119,377 | 823 | 230,716 | 178 | 6,477 | 101 | 93,123 | 1,102 | 330,316 |
| 1906..... | 146 | 32,311 | 850 | 146,883 | 167 | 6,591 | 204 | 265,271 | 1,221 | 418,745 |
| 1907..... | 106 | 44,428 | 815 | 219,753 | 165 | 7,288 | 177 | 244,291 | 1,157 | 471,332 |
| 1908..... | 151 | 70,903 | 1,034 | 266,937 | 207 | 6,114 | 216 | 341,165 | 1,457 | 614,216 |
| 1909..... | 130 | 27,237 | 866 | 131,748 | 207 | 5,940 | 174 | 100,402 | 1,247 | 238,090 |
| 1910..... | 111 | 23,442 | 887 | 167,829 | 193 | 5,488 | 281 | 168,751 | 1,361 | 342,068 |
| 1911..... | 94 | 23,653 | 1,004 | 190,612 | 202 | 6,393 | 216 | 94,157 | 1,422 | 291,162 |
| 1912..... | 95 | 23,052 | 1,076 | 136,485 | 205 | 5,286 | 224 | 90,898 | 1,505 | 232,669 |
| 1913..... | 95 | 27,131 | 1,022 | 247,318 | 234 | 7,930 | 219 | 90,907 | 1,475 | 346,155 |
| 1914..... | 79 | 21,934 | 887 | 251,683 | 133 | 8,018 | 131 | 56,549 | 1,151 | 316,250 |
| 1915..... | 89 | 18,551 | 777 | 184,605 | 144 | 5,499 | 147 | 16,467 | 1,157 | 225,122 |
| 1916..... | 62 | 37,568 | 609 | 238,181 | 140 | 4,973 | 126 | 44,691 | 937 | 325,413 |
| 1917..... | 84 | 52,526 | 993 | 518,958 | 157 | 6,185 | 147 | 139,336 | 1,297 | 664,479 |
| 1918..... | 105 | 88,302 | 1,225 | 1,080,437 | 135 | 5,409 | 168 | 215,022 | 1,528 | 1,300,868 |
| 1919..... | 146 | 177,758 | 1,529 | 2,815,733 | 107 | 3,716 | 317 | 507,172 | 1,953 | 3,326,621 |
| 1920..... | 131 | 208,023 | 1,615 | 3,475,872 | 185 | 10,300 | 267 | 394,467 | 2,067 | 3,880,639 |
| 1921..... | 100 | 150,745 | 1,100 | 2,147,555 | 131 | 10,829 | 130 | 106,731 | 1,361 | 2,265,115 |
| 1922..... | 215 | 68,355 | 805 | 560,473 | 131 | 15,088 | 66 | 5,465 | 1,002 | 581,026 |

## DULUTH-SUPERIOR INTERLAKE TRAFFIC.

| Year. | Receipts. | Valuation of Receipts. | Shipments. | Valuation of Shipments. | Total Receipts and Shipments. | Tot. Valuat'n Receipts and Shipments. |
|---|---|---|---|---|---|---|
| | *Short tons.* | *Dollars.* | *Short tons.* | *Dollars.* | *Short tons.* | *Dollars.* |
| 1907..... | 7,840,023 | 95,702,839 | 26,946,682 | 191,826,855 | 34,786,705 | 287,529,694 |
| 1908..... | 6,594,915 | 66,664,997 | 17,202,247 | 156,449,323 | 23,797,162 | 223,114,320 |
| 1909..... | 6,815,410 | 75,504,761 | 25,713,891 | 186,004,398 | 32,529,301 | 261,509,159 |
| 1910..... | 9,520,990 | 99,079,192 | 27,163,588 | 184,969,880 | 36,684,578 | 284,049,072 |
| 1911..... | 9,424,962 | 83,087,646 | 21,247,884 | 152,968,727 | 30,672,846 | 236,056,373 |
| 1912..... | 9,705,999 | 89,661,073 | 31,768,777 | 231,260,859 | 41,474,776 | 320,921,932 |
| 1913..... | 12,165,608 | 113,918,404 | 34,709,808 | 238,677,173 | 46,875,416 | 352,595,577 |
| 1914..... | 10,616,492 | 99,186,531 | 22,919,212 | 187,816,429 | 33,535,704 | 287,002,960 |
| 1915..... | 9,713,245 | 117,415,770 | 30,781,427 | 251,386,384 | 40,494,672 | 368,802,154 |
| 1916..... | 11,045,855 | 110,207,992 | 41,131,478 | 277,011,633 | 52,177,333 | 387,219,625 |
| 1917..... | 12,242,814 | 141,912,526 | 40,169,010 | 329,397,210 | 52,411,824 | 471,309,736 |
| 1918..... | 12,489,867 | 128,681,152 | 41,256,491 | 408,833,754 | 53,746,358 | 537,514,906 |
| 1919..... | 10,183,694 | 156,439,551 | 32,711,987 | 287,598,077 | 42,895,681 | 444,037,628 |
| 1920..... | 10,562,130 | 191,171,481 | 36,246,483 | 361,728,552 | 46,808,613 | 552,900,033 |
| 1921..... | 11,340,028 | 130,648,729 | 18,743,527 | 199,864,162 | 30,083,555 | 330,512,891 |

## KEEWEENAW WATERWAY TRAFFIC.

| Year. | Vessels, Number. | Vessels, Net Tonnage. | Cargoes, West Bound Tons. | Cargoes, East Bound Tons. | Total Tons. | Valuation, Exclusive of Logs. | Logs, M. Ft. B. M. | Valuation of Logs. | Largest Single Cargoes Tons. |
|---|---|---|---|---|---|---|---|---|---|
| 1907..... | 3,647 | 2,477,687 | 1,715,068 | 732,973 | 2,448,041 | $101,774,806 | 9,659 | $144,834 | 11,115 |
| 1908..... | 3,085 | 2,265,304 | 1,627,924 | 635,990 | 2,263,914 | 77,323,898 | 7,242 | 107,544 | 11,500 |
| 1909..... | 2,984 | 2,389,204 | 1,720,295 | 823,778 | 2,544,073 | 85,266,001 | 9,619 | 134,666 | 10,560 |
| 1910..... | 3,426 | 2,479,170 | 1,609,593 | 775,083 | 2,384,676 | 77,262,115 | 13,832 | 193,648 | 10,116 |
| 1911..... | 2,839 | 2,293,133 | 1,525,046 | 621,571 | 2,146,617 | 78,861,611 | 10,757 | 150,598 | 10,000 |
| 1912..... | 2,280 | 2,398,856 | 1,619,872 | 786,746 | 2,406,618 | 86,582,812 | 4,118 | 57,652 | 11,767 |
| 1913..... | 2,446 | 2,248,262 | 1,496,901 | 763,659 | 2,260,560 | 72,550,334 | 16,318 | 179,498 | 10,680 |
| 1914..... | 2,162 | 1,998,203 | 1,397,618 | 502,970 | 1,900,588 | 70,010,151 | 8,530 | 93,830 | 10,318 |
| 1915..... | 2,208 | 2,383,081 | 1,724,945 | 737,984 | 2,462,929 | 110,414,125 | 9,431 | 84,879 | 10 881 |
| 1916..... | 2,233 | 2,145,628 | 1,679,311 | 547,743 | 2,227,054 | 105,181,229 | 8,314 | 99,768 | 10,850 |
| 1917..... | 1,336 | 1,661,725 | 1,778,048 | 405,226 | 2,183,274 | 106,397,272 | 5,025 | 72,863 | 12,079 |
| 1918..... | 1,044 | 1,528,024 | 1,671,917 | 279,873 | 1,951,790 | 72,492,503 | 7,311 | 140,737 | 11,900 |
| 1919..... | 1,104 | 1,347,604 | 1,110,632 | 276,040 | 1,386,672 | 64,513,670 | 8,827 | 220,675 | 11,655 |
| 1920..... | 914 | 1,123,627 | 907,578 | 241,170 | 1,148,748 | 56,661,208 | 9,530 | 298,289 | 11,600 |
| 1921..... | 629 | 1,051,767 | 735,925 | 204,756 | 940,681 | 42,688,375 | 7,618 | 152,360 | 12,478 |

## BEAUMONT AND PORT ARTHUR SHIP CHANNEL.

(By Harvey W. Gilbert, member Waterway Committee.)

The Beaumont and Port Arthur ship channel has now become one of the greatest in the United States, both in value of exports and imports, as well as tonnage produced. The imports consist mainly of Mexican petroleum and a small amount of sisal. The first shipping done in this district was through the port of Sabine Pass, which was a natural outlet for the Neches and Sabine Rivers which passed into Sabine Lake and emptied into the Gulf through Sabine Pass.

Seven years ago the channel from Port Arthur to Beaumont was completed, the citizens of Jefferson County putting up one-half of the money to dig this channel, and the U. S. Government furnishing the other half, making a complete waterway from the Gulf up as far as Beaumont, thirty miles inland. The waterway has become the world's greatest oil refining centre.

The bulk of the lumber from the great pine regions of Eastern Texas, and Western Louisiana, as well as the sulphur production of Louisiana, use this waterway. Most of the petroleum from Kansas, Oklahoma, and Texas, is run through the Beaumont refineries. The late John W. Gates settled at and developed Port Arthur.

Approximately 300,000 barrels of petroleum are handled daily on the channel.

## SAULT STE. MARIE CANAL TRAFFIC.

| Year. | Total Freight Tons. | Valuation of Freight. | Freight Charges. | Average Haul. | Freight Charges, Mile-Ton. | Value of American Craft. | Value of Canadian Craft. |
|---|---|---|---|---|---|---|---|
| | | *Dollars.* | *Dollars.* | *Miles.* | *Mills.* | *Dollars.* | *Dollars.* |
| 1900 | 25,643,073 | 267,041,959 | 24,953,314 | 825.9 | 1.18 | 66,116,583 | 3,618,576 |
| 1901 | 28,403,065 | 289,906,865 | 23,217,974 | 823.3 | .99 | 57,244,200 | 3,311,900 |
| 1902 | 35,961,146 | 358,306,300 | 26,566,189 | 827.4 | .89 | 67,205,000 | 3,792,400 |
| 1903 | 34,674,437 | 349,405,014 | 26,727,735 | 835.6 | .92 | 68,252,800 | 6,384,500 |
| 1904 | 31,546,106 | 334,502,686 | 21,552,894 | 843.5 | .81 | 63,789,300 | 5,377,100 |
| 1905 | 44,270,680 | 416,965,484 | 31,420,585 | 833.3 | .85 | 73,211,300 | 5,429,000 |
| 1906 | 51,751,080 | 537,463,454 | 36,666,889 | 842.4 | .84 | 88,392,000 | 6,140,500 |
| 1907 | 58,217,214 | 569,830,188 | 38,457,345 | 828.3 | .80 | 102,525,500 | 7,918,000 |
| 1908 | 41,390,557 | 470,141,318 | 23,903,244 | 842.0 | .69 | 101,643,000 | 10,054,000 |
| 1909 | 57,895,149 | 626,104,173 | 36,291,948 | 809.0 | .78 | 116,192,000 | 10,707,000 |
| 1910 | 62,363,218 | 654,010,844 | 38,710,904 | 840.0 | .74 | 123,061,500 | 11,675,000 |
| 1911 | 53,477,216 | 595,019,844 | 29,492,196 | 826.0 | .67 | 109,336,000 | 12,211,500 |
| 1912 | 72,472,676 | 791,357,837 | 40,578,225 | 831.0 | .67 | 125,618,800 | 12,927,500 |
| 1913 | 79,718,344 | 865,957,838 | 44,380,864 | 820.0 | .68 | 127,125,500 | 15,295,700 |
| 1914 | 55,369,934 | 634,800,268 | 27,597,099 | 832.8 | .60 | 117,211,000 | 17,420,700 |
| 1915 | 71,290,304 | 882,263,141 | 41,984,031 | 832.0 | .71 | 123,472,700 | 15,936,700 |
| 1916 | 91,888,219 | 974,161,156 | 60,845,023 | 824.0 | .80 | 129,170,500 | 15,757,700 |
| 1917 | 89,813,818 | 1,196,922,183 | 89,277,226 | 820.0 | 1.21 | 229,538,875 | 18,247,475 |
| 1918 | 85,680,327 | 987,005,347 | 83,507,638 | 818.2 | 1.19 | 223,757,625 | 17,583,550 |
| 1919 | 68,235,542 | 914,513,944 | 58,478,567 | 815.0 | 1.05 | 223,162,200 | 17,409,450 |
| 1920 | 79,282,496 | 1,119,774,214 | 85,741,850 | 816.1 | 1.33 | 222,422,100 | 17,461,650 |
| 1921 | 48,259,254 | 746,134,195 | 43,344,174 | 788.3 | 1.14 | 186,070,700 | 19,630,475 |

## VESSELS ENTERED AND CLEARED AT U. S. PORTS.

| Year (Fiscal). | Entered. All Ports, Sailing and Steam. | | | Cleared. All Ports, Sailing and Steam. | | |
|---|---|---|---|---|---|---|
| | American. | Foreign. | Total. | American. | Foreign. | Total. |
| | *Net tons.* | *Net tons.* | *Net tons.* | *Net tons.* | *Net tons.* | *Net tons.* |
| 1895 | 4,472,830 | 14,822,085 | 19,294,915 | 4,504,227 | 15,246,319 | 19,750,546 |
| 1896 | 5,196,320 | 15,792,864 | 20,989,184 | 5,329,599 | 16,084,986 | 21,414,585 |
| 1897 | 5,525,328 | 18,234,922 | 23,760,250 | 5,618,142 | 18,091,053 | 23,709,195 |
| 1898 | 5,240,046 | 20,339,353 | 25,579,399 | 5,111,447 | 20,636,785 | 25,748,232 |
| 1899 | 5,340,660 | 20,770,156 | 26,110,816 | 5,471,752 | 20,794,224 | 26,265,976 |
| 1900 | 6,135,652 | 22,027,353 | 28,163,005 | 6,208,918 | 22,072,223 | 28,281,141 |
| 1901 | 6,381,305 | 23,386,716 | 29,768,021 | 6,417,347 | 23,402,546 | 29,819,893 |
| 1902 | 6,961,200 | 23,693,232 | 30,654,432 | 6,821,555 | 23,622,527 | 30,444,082 |
| 1903 | 6,906,582 | 24,187,081 | 31,093,663 | 6,975,227 | 24,340,941 | 31,316,168 |
| 1904 | 6,679,173 | 23,273,237 | 29,952,410 | 6,641,374 | 23,374,201 | 30,015,575 |
| 1905 | 7,080,624 | 23,902,593 | 30,983,217 | 7,203,008 | 23,954,533 | 31,157,541 |
| 1906 | 7,612,690 | 26,542,755 | 34,155,445 | 7,580,533 | 26,203,921 | 33,784,454 |
| 1907 | 8,115,656 | 28,506,600 | 36,622,256 | 8,092,557 | 27,897,500 | 35,990,057 |
| 1908 | 8,473,227 | 30,065,968 | 38,539,195 | 8,435,207 | 29,846,489 | 38,281,696 |
| 1909 | 8,771,464 | 30,286,674 | 39,058,138 | 8,491,725 | 29,704,756 | 38,196,481 |
| 1910 | 8,888,459 | 31,347,347 | 40,235,806 | 8,808,603 | 30,897,255 | 39,705,858 |
| 1911 | 9,692,770 | 32,982,219 | 42,674,989 | 9,753,463 | 32,683,684 | 42,437,147 |
| 1912 | 11,257,098 | 34,900,973 | 46,158,071 | 11,703,467 | 34,713,445 | 46,416,912 |
| 1913 | 13,072,567 | 37,566,606 | 50,639,173 | 13,945,801 | 37,206,158 | 51,151,959 |
| 1914 | 13,730,075 | 39,658,502 | 53,388,577 | 13,740,628 | 39,442,781 | 53,183,409 |
| 1915 | 13,275,454 | 33,435,012 | 46,710,466 | 13,418,282 | 33,466,806 | 46,885,088 |
| 1916 | 17,927,674 | 33,622,223 | 51,549,897 | 17,902,068 | 34,520,940 | 52,423,008 |
| 1917 | 18,724,710 | 31,747,466 | 50,472,176 | 19,145,754 | 32,931,316 | 52,077,070 |
| 1918 | 19,283,530 | 26,172,507 | 45,456,037 | 19,206,233 | 26,807,749 | 46,013,982 |
| 1919 | 19,694,012 | 25,259,605 | 44,953,617 | 21,326,734 | 26,595,996 | 47,922,730 |
| 1920 | 26,242,330 | 26,178,328 | 52,420,658 | 28,997,549 | 27,074,832 | 56,072,381 |
| 1921 | 33,956,732 | 33,996,562 | 67,953,294 | 33,989,604 | 36,128,271 | 70,117,875 |
| 1922 | 29,920,203 | 31,312,340 | 61,232,543 | 29,836,283 | 31,846,945 | 61,683,228 |

The "net ton" equals 100 cubic feet of carrying capacity, exclusive of cabins, machinery, etc.

## RECAPITULATION—ENTERED AND CLEARED, UNITED STATES PORTS.

| Country from which Entered. | Entered. 1921. | | | 1922. | | |
|---|---|---|---|---|---|---|
| | American. | Foreign. | Total. | American. | Foreign. | Total. |
| Europe | 7,365,953 | 17,431,129 | 24,797,082 | 5,704,051 | 14,285,283 | 19,989,334 |
| North America | 23,071,690 | 12,715,032 | 35,786,722 | 21,726,988 | 12,858,367 | 34,585,355 |
| South America | 1,623,339 | 1,168,738 | 2,792,077 | 1,060,949 | 1,108,621 | 2,169,570 |
| Asia | 1,118,458 | 1,621,227 | 2,737,685 | 1,152,438 | 2,354,041 | 3,506,479 |
| Oceania | 340,237 | 295,826 | 636,063 | 133,606 | 230,523 | 364,129 |
| Africa | 437,055 | 764,610 | 1,201,665 | 142,171 | 475,505 | 617,676 |

| Country from which Cleared. | Cleared. 1921. | | | 1922. | | |
|---|---|---|---|---|---|---|
| | American. | Foreign. | Total. | American. | Foreign. | Total. |
| Europe | 7,499,852 | 18,049,534 | 25,549,386 | 5,633,554 | 14,578,146 | 20,211,700 |
| North America | 22,999,307 | 12,694,338 | 35,693,645 | 21,750,764 | 12,694,018 | 34,444,782 |
| South America | 1,932,439 | 2,164,359 | 4,096,798 | 1,062,741 | 1,151,261 | 2,214,002 |
| Asia | 902,329 | 1,723,599 | 2,625,928 | 1,156,876 | 2,530,454 | 3,687,330 |
| Oceania | 245,136 | 661,265 | 906,401 | 103,499 | 530,564 | 634,063 |
| Africa | 410,541 | 835,176 | 1,245,717 | 128,849 | 362,502 | 491,351 |

## VESSEL AND CARGO MOVEMENTS IN FOREIGN TRADE OF U. S.

(Covers Year Ending June 30, 1922.)

| VESSELS. | NORTH ATLANTIC DISTRICT. | | SOUTH ATLANTIC DISTRICT. | | GULF DISTRICT. | |
|---|---|---|---|---|---|---|
| | Dead-Weight Tons. | Cargo in Long Tons. | Dead-Weight Tons. | Cargo in Long Tons. | Dead-Weight Tons. | Cargo in Long Tons. |
| IMPORTS. | | | | | | |
| U. S. Shipping Board | 8,527,930 | 1,972,532 | 734,526 | 140,414 | 5,041,368 | 1,924,244 |
| Independent American | 15,553,266 | 9,181,910 | 770,949 | 431,154 | 11,783,962 | 7,490,610 |
| Total American | 24,081,196 | 11,154,442 | 1,505,475 | 571,568 | 16,825,330 | 9,414,854 |
| Foreign | 30,861,442 | 8,261,891 | 704,571 | 246,225 | 10,322,908 | 1,792,318 |
| Total | 54,924,638 | 19,416,333 | 2,210,046 | 817,793 | 27,148,238 | 11,207,172 |
| EXPORTS. | | | | | | |
| U. S. Shipping Board | 6,646,685 | 2,879,543 | 782,212 | 486,202 | 5,752,284 | 2,266,678 |
| Independent American | 15,737,450 | 2,790,584 | 953,019 | 138,891 | 11,331,613 | 1,922,517 |
| Total American | 22,384,135 | 5,670,127 | 1,735,231 | 625,093 | 17,083,897 | 4,189,195 |
| Foreign | 27,959,276 | 13,000,293 | 1,226,354 | 686,570 | 12,140,840 | 7,292,754 |
| Total | 50,343,411 | 18,670,420 | 2,961,585 | 1,311,663 | 29,224,737 | 11,481,949 |
| TOTAL (IMPORTS & EXPORTS). | | | | | | |
| U. S. Shipping Board | 15,174,615 | 4,852,075 | 1,516,738 | 626,616 | 10,793,652 | 4,190,922 |
| Independent American | 31,290,716 | 11,972,494 | 1,723,968 | 570,045 | 23,115,575 | 9,413,127 |
| Total American | 46,465,331 | 16,824,569 | 3,240,706 | 1,196,661 | 33,909,227 | 13,604,049 |
| Foreign | 58,820,718 | 21,262,184 | 1,930,925 | 932,795 | 22,463,748 | 9,085,072 |
| Total | 105,286,049 | 38,086,753 | 5,171,631 | 2,129,456 | 56,372,975 | 22,689,121 |

| VESSELS. | PACIFIC DISTRICT. | | GREAT LAKES DISTRICT. | | TOTAL (ALL DISTRICTS). | |
|---|---|---|---|---|---|---|
| | Dead-Weight Tons. | Cargo in Long Tons. | Dead-Weight Tons. | Cargo in Long Tons. | Dead-Weight Tons. | Cargo in Long Tons. |
| IMPORTS. | | | | | | |
| U. S. Shipping Board | 1,613,937 | 276,723 | ..... | ..... | 15,917,761 | 4,313,913 |
| Independent American | 2,248,488 | 335,918 | 8,753,814 | 3,065,154 | 39,110,479 | 20,504,746 |
| Total American | 3,862,425 | 612,641 | 8,753,814 | 3,065,154 | 55,028,240 | 24,818,659 |
| Foreign | 6,631,920 | 973,052 | 4,357,813 | 492,859 | 52,878,654 | 11,766,345 |
| Total | 10,494,345 | 1,585,693 | 13,111,627 | 3,558,013 | 107,906,894 | 36,585,004 |
| EXPORTS. | | | | | | |
| U. S. Shipping Board | 1,898,225 | 1,001,958 | ..... | ..... | 15,079,406 | 6,634,381 |
| Independent American | 2,742,570 | 985,827 | 8,375,387 | 4,411,912 | 39,140,039 | 10,249,731 |
| Total American | 4,640,795 | 1,987,785 | 8,375,387 | 4,411,912 | 54,219,445 | 16,884,112 |
| Foreign | 7,243,531 | 3,443,420 | 4,255,608 | 2,338,799 | 52,825,609 | 26,761,836 |
| Total | 11,884,326 | 5,431,205 | 12,630,995 | 6,750,711 | 107,045,054 | 43,645,948 |
| TOTAL (IMPORTS & EXPORTS). | | | | | | |
| U. S. Shipping Board | 3,512,162 | 1,278,681 | ..... | ..... | 30,997,167 | 10,948,294 |
| Independent American | 4,991,058 | 1,321,745 | 17,129,201 | 7,477,066 | 78,250,518 | 30,754,477 |
| Total American | 8,503,220 | 2,600,426 | 17,129,201 | 7,477,066 | 109,247,685 | 41,702,771 |
| Foreign | 13,875,451 | 4,316,472 | 8,613,421 | 2,831,658 | 105,704,263 | 38,528,181 |
| Total | 22,378,671 | 7,016,898 | 25,742,622 | 10,308,724 | 214,951,948 | 80,230,952 |

## TONNAGE EXPLAINED.

(By the U. S. Shipping Board.)

Deadweight Tonnage expresses the number of tons of 2,240 pounds that a vessel can transport of cargo, stores and bunker fuel. It is the difference between the number of tons of water a vessel displaces "light" and the number of tons it displaces when submerged to the "load water line." Deadweight tonnage is used interchangeably with deadweight carrying capacity. A vessel's capacity for weight cargo is less than its total deadweight tonnage.

Cargo Tonnage is either "weight" or "measurement." The weight ton in the United States and in British countries is the English long or gross ton of 2,240 pounds. In France and other countries having the metric system a weight ton is 2,204.6 pounds. A "measurement" ton is usually 40 cubic feet, but in some instances a larger number of cubic feet is taken for a ton. Most ocean package freight is taken at weight or measurement (W|M), ship's option.

Gross Tonnage applies to vessels, not to cargo. It is determined by dividing by 100 the contents, in cubic feet, of the vessel's closed-in spaces. A vessel ton is 100 cubic feet. The register of a vessel states both gross and net tonnage.

Net Tonnage is a vessel's gross tonnage minus deductions of space occupied by accommodations for crew, for machinery for navigation, by the engine room and fuel. A vessel's net tonnage expresses the space available for the accommodation of passengers and the stowage of cargo. A ton of cargo, in most instances, occupies less than 100 cubic feet; hence the vessel's cargo tonnage may exceed its net tonnage, and, indeed, the tonnage of cargo carried is usually greater than the gross tonnage.

Displacement of a vessel is the weight, in tons of 2,240 pounds, of the vessel and its contents. Displacement "light" is the weight of the vessel without stores, bunker fuel, or cargo. Displacement "loaded" is the weight of the vessel, plus cargo, fuel, and stores.

For a modern freight steamer the following relative tonnage figures would ordinarily be approximately correct: net tonnage, 4,000; gross tonnage, 6,000; deadweight carrying capacity, 10,000; displacement loaded, about 13,350.

## U. S. MERCHANT SHIPWRECKS AND CASUALTIES.

| Year (Fiscal). | No Ships. | Wrecks, Total. | Wrecks, Partial. | Ships Tot. Lost | Ships Damaged. | Losses to Ships. | Losses to Cargoes. | Passengers. | Crews. | Lives Lost. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | *Tons.* | *Tons.* | *Dollars.* | *Dollars.* | *No.* | *No.* | *No.* |
| 1898..... | 1,257 | 406 | 851 | 130,087 | 646,978 | 11,091,260 | 1,771,860 | 13,503 | 15,754 | 765 |
| 1899..... | 1,632 | 559 | 1,073 | 186 823 | 784,147 | 9,830,070 | 2,782,535 | 13,183 | 19,331 | 755 |
| 1900..... | 1,274 | 360 | 914 | 112,781 | 818,693 | 8.182,985 | 3,417,900 | 11,436 | 16,638 | 418 |
| 1901..... | 1,313 | 371 | 942 | 104,570 | 939,106 | 7,094,345 | 2,147,675 | 15,710 | 17,635 | 452 |
| 1902..... | 1,359 | 405 | 954 | 144,118 | 877,687 | 8,823,920 | 2,309,335 | 14,477 | 16,463 | 531 |
| 1903..... | 1,204 | 332 | 872 | 110,311 | 801,390 | 7,011,775 | 1,722,210 | 13,216 | 15,790 | 376 |
| 1904..... | 1,182 | 357 | 825 | 126,132 | 879,870 | 7,628,855 | 1,634,615 | 14,966 | 15,607 | 1,457 |
| 1905..... | 1,209 | 323 | 886 | 118,936 | 1,028,740 | 8,187,500 | 2,263,795 | 14,513 | 17,377 | 267 |
| 1906..... | 1,326 | 350 | 976 | 153,080 | 1,255,825 | 10,089,610 | 2,245,305 | 13,053 | 19,097 | 499 |
| 1907..... | 1,670 | 447 | 1,223 | 185,642 | 1,786,933 | 13,709,915 | 3,062,110 | 16,027 | 23,147 | 624 |
| 1908..... | 1,341 | 344 | 997 | 127,684 | 1,584.206 | 9,555,825 | 2,152,155 | 17,502 | 21,289 | 374 |
| 1909..... | 1,415 | 282 | 1,133 | 122,150 | 1,699,940 | 9,491,635 | 3,330,825 | 23,143 | 23,596 | 403 |
| 1910..... | 1,493 | 365 | 1,128 | 135,305 | 2,000,997 | 11,058,840 | 2,565,580 | 15,464 | 22,640 | 403 |
| 1911..... | 1,227 | 294 | 933 | 101,365 | 1,475,688 | 9,565,995 | 1,694,630 | 22,484 | 21,668 | 262 |
| 1912..... | 1,447 | 328 | 1,119 | 113,920 | 1,546,391 | 8,213,375 | 1,941,010 | 15,972 | 24,310 | 195 |
| 1913..... | 1,265 | 274 | 991 | 91,188 | 1,663,623 | 8,338,935 | 1,549,285 | 21,101 | 23,077 | 283 |
| 1914..... | 1,210 | 293 | 917 | 173,069 | 1,518,630 | 11,437,330 | 2,509,405 | 14,533 | 22,199 | 421 |
| 1915..... | 1,088 | 289 | 799 | 151,968 | 1,276,125 | 10,196,560 | 4,013,083 | 12,857 | 20,220 | 277 |
| 1916..... | 1,140 | 317 | 823 | 135,233 | 1,714,434 | 12,671,040 | 3,668,995 | 14,080 | 20,653 | 1,364 |
| 1917..... | 1,072 | 324 | 748 | 197,119 | 1,523,307 | 33,708,710 | 12,479,600 | 8,233 | 21,418 | 490 |
| 1918..... | 976 | 380 | 596 | 248,520 | 1,090,956 | 57,728,110 | 22,557,940 | 6,911 | 16,207 | 398 |
| 1919..... | 738 | 303 | 435 | 163,168 | 1,016,590 | 38,139,080 | 12,698,145 | 5,722 | 14,289 | 452 |
| 1920..... | 1,074 | 285 | 789 | 214,531 | 2,088,534 | 54,955,480 | 17,612,455 | 14,499 | 26,100 | 551 |
| 1921..... | 777 | 222 | 555 | 122,397 | 1,434,888 | 28,662,733 | 6,269,298 | 7,081 | 16,005 | 206 |
| 1922..... | 907 | 277 | 630 | 131,027 | 1,762,412 | 18.727,614 | 3,975,714 | 8,989 | 19,065 | 227 |

Exclusive of lives lost on vessels suffering no material damage.

The above table covers wrecks and casualties on and near the United States coasts, on United States rivers and the Great Lakes, at sea, and on the coasts of foreign countries. Of the 1922 casualties, for example, 40 of the vessels were lost, with 57 lives, at sea and on foreign coasts.

## UNITED STATES AND LATIN-AMERICAN COMMERCE.

| Year (Fiscal). | Imports Into the United States. | | | Exports From the United States. | | |
|---|---|---|---|---|---|---|
| | Total. | From Latin America. | Pct. From Latin America. | Total. | To Latin America. | Pct. to Latin America. |
| | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* | |
| 1900..... | 849,941,184 | 167,180,295 | 19.67 | 1,394,483,082 | 110,674,490 | 7.94 |
| 1901..... | 823,172,165 | 198,233,744 | 24.08 | 1,487,764,991 | 118,772,158 | 7.98 |
| 1902..... | 903,320,948 | 208,510,497 | 23.08 | 1,381,719,401 | 115,132,413 | 8.33 |
| 1903..... | 1,025,719,237 | 225,923,096 | 22.03 | 1,420,141,679 | 115,053,595 | 8.10 |
| 1904..... | 991,087,371 | 256,227,244 | 25.85 | 1,460,827,271 | 136,615,381 | 9.35 |
| 1905..... | 1,117,513,071 | 302,266,593 | 27.05 | 1,518,561,666 | 159,156,657 | 10 48 |
| 1906..... | 1,226,562,446 | 294,049,326 | 23.97 | 1,743,864,500 | 209,043,359 | 11.99 |
| 1907..... | 1,434,421,425 | 334,572,126 | 23.33 | 1,880,851,078 | 229,966,603 | 12.23 |
| 1908..... | 1,194,341,792 | 273,176,971 | 22.87 | 1,860,773,346 | 219,968,513 | 11.82 |
| 1909..... | 1,311,920,224 | 324,154,136 | 24.71 | 1,663.011,104 | 201,912,874 | 12.14 |
| 1910..... | 1,556,947,430 | 392,955,257 | 25.24 | 1,744,984,720 | 242,123,502 | 13.87 |
| 1911..... | 1,527,226,105 | 371,300,234 | 24.31 | 2,049,320,199 | 273,525,344 | 13.35 |
| 1912..... | 1,653.264,934 | 423,037,208 | 25.59 | 2,204,322,409 | 296,141,651 | 13.43 |
| 1913..... | 1,813,008,234 | 442,419,973 | 24.40 | 2,465,884,149 | 323,775,885 | 13.13 |
| 1914..... | 1,893,925,657 | 469,082,667 | 24.77 | 2,364,579,148 | 282,070,153 | 11.93 |
| 1915..... | 1,674,169,740 | 557,413,053 | 33.29 | 2,768,589,340 | 251,469,431 | 9.08 |
| 1916..... | 2,197,883,510 | 760,132,729 | 34.58 | 4,333,482,885 | 411,193,859 | 9.49 |
| 1917..... | 2,659,355,185 | 962,860,611 | 36.21 | 6,290,048,394 | 581,954,695 | 9.25 |
| 1918..... | 2,945,655,403 | 985,160,871 | 33.44 | 5,919,711,371 | 725,820,970 | 12.24 |
| 1919..... | 3,095,720,068 | 1,126,788,810 | 36.39 | 7,232,282,686 | 866,272,958 | 11.99 |
| 1920..... | 5,238,621,668 | 1,805,516,408 | 34.50 | 8,111,030,733 | 1,221,099,099 | 15.05 |
| 1921..... | 3,654,449,330 | 1,156,566,975 | 31.70 | 6,516,315,346 | 1,363,594,386 | 20.90 |
| 1922..... | 2,608,009,008 | 679,425,736 | 26.05 | 3,771,181,597 | 536,275,523 | 14.22 |

## PHILIPPINE COMMERCE SINCE 1905.

| Year (Fiscal). | Imports From United States. | Imports From Oth. Countries | Total Imports. | Exports to United States. | Exports to Oth. Countries | Total Exports. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1905..... | 5,761,498 | 25,114,852 | 30,876,350 | 15,668,026 | 16,684,589 | 32,352,615 |
| 1906..... | 4,333,893 | 21,465,373 | 25,799,266 | 11,579,411 | 20,337,723 | 31,917,134 |
| 1907..... | 5,155,359 | 23,630,496 | 28,785,855 | 12,079,204 | 21,634,153 | 33,713,357 |
| 1908..... | 5,079,487 | 25,838,870 | 30,918,357 | 10,323,233 | 22,493,334 | 32,816,567 |
| 1909..... | 4,691,770 | 23,100,627 | 27,792,397 | 10,215,331 | 20,778,232 | 30,993,563 |
| 1910..... | 10,775,301 | 26,292,329 | 37,067,630 | 18,741,771 | 21,122,398 | 39,864,169 |
| 1911..... | 19,483,658 | 30,350,064 | 49,833,722 | 16,716,956 | 23,061,673 | 39,778,629 |
| 1912..... | 20,604,155 | 33,945,825 | 54,549,980 | 21,517,777 | 28,802,059 | 50,319,836 |
| 1913..... | 25,387,085 | 30,940,498 | 56,327,583 | 19,848,885 | 33,834,441 | 53,683,326 |
| 1914..... | 28,571,821 | 27,439,749 | 56,011,570 | 22,047,105 | 29,190,943 | 51,238,048 |
| 1915..... | 22,394,381 | 22,085,480 | 44,479,861 | 23,001,275 | 27,913,786 | 50,915,061 |
| 1916..... | 23,804,367 | 22,169,258 | 45,973,625 | 28,638,526 | 32,825,505 | 61,464,031 |
| 1917..... | 27,516,556 | 24,466,722 | 51,983,278 | 43,125,393 | 28,589,982 | 71,715,375 |
| 1918..... | 49,799,229 | 33,964,061 | 83,763,290 | 77,010,233 | 39,604,378 | 116,614,611 |
| 1919..... | 64,655,144 | 43,119,119 | 107,774,263 | 79,332,548 | 43,396,690 | 122,729,238 |
| 1920..... | 80,374,530 | 42,757,581 | 123,132,111 | 84,186,048 | 68,195,193 | 152,381,241 |
| 1921.. .. | 100,687,157 | 60,127,507 | 160,814,664 | 75,264,002 | 33,765,725 | 109,029,727 |
| 1922..... | 50,113,575 | 32,901,794 | 83,015,369 | 59,168,170 | 35,309,433 | 94,477,603 |

# Foreign Trade of the United States.

## IMPORT AND EXPORT TOTALS, BY YEARS.

| Fiscal Year. | Tot. Imports and Exports. | Fiscal Year. | Tot. Imports and Exports. | Fiscal Year. | Tot. Imports and Exports. | Fiscal Year. | Tot. Imports and Exports. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| 1790..... | 43,205,156 | 1870..... | 828,730,176 | 1888..... | 1,419,911,621 | 1906..... | 2,970,426,946 |
| 1800..... | 162,224,548 | 1871..... | 963,043,862 | 1889..... | 1,487,533,027 | 1907..... | 3,315,272,503 |
| 1810..... | 152,157,970 | 1872..... | 1,070,772,663 | 1890..... | 1,647,139,093 | 1908..... | 3,055,115,138 |
| 1820..... | 144,141,669 | 1873..... | 1,164,616,132 | 1891..... | 1,729,397,006 | 1909..... | 2,974,931,328 |
| 1830..... | 134,391,691 | 1874..... | 1,153,689,382 | 1892..... | 1,857,680,610 | 1910..... | 3,301,932,150 |
| 1840..... | 221,927,638 | 1875..... | 1,046,448,147 | 1893..... | 1,714,066,116 | 1911..... | 3,576,546,304 |
| 1850..... | 316,885,252 | 1876..... | 1,001,125,861 | 1894..... | 1,547,135,194 | 1912..... | 3,857,587,343 |
| 1855..... | 476,718,211 | 1877..... | 1,053,798,346 | 1895..... | 1,539,508,130 | 1913..... | 4,278,892,383 |
| 1860..... | 687,192,176 | 1878..... | 1,131,917,298 | 1896..... | 1,662,331,612 | 1914..... | 4,258,504,805 |
| 1861..... | 506,864,375 | 1879..... | 1,156,217,216 | 1897..... | 1,815,723,968 | 1915..... | 4,442,759,085 |
| 1862..... | 380,027,178 | 1880..... | 1,503,593,404 | 1898..... | 1,847,531,984 | 1916..... | 6,531,366,390 |
| 1863..... | 447,300,262 | 1881..... | 1,545,041,974 | 1899..... | 1,924,171,791 | 1917..... | 8,949,403,579 |
| 1864..... | 475,285,291 | 1882..... | 1,475,181,831 | 1900..... | 2,244,424,266 | 1918..... | 7,865,366,774 |
| 1865..... | 404,774,883 | 1883..... | 1,547,020,316 | 1901..... | 2,310,937,156 | 1919..... | 10,328,002,754 |
| 1866..... | 783,671,588 | 1884..... | 1,408,211,302 | 1902..... | 2,285,040,349 | 1920..... | 13,342,340,777 |
| 1867..... | 690,267,237 | 1885..... | 1319,717,084 | 1903..... | 2,445,860,916 | 1921..... | 10,170,969,379 |
| 1868..... | 639,389,339 | 1886..... | 1,314,960,966 | 1904..... | 2,451,914,642 | 1922..... | 6,379,190,605 |
| 1869..... | 703,624,076 | 1887..... | 1,408,502,979 | 1905..... | 2,636,074,737 | | |

## UNITED STATES FOREIGN TRADE BY GEOGRAPHIC DISTRICTS.

| Fiscal Year. | Imports. | | | | | |
|---|---|---|---|---|---|---|
| | Atlantic Coast. | Gulf Coast. | Mexican Border. | Pacific Coast. | Northern Border. | Interior. |
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1900..... | 693,112,563 | 23,692,936 | 5,377,669 | 58,916,113 | 59,947,859 | 8,894,044 |
| 1901..... | 670,622,399 | 26,669,898 | 10,142,272 | 48,202,943 | 57,119,751 | 10,414,902 |
| 1902..... | 724,370,676 | 31,076,809 | 13,704,334 | 54,301,387 | 67,756,020 | 12,111,722 |
| 1903..... | 821,251,923 | 38,378,060 | 13,377,200 | 56,474,603 | 82,054,497 | 14,182,954 |
| 1904..... | 779,237,183 | 43,923,657 | 12,449,975 | 57,499,129 | 83,744,295 | 14,233,132 |
| 1905..... | 888,238,697 | 48,209,910 | 14,981,271 | 62,257,390 | 90,029,593 | 13,796,210 |
| 1906..... | 974,562,799 | 53,983,654 | 16,944,791 | 66,323,922 | 97,927,685 | 16,819,595 |
| 1907..... | 1,133,032,203 | 62,908,323 | 18,001,491 | 91,139,804 | 109,172,280 | 20,167,324 |
| 1908..... | 907,184,563 | 59,340,735 | 10,868,544 | 81,981,637 | 114,873,922 | 20,092,391 |
| 1909..... | 1,018,847,312 | 59,565,904 | 16,178,002 | 85,961,830 | 112,690,231 | 18,676,945 |
| 1910..... | 1,227,154,723 | 68,704,561 | 22,911,198 | 88,656,730 | 129,123,041 | 20,397,177 |
| 1911..... | 1,163,540,071 | 82,147,619 | 20,363,988 | 102,702,653 | 137,723,850 | 20,747,924 |
| 1912..... | 1,268,100,584 | 92,244,523 | 22,512,229 | 111,488,360 | 137,382,121 | 21,037,117 |
| 1913..... | 1,375,849,335 | 103,612,409 | 27,059,560 | 128,895,064 | 153,612,547 | 23,978,819 |
| 1914..... | 1,374,620,578 | 120,372,034 | 32,802,909 | 138,151,367 | 205,273,412 | 22,705,357 |
| 1915..... | 1,212,655,650 | 102,388,415 | 20,801,472 | 158,858,408 | 164,897,211 | 14,568,584 |
| 1916..... | 1,562,179,535 | 110,154,169 | 33,797,117 | 262,975,769 | 214,196,786 | 14,586,134 |
| 1917..... | 1,763,466,262 | 128,349,000 | 49,334,306 | 358,858,637 | 338,349,328 | 20,997,652 |
| 1918..... | 1,711,757,676 | 146,798,259 | 46,652,656 | 617,099,614 | 404,529,488 | 18,817,710 |
| 1919..... | 1,932,948,730 | 174,104,730 | 42,911,157 | 493,147,419 | 432,098,990 | 20,509,042 |
| 1920..... | 3,763,649,904 | 304,218,105 | 39,196,712 | 467,127,868 | 627,807,045 | 36,352,480 |
| 1921..... | 2,519,562,240 | 253,193,429 | 23,591,188 | 258,135,363 | 570,816,498 | 29,160,628 |
| 1922..... | 1,759,664,097 | 156,877,201 | 8,581,727 | 287,143,024 | 380,656,248 | 15,086,711 |

| Fiscal Year. | Exports. | | | | | |
|---|---|---|---|---|---|---|
| | Atlantic Coast. | Gulf Coast. | Mexican Border. | Pacific Coast. | Northern Border. | Interior. |
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1900..... | 963,569,447 | 234,107,671 | 22,320,157 | 70,175,057 | 104,267,087 | 43,663 |
| 1901..... | 1,002,840,573 | 285,464,529 | 21,147,121 | 69,533,962 | 107,938,789 | 840,017 |
| 1902..... | 895,444,758 | 263,079,196 | 24,231,221 | 87,515,263 | 111,441,279 | 7,684 |
| 1903..... | 904,171,980 | 285,021,044 | 25,935,871 | 79,253,334 | 125,758,847 | 603 |
| 1904..... | 897,106,123 | 334,794,649 | 29,260,684 | 65,722,816 | 133,942,317 | 682 |
| 1905..... | 917,349,861 | 319,544,369 | 26,245,121 | 103,121,575 | 152,300,325 | 415 |
| 1906..... | 1,061,778,069 | 368,723,184 | 34,925,348 | 101,770,160 | 176,664,860 | 2,879 |
| 1907..... | 1,079,770,229 | 469,273,078 | 41,100,832 | 92,029,634 | 198,673,650 | 3,655 |
| 1908..... | 1,155,761,363 | 396,552,136 | 33,101,272 | 94,207,094 | 181,146,516 | 4,965 |
| 1909..... | 976,962,769 | 409,630,809 | 27,135,805 | 69,949,403 | 179,329,260 | 3,058 |
| 1910..... | 1,018,143,541 | 399,100,499 | 29,106,100 | 73,188,636 | 225,398,112 | 47,832 |
| 1911..... | 1,166,468,889 | 487,929,157 | 30,396,911 | 94,261,132 | 269,889,577 | 374,533 |
| 1912..... | 1,262,679,331 | 463,973,859 | 27,193,816 | 127,542,331 | 322,370,708 | 562,364 |
| 1913..... | 1,348,811,300 | 543,076,878 | 24,902,645 | 146,856,469 | 401,997,518 | 239,339 |
| 1914..... | 1,304,108,797 | 566,387,662 | 16,630,369 | 136,243,148 | 341,183,200 | 425,972 |
| 1915..... | 1,739,159,496 | 508,434,734 | 14,801,494 | 173,685,617 | 332,019,531 | 488,468 |
| 1916..... | 3,039,147,369 | 485,403,919 | 20,510,636 | 273,193,851 | 555,227,110 | ..... |
| 1917..... | 3,395,502,570 | 685,915,838 | 33,139,215 | 333,955,377 | 842,135,395 | ..... |
| 1918..... | 3,881,744,288 | 715,590,999 | 51,052,179 | 491,401,313 | 779,922,592 | ..... |
| 1919..... | 4,612,484,016 | 958,287,905 | 53,722,840 | 621,531,504 | 986,256,421 | ..... |
| 1920..... | 5,104,011,096 | 1,446,355,456 | 59,738,200 | 534,992,258 | 963,891,653 | ..... |
| 1921..... | 3,739,748,080 | 1,469,736,256 | 111,133,853 | 361,036,167 | 834,855,677 | ..... |
| 1922..... | 1,888,284,359 | 922,673,509 | 74,685,784 | 315,769,424 | 569,768,523 | ..... |

*Interior* includes Col., Ind., Iowa, Ky., Minn., Omaha, Pittsburgh, St. Louis, Tenn., Utah, and Nev.

The extension of rail and water routes to the East, West and South coasts of the United States has transferred the export trade to the great coast ports. The import figures at the *Interior* points mostly relate to parcel post and other mail, and express, matter.

## UNITED STATES EXPORTS, BY GRAND DIVISIONS.

| Fiscal Year. | Imports From— | | | | | |
|---|---|---|---|---|---|---|
| | Europe. | No. America. | So. America. | Asia. | Oceania. | Africa. |
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1800 | 46,857,960 | 32,106,092 | ..... | 11,560,810 | 142,969 | 551,496 |
| 1830 | 40,841,420 | 17,548,892 | 6,239,176 | 5,531,737 | 384,887 | 308,797 |
| 1840 | 64,146,814 | 22,627,639 | 9,420,586 | 9,695,639 | 602,447 | 646,869 |
| 1850 | 124,954,302 | 24,136,879 | 16,647,637 | 10,315,486 | 1,401,340 | 682,151 |
| 1860 | 216,831,353 | 75,082,583 | 35,992,719 | 26,201,603 | 3,495,226 | 3,798,518 |
| 1870 | 249,540,283 | 126,544,611 | 43,596,045 | 31,413,378 | 1,423,212 | 9,860,058 |
| 1880 | 370,821,782 | 130,077,225 | 82,126,922 | 67,008,793 | 14,130,604 | 3,789,420 |
| 1890 | 449,987,266 | 148,368,709 | 90,006,144 | 67,506,833 | 28,356,568 | 5,084,892 |
| 1900 | 440,567,314 | 130,035,221 | 93,666,774 | 139,842,330 | 34,611,108 | 11,218,437 |
| 1901 | 429,620,452 | 145,158,104 | 110,367,342 | 117,677,611 | 11,395,195 | 8,953,461 |
| 1902 | 475,161,941 | 151,076,524 | 119,785,756 | 129,682,651 | 14,166,461 | 13,447,615 |
| 1903 | 547,226,887 | 189,736,475 | 107,428,323 | 147,702,374 | 21,043,527 | 12,581,651 |
| 1904 | 498,697,379 | 198,778,952 | 120,364,113 | 143,509,153 | 20,310,998 | 9,426,776 |
| 1905 | 540,773,092 | 227,229,145 | 150,795,800 | 161,982,991 | 25,388,421 | 11,343,622 |
| 1906 | 633,292,184 | 23[illegible]53,322 | 140,422,876 | 180,095,671 | 24,769,658 | 12,628,735 |
| 1907 | 747,291,253 | 263,576,349 | 160,165,537 | 212,475,427 | 29,785,393 | 21,127,466 |
| 1908 | 608,014,147 | 238,815,898 | 124,998,590 | 181,167,616 | 25,054,866 | 16,290,675 |
| 1909 | 654,322,918 | 253,999,920 | 163,878,724 | 197,548,027 | 27,062,008 | 15,108,627 |
| 1910 | 806,270,280 | 306,767,486 | 196,164,786 | 193,155,344 | 37,099,795 | 17,489,739 |
| 1911 | 768,167,760 | 305,496,793 | 182,623,750 | 213,449,730 | 30,274,452 | 27,213,620 |
| 1912 | 819,585,326 | 334,072,039 | 215,089,316 | 225,468,250 | 36,464,115 | 22,585,888 |
| 1913 | 892,866,384 | 361,943,659 | 217,734,629 | 276,494,777 | 37,543,441 | 26,425,344 |
| 1914 | 895,602,868 | 427,399,354 | 222,677,075 | 286,952,486 | 42,144,398 | 19,149,476 |
| 1915 | 614,354,645 | 473,079,796 | 261,489,563 | 247,770,103 | 52,522,552 | 24,953,081 |
| 1916 | 616,252,749 | 591,895,543 | 391,562,018 | 437,181,464 | 96,225,991 | 64,765,745 |
| 1917 | 610,470,670 | 766,112,537 | 542,212,820 | 615,217,463 | 65,328,379 | 60,013,316 |
| 1918 | 411,578,494 | 918,347,346 | 567,418,257 | 826,193,642 | 146,205,707 | 75,911,957 |
| 1919 | 372,951,315 | 1,052,567,498 | 568,374,904 | 830,752,463 | 190,008,129 | 81,065,759 |
| 1920 | 1,179,400,699 | 1,486,250,288 | 869,944,300 | 1,368,669,105 | 157,891,783 | 185,195,939 |
| 1921 | 937,868,864 | 1,207,526,768 | 485,225,042 | 968,978,366 | | 54,860,306 |
| 1922 | 830,473,712 | 700,739,286 | 288,897,069 | 735,797,703 | | 52,101,238 |

There are no available Government figures for 1810 or 1820 in above table.

## UNITED STATES IMPORTS, BY GRAND DIVISIONS.

| Fiscal Year. | Exports To— | | | | | |
|---|---|---|---|---|---|---|
| | Europe. | No. America. | So. America. | Asia. | Oceania. | Africa. |
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1800 | 41,348,088 | 27,208,618 | ..... | 1,177,846 | 14,112 | 1,110,374 |
| 1810 | 46,853,851 | 16,066,899 | 1,611,738 | 556,881 | 227,560 | 1,407,828 |
| 1820 | 48,116,538 | 16,810,597 | 1,133,689 | 3,289,000 | 8,906 | 305,968 |
| 1830 | 48,175,248 | 18,886,434 | 4,587,391 | 1,845,224 | 93,668 | 233,601 |
| 1840 | 98,930,684 | 23,737,078 | 5,969,517 | 2,286,290 | 454,814 | 707,563 |
| 1850 | 113,862,253 | 24,722,610 | 9,076,724 | 3,051,720 | 208,129 | 977,284 |
| 1860 | 310,272,818 | 53,325,937 | 16,742,100 | 11,067,921 | 5,373,497 | 3,227,760 |
| 1870 | 420,184,014 | 68,962,006 | 21,651,459 | 10,972,064 | 4,334,991 | 3,414,768 |
| 1880 | 719,433,788 | 69,437,783 | 23,190,220 | 11,645,703 | 6,846,698 | 5,084,466 |
| 1890 | 683,736,397 | 94,100,410 | 38,752,648 | 19,696,820 | 16,460,269 | 5,082,140 |
| 1900 | 1,040,167,763 | 187,594,625 | 38,945,763 | 64,913,807 | 43,391,275 | 19,469,849 |
| 1901 | 1,136,504,605 | 196,534,460 | 44,400,195 | 49,390,712 | 35,392,401 | 25,542,618 |
| 1902 | 1,008,033,981 | 203,971,080 | 38,043,617 | 63,944,077 | 34,258,041 | 33,468,605 |
| 1903 | 1,029,256,657 | 215,482,769 | 41,137,872 | 58,359,016 | 37,468,512 | 38,436,853 |
| 1904 | 1,057,930,131 | 234,909,959 | 50,755,027 | 60,151,347 | 32,850,681 | 24,230,126 |
| 1905 | 1,020,972,641 | 260,570,235 | 56,894,131 | 128,504,610 | 33,079,446 | 18,540,603 |
| 1906 | 1,200,166,036 | 308,382,982 | 75,159,781 | 105,451,610 | 35,141,751 | 19,562,340 |
| 1907 | 1,298,452,380 | 349,840,641 | 82,157,174 | 92,703,664 | 41,186,193 | 16,511,026 |
| 1908 | 1,283,600,155 | 324,674,719 | 83,583,874 | 101,784,932 | 46,789,201 | 20,340,565 |
| 1909 | 1,146,755,321 | 309,476,694 | 76,561,680 | 71,792,187 | 41,389,788 | 17,035,434 |
| 1910 | 1,135,914,551 | 385,520,069 | 93,246,820 | 60,861,813 | 50,890,087 | 18,551,380 |
| 1911 | 1,308,275,778 | 457,059,179 | 108,894,894 | 85,422,428 | 66,060,813 | 23,607,107 |
| 1912 | 1,341,732,789 | 516,837,597 | 132,310,451 | 117,461,635 | 71,936,513 | 24,043,424 |
| 1913 | 1,479,074,761 | 617,413,013 | 146,147,993 | 115,056,620 | 79,102,845 | 29,088,917 |
| 1914 | 1,486,498,729 | 528,644,962 | 124,539,909 | 113,425,616 | 83,568,417 | 27,901,515 |
| 1915 | 1,971,434,687 | 477,075,727 | 99,323,957 | 114,470,493 | 77,764,725 | 28,519,751 |
| 1916 | 2,999,305,097 | 733,024,674 | 180,175,374 | 278,610,881 | 98,775,828 | 43,591,031 |
| 1917 | 4,324,512,661 | 1,163,758,100 | 259,480,371 | 380,249,708 | 109,314,490 | 52,733,064 |
| 1918 | 3,732,174,352 | 1,236,359,013 | 314,558,794 | 447,429,267 | 134,891,888 | 54,298,757 |
| 1919 | 4,644,937,841 | 1,288,157,869 | 400,646,300 | 607,721,118 | 105,662,126 | 85,157,432 |
| 1920 | 4,863,792,739 | 1,634,193,861 | 490,898,074 | 798,216,708 | 193,229,039 | 128,658,242 |
| 1921 | 3,408,522,000 | 1,645,906,752 | 523,450,650 | 804,601,423 | | 134,029,208 |
| 1922 | 2,067,027,605 | 896,951,012 | 190,827,828 | 564,659,603 | | 51,715 549 |

## VALUE OF U. S.-CANADA TRADE (STATED IN DOLLARS). FISCAL YEARS.

| | Imports From U. S. | Exports to U. S. | | Imports From U. S. | Exports to U. S. | | Imports From U. S. | Exports to U. S. |
|---|---|---|---|---|---|---|---|---|
| 1907 | 155,943,029 | 79,021,480 | 1912 | 356,354,478 | 120,534,634 | 1917 | 677,631,616 | 486,870,690 |
| 1908 | 210,652,825 | 113,520,500 | 1913 | 441,141,562 | 167,110,382 | 1918 | 791,906,125 | 441,390,920 |
| 1909 | 180,026,550 | 92,604,357 | 1914 | 410,786,091 | 200,459,373 | 1919 | 746,920,654 | 477,745,659 |
| 1910 | 223,501,809 | 113,150,778 | 1915 | 428,616,927 | 215,409,326 | 1920 | 802,096,817 | 464,029,273 |
| 1911 | 284,934,739 | 119,396,801 | 1916 | 398,693,720 | 320,225,080 | | | |

Figures for 1907 cover 9 months.

## UNITED STATES EXPORTS—DOMESTIC AND FOREIGN.

| Fiscal Year | Domestic. | Foreign. | Total. | Fiscal Year | Domestic. | Foreign. | Total. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* | *Dollars.* |
| 1800 | 31,840,903 | 39,130,877 | 70,971,780 | 1889 | 730,282,609 | 12,118,766 | 742,401,375 |
| 1810 | 42,366,675 | 24,791,295 | 66,757,970 | 1890 | 845,293,828 | 12,534,856 | 857,828,684 |
| 1820 | 51,683,640 | 18,008,029 | 69,691,669 | 1891 | 872,270,288 | 12,210,527 | 884,480,810 |
| 1830 | 58,524,878 | 13,145,857 | 71,670,735 | 1892 | 1,015,732,011 | 14,546,137 | 1,030,278,148 |
| 1840 | 111,660,561 | 12,008,371 | 123,668,932 | 1893 | 831,030,785 | 16,634,409 | 847,665,194 |
| 1850 | 134,900,233 | 9,475,493 | 144,375,726 | 1894 | 869,204,937 | 22,935,635 | 892,140,572 |
| 1860 | 316,242,423 | 17,333,634 | 333,576,057 | 1895 | 793,392,599 | 14,145,566 | 807,538,165 |
| 1861 | 204,899,616 | 14,654,217 | 219,553,833 | 1896 | 863,200,487 | 19,406,451 | 882,606,938 |
| 1862 | 179,644,024 | 11,026,477 | 190,670,501 | 1897 | 1,032,007,603 | 18,985,953 | 1,050,993,556 |
| 1863 | 186,003,912 | 17,960,535 | 203,964,447 | 1898 | 1,210,291,913 | 21,190,417 | 1,231,482,330 |
| 1864 | 143,504,027 | 15,333,961 | 158,837,988 | 1899 | 1,203,931,222 | 23,092,080 | 1,227,023,302 |
| 1865 | 136,940,248 | 29,089,055 | 166,029,303 | 1900 | 1,370,763,571 | 23,719,511 | 1,394,483,082 |
| 1866 | 337,518,102 | 11,341,420 | 348,859,522 | 1901 | 1,460,462,806 | 27,302,185 | 1,487,764,991 |
| 1867 | 279,786,809 | 14,719,332 | 294,506,141 | 1902 | 1,355,481,861 | 26,237,540 | 1,381,719,401 |
| 1868 | 269,389,900 | 12,562,999 | 281,952,899 | 1903 | 1,392,231,302 | 27,910,377 | 1,420,141,679 |
| 1869 | 275,166,697 | 10,951,000 | 286,117,697 | 1904 | 1,435,179,017 | 25,648,254 | 1,460,827,271 |
| 1870 | 376,616,473 | 16,155,295 | 392,771,768 | 1905 | 1,491,744,641 | 26,817,025 | 1,518,561,666 |
| 1871 | 428,398,908 | 14,421,270 | 442,820,178 | 1906 | 1,717,953,382 | 25,911,118 | 1,743,864,500 |
| 1872 | 428,487,131 | 15,690,455 | 444,177,586 | 1907 | 1,853,718,034 | 27,133,044 | 1,880,851,078 |
| 1873 | 505,033,439 | 17,446,483 | 522,479,922 | 1908 | 1,834,786,357 | 25,986,989 | 1,860,773,346 |
| 1874 | 569,433,421 | 16,849,619 | 586,283,040 | 1909 | 1,638,355,593 | 24,655,511 | 1,663,011,104 |
| 1875 | 499,284,100 | 14,158,611 | 513,442,711 | 1910 | 1,710,083,998 | 34,900,722 | 1,744,984,720 |
| 1876 | 525,582,247 | 14,802,424 | 540,384,671 | 1911 | 2,013,549,025 | 35,771,174 | 2,049,320,199 |
| 1877 | 589,670,224 | 12,804,996 | 602,475,220 | 1912 | 2,170,319,828 | 34,002,581 | 2,204,322,409 |
| 1878 | 680,709,268 | 14,156,498 | 694,865,766 | 1913 | 2,428,506,358 | 37,377,791 | 2,465,884,149 |
| 1879 | 698,340,790 | 12,098,651 | 710,439,441 | 1914 | 2,329,684,025 | 34,895,123 | 2,364,579,148 |
| 1880 | 823,946,353 | 11,692,305 | 835,638,658 | 1915 | 2,716,178,465 | 52,410,875 | 2,768,589,340 |
| 1881 | 883,925,947 | 18,451,399 | 902,377,346 | 1916 | 4,272,177,579 | 61,305,306 | 4,333,482,885 |
| 1882 | 733,239,732 | 17,302,525 | 750,542,257 | 1917 | 6,227,164,050 | 62,884,344 | 6,290,048,394 |
| 1883 | 804,223,632 | 19,615,770 | 823,839,402 | 1918 | 5,838,652,057 | 81,059,314 | 5,919,711,371 |
| 1884 | 724,964,852 | 15,548,757 | 740,513,609 | 1919 | 7,081,461,938 | 150,820,748 | 7,232,282,686 |
| 1885 | 726,682,946 | 15,506,809 | 742,189,755 | 1920 | 7,949,309,106 | 159,679,557 | 8,108,988,663 |
| 1886 | 665,964,529 | 13,560,301 | 679,524,830 | 1921 | 6,385,883,676 | 130,626,357 | 6,516,510,033 |
| 1887 | 703,022,923 | 13,160,788 | 716,183,211 | 1922 | 3,699,867,062 | 71,314,535 | 3,770,169,427 |
| 1888 | 683,862,104 | 12,092,403 | 695,954,507 | | | | |

## VALUE OF IMPORTS FOR CONSUMPTION AND DUTIES.

| Year (Fiscal). | Free, Dollars. | Dutiable, Dollars. | Total, Dollars. | Per Cent. of Free. | Total Duties, Dollars. | Ad Val. Rate of Duty Dutiable. | Ad Val. Rate D'ty Free and Dutiable. | Imports Per Cap. Dollars. |
|---|---|---|---|---|---|---|---|---|
| 1821 | 1,730,725 | 41,965,680 | 43,696,405 | 3.96 | 18,883,252 | 35.97 | 34.64 | 4.40 |
| 1830 | 3,511,586 | 46,063,513 | 49,575,099 | 7.09 | 28,417,055 | 48.88 | 45.31 | 3.85 |
| 1840 | 42,110,829 | 44,139,506 | 86,250,335 | 48.82 | 15,178,975 | 30.37 | 15.45 | 5.05 |
| 1850 | 15,982,458 | 148,051,575 | 164,034,033 | 9.74 | 40,181,813 | 25.85 | 23.16 | 7.07 |
| 1860 | 68,391,038 | 267,891,447 | 336,282,485 | 20.34 | 52,692,421 | 19.67 | 15.67 | 10.69 |
| 1870 | 20,214,105 | 406,131,905 | 426,346,010 | 4.74 | 191,513,975 | 47.08 | 44.89 | 11.06 |
| 1880 | 207,772,522 | 419,753,948 | 627,526,470 | 33.11 | 182,747,654 | 43.46 | 29.12 | 12.51 |
| 1881 | 202,293,871 | 448,325,411 | 650,618,282 | 31.09 | 193,800,880 | 43.27 | 29.79 | 12.68 |
| 1882 | 210,672,355 | 506,045,034 | 716,717,389 | 29.39 | 216,138,916 | 42.61 | 30.16 | 13.65 |
| 1883 | 206,868,036 | 494,352,144 | 701,220,180 | 29.50 | 210,637,293 | 42.41 | 30.04 | 13.05 |
| 1884 | 211,089,414 | 456,662,413 | 667,751,827 | 31.61 | 190,282,836 | 41.57 | 28.50 | 12.16 |
| 1885 | 192,443,389 | 386,892,253 | 579,335,642 | 33.22 | 178,151,601 | 45.83 | 30.75 | 10.32 |
| 1886 | 210,271,333 | 413,778,055 | 624,049,388 | 33.69 | 189,410,448 | 45.53 | 30.35 | 10.87 |
| 1887 | 229,319,335 | 450,325,322 | 679,644,657 | 33.74 | 214,222,310 | 47.08 | 31.52 | 11.58 |
| 1888 | 238,947,634 | 468,143,774 | 707,091,408 | 33.78 | 216,042,256 | 45.61 | 30.55 | 11.79 |
| 1889 | 249,824,339 | 484,856,768 | 734,681,107 | 34.05 | 220,576,989 | 45.11 | 30.02 | 11.99 |
| 1890 | 258,136,929 | 507,571,764 | 765,708,693 | 33.71 | 226,540,037 | 44.39 | 29.59 | 12.14 |
| 1891 | 379,028,079 | 466,455,173 | 845,483,252 | 44.83 | 216,885,701 | 46.26 | 25.65 | 13.14 |
| 1892 | 448,771,192 | 355,526,741 | 804,297,933 | 55.78 | 174,124,270 | 48.69 | 21.65 | 12.25 |
| 1893 | 432,450,474 | 400,282,519 | 832,732,993 | 51.93 | 190,143,678 | 49.56 | 23.79 | 12.43 |
| 1894 | 372,461,955 | 257,645,703 | 630,107,658 | 59.11 | 129,553,892 | 50.00 | 20.56 | 9.23 |
| 1895 | 376,890,100 | 354,271,990 | 731,162,090 | 51.55 | 149,450,603 | 41.75 | 20.44 | 10.51 |
| 1896 | 368,897,523 | 390,796,561 | 759,694,084 | 48.56 | 157,013,506 | 39.95 | 20.67 | 10.72 |
| 1897 | 381,902,414 | 407,348,616 | 789,251,030 | 48.39 | 172,760,361 | 42.17 | 21.89 | 10.93 |
| 1898 | 291,534,005 | 295,619,695 | 587,153,700 | 49.65 | 145,438,385 | 48.80 | 24.77 | 7.99 |
| 1899 | 299,668,977 | 385,772,915 | 685,441,892 | 43.72 | 202,072,050 | 52.07 | 29.48 | 9.16 |
| 1900 | 366,759,922 | 463,759,330 | 830,519,252 | 44.16 | 229,360,771 | 49.24 | 27.62 | 10.91 |
| 1901 | 339,093,256 | 468,670,045 | 807,763,301 | 41.98 | 233,556,110 | 49.64 | 28.91 | 10.23 |
| 1902 | 396,542,233 | 503,251,521 | 899,793,754 | 44.01 | 251,453,155 | 49.79 | 27.95 | 11.17 |
| 1903 | 437,290,728 | 570,669,382 | 1,007,960,110 | 43.38 | 280,752,416 | 49.03 | 27.85 | 12.26 |
| 1904 | 454,153,100 | 527,669,459 | 981,822,559 | 46.26 | 258,161,130 | 48.77 | 26.29 | 11.71 |
| 1905 | 517,073,277 | 570,044,856 | 1,087,118,133 | 47.56 | 258,426,295 | 45.24 | 23.77 | 12.71 |
| 1906 | 548,695,764 | 664,721,885 | 1,213,417,649 | 45.22 | 293,910,396 | 44.16 | 24.22 | 13.93 |
| 1907 | 641,953,451 | 773,448,834 | 1,415,402,285 | 45.35 | 329,480,048 | 42.55 | 23.28 | 15.95 |
| 1908 | 525,704,745 | 657,415,920 | 1,183,120,665 | 44.43 | 282,582,895 | 42.94 | 23.88 | 13.09 |
| 1909 | 599,375,868 | 682,265,867 | 1,281,641,735 | 46.77 | 294,667,054 | 43.15 | 22.99 | 13.92 |
| 1910 | 761,353,117 | 785,756,020 | 1,547,109,137 | 49.21 | 326,561,683 | 41.52 | 21.11 | 16.52 |
| 1911 | 776,963,955 | 750,981,697 | 1,527,945,652 | 50.85 | 309,965,692 | 41.22 | 20.29 | 16.07 |
| 1912 | 881,512,987 | 759,209,915 | 1,640,722,902 | 53.73 | 304,899,366 | 40.12 | 18.58 | 17.00 |
| 1913 | 986,972,333 | 779,747,079 | 1,766,189,412 | 55.87 | 312,509,946 | 40.05 | 17.69 | 18.03 |
| 1914 | 1,152,392,059 | 754,008,335 | 1,906,400,394 | 60.45 | 283,719,081 | 37.60 | 14.88 | 19.18 |
| 1915 | 1,032,863,558 | 615,522,722 | 1,648,386,280 | 62.66 | 205,946,842 | 33.43 | 12.49 | 16.35 |
| 1916 | 1,495,881,357 | 683,153,244 | 2,179,034,601 | 68.65 | 209,725,801 | 30.67 | 9.62 | 21.30 |
| 1917 | 1,852,530,536 | 814,689,485 | 2,667,220,021 | 69.46 | 221,659,066 | 27.18 | 8.31 | 25.71 |
| 1918 (Cal.) | 2,117,555,366 | 747,338,621 | 2,864,893,987 | 73.91 | 180,589,834 | 24.11 | 6.30 | 27.24 |
| 1918 | 1,149,881,796 | 303,079,210 | 1,452,961,006 | 71.14 | 73,928,070 | 24.39 | 5.09 | 13.82 |
| 1919 | 2,711,462,069 | 1,116,221,362 | 3,829,966,446 | 70.84 | 237,456,680 | 21.27 | 6.20 | 35.91 |
| 1920 | 3,115,958,238 | 1,985,865,155 | 5,104,669,713 | 61.08 | 325,645,565 | 16.40 | 6.38 | 47.22 |
| 1921 | 1,564,278,455 | 992,591,256 | 2,556,869,711 | 61.18 | 292,396,752 | 29.45 | 1.14 | 23.35 |

Fiscal years 1821, 1830, and 1840, in above table, ended on Sept. 30.
Figures for calendar year 1918 are for last six months of that year.

## UNITED STATES EXPORTS BY SEA AND LAND.

| Fiscal Year. | By Sea. In American Vessels. | By Sea. In Foreign Vessels. | By Sea. Total. | Pct. in Americ'n Vessels. | By Land Vehicles. | Total by Land and Sea. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* |
| 1830 | 63,882,719 | 9,966,789 | 73,849,508 | 86.5 | ..... | 73,849,508 |
| 1840 | 105,622,257 | 26,463,689 | 132,085,946 | 80.0 | ..... | 132,085,946 |
| 1850 | 99,615,041 | 52,283,679 | 151,998,720 | 65.4 | ..... | 151,998,720 |
| 1860 | 279,082,902 | 121,039,394 | 400,122,296 | 70.0 | ..... | 400,122,296 |
| 1870 | 199,732,324 | 329,786,978 | 529,519,302 | 37.7 | ..... | 529,519,302 |
| 1880 | 109,029,209 | 720,770,521 | 829,799,730 | 13.1 | 5,838,928 | 835,638,658 |
| 1890 | 77,502,138 | 747,376,644 | 824,878,782 | 9.4 | 32,949,902 | 857,828,684 |
| 1900 | 90,779,252 | 1,193,220,689 | 1,283,999,941 | 7.1 | 110,483,141 | 1,394,483,082 |
| 1901 | 84,343,122 | 1,291,520,938 | 1,375,864,060 | 6.1 | 111,900,931 | 1,487,764,991 |
| 1902 | 83,631,985 | 1,174,263,079 | 1,257,895,064 | 6.6 | 123,824,337 | 1,381,719,401 |
| 1903 | 91,028,200 | 1,190,262,178 | 1,281,290,378 | 7.1 | 138,851,301 | 1,420,141,679 |
| 1904 | 97,482,054 | 1,210,608,328 | 1,308,090,382 | 7.5 | 152,736,889 | 1,460,827,271 |
| 1905 | 129,958,375 | 1,225,063,232 | 1,355,021,607 | 9.6 | 163,540,059 | 1,518,561,666 |
| 1906 | 153,859,076 | 1,396,270,084 | 1,550,129,160 | 9.9 | 193,735,340 | 1,743,864,500 |
| 1907 | 141,780,310 | 1,520,598,231 | 1,662,378,541 | 8.5 | 215,472,537 | 1,880,851,078 |
| 1908 | 120,593,589 | 1,549,628,630 | 1,670,222,219 | 7.2 | 190,551,127 | 1,860,773,346 |
| 1909 | 108,129,142 | 1,372,692,807 | 1,480,821,949 | 7.3 | 182,189,155 | 1,663,011,104 |
| 1910 | 113,736,171 | 1,402,524,390 | 1,516,260,561 | 7.5 | 228,724,159 | 1,744,984,720 |
| 1911 | 133,565,552 | 1,640,925,993 | 1,774,491,485 | 7.5 | 274,828,714 | 2,049,320,199 |
| 1912 | 155,601,885 | 1,728,790,688 | 1,880,392,573 | 8.1 | 323,929,836 | 2,204,322,409 |
| 1913 | 187,938,254 | 1,887,460,562 | 2,075,398,816 | 9.1 | 390,485,334 | 2,465,884,150 |
| 1914 | 169,436,090 | 1,878,323,769 | 2,047,759,859 | 8.3 | 316,819,289 | 2,364,579,148 |
| 1915 | 290,597,071 | 2,175,758,992 | 2,466,356,063 | 11.8 | 302,233,277 | 2,768,589,340 |
| 1916 | 499,035,673 | 3,327,030,418 | 3,826,066,091 | 13.0 | 507,416,794 | 4,333,482,885 |
| 1917 | 794,604,353 | 4,637,151,133 | 5,431,755,486 | 14.6 | 795,408,564 | 6,227,164,050 |
| 1918 | 977,718,929 | 4,165,554,282 | 5,143,273,211 | 19.01 | 695,378,846 | 5,838,652,057 |
| 1919 | 1,584,173,467 | 4,632,138,533 | 6,216,312,000 | 25.50 | 865,149,938 | 7,081,461,938 |
| 1920 | 3,183,663,922 | 3,866,708,250 | 7,050,372,172 | 45.15 | 898,936,934 | 7,949,309,106 |
| 1921 | 2,203,296,091 | 3,398,879,596 | 5,602,175,687 | 39.38 | 783,707,989 | 6,385,883,676 |
| 1922 | 1,163,155,586 | 2,035,605,979 | 3,198,761,565 | 36.27 | 501,105,497 | 3,699,867,062 |

## UNITED STATES EXPORTS, BY CLASSES OF MATERIALS.

| Fiscal Year. | Crude Materials For Use in Manufacturing. | Foodstuffs in Crude Condit'n, & Food Animals. | Foodstuffs Partly or Wholly Manufactured. | Manufactures For Further Use in Manufacturing. | Manufactures Ready For Consumption. | Miscellaneous. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1820 | 31,246,382 | 2,474,822 | 10,085,366 | 4,867,379 | 2,925,165 | 84,526 |
| 1830 | 36,482,266 | 2,724,181 | 9,556,992 | 4,117,606 | 5,461,589 | 182,244 |
| 1840 | 75,488,421 | 4,564,532 | 15,936,108 | 4,841,101 | 10,584,079 | 246,320 |
| 1850 | 83,984,707 | 7,535,764 | 20,017,162 | 6,060,900 | 17,162,206 | 139,494 |
| 1855 | 108,476,851 | 10,919,803 | 33,009,127 | 11,304,094 | 28,832,786 | 208,474 |
| 1860 | 216,009,648 | 12,166,447 | 38,624,949 | 12,641,625 | 35,811,383 | 988,371 |
| 1870 | 213,439,991 | 41,852,630 | 50,919,666 | 13,711,708 | 56,329,137 | 363,341 |
| 1880 | 238,787,934 | 266,108,950 | 193,352,723 | 29,044,159 | 92,774,139 | 3,878,448 |
| 1890 | 304,566,922 | 132,073,183 | 224,756,580 | 46,454,992 | 132,527,050 | 4,915,101 |
| 1900 | 325,244,296 | 225,906,246 | 319,696,334 | 153,275,660 | 331,746,496 | 14,894,539 |
| 1901 | 397,417,247 | 245,836,198 | 337,152,992 | 148,350,529 | 317,745,673 | 13,960,167 |
| 1902 | 373,307,140 | 184,786,389 | 328,831,350 | 132,206,324 | 321,946,630 | 14,404,028 |
| 1903 | 408,442,137 | 185,308,064 | 323,244,697 | 140,666,864 | 327,468,629 | 7,100,911 |
| 1904 | 461,424,464 | 135,747,224 | 308,836,077 | 174,876,659 | 348,734,801 | 5,559,792 |
| 1905 | 472,114,493 | 118,185,098 | 283,065,098 | 209,926,174 | 402,049,798 | 6,403,980 |
| 1906 | 500,536,700 | 177,216,467 | 347,385,463 | 226,210,513 | 459,812,655 | 6,791,584 |
| 1907 | 593,145,135 | 167,348,227 | 345,706,609 | 259,442,028 | 480,681,423 | 7,394,612 |
| 1908 | 556,681,462 | 189,051,824 | 331,961,663 | 261,105,883 | 489,469,958 | 6,515,567 |
| 1909 | 520,907,436 | 135,693,409 | 302,555,341 | 231,144,267 | 440,271,747 | 7,783,393 |
| 1910 | 565,934,957 | 109,828,320 | 259,259,654 | 267,765,916 | 499,215,329 | 8,079,822 |
| 1911 | 713,018,206 | 103,401,553 | 282,016,883 | 309,151,989 | 598,367,852 | 7,592,542 |
| 1912 | 723,008,839 | 99,899,270 | 318,838,493 | 348,149,524 | 672,268,163 | 8,155,539 |
| 1913 | 731,758,513 | 181,907,266 | 321,204,373 | 408,806,949 | 776,297,360 | 8,531,897 |
| 1914 | 792,716,109 | 137,495,121 | 293,218,336 | 374,224,210 | 724,908,000 | 7,122,249 |
| 1915 | 510,455,540 | 506,993,179 | 454,575,404 | 355,862,329 | 807,465,511 | 30,826,502 |
| 1916 | 535,952,043 | 380,638,102 | 599,059,151 | 657,923,305 | 1,998,298,249 | 100,306,729 |
| 1917 | 731,990,339 | 531,866,009 | 737,795,334 | 1,191,262,523 | 2,942,577,415 | 91,672,430 |
| 1918 | 897,324,082 | 374,978,216 | 1,153,702,460 | 1,201,438,423 | 2,185,420,221 | 25,787,655 |
| 1919 | 1,226,395,137 | 719,340,233 | 1,783,512,167 | 952,168,641 | 2,384,467,863 | 15,577,897 |
| 1920 | 1,968,639,653 | 626,566,067 | 1,514,526,450 | 991,536,840 | 2,834,848,116 | 13,191,980 |
| 1921 | 1,288,361,358 | 979,542,840 | 779,204,666 | 660,195,147 | 2,670,347,350 | 8,232,315 |
| 1922 | 925,632,665 | 520,498,723 | 623,606,878 | 411,646,496 | 1,210,868,533 | 7,613,767 |

There are no available Government figures prior to 1820.

## EXPORTS, BY CHIEF CUSTOMS DISTRICTS, IN FISCAL YEARS 1921, 1922.

(1921 figures in parentheses.)

New York, $1,317,440,816 ($2,545,015,371); Galveston, $402,337,575 ($550,032,922); New Orleans, $365,116,311 ($614,206,827); Detroit, $177,461,773 ($272,984,947); Norfolk, $161,284,216 ($324,798,241); Buffalo, $139,972,523 ($200,763,632); San Francisco, $130,286,495 ($155,030,658); Baltimore, $123,243,240 ($306,178,352); Philadelphia, $117,835,117 ($322,296,316); Seattle, $96,089,637 ($108,380,498).

## UNITED STATES IMPORTS BY SEA AND LAND.

| Fiscal Year. | By Sea. | | | | By Land Vehicles. | Total by Land and Sea. |
|---|---|---|---|---|---|---|
| | In American Vessels. | In Foreign Vessels. | Total. | Pct. in Americ'n Vessels. | | |
| | *Dollars.* | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* |
| 1830 | 66,035,739 | 4,481,181 | 70,516,920 | 94.2 | ..... | 70,516,920 |
| 1840 | 92,802,352 | 14,339,167 | 107,141,519 | 86.6 | ..... | 107,141,519 |
| 1850 | 139,657,943 | 38,481,375 | 178,139,318 | 78.4 | ..... | 178,139,318 |
| 1860 | 228,164,855 | 134,001,399 | 362,166,254 | 63.0 | ..... | 362,166,254 |
| 1870 | 153,237,077 | 309,140,510 | 462,377,587 | 33.1 | ..... | 462,377,587 |
| 1880 | 149,317,368 | 503,494,913 | 652,812,281 | 22.9 | 15,142,465 | 667,954,746 |
| 1890 | 124,948,948 | 623,740,100 | 748,689,048 | 16.7 | 40,621,361 | 789,310,409 |
| 1900 | 104,304,940 | 701,223,735 | 805,528,675 | 12.9 | 44,412,509 | 849,941,184 |
| 1901 | 93,055,493 | 683,015,858 | 776,071,351 | 12.0 | 47,100,814 | 823,172,165 |
| 1902 | 102,188,002 | 744,766,235 | 846,954,237 | 12.1 | 56,366,711 | 903,320,948 |
| 1903 | 123,666,832 | 835,844,210 | 959,511,042 | 12.9 | 66,208,195 | 1,025,719,237 |
| 1904 | 132,253,065 | 790,595,186 | 922,848,251 | 14.3 | 68,239,120 | 991,087,371 |
| 1905 | 160,649,571 | 878,138,230 | 1,038,787,801 | 15.5 | 78,725,270 | 1,117,513,071 |
| 1906 | 168,488,129 | 971,397,270 | 1,139,885,399 | 14.8 | 86,677,047 | 1,226,562,446 |
| 1907 | 176,550,716 | 1,163,698,060 | 1,340,248,776 | 13.2 | 94,172,649 | 1,434,421,425 |
| 1908 | 151,919,733 | 971,111,234 | 1,123,030,967 | 13.5 | 71,310,825 | 1,194,341,792 |
| 1909 | 150,528,075 | 1,090,001,007 | 1,240,529,082 | 12.1 | 71,391,142 | 1,311,920,224 |
| 1910 | 147,100,976 | 1,319,438,085 | 1,466,539,061 | 10.0 | 90,408,369 | 1,556,947,430 |
| 1911 | 146,640,912 | 1,289,510,573 | 1,436,151,485 | 10.2 | 91,074,620 | 1,527,226,105 |
| 1912 | 170,849,680 | 1,380,228,270 | 1,551,077,950 | 11.0 | 102,187,084 | 1,653,264,934 |
| 1913 | 193,094,242 | 1,504,567,867 | 1,697,662,109 | 11.4 | 115,346,125 | 1,813,008,234 |
| 1914 | 198,923,666 | 1,538,784,987 | 1,737,708,653 | 11.4 | 156,217,004 | 1,893,925,657 |
| 1915 | 281,334,841 | 1,244,934,571 | 1,526,269,412 | 18.4 | 147,900,328 | 1,674,169,740 |
| 1916 | 449,872,543 | 1,550,102,577 | 1,999,975,120 | 22.5 | 197,908,390 | 2,197,883,510 |
| 1917 | 648,256,478 | 1,706,482,324 | 2,354,738,802 | 27.5 | 304,616,383 | 2,659,355,185 |
| 1918 | 710,777,017 | 1,849,650,228 | 2,560,427,245 | 27.7 | 385,228,158 | 2,945,655,403 |
| 1919 | 875,602,857 | 1,741,432,980 | 2,617,035,837 | 33.5 | 478,684,231 | 3,095,720,068 |
| 1920 | 1,835,757,405 | 2,870,930,209 | 4,706,687,614 | 39.0 | 531,664,500 | 5,238,352,114 |
| 1921 | 1,301,926,297 | 1,905,696,439 | 3,207,622,736 | 40.6 | 446,836,610 | 3,654,459,346 |
| 1922 | 734,375,471 | 1,533,906,433 | 2,268,281,904 | 32.4 | 258,686,097 | 2,607,618,110 |

There are no available Government figures prior to 1820 in above table.

## UNITED STATES IMPORTS, BY CLASSES OF MATERIALS.

(Includes both free and dutiable, all classes.)

| Fiscal Year. | Crude Materials For Use in Manufacturing. | Foodstuffs in Crude Condit'n, & Food Animals. | Foodstuffs Partly or Wholly Manufactured. | Manufactures For Further Use in Manufacturing. | Manufactures Ready For Consumption. | Miscellaneous. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1821 | 1,983,706 | 6,081,641 | 10,820,814 | 4,079,064 | 30,998,900 | 556,709 |
| 1830 | 4,214,825 | 7,382,274 | 9,653,971 | 5,152,486 | 35,734,837 | 582,563 |
| 1840 | 11,510,245 | 15,273,321 | 15,188,845 | 11,359,196 | 44,300,005 | 630,094 |
| 1850 | 11,711,266 | 18,011,659 | 21,465,776 | 26,163,152 | 95,312,499 | 845,174 |
| 1860 | 39,691,797 | 45,743,826 | 59,837,674 | 34,899,303 | 172,128,991 | 1,314,528 |
| 1870 | 55,615,202 | 54,081,091 | 96,081,635 | 55,569,071 | 173,614,888 | 996,521 |
| 1880 | 131,861,617 | 100,297,040 | 118,125,216 | 110,779,516 | 196,587,405 | 10,303,952 |
| 1890 | 170,637,250 | 128,480,142 | 133,332,031 | 116,924,080 | 230,685,581 | 9,251,325 |
| 1900 | 276,241,152 | 97,916,293 | 133,027,374 | 134,222,045 | 203,126,341 | 5,407,979 |
| 1901 | 248,006,751 | 110,385,208 | 125,540,654 | 127,576,924 | 205,505,580 | 6,157,048 |
| 1902 | 303,001,868 | 120,280,302 | 95,350,256 | 147,656,292 | 231,420,820 | 5,611,410 |
| 1903 | 330,491,084 | 119,202,674 | 116,620,623 | 195,750,847 | 257,757,184 | 5,896,825 |
| 1904 | 320,794,431 | 132,223,895 | 118,222,862 | 160,233,890 | 252,857,673 | 6,754,620 |
| 1905 | 389,160,658 | 146,130,903 | 145,355,839 | 177,827,960 | 252,372,650 | 6,665,061 |
| 1906 | 414,687,999 | 134,315,448 | 140,358,114 | 220,298,751 | 307,801,154 | 9,100,980 |
| 1907 | 477,027,174 | 149,747,693 | 158,656,263 | 274,096,464 | 364,192,884 | 10,700,947 |
| 1908 | 363,482,258 | 145,577,427 | 147,008,870 | 196,248,409 | 331,617,926 | 10,406,902 |
| 1909 | 451,359,259 | 164,110,674 | 165,700,920 | 222,101,622 | 299,106,235 | 9,541,514 |
| 1910 | 566,270,770 | 144,776,636 | 181,566,572 | 285,138,373 | 367,723,367 | 11,471,712 |
| 1911 | 511,362,140 | 181,194,863 | 172,006,501 | 287,785,652 | 361,422,180 | 13,454,769 |
| 1912 | 555,986,041 | 230,358,230 | 196,100,608 | 293,739,134 | 360,018,963 | 17,061,958 |
| 1913 | 635,210,201 | 211,746,500 | 194,243,220 | 349,401,928 | 408,178,704 | 14,227,681 |
| 1914 | 632,865,860 | 247,947,621 | 227,644,329 | 319,275,488 | 449,318,214 | 16,874,145 |
| 1915 | 575,357,144 | 223,929,564 | 285,725,091 | 237,176,522 | 335,876,628 | 16,104,791 |
| 1916 | 948,825,500 | 251,886,746 | 310,938,181 | 356,857,137 | 311,870,962 | 17,504,984 |
| 1917 | 1,109,704,565 | 335,573,042 | 343,435,475 | 477,730,509 | 377,256,553 | 15,655,041 |
| 1918 | 1,230,252,430 | 372,681,751 | 380,227,084 | 540,742,182 | 402,670,415 | 19,081,541 |
| 1919 | 1,250,674,773 | 376,222,730 | 456,200,261 | 605,727,715 | 393,223,404 | 13,671,185 |
| 1920 | 2,141,453,939 | 622,092,148 | 891,029,825 | 801,248,503 | 745,165,833 | 37,361,866 |
| 1921 | 1,051,115,616 | 450,394,836 | 844,510,050 | 543,046,843 | 744,030,118 | 21,361,883 |
| 1922 | 909,097,565 | 301,962,648 | 332,893,772 | 405,967,998 | 639,820,899 | 18,266,126 |

There are no available Government figures prior to 1821 in above table.

## IMPORTS, BY CHIEF CUSTOMS DISTRICTS, IN FISCAL YEARS.

(1921 figures in parentheses.)

New York, $1,365,484,094 ($1,920,662,644); Boston, $163,075,778 ($221,865,187); Ogdensburg, N. Y., $132,658,536 ($140,379,244); San Francisco, $127,657,445; Seattle, $124,102,503 ($70,938,939); Philadelphia, $120,191,347 ($205,892,494); New Orleans, $104,056,671 ($190,950,076); Detroit, $59,383,185 ($89,291,554); Buffalo, $58,123,625 ($109,513,625); Chicago, $46,698,026 ($55,279,777); Baltimore, $41,346,635 ($61,485,414).

## U. S. FOREIGN TRADE, BY COUNTRIES.

(Figures Cover Years Ending June 30.)

| Countries. | Imports. | | Exports. | |
|---|---|---|---|---|
| | 1921. | 1922. | 1921. | 1922. |
| EUROPE. | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Austria | 2,085,040 | 2,603,807 | 8,168,485 | 1,317,628 |
| Azores and Madeira Islands | 2,442,687 | 3,191,248 | 1,726,524 | 897,555 |
| Belgium | 42,464,701 | 42,792,800 | 184,472,230 | 103,449,034 |
| Bulgaria | 3,014,386 | 1,144,868 | 1,312,526 | 1,242,992 |
| Czecho-Slovakia | 11,213,512 | 12,501,554 | 1,988,340 | 824,789 |
| Denmark | 17,129,151 | 3,988,645 | 63,065,607 | 36,453,208 |
| Esthonia | ..... | 494,355 | ..... | 5,064,091 |
| Finland | 7,353,681 | 5,226,130 | 11,969,036 | 8,550,155 |
| France | 149,785,576 | 139,588,185 | 432,599,757 | 230,939,597 |
| Germany | 90,773,014 | 95,592,004 | 381,869,349 | 350,442,438 |
| Gibraltar | 409,379 | 10,005 | 21,466,475 | 4,514,326 |
| Greece | 24,331,162 | 18,566,134 | 37,804,642 | 11,066,880 |
| Hungary | 262,410 | 193,464 | 1,521,581 | 180,329 |
| Iceland and Faroe Islands | 107,376 | 165,335 | 619,149 | 371,882 |
| Italy | 59,096,514 | 61,346,780 | 302,121,278 | 138,174,639 |
| Latvia | ..... | 275,432 | ..... | 6,660,589 |
| Lithuania | ..... | 62,850 | ..... | 63,968 |
| Malta, Gozo, and Cyprus Islands | 127,686 | 201,934 | 1,560,140 | 1,764,981 |
| Netherlands | 61,315,284 | 53,120,972 | 250,818,059 | 129,789,054 |
| Norway | 18,849,358 | 11,739,624 | 57,920,018 | 29,789,272 |
| Poland and Danzig | 962,129 | 1,204,679 | 37,520,659 | 9,475,560 |
| Portugal | 5,991,230 | 4,368,174 | 14,773,549 | 7,219,158 |
| Roumania | 55,065 | 501,868 | 9,779,668 | 2,577,415 |
| Russia in Europe | 1,055,146 | 22,153 | 17,111,758 | 13,830,070 |
| Spain | 32,154,558 | 27,626,411 | 118,578,676 | 66,408,756 |
| Sweden | 27,905,342 | 23,203,575 | 76,615,673 | 30,082,053 |
| Switzerland | 46,797,810 | 41,556,266 | 25,632,565 | 5,016,246 |
| Turkey in Europe | 4,327,237 | 8,627,489 | 19,791,911 | 19,216,628 |
| Ukraine | ..... | 47,398 | ..... | 5,915,811 |
| United Kingdom: | | | | |
| England | 271,726,066 | 213,910,230 | 1,205,259,154 | 771,201,137 |
| Scotland | 29,789,051 | 28,563,555 | 82,452,731 | 47,054,920 |
| Ireland | 26,271,357 | 27,879,868 | 38,675,932 | 25,641,257 |
| Total United Kingdom | 327,786,474 | 270,353,653 | 1,326,387,817 | 843,897,314 |
| Jugo-Slavia, Albania, and Fiume | 72,956 | 155,920 | 1,326,528 | 1,831,187 |
| Total Europe | 937,868,864 | 830,473,712 | 3,408,522,000 | 2,067,027,605 |
| NORTH AMERICA | | | | |
| Canada | 529,421,972 | 156,403,736 | 788,979,532 | 297,385,308 |
| Maritime Provinces | ..... | 17,848,537 | ..... | 10,383,414 |
| Quebec and Ontario | ..... | 105,932,374 | ..... | 207,996,495 |
| Prairie Provinces | ..... | 9,074,225 | ..... | 16,933,793 |
| British Columbia and Yukon | ..... | 18,725,447 | ..... | 12,746,322 |
| Total Canada | 529,421,972 | 307,984,319 | 788,979,532 | 545,445,332 |
| Central America: | | | | |
| British Honduras | 3,720,142 | 2,309,003 | 2,622,217 | 1,823,553 |
| Costa Rica | 7,257,138 | 5,641,596 | 6,746,507 | 2,736,951 |
| Guatemala | 14,257,218 | 8,934,231 | 7,550,297 | 5,646,907 |
| Honduras | 6,017,554 | 5,181,943 | 14,637,695 | 10,526,633 |
| Nicaragua | 6,477,186 | 3,504,591 | 6,133,302 | 3,385,030 |
| Panama | 5,581,781 | 3,535,566 | 32,179,004 | 14,662,814 |
| Salvador | 6,980,175 | 1,987,102 | 6,205,186 | 4,614,934 |
| Total Central America | 50,291,194 | 31,094,032 | 76,074,208 | 44,396,822 |
| Greenland | 210,000 | 294,500 | 20,302 | 12,884 |
| Mexico | 154,993,154 | 122,956,524 | 267,169,762 | 137,750,077 |
| Miquelon and St. Pierre Islands | 50 | 10,649 | 169,148 | 170,117 |
| Newfoundland and Labrador | 1,758,934 | 1,921,151 | 9,698,622 | 5,874,984 |
| West Indies and Bermuda: | | | | |
| British— | | | | |
| Bermuda | 1,098,682 | 1,092,054 | 4,311,331 | 3,352,762 |
| Barbados | 1,945,816 | 211,807 | 3,912,907 | 1,617,203 |
| Jamaica | 6,294,991 | 7,128,854 | 15,524,778 | 8,238,928 |
| Trinidad and Tobago | 7,295,120 | 4,565,575 | 14,238,171 | 4,882,268 |
| Other British | 4,013,120 | 1,690,929 | 6,124,861 | 4,620,375 |
| Cuba | 420,399,940 | 210,585,780 | 403,720,541 | 114,799,891 |
| Dominican Republic | 19,514,039 | 7,479,529 | 32,248,123 | 10,652,700 |
| Dutch West Indies | 2,514,838 | 1,735,227 | 3,173,607 | 2,092,962 |
| French West Indies | 126,274 | 86,537 | 5,997,446 | 2,644,317 |
| Haiti | 4,076,857 | 1,147,090 | 10,380,819 | 8,562,823 |
| Virgin Islands of U. S. | 3,571,787 | 754,729 | 4,162,594 | 1,836,567 |
| Total West Indies | 470,851,464 | 236,478,111 | 503,795,178 | 163,300,796 |
| Total North America | 1,207,526,768 | 700,739,286 | 1,645,906,752 | 896,951,012 |

### NOTES TO THE ABOVE TABLE.

The Canadian imports total for 1922 includes Russian famine relief supplies; the imports totals by provinces, 1922, cover last half of 1921; exports totals, 1922, by provinces, cover first half of 1922. Canadian exports total, 1922, covers last half of 1921.

Exports totals, 1922, for Esthonia, Latvia, European Russia and the Ukraine include Russian famine relief supplies.

U. S. FOREIGN TRADE BY COUNTRIES—*Continued.*

| COUNTRIES. | Imports. | | Exports. | |
|---|---|---|---|---|
| | 1921. | 1922. | 1921. | 1922. |
| SOUTH AMERICA. | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Argentina | 124,299,424 | 60,767,964 | 200,890,985 | 80,495,060 |
| Bolivia | 6,324,192 | 734,731 | 4,592,307 | 2,250,486 |
| Brazil | 147,520,940 | 100,435,733 | 128,746,345 | 38,330,449 |
| Chili | 77,854,552 | 38,912,591 | 49,715,357 | 16,716,462 |
| Colombia | 45,808,589 | 41,049,460 | 32,639,388 | 15,988,805 |
| Ecuador | 8,601,577 | 5,837,682 | 7,902,876 | 3,565,326 |
| Falkland Islands | ..... | ..... | 545 | 169 |
| Guiana: | | | | |
| British | 2,369,877 | 301,201 | 6,246,348 | 1,956,532 |
| Dutch | 470,296 | 925,292 | 2,056,133 | 977,549 |
| French | 68,627 | 329,771 | 1,312,021 | 499,836 |
| Paraguay | 1,207,791 | 1,161,732 | 980,357 | 262,531 |
| Peru | 40,822,263 | 14,442,775 | 42,954,229 | 12,496,799 |
| Uruguay | 17,564,731 | 11,588,604 | 27,960,135 | 9,702,557 |
| Venezuela | 12,312,183 | 12,409,533 | 17,459,628 | 7,585,267 |
| Total South America | 485,225,042 | 288,897,069 | 523,450,650 | 190,827,828 |
| ASIA. | | | | |
| Aden | 1,696,940 | 1,541,368 | 1,221,230 | 1,584,376 |
| Armenia and Kurdistan | ..... | 3,163 | ..... | 526,081 |
| British East Indies: | | | | |
| British India | 122,850,161 | 78,560,413 | 92,549,584 | 35,723,496 |
| Ceylon | ..... | 9,723,851 | ..... | 411,108 |
| Straits Settlements | 107,504,102 | 71,819,493 | 14,927,449 | 4,545,796 |
| Other British East Indies | 17,707,723 | 7,833,260 | 2,322,733 | 486,830 |
| China | 113,185,707 | 109,410,796 | 138,455,278 | 100,853,052 |
| Chosen | 84,127 | 29,112 | 2,471,677 | 2,858,032 |
| Dutch East Indies | 140,613,907 | 11,841,361 | 61,180,547 | 5,107,280 |
| Java and Madura | ..... | 11,343,496 | ..... | 2,954,752 |
| Other Dutch East Indies | ..... | 4,609,795 | ..... | 705,784 |
| Far Eastern Republic | ..... | 678,767 | ..... | 1,065,724 |
| French Indo-China | 311,419 | 96,411 | 1,337,253 | 542,871 |
| Greece in Asia | ..... | 10,802,281 | ..... | 3,156,884 |
| Hejaz, Arabia, and Mesopotamia | ..... | 734,523 | ..... | 291,229 |
| Hongkong | 28,210,902 | 11,036,422 | 22,042,197 | 19,569,408 |
| Japan | 253,217,835 | 307,514,995 | 189,181,585 | 248,716,339 |
| Kwangtung, leased territory | 5,724,131 | 1,835,664 | 6,403,561 | 5,862,221 |
| Palestine and Syria | ..... | 752,949 | ..... | 3,167,822 |
| Persia | 3,309,169 | 3,139,514 | 1,762,667 | 1,210,399 |
| Philippine Islands | 94,360,918 | 59,353,810 | 85,925,044 | 39,011,907 |
| Russia in Asia | 3,564,488 | 327,019 | 979,245 | 863,622 |
| Siam | 290,075 | 138,607 | 2,442,756 | 820,148 |
| Turkey in Asia | 17,171,475 | 1,372,201 | 9,843,255 | 760,269 |
| Other Asia | 46,390 | 57,009 | 249,322 | 61,006 |
| Total Asia | 909,849,469 | 704,556,280 | 633,340,386 | 480,856,406 |
| OCEANIA. | | | | |
| Australia | 31,461,017 | 19,193,614 | 120,985,720 | 64,776,548 |
| British Oceania | 2,131,849 | 635,584 | 841,701 | 355,192 |
| French Oceania | 1,971,936 | 1,130,363 | 1,447,405 | 999,978 |
| New Zealand | 22,237,914 | 9,896,813 | 47,605,552 | 17,419,616 |
| Other Oceania | 1,326,181 | 385,049 | 380,659 | 251,863 |
| Total Oceania | 59,128,897 | 31,241,423 | 171,261,037 | 83,803,197 |
| AFRICA. | | | | |
| Abyssinia | 336 | 9,500 | 19,477 | 2,051 |
| Belgian Congo | 427,736 | 174,893 | 521,467 | 343,378 |
| British Africa: | | | | |
| West | 7,051,365 | 9,338,098 | 9,300,348 | 6,077,715 |
| South | 10,838,040 | 5,282,140 | 46,925,067 | 18,059,700 |
| East | 4,340,333 | 1,204,997 | 2,600,642 | 1,487,399 |
| Canary Islands | 208,573 | 307,541 | 3,335,505 | 1,905,926 |
| Egypt | 26,437,350 | 32,161,501 | 29,530,047 | 9,454,116 |
| French Africa | 2,939,839 | 490,706 | 28,678,378 | 2,446,386 |
| Algeria and Tunis | ..... | 824,008 | ..... | 3,723,355 |
| Other French Africa | ..... | 142,825 | ..... | 932,759 |
| Italian Africa | 332,666 | 11,501 | 212,758 | 101,203 |
| Kamerun, etc | 13,923 | ..... | 460,366 | ..... |
| Liberia | 3,532 | 1,444 | 189,002 | 178,048 |
| Madagascar | 365,578 | 65,025 | 201,830 | 158,918 |
| Morocco | 522,516 | 205,913 | 2,717,303 | 3,470,526 |
| Portuguese Africa | 1,378,402 | 558,064 | 9,218,606 | 1,264,294 |
| East | ..... | 1,322,612 | ..... | 1,236,495 |
| Other Portuguese Africa | ..... | 470 | ..... | 266,886 |
| Spanish Africa | 117 | ..... | 118,412 | 606,394 |
| Total Africa | 54,860,306 | 52,101,238 | 134,029,208 | 51,715,549 |
| Grand total | 3,654,459,346 | 2,608,009,008 | 6,516,510,033 | 3,771,181,597 |

NOTES TO THE ABOVE TABLE.

Imports totals (1922) cover only first half of that year as to Dutch East Indies; exports totals (1922) cover only first half of that year as to Dutch East Indies, Algeria and Tunis, and Portuguese Africa; exports totals (1922) cover only last half of 1921 as to Dutch East Indies, and French and Portuguese Africa; exports totals (1921) cover only last half of that year as to French Africa.

## FARMERS—THEIR NUMBER, BY STATES, 1920.

| DIVISION AND STATE. | TOTAL. | | IN CITIES OF 25,000 OR MORE. | IN CITIES OF 10,000-25,000. | IN CITIES OF 2,500-10,000. | IN RURAL TERRITORY. | |
|---|---|---|---|---|---|---|---|
| | Number. | Pct. of Entire Population. | | | | Number. | Pct. of Entire Rural Pop. |
| United States | 31,614,269 | 29.9 | 52,955 | 36,131 | 166,543 | 31,358,640 | 61.0 |
| GEOGRAPHIC DIVISIONS: | | | | | | | |
| New England | 625,877 | 8.5 | 8,132 | 16,790 | 65,533 | 535,422 | 34.9 |
| Middle Atlantic | 1,892,789 | 8.5 | 12,804 | 2,962 | 15,862 | 1,861,161 | 33.3 |
| East North Central | 4,913,633 | 22.9 | 9,279 | 3,094 | 14,056 | 4,887,204 | 58.0 |
| West North Central | 5,171,596 | 41.2 | 5,757 | 3,299 | 9,357 | 5,153,183 | 65.9 |
| South Atlantic | 6,416,698 | 45.9 | 3,273 | 741 | 14,927 | 6,397,757 | 66.3 |
| East South Central | 5,182,937 | 58.3 | 1,202 | 514 | 6,415 | 5,174,806 | 75.0 |
| West South Central | 5,228,199 | 51.0 | 1,808 | 1,962 | 13,859 | 5,210,570 | 71.7 |
| Mountain | 1,168,367 | 35.0 | 871 | 1,182 | 13,321 | 1,152,993 | 54.4 |
| Pacific | 1,014,173 | 18.2 | 9,829 | 5,587 | 13,213 | 985,544 | 47.0 |
| NEW ENGLAND: | | | | | | | |
| Maine | 197,601 | 25.7 | 1,301 | 3,348 | 3,926 | 189,026 | 40.4 |
| New Hampshire | 76,021 | 17.2 | 818 | 2,751 | 7,845 | 64,607 | 39.6 |
| Vermont | 125,263 | 35.5 | ..... | 244 | 574 | 124,445 | 51.3 |
| Massachusetts | 118,554 | 3.1 | 4,229 | 8,269 | 44,324 | 61,732 | 30.5 |
| Rhode Island | 15,136 | 2.5 | 741 | 1,332 | 7,748 | 5,315 | 34.9 |
| Connecticut | 93,302 | 6.8 | 1,043 | 846 | 1,116 | 90,297 | 20.3 |
| MIDDLE ATLANTIC: | | | | | | | |
| New York | 800,747 | 7.7 | 7,261 | 1,643 | 8,889 | 782,954 | 43.6 |
| New Jersey | 143,708 | 4.6 | 1,890 | 703 | 4,268 | 136,847 | 20.1 |
| Pennsylvania | 948,334 | 10.9 | 3,653 | 616 | 2,705 | 941,360 | 30.2 |
| EAST NORTH CENTRAL: | | | | | | | |
| Ohio | 1,139,329 | 19.8 | 2,490 | 750 | 2,177 | 1,133,912 | 54.5 |
| Indiana | 907,295 | 31.0 | 2,511 | 260 | 1,704 | 902,820 | 62.4 |
| Illinois | 1,098,262 | 16.9 | 2,695 | 891 | 3,940 | 1,090,736 | 52.4 |
| Michigan | 848,710 | 23.1 | 1,237 | 408 | 2,566 | 844,499 | 59.2 |
| Wisconsin | 920,037 | 36.0 | 346 | 785 | 3,669 | 915,237 | 66.0 |
| WEST NORTH CENTRAL: | | | | | | | |
| Minnesota | 897,181 | 37.6 | 901 | 518 | 2,302 | 893,460 | 66.9 |
| Iowa | 984,799 | 41.0 | 2,973 | 859 | 3,273 | 977,694 | 64.0 |
| Missouri | 1,211,346 | 35.6 | 1,641 | 306 | 1,500 | 1,207,899 | 66.5 |
| North Dakota | 394,500 | 61.0 | ..... | 759 | 119 | 393,622 | 70.5 |
| South Dakota | 362,221 | 56.9 | 35 | 5 | 295 | 361,886 | 67.7 |
| Nebraska | 584,172 | 45.1 | 131 | 113 | 1,190 | 582,738 | 65.4 |
| Kansas | 737,377 | 41.7 | 76 | 739 | 678 | 735,884 | 63.9 |
| SOUTH ATLANTIC: | | | | | | | |
| Delaware | 51,212 | 23.0 | 34 | ..... | 27 | 51,151 | 50.0 |
| Maryland | 279,225 | 19.3 | 1,391 | 14 | 164 | 277,656 | 47.9 |
| District of Columbia | 894 | 0.2 | 894 | ..... | ..... | ..... | ..... |
| Virginia | 1,064,417 | 46.1 | 190 | 48 | 4,266 | 1,059,913 | 64.8 |
| West Virginia | 477,924 | 32.7 | 286 | 75 | 932 | 476,631 | 43.5 |
| North Carolina | 1,501,227 | 58.7 | 207 | 237 | 837 | 1,499,946 | 72.5 |
| South Carolina | 1,074,693 | 63.8 | 70 | 103 | 2,041 | 1,072,479 | 77.2 |
| Georgia | 1,685,213 | 58.2 | 96 | 230 | 4,276 | 1,680,611 | 77.5 |
| Florida | 281,893 | 29.1 | 105 | 34 | 2,384 | 279,370 | 45.6 |
| EAST SOUTH CENTRAL: | | | | | | | |
| Kentucky | 1,304,862 | 54.0 | 100 | 141 | 2,279 | 1,302,342 | 73.0 |
| Tennessee | 1,271,708 | 54.4 | 823 | 183 | 1,523 | 1,269,179 | 73.5 |
| Alabama | 1,335,885 | 56.9 | 279 | 118 | 975 | 1,334,513 | 72.6 |
| Mississippi | 1,270,482 | 71.0 | ..... | 72 | 1,638 | 1,268,772 | 81.8 |
| WEST SOUTH CENTRAL: | | | | | | | |
| Arkansas | 1,147,049 | 65.5 | 433 | 472 | 1,662 | 1,144,482 | 78.3 |
| Louisiana | 786,050 | 43.7 | 269 | 32 | 1,294 | 784,455 | 67.0 |
| Oklahoma | 1,017,327 | 50.2 | 173 | 170 | 1,085 | 1,015,899 | 68.2 |
| Texas | 2,277,773 | 48.8 | 933 | 1,288 | 9,818 | 2,265,734 | 71.9 |
| MOUNTAIN: | | | | | | | |
| Montana | 225,667 | 41.1 | 7 | 45 | 226 | 225,389 | 59.8 |
| Idaho | 200,902 | 46.5 | ..... | 497 | 3,842 | 196,563 | 62.8 |
| Wyoming | 67,306 | 34.6 | ..... | 31 | 199 | 67,076 | 48.9 |
| Colorado | 266,073 | 28.3 | 203 | 86 | 503 | 265,281 | 54.5 |
| New Mexico | 161,446 | 44.8 | ..... | 9 | 895 | 160,542 | 54.3 |
| Arizona | 90,560 | 27.1 | 42 | 1 | 360 | 90,167 | 41.6 |
| Utah | 140,249 | 31.2 | 619 | 507 | 7,251 | 131,872 | 56.4 |
| Nevada | 16,164 | 20.9 | ..... | 6 | 55 | 16,103 | 25.9 |
| PACIFIC: | | | | | | | |
| Washington | 283,382 | 20.9 | 1,605 | 248 | 1,507 | 280,022 | 46.1 |
| Oregon | 214,021 | 27.3 | 220 | 53 | 1,749 | 212,009 | 54.0 |
| California | 516,770 | 15.1 | 8,024 | 5,276 | 9,957 | 493,513 | 45.1 |

### ACREAGE OF WHITE AND COLORED FARMERS, BY STATES, 1920.

(Acreage of colored farmers is in parentheses.)

Alabama, 15,228,611 (4,348,245); Arizona, 5,741,704 (60,422); Arkansas, 14,862,383 (2,703,752); California, 28,844,686 (520,981); Colorado, 24,374,636 (87,378); Connecticut, 1,891,735 (7,245); Delaware, 889,623 (54,888); District of Columbia, 5,380, (288); Florida, 5,408,823 (637,868); Georgia, 18,634,305 (7,072,767); Idaho, 8,327,986 (47,887); Illinois, 31,916,811 (57,702); Indiana, 21,026,616 (36,716); Iowa, 33,466,049 (8,847); Kansas, 45,236,124 (189,055); Kentucky, 21,185,813 (426,959); Louisiana 7,837,244 (2,182,578); Maine, 5,425,015 (953); Maryland, 4,406,422 (351,577); Massachusetts, 2,488,887 (5,590); Michigan, 18,985,409 (48,795), Minnesota, 30,201,479 (20,279); Mississippi, 12,438,914 (5,814,665); Missouri, 34,584,245 (190,434). Montana, 54, 419,041 (651,615); Nebraska, 42,270,327 (68,509); Nevada, 2,345,393 (11,770); New Hampshire, 2,602,330 (1,476); New Jersey, 2,256,265 (26,320); New Mexico, 24,345,274 (64,359); New York. 20,589,928 (42,875); North Carolina, 16,584,294 (3,437,442); North Dakota, 36,028,299 (186,452); Ohio, 23,415,476 (100,412); Oklahoma, 30,274,576 (1,715,374); Oregon, 13,442,465 (99,853); Pennsylvania, 17,611,836 (26,934); Rhode Island, 330,648 (952); South Carolina, 8,051,424 (4,410,521); South Dakota, 33,683,313 (840,462), Tennessee, 17,987,453 (1,523,803); Texas, 109,106,553 (4,474,163); Utah, 4,999,240 (51,170); Vermont, 4,231,660 (4,450); Virginia, 16,297,693 (2,263,419); Washington, 13,143,321 (101,399), West Virginia, 9,542,246 (27,544); Wisconsin, 22,114,129 (34,094); Wyoming, 11,794,035 (26,668); total United States— 910,608,420 (45,068,125).

## RACE AND NATIVITY OF FARMERS IN U. S., BY STATES.

(U. S. Census Returns.)

| Division or State. | Native White Farmers. | | Foreign-Born White Farmers. | | Colored Farmers. | | Colored Farmers by Race, 1920. | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1920. | 1910. | 1920. | 1910. | Negro. | Indian. | Japanese | Chinese |
| United States | 4,917,386 | 4,771,063 | 581,068 | 669,556 | 949,889 | 920,883 | 925,708 | 16,680 | 6,892 | 609 |
| NEW ENGLAND: | | | | | | | | | | |
| Maine | 43,830 | 55,014 | 4,384 | 4,973 | 13 | 29 | 13 | ..... | ..... | ..... |
| New Hampshire | 17,890 | 24,347 | 2,619 | 2,691 | 14 | 15 | 14 | ..... | ..... | ..... |
| Vermont | 25,280 | 28,968 | 3,767 | 3,721 | 28 | 20 | 28 | ..... | ..... | ..... |
| Massachusetts | 22,950 | 28,431 | 8,930 | 8,362 | 121 | 124 | 103 | 18 | ..... | ..... |
| Rhode Island | 3,123 | 4,408 | 940 | 843 | 20 | 41 | 19 | 1 | ..... | ..... |
| Connecticut | 14,955 | 19,841 | 7,625 | 6,861 | 75 | 113 | 65 | 10 | ..... | ..... |
| MIDDLE ATLANTIC: | | | | | | | | | | |
| New York | 166,869 | 187,629 | 25,776 | 27,029 | 550 | 939 | 245 | 299 | 5 | 1 |
| New Jersey | 22,555 | 26,796 | 6,612 | 6,215 | 535 | 476 | 531 | 1 | 2 | 1 |
| Pennsylvania | 187,277 | 204,917 | 14,522 | 13,832 | 451 | 546 | 451 | ..... | ..... | ..... |
| EAST NORTH CENTRAL: | | | | | | | | | | |
| Ohio | 241,075 | 252,645 | 14,004 | 17,450 | 1,616 | 1,950 | 1,616 | ..... | ..... | ..... |
| Indiana | 198,156 | 204,951 | 6,398 | 9,729 | 572 | 805 | 570 | 2 | ..... | ..... |
| Illinois | 214,177 | 217,053 | 22,111 | 33,394 | 893 | 1,425 | 892 | 1 | ..... | ..... |
| Michigan | 147,450 | 147,790 | 48,264 | 58,224 | 733 | 946 | 549 | 182 | 1 | 1 |
| Wisconsin | 134,634 | 107,180 | 53,998 | 69,356 | 663 | 591 | 47 | 615 | 1 | ..... |
| WEST NORTH CENTRAL: | | | | | | | | | | |
| Minnesota | 110,966 | 74,710 | 67,305 | 81,134 | 207 | 293 | 33 | 174 | ..... | ..... |
| Iowa | 181,109 | 167,856 | 32,221 | 48,987 | 109 | 201 | 109 | ..... | ..... | ..... |
| Missouri | 251,835 | 259,111 | 8,343 | 14,467 | 2,826 | 3,666 | 2,824 | 1 | ..... | 1 |
| North Dakota | 40,899 | 35,750 | 36,248 | 37,867 | 543 | 743 | 26 | 517 | ..... | ..... |
| South Dakota | 52,700 | 49,360 | 20,325 | 25,476 | 1,612 | 2,808 | 47 | 1,563 | 1 | 1 |
| Nebraska | 99,441 | 93,509 | 24,592 | 35,707 | 384 | 462 | 63 | 260 | 61 | ..... |
| Kansas | 146,859 | 150,346 | 17,189 | 25,804 | 1,238 | 1,691 | 1,135 | 103 | ..... | ..... |
| SOUTH ATLANTIC: | | | | | | | | | | |
| Delaware | 8,905 | 9,504 | 363 | 410 | 872 | 922 | 872 | ..... | ..... | ..... |
| Maryland | 40,130 | 40,669 | 1,569 | 1,882 | 6,209 | 6,372 | 6,208 | 1 | ..... | ..... |
| Dist. of Columbia | 153 | 168 | 31 | 37 | 20 | 12 | 20 | ..... | ..... | ..... |
| Virginia | 136,874 | 134,155 | 1,582 | 1,749 | 47,786 | 48,114 | 47,690 | 96 | ..... | ..... |
| West Virginia | 86,033 | 95,138 | 752 | 839 | 504 | 708 | 504 | ..... | ..... | ..... |
| North Carolina | 193,081 | 187,657 | 392 | 412 | 76,290 | 65,656 | 74,849 | 1,440 | ..... | 1 |
| South Carolina | 83,542 | 79,424 | 141 | 212 | 109,010 | 96,798 | 109,005 | 1 | 3 | 1 |
| Georgia | 180,217 | 168,083 | 328 | 385 | 130,187 | 122,559 | 130,176 | 11 | ..... | ..... |
| Florida | 88,836 | 34,080 | 2,215 | 1,215 | 12,954 | 14,721 | 12,954 | ..... | ..... | ..... |
| EAST SOUTH CENTRAL: | | | | | | | | | | |
| Kentucky | 256,886 | 245,499 | 1,112 | 1,956 | 12,628 | 11,730 | 12,624 | 3 | ..... | 1 |
| Tennessee | 213,832 | 206,821 | 760 | 883 | 38,182 | 38,308 | 38,181 | 1 | ..... | ..... |
| Alabama | 159,865 | 151,214 | 1,031 | 1,244 | 95,203 | 110,443 | 95,200 | ..... | ..... | 3 |
| Mississippi | 110,279 | 108,909 | 603 | 736 | 161,219 | 164,737 | 161,001 | 218 | ..... | ..... |
| WEST SOUTH CENTRAL: | | | | | | | | | | |
| Arkansas | 158,273 | 148,627 | 2,049 | 2,458 | 72,282 | 63,593 | 72,275 | 7 | ..... | ..... |
| Louisiana | 71,081 | 63,236 | 2,323 | 2,431 | 62,059 | 54,879 | 62,036 | 22 | 1 | ..... |
| Oklahoma | 167,472 | 161,773 | 5,791 | 7,748 | 18,725 | 20,671 | 13,403 | 5,315 | 3 | 4 |
| Texas | 327,475 | 318,988 | 29,774 | 28,864 | 78,784 | 69,918 | 78,597 | 153 | 29 | 5 |
| MOUNTAIN: | | | | | | | | | | |
| Montana | 41,051 | 18,165 | 15,563 | 6,853 | 1,063 | 1,196 | 31 | 987 | 29 | 13 |
| Idaho | 35,284 | 24,694 | 6,314 | 5,708 | 508 | 405 | 23 | 336 | 129 | 20 |
| Wyoming | 13,306 | 9,019 | 2,273 | 1,903 | 169 | 65 | 17 | 134 | 15 | 3 |
| Colorado | 49,846 | 37,198 | 9,535 | 8,398 | 553 | 574 | 148 | 83 | 321 | 1 |
| New Mexico | 26,593 | 32,088 | 1,376 | 1,440 | 1,375 | 2,148 | 32 | 1,833 | 9 | 1 |
| Arizona | 8,262 | 5,218 | 1,067 | 806 | 646 | 3,203 | 32 | 537 | 69 | 8 |
| Utah | 21,276 | 15,948 | 3,972 | 5,452 | 414 | 276 | 61 | 209 | 133 | 11 |
| Nevada | 2,060 | 1,661 | 884 | 867 | 219 | 161 | 5 | 208 | 5 | 1 |
| PACIFIC: | | | | | | | | | | |
| Washington | 45,265 | 37,770 | 19,757 | 17,297 | 1,266 | 1,125 | 79 | 460 | 699 | 28 |
| Oregon | 40,484 | 35,819 | 9,149 | 9,056 | 573 | 627 | 15 | 300 | 224 | 34 |
| California | 76,995 | 58,926 | 34,189 | 26,193 | 6,486 | 3,078 | 290 | 578 | 5,152 | 466 |

### JAPANESE AND CHINESE FARMERS.

Japanese, in 1920, tilled 361,276 acres in Cal., 37,939 in Col., 25,340 in Wash., 11,357 in Idaho, 8,348 in Utah, 8,080 in Ore., 5,714 in Mont., 3,527 in Ariz., 1,131 in N. M., 601 in Nev., 165 in N. J., 121 in N. Y., 7 in Wis.

Chinese, in 1920, tilled 50,472 acres in Cal., 2,439 in Ore., 1,599 in Wash., 822 in Ariz., 671 in Mont., 334 in Idaho, 227 in Ala., 148 in N. J., 124 in Utah, 101 in Col.

Native white farmers, in 1920, tilled 799,767,149 acres; foreign-born whites, 111,172,045 acres; colored farmers, 44,944,521 acres.

In N. Y. State the farm acreage is—Native white, 18,344,237; foreign-born white, 2,245,691; colored, 42 875.

### STATE AGRICULTURAL EXPERIMENT STATIONS IN THE UNITED STATES.

Alabama, Auburn, Uniontown, Tuskegee Institute; Alaska (Federal); Arizona, Tucson; Arkansas, Fayetteville; California, Berkeley; Colorado, Fort Collins; Connecticut, New Haven and Storrs; Delaware, Newark; Florida, Gainesville; Georgia, Experiment; Guam, Island of Guam (Federal); Hawaii, Honolulu (Federal), Sugar Planters; Idaho, Moscow; Illinois, Urbana; Indiana, La Fayette; Iowa, Ames; Kansas, Manhattan; Kentucky, Lexington; Louisiana, Baton Rouge, Audubon Park, New Orleans (Sugar Station); Calhoun, Crowley (Rice Station), Hammond (fruit and truck); Maine, Orono; Maryland, College Park; Massachusetts, Amherst; Michigan, East Lansing; Minnesota, University Farm, St. Paul; Mississippi, Agricultural College; Missouri, Columbia Mountain Grove (fruit); Montana, Bozeman; Nebraska, Lincoln; Nevada, Reno; New Hampshire, Durham; New Jersey, New Brunswick; New Mexico, State College; New York, Ithaca (Cornell), Geneva; North Carolina, Raleigh; North Dakota, Agricultural College; Ohio, Wooster; Oklahoma, Stillwater; Oregon, Corvallis; Pennsylvania, State College; Porto Rico, Mayaguez (Federal), Rio Piedras (Insular); Rhode Island, Kingston; South Carolina, Clemson College, South Dakota, Brookings; Tennessee, Knoxville; Texas, College Station; Utah, Logan; Vermont, Burlington; Virginia, Blacksburg, Norfolk (truck); Virgin Islands (Federal), St. Croix; Washington, Pullman; West Virginia, Morgantown; Wisconsin, Madison; Wyoming, Laramie.

## NATIONALITY OF FOREIGN-BORN WHITE FARMERS IN U. S. 1920.

(U. S. Census Returns. Table shows countries of birth.)

Figures indicate number of farmers born in respective countries.

| DIVISION OR STATE. | England. | Ireland. | Norway. | Sweden. | Denmark. | Germany. | Austria. | Hungary. | Russia. | Italy. | Canada. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| United States | 26,614 | 16,562 | 51,599 | 60,461 | 25,565 | 140,667 | 30,172 | 7,122 | 32,388 | 18,267 | 48,668 |
| NEW ENGLAND: | | | | | | | | | | | |
| Maine | 188 | 96 | 28 | 284 | 104 | 74 | 19 | 2 | 57 | 40 | 3,088 |
| New Hampshire | 210 | 124 | 23 | 111 | 17 | 74 | 51 | 3 | 80 | 21 | 1,514 |
| Vermont | 182 | 199 | 15 | 78 | 30 | 98 | 35 | 14 | 28 | 62 | 2,663 |
| Massachusetts | 740 | 796 | 67 | 577 | 92 | 380 | 352 | 84 | 628 | 687 | 2,076 |
| Rhode Island | 105 | 59 | 5 | 62 | 7 | 103 | 13 | 1 | 22 | 131 | 162 |
| Connecticut | 361 | 650 | 40 | 672 | 133 | 1,111 | 687 | 208 | 997 | 729 | 381 |
| MIDDLE ATLANTIC: | | | | | | | | | | | |
| New York | 2,728 | 2,354 | 269 | 919 | 468 | 5,838 | 1,182 | 407 | 1,346 | 1,782 | 3,188 |
| New Jersey | 409 | 309 | 42 | 113 | 101 | 1,453 | 399 | 315 | 596 | 1,745 | 75 |
| Pennsylvania | 924 | 859 | 43 | 1,063 | 120 | 3,165 | 2,811 | 785 | 696 | 952 | 264 |
| EAST NORTH CENTRAL: | | | | | | | | | | | |
| Ohio | 1,124 | 464 | 14 | 195 | 98 | 5,289 | 1,685 | 942 | 327 | 311 | 345 |
| Indiana | 310 | 219 | 19 | 522 | 93 | 3,048 | 229 | 126 | 65 | 80 | 131 |
| Illinois | 1,368 | 916 | 709 | 3,285 | 743 | 9,725 | 477 | 144 | 209 | 435 | 350 |
| Michigan | 2,203 | 819 | 654 | 3,088 | 1,142 | 9,746 | 2,034 | 933 | 1,538 | 298 | 13,393 |
| Wisconsin | 851 | 555 | 8,652 | 4,838 | 2,462 | 18,032 | 3,429 | 549 | 1,295 | 276 | 1,728 |
| WEST NORTH CENTRAL: | | | | | | | | | | | |
| Minnesota | 655 | 634 | 14,925 | 16,934 | 3,126 | 14,731 | 2,246 | 281 | 671 | 71 | 2,527 |
| Iowa | 1,267 | 1,080 | 3,094 | 3,318 | 3,273 | 12,730 | 926 | 53 | 119 | 116 | 752 |
| Missouri | 555 | 365 | 29 | 411 | 164 | 4,328 | 425 | 82 | 87 | 190 | 296 |
| North Dakota | 431 | 335 | 10,900 | 3,377 | 1,237 | 3,694 | 849 | 697 | 8,590 | 12 | 3,125 |
| South Dakota | 465 | 314 | 4,025 | 2,265 | 1,703 | 4,400 | 587 | 167 | 2,977 | 28 | 666 |
| Nebraska | 710 | 584 | 360 | 3,578 | 2,487 | 9,505 | 1,871 | 48 | 1,294 | 62 | 632 |
| Kansas | 1,017 | 578 | 210 | 2,297 | 542 | 5,265 | 1,109 | 79 | 2,639 | 117 | 715 |
| SOUTH ATLANTIC: | | | | | | | | | | | |
| Delaware | 35 | 27 | ..... | 9 | 4 | 88 | 24 | 16 | 14 | 44 | 36 |
| Maryland | 119 | 73 | 4 | 18 | 17 | 722 | 146 | 55 | 73 | 34 | 53 |
| Dist. of Columbia | 5 | 3 | ..... | ..... | ..... | 15 | 1 | 1 | ..... | 3 | ..... |
| Virginia | 264 | 75 | 36 | 31 | 47 | 259 | 253 | 85 | 56 | 28 | 105 |
| West Virginia | 105 | 46 | 2 | 7 | 3 | 165 | 144 | 19 | 14 | 70 | 24 |
| North Carolina | 50 | 11 | 3 | 8 | 9 | 61 | 25 | 13 | 6 | 50 | 31 |
| South Carolina | 13 | 12 | 3 | 2 | 3 | 59 | 4 | ..... | 6 | 3 | 12 |
| Georgia | 51 | 14 | 4 | 16 | 3 | 81 | 13 | 11 | 11 | 4 | 29 |
| Florida | 310 | 70 | 52 | 210 | 83 | 439 | 76 | 58 | 49 | 74 | 339 |
| EAST SOUTH CENTRAL: | | | | | | | | | | | |
| Kentucky | 66 | 83 | 1 | 10 | 13 | 508 | 39 | 5 | 10 | 19 | 46 |
| Tennessee | 75 | 41 | 13 | 36 | 14 | 140 | 34 | 6 | 23 | 146 | 48 |
| Alabama | 68 | 23 | 27 | 152 | 27 | 333 | 67 | 68 | 14 | 49 | 41 |
| Mississippi | 58 | 41 | 6 | 31 | 18 | 102 | 9 | 6 | 12 | 202 | 24 |
| WEST SOUTH CENTRAL: | | | | | | | | | | | |
| Arkansas | 132 | 38 | 10 | 52 | 42 | 856 | 152 | 20 | 37 | 187 | 85 |
| Louisiana | 46 | 34 | 9 | 37 | 14 | 244 | 57 | 96 | 19 | 1,336 | 50 |
| Oklahoma | 259 | 143 | 48 | 165 | 130 | 1,864 | 402 | 37 | 1,216 | 68 | 230 |
| Texas | 543 | 184 | 245 | 869 | 392 | 7,384 | 3,535 | 121 | 389 | 906 | 200 |
| MOUNTAIN: | | | | | | | | | | | |
| Montana | 807 | 552 | 2,796 | 1,364 | 943 | 1,942 | 870 | 145 | 1,230 | 260 | 1,947 |
| Idaho | 655 | 166 | 337 | 934 | 536 | 975 | 215 | 31 | 355 | 129 | 624 |
| Wyoming | 274 | 85 | 69 | 295 | 153 | 322 | 99 | 25 | 222 | 58 | 161 |
| Colorado | 623 | 335 | 162 | 1,145 | 442 | 1,560 | 674 | 71 | 1,670 | 967 | 527 |
| New Mexico | 93 | 45 | 17 | 50 | 71 | 178 | 46 | 15 | 38 | 97 | 74 |
| Arizona | 75 | 44 | 10 | 35 | 61 | 102 | 47 | 4 | 101 | 39 | 98 |
| Utah | 1,126 | 34 | 125 | 528 | 904 | 210 | 38 | 4 | 28 | 148 | 50 |
| Nevada | 65 | 45 | 13 | 37 | 52 | 124 | 16 | 1 | 3 | 198 | 51 |
| PACIFIC: | | | | | | | | | | | |
| Washington | 1,126 | 524 | 2,492 | 3,231 | 995 | 3,001 | 681 | 70 | 1,010 | 386 | 2,279 |
| Oregon | 620 | 348 | 518 | 957 | 530 | 1,945 | 261 | 75 | 355 | 164 | 972 |
| California | 2,148 | 1,157 | 474 | 2,245 | 1,917 | 4,199 | 828 | 144 | 1,166 | 4,453 | 2,461 |

### OTHER NATIONALITIES, NOT INCLUDED IN TABLE.

Number of farmers born in—Scotland, 7,605; Wales, 2,472; Holland, 15,589; Switzerland, 13,051; France, 6,119; Poland, 17,352; Finland, 14,988; Roumania, 693; Greece, 846; Portugal, 4,254; other European countries not in the table, 20,107; Mexico, 12,142; all other countries, 7,765.

*Note by the Census Bureau*—The foreign countries which contributed the largest numbers to the total of 581,068 foreign-born white farmers in the United States as reported for 1920, were as follows: Germany, 140,667; Sweden, 60,461; Norway, 51,599; Canada, 48,668; Russia, 32,388; Austria, 30,172; England, 26,614; and Denmark, 25,565.

It should be noted that this order by no means corresponds to the order in which the various foreign countries have contributed to the total population of the United States.

The immigrants from certain countries, notably Italy, Poland, and Ireland, have gone chiefly into pursuits other than agricultural.

### FOREIGN-BORN WHITE FARMERS IN 1910.

The number of foreign-born white farmers in the United States in 1910, by the Federal Census of that year, by chief races, was as follows: Germany, 221,800; Sweden, 67,453; Canada, 61,878; Norway, 59,742; England, 39,728; Ireland, 33,480; Austria, 33,336; Denmark, 28,375; Russia, 25,788; Switzerland, 14,333; Holland, 13,790; Italy, 10,614; Scotland, 10,220; Poland, 7,228; France, 5,832; Wales, 4,110; Hungary, 3,827.

### FARM MIGRATIONS TO AND FROM CANADA.

The number of Canadian farmers in the United States in 1920 (48,668) was offset, approximately, by the number of farmers born in the United States who are now cultivating land in Canada. This migration across the international border is largely in the Northwest, and is due to the gradual movement north of the wheat-growing lands. There are in the eastern provinces of the Dominion comparatively few farmers who were born in the United States, the migration having been chiefly by the French Canadians into this country, where they engaged in the intensive cultivation of small tracts in New England.

## VALUE OF FARM PROPERTY IN THE U. S.—1850-1920.

(By the Census Bureau.)

| Census Year. | All Farm Property | Land. | Buildings. | Implements and Machinery. | Live Stock. |
|---|---|---|---|---|---|
| 1850 | $3,967,343,580 | $3,271,575,426 | ..... | $151,587,638 | $544,180,516 |
| 1860 | 7,980,493,063 | 6,645,045,007 | ..... | 246,118,141 | 1,089,329,915 |
| 1870 | 8,944,857,749 | 7,444,054,462 | ..... | 270,913,678 | 1,229,889,609 |
| 1880 | 12,180,501,538 | 10,197,096,776 | ..... | 406,520,055 | 1,576,884,707 |
| 1890 | 16,082,267,689 | 13,279,252,649 | ..... | 494,247,467 | 2,308,767,573 |
| 1900 | 20,439,901,164 | 13,058,007,995 | $3,556,639,496 | 749,775,970 | 3,075,477,703 |
| 1910 | 40,991,449,090 | 28,475,674,169 | 6,325,451,528 | 1,265,149,783 | 4,925,173,610 |
| 1920 | 77,924,100,338 | 54,829,563,059 | 11,486,439,543 | 3,594,772,928 | 8,013,324,808 |

Until 1900 land and buildings were not separately stated; including only the reported value of live stock on farms until 1870; including estimated value of live stock on ranges; exclusive of Alaska and Hawaii after 1890; including value of live stock on ranges as well as on farms until 1900; exclusive of Porto Rico in 1910.

| Census Year. | No. of Farms. | Improved. | Other and Total. | Census Year. | No. of Farms. | Improved. | Other and Total. |
|---|---|---|---|---|---|---|---|
| | | *Acres.* | *Acres.* | | | *Acres.* | *Acres.* |
| 1850 | 1,449,073 | 113,032,614 | 293,560,614 | 1890 | 4,564,641 | 357,616,755 | 623,218,619 |
| 1860 | 2,044,077 | 163,110,720 | 407,212,538 | 1900 | 5,737,372 | 414,498,487 | 838,591,774 |
| 1870 | 2,659,985 | 188,921,099 | 407,735,041 | 1910 | 6,361,502 | 478,451,750 | 878,798,325 |
| 1880 | 4,008,907 | 284,771,042 | 536,081,835 | 1920 | 6,448,343 | 503,073,007 | 955,883,715 |

## NUMBER, ACREAGE AND VALUE OF FARMS, BY STATES.

(U. S. Census Returns as of Jan. 1, 1920, and April 15, 1910.)

| Division or State. | Farms. | | Land in Farms. | | Value of Land Alone. | |
|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1920. | 1910. | 1920. | 1910. |
| | *Number.* | *Number.* | *Acres.* | *Acres.* | *Dollars.* | *Dollars.* |
| United States | 6,448,343 | 6,361,502 | 955,883,715 | 878,798,325 | 54,829,563,059 | 28,475,674,169 |
| NEW ENGLAND: | | | | | | |
| Maine | 48,227 | 60,016 | 5,425,968 | 6,296,859 | 114,411,871 | 86,481,395 |
| New Hampshire | 20,523 | 27,053 | 2,603,806 | 3,249,458 | 47,425,331 | 44,519,047 |
| Vermont | 29,075 | 32,709 | 4,235,811 | 4,663,577 | 82,938,253 | 58,385,327 |
| Massachusetts | 32,001 | 36,917 | 2,494,477 | 2,875,941 | 127,653,607 | 105,532,616 |
| Rhode Island | 4,083 | 5,292 | 331,600 | 443,308 | 14,509,073 | 15,009,981 |
| Connecticut | 22,655 | 26,815 | 1,898,980 | 2,185,788 | 101,187,115 | 72,206,058 |
| MIDDLE ATLANTIC: | | | | | | |
| New York | 193,195 | 215,597 | 20,632,803 | 22,030,367 | 793,335,558 | 707,747,828 |
| New Jersey | 29,702 | 33,487 | 2,282,585 | 2,573,857 | 142,182,498 | 124,143,167 |
| Pennsylvania | 202,250 | 219,295 | 17,657,513 | 18,586,832 | 726,158,051 | 630,430,010 |
| EAST NORTH CENTRAL: | | | | | | |
| Ohio | 256,695 | 272,045 | 23,515,888 | 24,105,708 | 2,015,112,999 | 1,285,894,812 |
| Indiana | 205,126 | 215,485 | 21,063,332 | 21,299,823 | 2,202,566,336 | 1,328,196,545 |
| Illinois | 237,181 | 251,872 | 31,974,775 | 32,522,937 | 5,250,294,752 | 3,090,411,148 |
| Michigan | 196,447 | 206,960 | 19,032,961 | 18,940,614 | 959,186,538 | 615,258,348 |
| Wisconsin | 189,295 | 177,127 | 22,148,223 | 21,060,066 | 1,618,913,059 | 911,938,261 |
| WEST NORTH CENTRAL: | | | | | | |
| Minnesota | 178,478 | 156,137 | 30,221,758 | 27,675,823 | 2,750,328,432 | 1,019,102,027 |
| Iowa | 213,439 | 217,044 | 33,474,896 | 33,930,688 | 6,679,020,577 | 2,801,973,729 |
| Missouri | 263,004 | 277,244 | 34,774,679 | 34,591,248 | 2,594,193,271 | 1,445,982,389 |
| North Dakota | 77,690 | 74,360 | 36,214,751 | 28,426,650 | 1,279,313,627 | 730,380,131 |
| South Dakota | 74,637 | 77,644 | 34,636,491 | 26,016,892 | 2,231,431,723 | 902,606,751 |
| Nebraska | 124,417 | 129,678 | 42,223,475 | 38,622,021 | 3,330,222,340 | 1,614,539,313 |
| Kansas | 165,286 | 177,841 | 45,425,179 | 43,384,799 | 2,475,635,172 | 1,537,976,573 |
| SOUTH ATLANTIC: | | | | | | |
| Delaware | 10,140 | 10,836 | 944,511 | 1,038,866 | 42,115,802 | 34,938,161 |
| Maryland | 47,908 | 48,923 | 4,757,999 | 5,057,140 | 259,904,047 | 163,451,614 |
| District of Columbia | 204 | 217 | 5,668 | 6,063 | 4,156,148 | 7,193,950 |
| Virginia | 186,242 | 184,018 | 18,561,112 | 19,495,636 | 756 354,277 | 394,658,912 |
| West Virginia | 87,289 | 96,685 | 9,569,790 | 10,026,442 | 307,309,704 | 207,075,759 |
| North Carolina | 269,763 | 253,725 | 20,021,736 | 22,439,129 | 857,815,016 | 343,164,945 |
| South Carolina | 192,693 | 176,434 | 12,426,675 | 13,512,028 | 647,157,209 | 268,774,854 |
| Georgia | 310,732 | 291,027 | 25,441,061 | 26,953,413 | 897,444,961 | 370,353,415 |
| Florida | 54,005 | 50,016 | 6,046,691 | 5,253,538 | 228,424,740 | 93,738,065 |
| EAST SOUTH CENTRAL: | | | | | | |
| Kentucky | 270,626 | 259,185 | 21,612,772 | 22,189,127 | 1,050,752,680 | 484,464,617 |
| Tennessee | 252,774 | 246,012 | 19,510,856 | 20,041,657 | 807,782,296 | 371,415,783 |
| Alabama | 256,099 | 262,901 | 19,576,856 | 20,732,312 | 415,763,862 | 216,944,175 |
| Mississippi | 272,101 | 274,382 | 18,196,979 | 18,557,533 | 641,842,394 | 254,002,289 |
| WEST SOUTH CENTRAL: | | | | | | |
| Arkansas | 232,604 | 214,678 | 17,456,750 | 17,416,075 | 607,773,440 | 246,021,450 |
| Louisiana | 135,463 | 120,546 | 10,019,822 | 10,439,481 | 383,618,162 | 187,803,277 |
| Oklahoma | 191,988 | 190,192 | 31,951,934 | 28,859,353 | 1,171,459,364 | 649,066,668 |
| Texas | 436,033 | 417,770 | 114,020,621 | 112,435,067 | 3,245,208,649 | 1,633,207,135 |
| MOUNTAIN: | | | | | | |
| Montana | 57,677 | 26,214 | 35,070,656 | 13,545,603 | 691,912,265 | 226,771,302 |
| Idaho | 42,106 | 30,807 | 8,375,873 | 5,283,604 | 511,865,869 | 219,953,316 |
| Wyoming | 15,748 | 10,987 | 11,809,351 | 8,543,010 | 210,947,494 | 88,908,276 |
| Colorado | 59,934 | 46,170 | 24,462,014 | 13,532,113 | 763,722,716 | 362,822,205 |
| New Mexico | 29,844 | 35,676 | 24,409,633 | 11,270,021 | 196,341,050 | 98,806,497 |
| Arizona | 9,975 | 9,227 | 5,802,126 | 1,246,613 | 156,562,606 | 42,349,737 |
| Utah | 25,662 | 21,676 | 5,050,410 | 3,397,699 | 210,997,840 | 99,482,164 |
| Nevada | 3,163 | 2,689 | 2,357,163 | 2,714,757 | 59,362,239 | 35,276,599 |
| PACIFIC: | | | | | | |
| Washington | 66,288 | 56,192 | 13,244,720 | 11,712,235 | 797,651,020 | 517,421,993 |
| Oregon | 50,206 | 45,502 | 13,542,318 | 11,685,110 | 586,242,049 | 411,696,102 |
| California | 117,670 | 88,197 | 29,365,667 | 27,931,444 | 2,783,054,977 | 1,317,195,448 |

## FARM WEALTH OF THE UNITED STATES SINCE 1889.

| Calendar Year. | Value of Crops Produced. | Value of Live Stock Products. | Total Gross Wealth Produced. | Calendar Year. | Value of Crops Produced. | Value of Live Stock Products. | Total Gross Wealth Produced. |
|---|---|---|---|---|---|---|---|
| | *1,000 Dols.* | *1,000 Dols.* | *1,000 Dols.* | | *1,000 Dols.* | *1,000 Dols.* | *1,000 Dols.* |
| 1889 | ..... | ..... | 2,460,107 | 1910 | 5,486,374 | 3,551,017 | 9,037,391 |
| 1899 | 2,998,704 | 1,718,366 | 4,717,070 | 1911 | 5,562,058 | 3,257,117 | 8,819,175 |
| 1900 | 3,191,942 | 1,817,653 | 5,009,595 | 1912 | 5,842,220 | 3,500,570 | 9,342,790 |
| 1901 | 3,385,179 | 1,916,941 | 5,302,120 | 1913 | 6,132,759 | 3,716,754 | 9,849,513 |
| 1902 | 3,578,416 | 2,016,229 | 5,594,645 | 1914 | 6,111,684 | 3,783,277 | 9,894,961 |
| 1903 | 3,771,654 | 2,115,516 | 5,887,170 | 1915 | 6,907,187 | 3,868,304 | 10,775,000 |
| 1904 | 3,981,676 | 2,140,102 | 6,121,778 | 1916 | 9,054,459 | 4,352,000 | 13,406,000 |
| 1905 | 4,012,653 | 2,251,344 | 6,273,997 | 1917 | 14,222,000 | 5,852,000 | 19,331,000 |
| 1906 | 4,263,134 | 2,501,076 | 6,764,210 | 1918 | 14,331,000 | 8,149,000 | 22,480,000 |
| 1907 | 4,761,112 | 2,726,877 | 7,487,989 | 1919 | 14,755,365 | 8,957,000 | 24,982,000 |
| 1908 | 5,098,293 | 2,792,333 | 7,890,626 | 1920 | 10,909,000 | 7,354,000 | 18,263,000 |
| 1909 | 5,231,851 | 3,011,150 | 8,498,311 | 1921 | 7,028,000 | 5,339,000 | 12,367,000 |

"Total Gross Wealth Produced" in above table includes miscellaneous items not included in two other columns.

## VALUE OF FARMS IN THE UNITED STATES BY STATES.

(U. S. Census Returns.)

| Division or State. | Value of All Farm Property. | | Value of Buildings. | | Value of Implements and Machinery. | |
|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1920. | 1910. | 1920. | 1910. |
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| United States | 77,924,100,338 | 40,991,449,090 | 11,486,439,543 | 6,325,451,528 | 3,594,772,928 | 1,265,149,783 |
| NEW ENGLAND: | | | | | | |
| Maine | 270,526,733 | 199,271,998 | 89,697,100 | 73,138,231 | 26,637,660 | 14,490,533 |
| New Hampshire | 118,656,115 | 103,704,196 | 42,570,539 | 41,397,014 | 9,499,322 | 5,877,657 |
| Vermont | 222,736,620 | 145,399,728 | 76,178,906 | 54,202,948 | 21,234,130 | 10,168,687 |
| Massachusetts | 300,471,743 | 226,474,025 | 119,934,224 | 88,636,149 | 19,359,755 | 11,563,894 |
| Rhode Island | 33,636,766 | 32,990,739 | 11,878,853 | 12,922,879 | 2,408,561 | 1,781,407 |
| Connecticut | 226,991,617 | 159,399,771 | 89,083,712 | 66,113,163 | 13,248,097 | 6,916,648 |
| MIDDLE ATLANTIC: | | | | | | |
| New York | 1,908,483,201 | 1,451,481,495 | 631,726,182 | 476,998,001 | 169,866,766 | 83,644,822 |
| New Jersey | 311,847,948 | 254,832,665 | 108,141,488 | 92,991,352 | 25,459,205 | 13,109,507 |
| Pennsylvania | 1,729,353,034 | 1,253,274,862 | 600,593,977 | 410,638,745 | 163,826,365 | 70,726,055 |
| EAST NO. CENTRAL: | | | | | | |
| Ohio | 3,095,666,336 | 1,902,694,589 | 646,322,950 | 368,257,594 | 146,575,269 | 51,210,071 |
| Indiana | 3,042,311,247 | 1,809,135,238 | 451,077,637 | 266,079,051 | 127,403,086 | 40,999,541 |
| Illinois | 6,666,767,235 | 3,905,321,075 | 747,698,814 | 432,381,422 | 222,619,605 | 73,724,074 |
| Michigan | 1,763,334,778 | 1,088,858,379 | 477,499,672 | 285,879,951 | 122,389,936 | 49,916,285 |
| Wisconsin | 2,677,282,997 | 1,413,118,785 | 568,968,914 | 289,694,462 | 167,088,909 | 52,956,579 |
| WEST NO. CENTRAL: | | | | | | |
| Minnesota | 3,787,420,118 | 1,476,411,737 | 550,839,893 | 243,339,399 | 181,087,968 | 52,329,165 |
| Iowa | 8,524,870,956 | 3,745,860,544 | 922,751,713 | 455,405,671 | 309,172,398 | 95,477,948 |
| Missouri | 3,591,068,085 | 2,052,917,488 | 468,774,429 | 270,221,997 | 138,261,340 | 50,873,994 |
| North Dakota | 1,755,742,995 | 973,814,205 | 209,207,868 | 92,276,613 | 114,186,865 | 43,907,595 |
| South Dakota | 2,823,870,212 | 1,166,096,980 | 241,461,958 | 102,474,056 | 112,408,268 | 33,786,973 |
| Nebraska | 4,201,655,992 | 2,079,818,647 | 381,885,420 | 198,807,622 | 153,104,448 | 44,249,708 |
| Kansas | 3,302,806,187 | 2,039,389,910 | 354,428,746 | 199,579,599 | 154,716,977 | 48,310,161 |
| SOUTH ATLANTIC: | | | | | | |
| Delaware | 80,137,614 | 63,179,201 | 22,639,829 | 18,217,822 | 6,781,318 | 3,206,095 |
| Maryland | 463,638,120 | 286,167,028 | 126,692,803 | 78,285,509 | 28,970,020 | 11,859,771 |
| Dist. of Columbia | 5,927,987 | 8,476,533 | 1,421,221 | 1,037,393 | 104,252 | 92,350 |
| Virginia | 1,196,555,772 | 625,065,383 | 268,080,748 | 137,399,150 | 50,151,466 | 18,115,883 |
| West Virginia | 496,439,617 | 314,738,540 | 103,473,702 | 57,315,195 | 18,395,058 | 7,011,513 |
| North Carolina | 1,250,166,995 | 537,716,210 | 218,577,944 | 113,459,662 | 54,621,363 | 18,441,619 |
| South Carolina | 953,064,742 | 392,128,314 | 166,326,991 | 64,113,227 | 48,062,387 | 14,108,853 |
| Georgia | 1,356,685,196 | 580,546,381 | 240,853,666 | 108,850,917 | 63,343,220 | 20,948,056 |
| Florida | 330,301,717 | 143,183,183 | 53,024,664 | 24,407,924 | 13,551,773 | 4,446,007 |
| EAST SO. CENTRAL: | | | | | | |
| Kentucky | 1,511,901,077 | 773,797,880 | 254,406,256 | 150,994,755 | 48,354,857 | 20,851,846 |
| Tennessee | 1,251,964,585 | 612,520,836 | 217,197,598 | 109,106,804 | 53,462,556 | 21,292,171 |
| Alabama | 690,848,720 | 370,138,429 | 127,893,893 | 71,309,416 | 34,366,217 | 16,290,004 |
| Mississippi | 964,751,855 | 426,314,634 | 148,054,384 | 80,160,000 | 39,881,256 | 16,905,312 |
| WEST SO. CENTRAL: | | | | | | |
| Arkansas | 924,395,483 | 400,089,303 | 145,337,226 | 63,145,363 | 43,432,237 | 16,864,198 |
| Louisiana | 589,826,679 | 301,220,988 | 90,420,631 | 49,741,173 | 32,715,010 | 18,977,053 |
| Oklahoma | 1,660,423,544 | 918,198,882 | 192,405,930 | 89,610,556 | 80,630,547 | 27,088,866 |
| Texas | 4,447,420,321 | 2,218,645,164 | 454,964,670 | 210,001,260 | 154,320,996 | 56,790,260 |
| MOUNTAIN: | | | | | | |
| Montana | 985,961,308 | 347,828,770 | 84,855,264 | 24,854,628 | 55,004,212 | 10,539,653 |
| Idaho | 716,137,910 | 305,317,185 | 69,646,095 | 25,112,509 | 38,417,253 | 10,476,051 |
| Wyoming | 334,410,590 | 167,189,081 | 23,800,631 | 9,007,001 | 11,777,949 | 3,668,294 |
| Colorado | 1,076,794,749 | 491,471,806 | 102,290,944 | 45,696,656 | 49,804,509 | 12,791,601 |
| New Mexico | 325,185,999 | 159,447,990 | 25,473,162 | 13,024,502 | 9,745,369 | 4,122,312 |
| Arizona | 233,592,989 | 75,123,970 | 15,762,715 | 4,935,573 | 8,820,667 | 1,787,790 |
| Utah | 311,274,728 | 150,795,201 | 32,753,918 | 18,063,168 | 13,514,787 | 4,468,178 |
| Nevada | 99,779,666 | 60,399,365 | 6,892,975 | 4,332,740 | 3,630,927 | 1,576,096 |
| PACIFIC: | | | | | | |
| Washington | 1,057,429,848 | 637,543,411 | 122,741,321 | 54,546,459 | 54,721,377 | 16,709,844 |
| Oregon | 818,559,751 | 528,243,782 | 88,971,235 | 43,880,207 | 41,567,125 | 13,205,645 |
| California | 3,431,021,861 | 1,614,694,584 | 290,756,132 | 133,406,040 | 136,069,290 | 36,493,158 |

The average value of land and buildings per acre of land in farms in the United States in 1920 was $69.38, as compared with $39.60 in 1910.

The average value of land and buildings per farm for the United States as a whole in 1920 was $10,284, as compared with $5,471 in 1910.

In the census reports a distinction is made between farmers operating their own land only and farmers who hire some land in addition to that which they own. The former are classified as "full owners" and the latter as "part owners." The value of farms operated by full owners in 1920 was $30,717,493,565, and of those operated by part owners, $9,156,810,001. The corresponding figures for 1910 were: Full owners, $17,310,639,016, and part owners, $5,056,295,262.

## LAND IN FARMS, IMPROVED, WOODED, ETC.

(U. S. Census Returns.)

| Division or State. | Improved Land. | | Woodland. | | Other Unimproved Land. | |
|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1920. | 1910. | 1920. | 1910. |
| | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| United States... | 503,073,007 | 478,451,750 | 167,730,794 | 190,865,553 | 285,079,914 | 209,481,022 |
| NEW ENGLAND: | | | | | | |
| Maine | 1,977,329 | 2,360,657 | 2,447,597 | 2,775,621 | 1,001,042 | 1,160,581 |
| New Hampshire | 702,902 | 929,185 | 1,299,838 | 1,502,389 | 601,066 | 817,884 |
| Vermont | 1,691,595 | 1,633,965 | 1,428,309 | 1,566,698 | 1,115,907 | 1,462,914 |
| Massachusetts | 908,834 | 1,164,501 | 1,030,386 | 1,064,553 | 555,257 | 646,887 |
| Rhode Island | 132,855 | 178,344 | 130,462 | 185,909 | 68,283 | 79,055 |
| Connecticut | 701,086 | 988,252 | 683,719 | 757,743 | 514,175 | 439,793 |
| MIDDLE ATLANTIC: | | | | | | |
| New York | 13,158,781 | 14,844,039 | 4,160,567 | 4,436,145 | 3,313,455 | 2,750,183 |
| New Jersey | 1,555,607 | 1,803,336 | 454,768 | 538,131 | 272,210 | 232,390 |
| Pennsylvania | 11,847,719 | 12,673,519 | 4,043,902 | 4,281,439 | 1,765,892 | 1,631,874 |
| EAST NO. CENTRAL: | | | | | | |
| Ohio | 18,542,353 | 19,227,969 | 3,198,929 | 3,285,376 | 1,774,606 | 1,592,363 |
| Indiana | 16,680,212 | 16,981,252 | 3,141,042 | 3,370,791 | 1,242,078 | 997,780 |
| Illinois | 27,294,533 | 28,048,323 | 3,102,579 | 3,147,879 | 1,577,663 | 1,326,735 |
| Michigan | 12,925,521 | 12,832,078 | 3,217,000 | 2,927,554 | 2,890,440 | 3,180,982 |
| Wisconsin | 12,452,216 | 11,907,606 | 5,401,910 | 5,377,580 | 4,294,097 | 3,774,880 |
| WEST NO. CENTRAL: | | | | | | |
| Minnesota | 21,481,710 | 19,643,533 | 4,482,656 | 3,922,391 | 4,257,392 | 4,109,899 |
| Iowa | 28,606,951 | 29,491,199 | 2,295,274 | 2,314,115 | 2,572,671 | 2,125,374 |
| Missouri | 24,832,966 | 24,581,186 | 8,553,857 | 8,918,972 | 1,387,856 | 1,091,090 |
| North Dakota | 24,563,178 | 20,455,092 | 679,836 | 421,877 | 10,971,737 | 7,549,681 |
| South Dakota | 18,199,250 | 15,827,208 | 536,183 | 383,144 | 15,901,058 | 9,806,540 |
| Nebraska | 23,109,624 | 24,382,577 | 990,933 | 803,206 | 18,214,918 | 13,436,238 |
| Kansas | 30,600,760 | 29,904,067 | 1,313,093 | 1,205,910 | 13,511,326 | 12,274,822 |
| SOUTH ATLANTIC: | | | | | | |
| Delaware | 653,052 | 713,538 | 222,658 | 252,032 | 68,801 | 73,296 |
| Maryland | 3,136,728 | 3,354,767 | 1,327,221 | 1,467,333 | 294,050 | 235,040 |
| Dist. of Columbia | 4,258 | 5,133 | 828 | 689 | 582 | 241 |
| Virginia | 9,460,492 | 9,870,058 | 7,907,352 | 8,414,680 | 1,193,268 | 1,210,898 |
| West Virginia | 5,520,308 | 5,521,757 | 3,469,444 | 3,968,836 | 580,038 | 535,849 |
| North Carolina | 8,198,409 | 8,813,056 | 10,299,547 | 12,451,739 | 1,523,780 | 1,174,334 |
| South Carolina | 6,184,159 | 6,097,999 | 5,302,575 | 6,339,142 | 939,941 | 1,074,887 |
| Georgia | 13,055,209 | 12,298,017 | 10,491,848 | 13,002,741 | 1,894,004 | 1,652,655 |
| Florida | 2,297,271 | 1,805,408 | 2,780,790 | 3,007,638 | 968,630 | 440,492 |
| EAST SO. CENTRAL: | | | | | | |
| Kentucky | 13,975,746 | 14,354,471 | 6,018,280 | 6,951,626 | 1,618,746 | 883,030 |
| Tennessee | 11,185,302 | 10,890,484 | 7,080,169 | 8,007,733 | 1,245,385 | 1,143,440 |
| Alabama | 9,893,407 | 9,693,581 | 8,301,177 | 9,444,764 | 1,382,272 | 1,593,967 |
| Mississippi | 9,325,677 | 9,008,310 | 7,014,898 | 7,883,558 | 1,856,404 | 1,665,665 |
| WEST SO. CENTRAL: | | | | | | |
| Arkansas | 9,210,556 | 8,076,254 | 7,396,028 | 8,511,510 | 850,166 | 828,311 |
| Louisiana | 5,626,226 | 5,276,016 | 3,614,040 | 4,316,561 | 779,556 | 846,904 |
| Oklahoma | 18,125,321 | 17,551,337 | 4,206,171 | 3,568,910 | 9,620,442 | 7,739,106 |
| Texas | 31,227,503 | 27,360,666 | 14,532,913 | 27,658,413 | 68,260,205 | 57,415,988 |
| MOUNTAIN: | | | | | | |
| Montana | 11,007,278 | 3,640,309 | 1,646,462 | 595,870 | 22,416,916 | 9,309,424 |
| Idaho | 4,511,680 | 2,778,740 | 820,876 | 584,556 | 3,043,317 | 1,920,308 |
| Wyoming | 2,102,005 | 1,256,160 | 421,806 | 252,152 | 9,285,540 | 7,034,698 |
| Colorado | 7,744,757 | 4,302,101 | 1,415,420 | 891,698 | 15,301,837 | 8,338,314 |
| New Mexico | 1,717,224 | 1,467,191 | 1,817,460 | 1,491,025 | 20,874,949 | 8,311,805 |
| Arizona | 712,803 | 350,173 | 523,648 | 100,061 | 4,565,675 | 796,379 |
| Utah | 1,715,380 | 1,368,211 | 212,762 | 145,510 | 3,122,268 | 1,883,978 |
| Nevada | 594,741 | 752,117 | 28,637 | 48,209 | 1,733,785 | 1,914,431 |
| PACIFIC: | | | | | | |
| Washington | 7,129,343 | 6,373,311 | 1,813,061 | 1,541,551 | 4,302,316 | 3,797,373 |
| Oregon | 4,913,851 | 4,274,803 | 2,309,596 | 2,237,826 | 6,318,871 | 5,172,481 |
| California | 11,878,339 | 11,389,894 | 4,252,287 | 4,541,767 | 13,235,041 | 11,999,783 |

## ANNUAL LOSS IN THE UNITED STATES CAUSED BY INSECTS.

Farm Crops—Cereals, $430,204,600; hay, $116,230,500; cotton, $140,631,100; tobacco, $16,900,800, vegetables, $199,412,600; sugar crops, $8,436,800; fruits, $141,264,300; farm-forest products, $22,138,900; other crops, $29,649,700; farm crop total, $1,104,869,300.

Forests and forest products $100,000,000; products in storage, $100,000,000; insect-borne diseases of man, $150,000,000; damage to domestic animals, $100,000,000; grand total, $1,554,869,300.

### MAJORITY OF INSECTS HELPFUL TO MAN.

As against over 7,000 deaths per year due to railroad accidents there are 97,200 deaths each year in this country due to malaria and intestinal diseases, spread by insect carriers. And while in the whole Spanish War only 300 men were killed by Spanish bullets, 5,000 died of fly-borne diseases. Yet the great majority of insects are either harmless or beneficial to man.

Although we are able to determine the damage done by insects it is impossible to calculate the benefits they confer. Practically no fruits could be formed without the blossom-pollinating aid of insects, and in the production of a harvest, insects, especially bees, of course, dwarf into insignificance all modern implements of husbandry.

It would be impossible to get a single crop of red clover without the aid of insects, and the present scarcity of bumble bees, who usually perform this service, is making itself felt in the smaller crops and lower vitality of the clover seed.

Their importance in this connection was realized in Australia and the Philippine Islands, which imported bumble bees for the sake of their clover crops. Figs could not be successfully grown in this country until a fig pollinating insect was imported from the Mediterranean countries.

A great majority of the beautiful flowers depend on insects for the development of their seed.

## VALUE OF FARM CROPS PER ACRE (1919).

Sugar beets and sugar cane, $108.83; potatoes, $144.54; sweet potatoes, $135.10; hay, $32.54; corn, $38.52; wheat, $27.76; oats, $21.02; rye, $16.81; barley, $27.10; buckwheat, $30.26; rice, $104.58; peanuts, $65.04; beans, (6 States), $50.93; clover-seed, $42.40; kafirs, $32.80; cow peas, $14.76; cotton, $50.71; flaxseed, $21.47; tobacco, $296.90.

## FARM MORTGAGE DEBT, BY STATES.

(U. S. Census Returns.)

| Division or State | Amount of Mortgage Debt. | | Ratio of Debt to Value, Per Cent. | | Average Interest Rate, 1920 Per Cent. | Average Value Per Farm. | | Average Debt Per Farm. | |
|---|---|---|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1920. | 1910. | | 1920. | 1910. | 1920. | 1910. |
| | *Dollars.* | *Dollars.* | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| United States... | 4,003,767,192 | 1,726,172,851 | 29.1 | 27.3 | 6.1 | 11,546 | 6,289 | 3,356 | 1,715 |
| NEW ENGLAND: | | | | | | | | | |
| Maine | 18,592,225 | 11,738,529 | 31.8 | 29.5 | 6.1 | 4,733 | 2,863 | 1,506 | 845 |
| New Hampshire | 6,820,551 | 4,773,610 | 33.6 | 30.9 | 5.1 | 4,095 | 2,728 | 1,378 | 842 |
| Vermont | 23,575,778 | 12,436,091 | 38.6 | 33.7 | 5.4 | 5,309 | 3,037 | 2,049 | 1,025 |
| Massachusetts | 23,412,188 | 16,371,484 | 33.1 | 32.9 | 5.7 | 6,066 | 4,135 | 2,007 | 1,361 |
| Rhode Island | 1,494,367 | 1,356,326 | 30.7 | 33.2 | 5.8 | 5,683 | 4,084 | 1,746 | 1,355 |
| Connecticut | 17,860,949 | 11,859,468 | 32.0 | 31.3 | 5.7 | 6,855 | 4,183 | 2,195 | 1,309 |
| MIDDLE ATLANTIC: | | | | | | | | | |
| New York | 145,533,268 | 97,309,848 | 37.5 | 34.2 | 5.4 | 6,497 | 4,551 | 2,436 | 1,556 |
| New Jersey | 25,122,582 | 19,476,938 | 37.4 | 35.1 | 5.4 | 7,226 | 5,204 | 2,703 | 1,826 |
| Pennsylvania | 87,741,155 | 61,539,433 | 34.2 | 34.9 | 5.3 | 5,777 | 3,915 | 1,976 | 1,368 |
| E. NORTH CENTRAL: | | | | | | | | | |
| Ohio | 121,120,774 | 63,788,397 | 31.3 | 28.9 | 5.9 | 8,990 | 5,160 | 2,812 | 1,491 |
| Indiana | 105,256,239 | 57,486,582 | 24.0 | 22.8 | 5.8 | 10,866 | 6,282 | 2,604 | 1,433 |
| Illinois | 197,211,841 | 115,799,646 | 25.4 | 25.5 | 5.5 | 21,149 | 12,314 | 5,379 | 3,135 |
| Michigan | 144,103,067 | 75,997,030 | 34.3 | 30.3 | 6.0 | 6,259 | 3,654 | 2,147 | 1,107 |
| Wisconsin | 354,574,391 | 146,815,313 | 37.8 | 34.3 | 5.3 | 10,765 | 6,160 | 4,072 | 2,116 |
| W. NORTH CENTRAL: | | | | | | | | | |
| Minnesota | 254,475,222 | 77,866,283 | 27.5 | 26.4 | 5.8 | 16,080 | 7,062 | 4,419 | 1,864 |
| Iowa | 489,816,739 | 204,242,722 | 27.0 | 27.8 | 5.5 | 34,662 | 14,574 | 9,358 | 4,048 |
| Missouri | 216,463,380 | 112,565,403 | 28.8 | 28.9 | 6.1 | 10,933 | 6,083 | 3,147 | 1,758 |
| North Dakota | 108,284,682 | 47,841,587 | 28.5 | 22.4 | 6.7 | 16,803 | 11,135 | 4,786 | 2,493 |
| South Dakota | 89,875,046 | 32,771,359 | 21.8 | 21.2 | 5.9 | 29,335 | 13,679 | 6,402 | 2,897 |
| Nebraska | 168,507,859 | 62,373,472 | 23.9 | 21.8 | 5.7 | 29,416 | 14,476 | 7,025 | 3,154 |
| Kansas | 109,914,464 | 70,819,736 | 25.9 | 24.7 | 6.0 | 15,766 | 9,430 | 4,083 | 2,326 |
| SOUTH ATLANTIC: | | | | | | | | | |
| Delaware | 4,460,416 | 3,068,721 | 39.0 | 34.9 | 5.7 | 6,002 | 4,355 | 2,344 | 1,518 |
| Maryland | 27,481,197 | 15,673,773 | 36.6 | 35.3 | 5.6 | 7,215 | 4,129 | 2,641 | 1,457 |
| Dist. of Columbia | 92,900 | 56,100 | 39.1 | 34.0 | 5.8 | 9,913 | 11,670 | 3,871 | 2,805 |
| Virginia | 41,725,542 | 15,440,291 | 27.5 | 24.8 | 5.9 | 7,165 | 3,583 | 1,972 | 887 |
| West Virginia | 11,205,953 | 5,592,533 | 25.5 | 26.0 | 5.9 | 4,871 | 2,735 | 1,241 | 710 |
| North Carolina | 31,968,285 | 9,958,389 | 31.0 | 23.2 | 6.0 | 5,126 | 2,231 | 1,587 | 517 |
| South Carolina | 25,153,227 | 10,109,072 | 27.3 | 25.5 | 7.3 | 7,505 | 3,539 | 2,051 | 903 |
| Georgia | 37,671,385 | 10,988,409 | 30.2 | 29.3 | 7.3 | 5,990 | 2,712 | 1,811 | 794 |
| Florida | 12,909,813 | 2,709,970 | 25.5 | 21.0 | 7.3 | 6,921 | 3,098 | 1,767 | 652 |
| E. SOUTH CENTRAL: | | | | | | | | | |
| Kentucky | 67,116,481 | 23,411,430 | 29.1 | 28.8 | 6.0 | 6,489 | 3,146 | 1,889 | 906 |
| Tennessee | 49,836,266 | 12,626,330 | 31.3 | 26.7 | 6.2 | 5,783 | 2,720 | 1,812 | 727 |
| Alabama | 29,103,101 | 10,350,577 | 35.5 | 32.0 | 7.5 | 3,309 | 1,680 | 1,176 | 538 |
| Mississippi | 30,046,272 | 13,381,306 | 30.3 | 31.7 | 6.5 | 4,539 | 1,850 | 1,375 | 586 |
| W. SOUTH CENTRAL: | | | | | | | | | |
| Arkansas | 38,539,428 | 8,941,332 | 29.8 | 25.5 | 7.8 | 4,384 | 2,116 | 1,306 | 540 |
| Louisiana | 20,490,966 | 8,950,301 | 30.0 | 31.1 | 7.2 | 6,636 | 3,826 | 1,989 | 1,190 |
| Oklahoma | 73,434,422 | 27,384,765 | 26.9 | 22.4 | 6.6 | 8,008 | 4,975 | 2,157 | 1,114 |
| Texas | 172,166,818 | 76,089,272 | 25.9 | 25.5 | 7.3 | 11,517 | 6,203 | 2,984 | 1,584 |
| MOUNTAIN: | | | | | | | | | |
| Montana | 77,949,679 | 10,741,280 | 32.4 | 24.1 | 7.6 | 11,323 | 11,182 | 3,669 | 2,692 |
| Idaho | 69,868,243 | 14,557,103 | 31.2 | 22.6 | 7.3 | 13,047 | 8,477 | 4,076 | 1,917 |
| Wyoming | 15,303,106 | 4,207,983 | 27.5 | 25.2 | 7.7 | 14,125 | 10,892 | 3,887 | 2,749 |
| Colorado | 62,623,338 | 18,986,026 | 29.6 | 24.6 | 6.8 | 13,454 | 10,214 | 3,980 | 2,508 |
| New Mexico | 11,178,034 | 2,590,282 | 25.9 | 24.2 | 7.3 | 9,948 | 7,647 | 2,581 | 1,854 |
| Arizona | 15,648,280 | 2,253,252 | 31.0 | 25.9 | 7.5 | 17,543 | 10,696 | 5,441 | 2,772 |
| Utah | 24,334,636 | 4,564,175 | 28.8 | 21.4 | 7.1 | 10,460 | 6,046 | 3,009 | 1,294 |
| Nevada | 6,518,605 | 1,464,084 | 35.7 | 34.1 | 6.7 | 23,834 | 13,907 | 8,499 | 4,738 |
| PACIFIC: | | | | | | | | | |
| Washington | 61,120,951 | 25,644,551 | 30.3 | 22.6 | 6.6 | 10,358 | 8,918 | 3,134 | 2,017 |
| Oregon | 51,999,178 | 21,165,627 | 31.2 | 22.6 | 6.5 | 11,610 | 9,103 | 3,622 | 2,660 |
| California | 224,063,903 | 60,036,660 | 29.3 | 24.0 | 6.6 | 20,466 | 11,675 | 6,001 | 2,802 |

### CENSUS BUREAU'S NOTE TO FARM MORTGAGE TABLE.

While the figures given above relative to the number of mortgaged farms in the United States include the farms operated by part owners—that is, farms whose owners hired some additional land—the figures representing the amount of the mortgage debt relate only to those farms which consisted wholly of land owned by the operator.

This limitation was made necessary by the difficulty of ascertaining the value of that part of the farm which was covered by the mortgage, where the farmer owned a part of the farm and hired a part of it.

### OWNERSHIP OF MORTGAGED FARMS.

The total number of farms reported as mortgaged in 1920 (1,461,306) comprised 1,217,234 farms operated by full owners and 244,072 farms operated by part owners.

The number of farms operated by full owners for which the amount of mortgage debt was reported in 1920 was 1,193,047, as compared with 1,006,511 in 1910.

The amount of the farm mortgage debt reported was $4,003,767,192 in 1920, as against $1,726,172,851 in 1910.

### INCREASE IN MORTGAGE DEBT.

The amount of debt thus increased $2,277,594,341, or 131.9 per cent., while the value of the mortgaged farms increased 117.6 per cent. during the decade.

The value of the farms for which the amount of the mortgage debt was reported in 1920 was $13,775,500,013.

The debt therefore represented 29.1 per cent. of the value, as compared with 27.3 per cent. in 1910.

The average rate of interest paid on farm mortgages in the United States in 1920 was 6.1 per cent.

## IRRIGATION IN THE UNITED STATES.

THE climatic conditions having the largest influence in determining the necessity for irrigation are the amount and seasonable distribution of precipitation, particularly rainfall, while wind movement and relative humidity also have an influence.

In that part of the United States lying east of the arid and semi-arid States the normal annual precipitation exceeds 25 inches and is so distributed throughout the year as to provide sufficient moisture for the growing of general farm crops. In this section short periods of drought occur sufficiently often to make irrigation desirable for such crops as truck and small fruits, which may be damaged to a large extent by lack of moisture for even short periods, although the irrigation of these crops is not general. Seasons with too little rainfall for the proper growth of general crops occur, but not sufficiently often to justify making provision for irrigation.

Arkansas, Louisiana, and Eastern Texas have a normal annual precipitation of from 40 to 50 inches, which is ample for all crops except rice. It is necessary to keep water standing on rice fields during most of the growing period of this crop, and for this the rainfall is not sufficient. Irrigation in this section is practically confined to the rice fields.

### THE SEMI-ARID REGION.

The States of North and South Dakota, Nebraska, Kansas, Oklahoma, and Western Texas lie in the so-called semi-arid region, and have a normal annual precipitation varying from about 15 inches at their western boundaries to about 25 or more inches at their eastern boundaries. In this section success in growing crops without irrigation varies from year to year according to the amount and distribution of the rainfall, and the practice of irrigation advances eastward and recedes to the west with periods of deficient or excessive rainfall.

The same condition exists on the plains in the eastern parts of Montana, Wyoming, Colorado, and New Mexico. Here crops are grown on the high plains without irrigation, with varying success, while irrigation is generally practised in the stream valleys.

The main ranges of the Rocky Mountains extend through Montana, Wyoming, Colorado, and New Mexico. On the high mountains the precipitation, particularly snowfall, is heavy, while in the valleys between the ranges the precipitation is light and irrigation is necessary for the growing of most crops.

### THE REAL ARID REGION.

West of the Rocky Mountains and between them and the Sierra Nevada and Cascade Mountains and extending from the Mexican boundary to Central Idaho is the real arid region of the United States. Here the normal annual precipitation varies from about 2 inches in Southwestern Arizona and Southeastern California to about 8 inches in Southern Idaho. In this section, comprising the larger parts of Arizona, Nevada and Utah, and considerable parts of California, Oregon, Washington and Idaho almost no crops can be grown in the valleys without irrigation. On the higher lands in Arizona, Utah Idaho, Oregon, and Washington the precipitation is greater and grain and forage crops are grown without irrigation. Northern Idaho, Northwestern Montana, and Northeastern Washington receive sufficient precipitation for growing crops without irrigation.

West of the Sierra Nevada and Cascade Mountains there is a great variation in rainfall. The western coast of Washington and Oregon receives the heaviest precipitation of any part of the United States, but there is a dry period in the late summer, during which irrigation is desirable for crops which make their growth during this period. Irrigation is practised to a limited extent for pastures, vegetables, and fruits.

### IN CALIFORNIA.

Throughout California there is a well-defined wet season in the winter months, and an equally well-defined dry season in summer. Most of the northern part of the State receives sufficient rainfall to mature crops if it were distributed throughout the year, but the growing of crops in late summer requires irrigation. On the other hand, most of the southern part of the State receives less moisture than is usually considered necessary for crop growing, but the concentration of the year's precipitation in the winter and spring makes it possible to mature crops where it would not be possible were the rainfall more widely distributed throughout the year.

IRRIGATION BY STATES.

| STATE. | Area Irrigated. | Capital Invested. | Est. Final Cost. | STATE. | Area Irrigated. | Capital Invested. | Est. Final Cost. |
|---|---|---|---|---|---|---|---|
| | *Acres.* | *Dollars.* | *Dollars.* | | *Acres.* | *Dollars.* | *Dollars.* |
| Total..... | 19,191,716 | 697,657,328 | 819,778,005 | Montana..... | 1,681,729 | 52,143,363 | 70,079,028 |
| | | | | Idaho..... | 2,488,806 | 91,501,009 | 97,019,717 |
| No. Dakota.. | 12,072 | 1,857,118 | 2,072,766 | Wyoming.... | 1,207,982 | 34,326,328 | 51,500,288 |
| So. Dakota... | 100.682 | 5,465,248 | 5,500,748 | Colorado..... | 3,348,385 | 88,302,442 | 95,198,423 |
| Nebraska..... | 442,690 | 13,909,185 | 18,030,154 | | | | |
| Kansas..... | 47,312 | 2,067,381 | 2,195,981 | New Mexico.. | 538,377 | 18,210,412 | 20,440,646 |
| | | | | Arizona..... | 467,565 | 33,498,094 | 34,615,064 |
| Arkansas..... | 143,946 | 7,183,322 | 7,283,522 | Utah..... | 1,371,651 | 32,037,351 | 33,835,641 |
| Louisiana.... | 454,882 | 14,063,181 | 14,264,178 | Nevada..... | 561,447 | 14,754,280 | 22,648,747 |
| Oklahoma.... | 2,969 | 151,325 | 162,775 | | | | |
| Texas..... | 586,120 | 35,072,739 | 39,860,871 | Washington.. | 529,899 | 29,299,011 | 37,684,591 |
| | | | | Oregon..... | 986,162 | 28,929,151 | 41,585,742 |
| | | | | California.... | 4,219,040 | 194,886,388 | 225,799,123 |

ACREAGE AND VALUE OF CROPS GROWN ON IRRIGATED LAND, BY STATES, 1919.
(In the tabulation for each State, crops for which the area reported was less than 500 acres were omitted. The crops omitted, however, form such a small part of the total as to be negligible.)

| STATE. | Acreage. | VALUE. Amount. | STATE. | Acreage. | VALUE. Amount. | STATE. | Acreage. | VALUE. Amount. |
|---|---|---|---|---|---|---|---|---|
| Total... | 10,482,653 | 801,005,326 | Louisiana.. | 454,882 | $42,735,849 | N. Mexico. | 233,893 | $11,400,144 |
| | | | Texas..... | 295,353 | 22,343,976 | Arizona... | 333,616 | 34,190,780 |
| No. Dakota | 25,280 | $267,148 | Montana.. | 867,226 | 30,382,674 | | | |
| So. Dakota. | 67,021 | 2,403,548 | Idaho..... | 1,203,270 | 76,830,746 | Utah..... | 843,219 | 50,114,342 |
| Nebraska.. | 199,815 | 11,547,679 | | | | Nevada .. | 331,177 | 12,390,593 |
| Kansas.... | 28,502 | 842,161 | Wyoming.. | 509,945 | 15,683,997 | Wash'gton. | 395,196 | 39,801,619 |
| Arkansas.. | 143,946 | 18,352,240 | Colorado.. | 1,946,676 | 100,215,136 | Oregon.... | 274,584 | 12,294,191 |
| | | | | | | California.. | 2,329,052 | 319,208,503 |

FARM LANDS WITH ARTIFICIAL DRAINAGE, BY STATES (ACRES).

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Total ..... | 53,024,975 | Ill..... | 11.247,637 | Va..... | 225,068 | Tex..... | 756,263 |
| NEW ENG.: | | Mich..... | 3,156,632 | W. Va..... | 38,464 | MOUNTAIN: | |
| Me..... | 26,302 | Wis..... | 658,411 | N. C..... | 1,066,933 | Mont..... | 51,146 |
| New Hamp. | 11,777 | W. N. CENT.: | | S. C..... | 676,152 | Idaho..... | 64,648 |
| Vt..... | 35,649 | Minn..... | 2,993,034 | Ga..... | 274,688 | Wyo..... | 35,654 |
| Mass..... | 39,022 | Iowa..... | 7,334,404 | Fla..... | 147,940 | Col..... | 127,037 |
| R. I..... | 2,403 | Mo..... | 859,663 | E. S. CENT.: | | N. Mex..... | 47,311 |
| Conn..... | 14,646 | N. Dak..... | 89,054 | Ky ..... | 225,228 | Ariz..... | 9,651 |
| MID. ATL.: | | So. Dak.... | 161,371 | Tenn..... | 254,118 | Utah..... | 74,316 |
| N. Y..... | 1,180,423 | Neb..... | 214,428 | Ala..... | 415,293 | Nev..... | 46,252 |
| N. J..... | 174,260 | Kan..... | 106,985 | Miss..... | 825,878 | PACIFIC: | |
| Pa..... | 318,955 | So. ATL.: | | W. S. CENT.: | | Wash..... | 274,696 |
| E. N. CENT.: | | Delaware... | 185,831 | Ark..... | 497,489 | Ore..... | 229,582 |
| Ohio..... | 7,365,532 | Md..... | 249,799 | La..... | 1,004,935 | Cal..... | 813,960 |
| Ind..... | 8,308,844 | Dist. Col.... | 197 | Okla..... | 107,014 | | |

## LIVE STOCK ON FARMS IN UNITED STATES SINCE 1880.

(By the United States Department of Agriculture.)

| JANUARY 1. | Total Value. | Cattle. | Horses. | Sheep. | Mules. | Swine. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Number.* | *Number.* | *Number.* | *Number.* | *Number.* |
| 1880 | 1,576,917,556 | 33,258,000 | 11,202,000 | 40,766,000 | 1,730,000 | 34,034,100 |
| 1890 | 2,418,766,028 | 52,801,907 | 14,214,000 | 44,336,000 | 2,331,000 | 51,603,000 |
| 1900 | 2,228,123,134 | 43,902,414 | 13,538,000 | 41,883,000 | 2,086,000 | 37,079,000 |
| 1901 | 3,011,254,076 | 62,333,870 | 16,744,723 | 59,756,718 | 2,864,458 | 56,982,142 |
| 1902 | 2,989,170,150 | 61,424,599 | 16,531,224 | 62,039,091 | 2,757,017 | 48,698,890 |
| 1903 | 3,102,515,540 | 61,764,433 | 16,557,373 | 63,964,876 | 2,728,088 | 46,922,624 |
| 1904 | 2,998,247,479 | 61,049,315 | 16,736,059 | 51,630,144 | 2,757,916 | 47,009,367 |
| 1905 | 3,006,580,737 | 61,241,907 | 17,057,702 | 45,170,423 | 2,888,710 | 47,320,511 |
| 1906 | 3,675,389,442 | 66,861,522 | 18,718,578 | 50,631,619 | 3,404,051 | 52,102,847 |
| 1907 | 4,423,697,853 | 72,533,996 | 19,746,583 | 53,240,282 | 3,816,692 | 54,794,439 |
| 1908 | 4,331,230,000 | 71,267,000 | 19,992,000 | 54,631,000 | 3,869,000 | 56,084,000 |
| 1909 | 4,525,259,000 | 71,099,000 | 20,640,000 | 56,084,000 | 4,053,000 | 54,147,000 |
| 1910 | 4,925,173,610 | 69,080,000 | 21,040,000 | 57,216,000 | 4,123,000 | 47,782,000 |
| 1911 | 5,276,438,000 | 60,502,000 | 20,277,000 | 53,633,000 | 4,323,000 | 65,620,000 |
| 1912 | 5,008,327,000 | 57,959,000 | 20,509,000 | 52,362,000 | 4,362,000 | 65,410,000 |
| 1913 | 5,501,783,000 | 56,527,000 | 20,567,000 | 51,482,000 | 4,386,000 | 61,178,000 |
| 1914 | 5,891,229,000 | 56,592,000 | 20,962,000 | 49,719,000 | 4,449,000 | 58,933,000 |
| 1915 | 5,969,253,000 | 58,329,000 | 21,195,000 | 49,958,000 | 4,479,000 | 64,618,000 |
| 1916 | 6,020,670,000 | 61,920,000 | 21,159,000 | 48,625,000 | 4,593,000 | 67,766,000 |
| 1917 | 6,735,612,000 | 64,583,000 | 21,210,000 | 47,616,000 | 4,723,000 | 67,503,000 |
| 1918 | 8,284,198,000 | 67,422,000 | 21,555,000 | 48,603,000 | 4,873,000 | 70,978,000 |
| 1919 | 8,827,894,000 | 68,560,000 | 21,482,000 | 48,866,000 | 4,954,000 | 74,584,000 |
| 1920 | 7,996,362,496 | 66,810,836 | 20,142,455 | 34,984,524 | 5,450,623 | 59,368,167 |
| 1921 | 6,235,560,000 | 66,191,000 | 20,183,000 | 45,067,000 | 4,999,000 | 66,649,000 |
| 1922 | 4,780,000,000 | 65,352,000 | 19,099,000 | 36,048,000 | 5,436,000 | 56,996,000 |

## YEARLY MARKETINGS OF LIVE STOCK.

The combined receipts and shipments of cattle, hogs and sheep at Chicago, Kansas City, Omaha, St. Louis, Sioux City, St. Joseph and St. Paul yearly since 1900 were as follows:

| YEAR. | CATTLE. | | HOGS. | | SHEEP. | |
|---|---|---|---|---|---|---|
| | Receipts. | Shipments | Receipts. | Shipments. | Receipts. | Shipments. |
| 1900 | 7,179,344 | 3,793,308 | 18,573,177 | 5,336,826 | 7,061,466 | 2,500,686 |
| 1901 | 7,708,839 | 3,888,460 | 20,339,864 | 5,772,717 | 7,798,359 | 2,712,866 |
| 1902 | 8,375,408 | 4,292,705 | 17,289,427 | 4,130,675 | 9,177,050 | 3,561,060 |
| 1903 | 8,878,789 | 4,490,748 | 16,780,250 | 4,233,572 | 9,680,692 | 3,983,310 |
| 1904 | 8,690,699 | 4,552,534 | 17,778,827 | 5,254,545 | 9,604,812 | 4,203,834 |
| 1905 | 9,202,083 | 4,964,753 | 18,988,933 | 5,614,306 | 10,572,259 | 4,725,872 |
| 1906 | 9,373,825 | 5,026,689 | 19,233,792 | 5,440,333 | 10,864,437 | 5,046,366 |
| 1907 | 9,590,710 | 5,360,790 | 10,544,617 | 5,993,069 | 9,857,877 | 4,549,000 |
| 1908 | 8,827,360 | 4,936,731 | 22,863,701 | 7,288,408 | 9,833,640 | 4,489,295 |
| 1909 | 9,189,312 | 5,181,446 | 18,420,012 | 6,381,667 | 10,284,858 | 4,172,388 |
| 1910 | 9,116,687 | 5,122,984 | 14,853,472 | 4,628,760 | 12,366,375 | 6,013,215 |
| 1911 | 8,629,109 | 4,805,766 | 19,926,547 | 6,418,246 | 13,521,492 | 5,891,034 |
| 1912 | 8,061,494 | 4,318,648 | 19,771,825 | 6,096,906 | 13,733,980 | 5,369,402 |
| 1913 | 7,904,552 | 4,596,085 | 19,924,331 | 6,414,815 | 14,037,830 | 6,046,260 |
| 1914 | 7,182,239 | 3,933,663 | 18,272,091 | 5,816,069 | 13,272,491 | 5,331,449 |
| 1915 | 7,963,591 | 3,944,152 | 21,031,405 | 6,823,983 | 11,160,246 | 4,370,504 |
| 1916 | 9,319,851 | 4,713,700 | 25,345,802 | 8,264,752 | 11,639,022 | 4,640,615 |
| 1917 | 11,241,038 | 5,676,015 | 20,945,391 | 7,151,995 | 10,017,353 | 4,534,489 |
| 1918 | 12,936,068 | 5,388,838 | 25,461,514 | 7,111,935 | 12,064,416 | 5,749,835 |
| 1919 | 12,151,902 | 5,316,761 | 25,280,243 | 5,941,663 | 14,307,503 | 5,714,471 |
| 1920 | 9,969,911 | 4,581,771 | 22,433,301 | 6,268,630 | 11,117,479 | 4,157,730 |
| 1921 | 8,676,063 | 4,104,494 | 22,080,870 | 6,841,880 | 11,755,676 | 3,610,311 |

## VALUE OF DOMESTIC ANIMALS SLAUGHTERED ON FARMS IN U. S., 1919.

(Includes cattle, sheep and swine: 1919 figures are Census estimates.)

| State. | 1919. | State. | 1919. | State. | 1919. | State. | 1919. |
|---|---|---|---|---|---|---|---|
| U. S. | $3,511,201,281 | Mich. | $75,611,444 | W. Va. | $34,570,832 | Tex. | $196,869,929 |
| Me. | 15,650,871 | Wis. | 103,323,381 | N. C. | 41,578,881 | Mont. | 45,963,076 |
| N. H. | 7,654,968 | Minn. | 104,007,104 | S. C. | 18,014,050 | Idaho. | 30,506,039 |
| Vt. | 13,313,879 | Iowa. | 420,258,381 | Ga. | 38,998,872 | Wyo. | 23,692,144 |
| Mass. | 10,925,051 | Mo. | 270,830,667 | Fla. | 7,973,177 | Col. | 70,621,996 |
| R. I. | 1,295,371 | N. Dak. | 34,909,274 | Ky. | 96,755,268 | N. Mex. | 25,720,270 |
| Conn. | 6,640,764 | S. Dak. | 63,732,797 | Tenn. | 101,013,971 | Ariz. | 10,915,788 |
| N. Y. | 71,043,960 | Neb. | 208,745,788 | Ala. | 29,085,772 | Utah. | 15,566,230 |
| N. J. | 8,664,894 | Kan. | 210,227,965 | Miss. | 29,575,049 | Nev. | 7,723,954 |
| Pa. | 90,527,419 | Del. | 2,401,339 | Ark. | 39,443,340 | Wash. | 23,945,493 |
| Ohio. | 159,387,679 | Md. | 16,816,823 | La. | 12,136,922 | Ore. | 36,193,794 |
| Ind. | 171,058,037 | D. C. | 55,606 | Okla. | 103,785,858 | Cal. | 67,520,004 |
| Ill. | 274,830,637 | Va. | 61,116,468 | | | | |

## NUMBER OF ANIMALS SLAUGHTERED ON FARMS AND RANGES, IN 1919.

Ala., 735,638; Ariz., 26,744; Ark., 673,803; Cal., 176,602; Colo., 151,980; Conn., 43,324; Del. 28,746; Dis. of Col., 560; Fla., 334.147; Ga., 1,185,010, Idaho, 127,222; Ill., 799,946; Ind., 624,190; Iowa. 613,070. Kan., 401,374; Ky., 750,750; La., 351,537; Me., 102,515; Md., 197,821; Mass., 46,277; Mich., 476,249; Minn., 503,219; Miss., 685,851; Mo., 848,198; Mont., 173,936; Neb., 312,535; Nev., 24,111; N. H., 35,165; N. J., 71,644; N. M., 94,816; N. Y., 552,695; N. C., 975,104; N. D. 268,486; Ohio, 821,488; Okla., 479,065; Ore., 182,240; Pa., 862,601; R. I., 5,161; S. C., 450,421; S. D., 199,638; Tenn., 819,176; Tex., 988,948; Utah. 102,739; Vt., 63,890; Va., 684,741; Wash., 208,823; W. Va., 270,938; Wis., 550,832; Wyo., 55,453; total, 19,139,419 (cattle, 1,904,581; sheep and lambs, goats and kids, 434,608; hogs, 16,800,230).

## VALUE OF LIVE-STOCK PRODUCTS OF FARMS BY STATES IN 1919.

(U. S. Census; does not include value of live-stock sold or slaughtered.)

| DIVISION OR STATE. | Total. | Dairy Products. | Chickens and Eggs. | Wool and Mohair. | Honey and Wax. |
|---|---|---|---|---|---|
| GEOGRAPHIC DIVISIONS. | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| United States | 2,667,072,273 | 1,481,462,091 | 1,047,323,170 | 124,006,859 | 14,280,153 |
| NEW ENGLAND: | | | | | |
| Maine | 26,075,219 | 17,772,370 | 7,815,871 | 412,728 | 74,250 |
| New Hampshire | 14,681,368 | 10,224,888 | 4,341,810 | 95,691 | 18,979 |
| Vermont | 31,573,340 | 27,207,813 | 4,038,495 | 250,977 | 76,055 |
| Massachusetts | 33,850,892 | 24,765,522 | 9,004,007 | 56,003 | 25,360 |
| Rhode Island | 5,367,881 | 3,830,881 | 1,526,891 | 8,405 | 1,704 |
| Connecticut | 20,862,330 | 14,923,971 | 5,876,684 | 31,256 | 30,419 |
| MIDDLE ATLANTIC: | | | | | |
| New York | 225,465,739 | 179,695,810 | 42,841,499 | 1,977,598 | 950,832 |
| New Jersey | 31,482,945 | 19,198,718 | 12,200,716 | 32,071 | 51,440 |
| Pennsylvania | 156,012,081 | 99,617,373 | 53,709,243 | 2,239,021 | 446,444 |
| EAST NORTH CENTRAL: | | | | | |
| Ohio | 155,587,919 | 81,148,586 | 64,109,133 | 10,075,214 | 254,986 |
| Indiana | 99,350,023 | 44,072,646 | 52,765,970 | 2,322,127 | 189,280 |
| Illinois | 142,351,262 | 71,998,333 | 67,690,085 | 2,219,526 | 443,318 |
| Michigan | 111,076,235 | 71,074,727 | 34,960,771 | 4,623,778 | 416,959 |
| Wisconsin | 213,022,023 | 180,306,599 | 30,288,326 | 1,693,215 | 733,883 |
| WEST NORTH CENTRAL: | | | | | |
| Minnesota | 113,236,965 | 77,870,358 | 33,438,496 | 1,559,256 | 368,855 |
| Iowa | 130,250,447 | 55,408,744 | 70,212,544 | 3,765,909 | 863,250 |
| Missouri | 105,601,436 | 34,752,845 | 66,271,029 | 4,217,400 | 360,162 |
| North Dakota | 30,979,932 | 19,576,343 | 10,486,386 | 913,551 | 3,652 |
| South Dakota | 35,739,209 | 16,812,347 | 16,050,023 | 2,761,265 | 115,574 |
| Nebraska | 54,612,075 | 23,706,963 | 29,500,431 | 1,230,427 | 174,254 |
| Kansas | 80,322,550 | 34,920,619 | 44,199,844 | 1,020,650 | 181,437 |
| SOUTH ATLANTIC: | | | | | |
| Delaware | 5,778,747 | 2,553,175 | 3,210,157 | 8,949 | 6,466 |
| Maryland | 25,522,172 | 13,407,526 | 11,737,629 | 320,180 | 56,837 |
| District of Columbia | 119,263 | 81,484 | 37,684 | ..... | 95 |
| Virginia | 46,311,494 | 19,167,935 | 25,879,870 | 914,713 | 348,976 |
| West Virginia | 26,332,970 | 11,390,209 | 13,042,688 | 1,593,776 | 306,297 |
| North Carolina | 35,860,056 | 14,912,137 | 20,406,603 | 185,223 | 356,093 |
| South Carolina | 20,354,060 | 7,995,753 | 12,204 752 | 36,117 | 117,438 |
| Georgia | 36,431,316 | 16,757,195 | 19,218,622 | 93,639 | 331,860 |
| Florida | 7,621,885 | 2,361,196 | 4,893,258 | 99,737 | 267,694 |
| EAST SOUTH CENTRAL: | | | | | |
| Kentucky | 50,928,217 | 22,487,710 | 26,210,759 | 1,775,201 | 454,547 |
| Tennessee | 50,960,694 | 20,640,849 | 29,065,336 | 733,980 | 520,529 |
| Alabama | 30,426,993 | 15,229,517 | 14,779,501 | 134,827 | 283,148 |
| Mississippi | 27,327,885 | 11,772,201 | 15,132,499 | 255,351 | 167,834 |
| WEST SOUTH CENTRAL: | | | | | |
| Arkansas | 30,083,950 | 13,445,124 | 16,245,102 | 191,607 | 202,117 |
| Louisiana | 13,613,465 | 4,509,985 | 8,835,402 | 205,988 | 62,090 |
| Oklahoma | 49,887,518 | 20,878,920 | 28,635,007 | 268,724 | 104,867 |
| Texas | 87,761,715 | 32,999,946 | 43,303,622 | 10,421,524 | 1,036,623 |
| MOUNTAIN: | | | | | |
| Montana | 24,809,029 | 7,534,413 | 6,883,213 | 10,231,133 | 160,270 |
| Idaho | 22,225,355 | 8,065,646 | 5,062,276 | 8,753,178 | 344,255 |
| Wyoming | 14,004,109 | 2,143,020 | 2,021,979 | 9,574,466 | 264,644 |
| Colorado | 26,921,292 | 12,674,036 | 8,773,648 | 4,888,684 | 584,924 |
| New Mexico | 8,447,826 | 2,134,987 | 2,102,831 | 4,088,528 | 121,480 |
| Arizona | 6,294,886 | 2,745,329 | 1,699,064 | 1,632,517 | 217,976 |
| Utah | 13,735,823 | 4,809,087 | 2,887,570 | 5,787,419 | 251,747 |
| Nevada | 4,694,649 | 963,966 | 585,698 | 3,010,068 | 134,917 |
| PACIFIC: | | | | | |
| Washington | 44,066,349 | 27,620,231 | 13,779,958 | 2,258,739 | 407,421 |
| Oregon | 35,146,671 | 17,651,409 | 9,018,444 | 8,230,902 | 245,916 |
| California | 103,932,013 | 55,642,649 | 40,341,744 | 6,805,621 | 1,141,999 |

The products shown for 1919 include chicken eggs and chickens only, while the 1909 figures include the products of all kinds of poultry. The figures represent the value of the total production of eggs and chickens, including estimates for farms reporting chickens on hand but no eggs or no chickens raised.

## LOSSES OF FARM ANIMALS IN U. S. FROM DISEASE AND EXPOSURE.

(By the U. S. Dept. of Agriculture.)

| YEAR. | HORSES AND MULES. | | CATTLE. | | | SWINE. | | SHEEP. | | | LAMBS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Losses From Disease. | | Losses From Disease. | Losses From Exposure. | Losses From Disease and Exposure. | Losses From Disease. | | Losses From Disease. | Losses From Exposure. | Losses From Disease and Exposure. | Losses From Disease and Exposure. |
| | Per 1,000. | Total. | Per 1,000. | | Total. | Per 1,000. | Total. | Per 1,000. | | Total. | Per 1,000. |
| 1908 | 17.1 | 342,087 | 18.9 | 12.0 | 2,202,563 | 52.4 | 2,940,350 | 22.5 | 22.9 | 2,477,997 | ..... |
| 1909 | 18.2 | 375,099 | 19.2 | 14.8 | 2,419,276 | 51.0 | 2,761,358 | 26.6 | 28.3 | 3,081,148 | ..... |
| 1910 | 19.9 | 394,650 | 21.0 | 17.6 | 2,385,544 | 45.1 | 2,623,902 | 27.5 | 43.9 | 2,831,519 | 60.4 |
| 1911 | 19.0 | 384,739 | 19.7 | 13.3 | 1,996,152 | 44.8 | 2,937,863 | 25.5 | 23.0 | 1,874,305 | 52.5 |
| 1912 | 21.9 | 544,666 | 21.6 | 21.5 | 2,497,551 | 89.2 | 5,834,456 | 26.7 | 47.0 | 2,803,820 | 81.0 |
| 1913 | 22.6 | 563,734 | 20.5 | 14.1 | 1,956,851 | 110.1 | 6,738,283 | 24.8 | 25.0 | 1,845,847 | 56.5 |
| 1914 | 20.6 | 522,754 | 19.8 | 10.9 | 1,737,387 | 118.9 | 7,004,756 | 21.9 | 22.0 | 1,571,370 | 49.0 |
| 1916 | 17.5 | 450,480 | 19.5 | 10.7 | 1,869,337 | 66.2 | 4,486,097 | 21.6 | 21.7 | 1,512,956 | 52.1 |
| 1917 | 16.9 | 437,150 | 19.4 | 14.6 | 2,197,537 | 48.6 | 3,280,161 | 21.8 | 32.4 | 1,854,715 | 60.2 |
| 1918 | 16.5 | 437,372 | 18.2 | 13.3 | 2,126,625 | 42.1 | 2,986,220 | 19.8 | 19.3 | 1,367,805 | 49.3 |
| 1919 | 15.7 | 415,021 | 17.4 | 15.9 | 2,279,154 | 41.4 | 3,088,185 | 19.7 | 24.4 | 1,549,864 | 47.7 |
| 1920 | 17.8 | 448,104 | 19.5 | 18.5 | 2,549,980 | 49.8 | 2,954,994 | 23.7 | 34.6 | 1,704,317 | 64.7 |
| 1921 | 14.07 | 361,442 | 17.0 | 9.2 | 1,716,303 | 43.0 | 2,411,592 | 23.1 | 15.6 | 1,083,659 | 95.4 |
| 1922 | 15.7 | 385,770 | 17.8 | 13.0 | 2,016,003 | 54.1 | 3,082,259 | 21.5 | 26.4 | 1,293,303 | 62.4 |

## DRESSED MEAT CONSUMPTION PER CAPITA IN THE U. S.

(Estimated by Bureau of Animal Industry, U. S. Department of Agriculture.)

Figures represent pounds. Calendar years; edible offal not included.

| PRODUCT. | 1900 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Beef | 82.7 | 71.8 | 68.4 | 61.7 | 60.8 | 58.9 | 55.6 | 58.1 | 62.0 | 64.7 | 57.2 | 61.1 | 57.7 |
| Veal | 4.9 | 7.4 | 7.0 | 7.0 | 5.0 | 4.4 | 4.3 | 5.3 | 6.5 | 7.6 | 8.2 | 8.9 | 8.0 |
| Mutton and lamb | 8.3 | 6.5 | 7.8 | 8.2 | 7.5 | 7.5 | 6.4 | 6.2 | 4.7 | 4.7 | 5.8 | 5.0 | 6.3 |
| Pork (excl. lard) | 83.4 | 60.3 | 75.1 | 70.6 | 72.5 | 69.9 | 72.0 | 75.7 | 58.4 | 69.8 | 67.1 | 68.9 | 72.8 |
| Goat | .... | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | .... |
| Total meat | 179.3 | 146.2 | 158.4 | 147.7 | 145.9 | 140.9 | 138.5 | 145.5 | 131.8 | 146.9 | 138.4 | 144.0 | 144.8 |
| Lard | 13.4 | 10.5 | 11.8 | 11.4 | 11.7 | 12.1 | 13.6 | 15.1 | 11.7 | 14.1 | 12.4 | 13.1 | 11.3 |
| Total meat and lard | 192.7 | 156.7 | 170.2 | 159.1 | 157.6 | 153.0 | 152.1 | 160.6 | 143.5 | 161.0 | 150.8 | 157.1 | 156.1 |

## ESTIMATED ANNUAL PRODUCTION, EXPORTS, IMPORTS, AND CONSUMPTION OF DRESSED MEAT (EXCLUDING LARD) IN UNITED STATES.

| CALENDAR YEAR. | SLAUGHTER. | | | Exports (Domestic) | Imports (Less Re-Exports). | CONSUMPTION. | |
|---|---|---|---|---|---|---|---|
| | Total. | Federally Inspected. | Other. | | | Total. | Per Capita. |
| | *Million Pounds.* | *Million Pounds.* | *Million Pounds.* | *Million Pounds.* | *Million Pounds.* | *Million Pounds.* | *Pounds.* |
| 1900 | 14,959 | 6,348 | 8,611 | 1,302 | ..... | 13,657 | 179.3 |
| 1907 | 16,002 | 9,399 | 6,603 | 1,367 | ..... | 14,635 | 167.4 |
| 1908 | 16,067 | 9,441 | 6,626 | 848 | ..... | 15,219 | 170.9 |
| 1909 | 15,060 | 8,835 | 6,225 | 637 | ..... | 14,423 | 159.0 |
| 1910 | 13,901 | 8,222 | 5,679 | 412 | ..... | 13,487 | 146.2 |
| 1911 | 15,403 | 9,233 | 6,190 | 534 | ..... | 14,857 | 158.4 |
| 1912 | 14,565 | 8,820 | 5,745 | 486 | ..... | 14,072 | 147.7 |
| 1913 | 14,640 | 8,763 | 5,877 | 507 | 41 | 14,174 | 145.9 |
| 1914 | 14,039 | 8,585 | 5 454 | 475 | 323 | 13,887 | 140.9 |
| 1915 | 14,937 | 9,384 | 5,553 | 1,309 | 129 | 13,757 | 138.5 |
| 1916 | 15,922 | 10,248 | 5,674 | 1,304 | 38 | 14,656 | 145.5 |
| 1917 | 14,740 | 9,906 | 4,834 | 1,322 | 44 | 13,462 | 131.8 |
| 1918 | 17,469 | 11,927 | 5,542 | 2,454 | 210 | 15,225 | 146.9 |
| 1919 | 16,687 | 11,209 | 5,478 | 2,214 | 59 | 14,532 | 138.4 |
| 1920 | 16,135 | 10,538 | 5,597 | 1,093 | 120 | 15,324 | 144.0 |
| 1921 | 16,160 | 10,325 | 5,835 | 820 | 41 | 15,624 | 144.8 |

## NUMBER OF ANIMALS SLAUGHTERED ANNUALLY UNDER FEDERAL INSPECTION, AND ESTIMATED TOTAL NUMBER SLAUGHTERED (INCLUDING FARM) IN U. S.

| CALENDAR YEAR. | | Cattle. | Calves. | Sheep and Lambs. | Goats. | Swine. |
|---|---|---|---|---|---|---|
| 1900: | U. S. Inspected | 5,064,243 | 365,457 | 6,399,950 | ..... | 24,113,134 |
| | Total | 12,254,500 | 4,415,500 | 14,753,000 | ..... | 53,399,500 |
| 1907: | U. S. Inspected | 7,633,365 | 2,024,387 | 10,252,070 | 56,750 | 32,885,377 |
| | Total | 13,469,900 | 6,026,800 | 13,300,600 | 161,000 | 55,737,900 |
| 1908: | U. S. Inspected | 7,279,260 | 1,958,273 | 10 304,663 | 42,981 | 38,643,101 |
| | Total | 12,845,000 | 5,829,000 | 13,368,800 | 121,000 | 65,496,800 |
| 1909: | U. S. Inspected | 7,713,807 | 2,189,017 | 11,350,349 | 100,659 | 31,394,896 |
| | Total | 13,611,422 | 6,515,976 | 14,724,699 | 285,553 | 53,219,568 |
| 1910: | U. S. Inspected | 7,807,600 | 2,238,587 | 11 408,020 | 100,379 | 26,003,463 |
| | Total | 13,540,600 | 6,552,600 | 14,800,200 | 284,800 | 44,073,500 |
| 1911: | U. S. Inspected | 7,619,096 | 2,183,533 | 14,020,446 | 38,891 | 34,232,955 |
| | Total | 12,958,100 | 6,264,500 | 18,189,500 | 110,300 | 58,022,000 |
| 1912: | U. S. Inspected | 7,252,378 | 2,277,946 | 14,979,265 | 72,894 | 33,052,727 |
| | Total | 11,979,000 | 6,348,000 | 19,433,400 | 206,800 | 56,022,000 |
| 1913: | U. S. Inspected | 6,978,361 | 1,902,414 | 14,405,759 | 75,655 | 34,198,585 |
| | Total | 11,477,600 | 5,284,500 | 18,689,400 | 214,600 | 57,973,500 |
| 1914: | U. S. Inspected | 6,756,737 | 1,696,962 | 14,229,343 | 175,906 | 32,531,840 |
| | Total | 11,004,500 | 4,661,400 | 18,460,500 | 499,000 | 55,148,100 |
| 1915: | U. S. Inspected | 7,153,395 | 1,818,702 | 12,211,765 | 153,346 | 38,381,228 |
| | Total | 10,822,100 | 4,639,500 | 15,843,000 | 435,000 | 65,064,000 |
| 1916: | U. S. Inspected | 8,310,458 | 2,367,303 | 11,941,366 | 198,909 | 43,088,708 |
| | Total | 12,026,700 | 5,773,900 | 15,492,200 | 564,300 | 73,035,600 |
| 1917: | U. S. Inspected | 10,350,052 | 3,142,721 | 9,344,994 | 165,660 | 33,909,704 |
| | Total | 13,723,900 | 7,030,700 | 12,123,800 | 470,000 | 57,488,800 |
| 1918: | U. S. Inspected | 11,828,549 | 3,456 393 | 10,319,877 | 137,725 | 41,214,250 |
| | Total | 15,750,449 | 7,767,193 | 13,230,577 | 390,125 | 65,732,459 |
| 1919: | U. S. Inspected | 10,089.984 | 3,969,019 | 12,691,117 | 87,380 | 41,811,830 |
| | Total | 13,635,084 | 9,041,019 | 16,264,817 | 247,480 | 66,680,330 |
| 1920: | U. S. Inspected | 8,608,691 | 4,058,370 | 10,982,180 | 42,477 | 38,018,684 |
| | Total | 12,847,691 | 9,223,370 | 14,079,680 | 120,477 | 60,635,884 |
| 1921: | U. S. Inspected | 7,608,280 | 3,807,568 | 13,004,905 | 12,133 | 38,982,356 |
| | Total | 12,271,280 | 8,654,568 | 16,673,005 | 34,433 | 62,172,856 |

NOTE—U. S. Inspection of horses at slaughter was commenced in September, 1919, the number so inspected to date being: 1919, 433; 1920, 894; 1921, 2,562. A large proportion of this horseflesh is exported.

## PORK PACKING IN THE WEST.

(Figures show number of hogs slaughtered. The average weight of a hog when it goes to slaughter is 230 pounds. The years including and since 1875 end on March 1; before that, calendar years.)

| YEAR. | | YEAR. | | YEAR | | YEAR. | |
|---|---|---|---|---|---|---|---|
| 1845 | 781,372 | 1901 | 23 600,676 | 1908 | 27,980,997 | 1915 | 27,386,462 |
| 1855 | 2,124,404 | 1902 | 25,411,674 | 1909 | 28,996,635 | 1916 | 32,602,333 |
| 1865 | 2,451,019 | 1903 | 20,605,571 | 1910 | 24,162,295 | 1917 | 33,708,874 |
| 1875 | 6,761,670 | 1904 | 22,375,686 | 1911 | 21,755,566 | 1918 | 28,490,633 |
| 1885 | 10,519,108 | 1905 | 23,918,423 | 1912 | 29,918,498 | 1919 | 36,263,733 |
| 1895 | 16,003,645 | 1906 | 25 574,760 | 1913 | 25,583,834 | 1920 | 33,172,444 |
| 1900 | 22,201,000 | 1907 | 25,430,555 | 1914 | 27,621,561 | 1921 | 30,483,884 |

## BEEF, MUTTON, PORK AND LARD EXPORTS FROM THE U. S.

| Year (Fiscal). | Fresh Beef. | Fresh Mutton | Beef, Cured. | Bacon. | Pickled Pork. | Lard. |
|---|---|---|---|---|---|---|
| | *Pounds.* | *Pounds.* | *Barrels.* | *Pounds.* | *Pounds.* | *Pounds.* |
| 1880 | 84,717,194 | 2,335,858 | 45,237,472 | 759,773,182 | 95,949,780 | 374,979,286 |
| 1890 | 173,237,596 | 256,711 | 97,610,529 | 531,899,677 | 79,788,868 | 471,083,598 |
| 1891 | 194,045,638 | 199,395 | 91,908,812 | 514,675,557 | 81,317,364 | 498,343,927 |
| 1892 | 220,544,617 | 105,463 | 71,158,448 | 507,919,830 | 80,366,481 | 460,045,776 |
| 1893 | 206,294,724 | 108,214 | 59,322,833 | 391,758,175 | 52,459,722 | 365,693,501 |
| 1894 | 193,891,824 | 2,197,900 | 63,901,001 | 416,657,577 | 63,575,881 | 557,566,867 |
| 1895 | 191,338,487 | 591,449 | 63,294,998 | 452,549,976 | 58,266,893 | 474,895,274 |
| 1896 | 224,783,225 | 422,950 | 71,223,512 | 425,352,187 | 69,498,373 | 509,534,256 |
| 1897 | 290,395,930 | 361,955 | 68,652,388 | 500,399,448 | 66,768,920 | 568,315,640 |
| 1898 | 274,768,074 | 329,169 | 45,903,531 | 650,108,933 | 88,133,078 | 709,344,045 |
| 1899 | 282,139,974 | 379,110 | 48,144,189 | 562,651,480 | 137,197,200 | 711,259,851 |
| 1900 | 329,078,609 | 773,760 | 49,625,678 | 512,153,729 | 133,199,683 | 661,813,663 |
| 1901 | 351,748,333 | 690,121 | 56,101,917 | 456,122,741 | 138,643,611 | 611,357,514 |
| 1902 | 301,824,473 | 430,351 | 49,451,109 | 383,150,624 | 115,896,275 | 556,840,220 |
| 1903 | 254,795,963 | 6,144,020 | 53,927,252 | 207,336,000 | 95,287,374 | 490,755,821 |
| 1904 | 299,579,671 | 465,255 | 57,853,822 | 249,665,941 | 112,224,861 | 561,302,643 |
| 1905 | 236,486,568 | 640,837 | 56,071,181 | 262,246,635 | 118,887,189 | 610,238,899 |
| 1906 | 268,454,227 | 516,345 | 81,287,581 | 361,210,563 | 141,820,720 | 741,516,886 |
| 1907 | 281,651,502 | 821,998 | 63,698,568 | 250,419,599 | 166,427,409 | 627,559,660 |
| 1908 | 201,154,105 | 1,185,040 | 47,896,087 | 241,189,929 | 149,505,937 | 603,413,770 |
| 1909 | 122,952,671 | 1,498,674 | 44,789,063 | 244,578,674 | 52,354,980 | 528,722,933 |
| 1910 | 75,729,666 | 1,989,472 | 36,871,313 | 152,163,107 | 40,131,599 | 362,927,671 |
| 1911 | 42,510,731 | 2,160,259 | 40,283,749 | 156,675,310 | 45,729,471 | 476,107,857 |
| 1912 | 15,264,320 | 3,595,543 | 38,087,907 | 208,574,208 | 56,321,469 | 532,255,865 |
| 1913 | 7,362,388 | 5,266,019 | 25,856,919 | 200,993,584 | 53,749,023 | 519,025,384 |
| 1914 | 6,394,404 | 4,685,496 | 23,365,974 | 193,964,252 | 45,543,085 | 481,457,792 |
| 1915 | 170,440,934 | 3,877,413 | 31,874,743 | 346,718,227 | 45,655,574 | 475,531,908 |
| 1916 | 231,214,000 | 5,552,918 | 38,114,682 | 579,808,786 | 63,460,713 | 427,011,338 |
| 1917 | 197,177,101 | 3,195,576 | 58,053,667 | 667,151,972 | 46,992,721 | 444,769,540 |
| 1918 | 370,032,900 | 2,098,423 | 54,467,910 | 815,294,424 | 33,221,502 | 392,506,355 |
| 1919 | 332,205,176 | 2,173,994 | 45,065,641 | 1,238,247,321 | 31,503,997 | 724,771,383 |
| 1920 | 153,560,647 | 3,958,131 | 32,383,501 | 803,666,917 | 41,643,119 | 587,224,549 |
| 1921 | 21,084,203 | 6,624,522 | 23,312,856 | 489,298,109 | 33,286,062 | 746,157,356 |
| 1922 | 3,868,580 | 2,502,213 | 26,792,124 | 350,548,952 | 33,516,746 | 812,379,396 |

## MEAT IMPORTS, YEAR ENDING JUNE 30, 1922.

(Values are in parentheses.)

Beef and veal, 28,001,208 lbs. ($2,988,720); pork, 929,615 lbs. ($177,020); canned meats, 240,-
mutton and lamb, 12,854,925 lbs. ($2,044,585); 655 lbs. ($38,225).

## EXPORTS OF BREADSTUFFS, MEATS, ETC.

| Article or Group. | Unit. | 1922 (Fiscal). | | 1921 (Fiscal) | |
|---|---|---|---|---|---|
| | | Quantity. | Value. | Quantity. | Value. |
| Groups. | | | *Dollars.* | | *Dollars.* |
| Breadstuffs | | | 591,295,498 | | 1,082,270,325 |
| Cottonseed oil | Lbs. | 91,614,635 | 8,400,072 | 283,268,025 | 31,392,838 |
| Meat & dairy prod. | | | 168,327,913 | | 234,816,819 |
| Cotton | Bales. | 6,541,841 | 596,378,864 | 5,408,896 | 600,185,629 |
| | Lbs. | 3,358,878,748 | | 2,811,388,710 | |
| Mineral oils | Gals. | 2,800,223,362 | 320,594,871 | 3,026,001,937 | 535,149,567 |
| Principal articles. | | | | | |
| Barley | Bush. | 22,400,393 | 16,614,001 | 20,457,198 | 25,184,082 |
| Corn | Bush. | 176,409,614 | 115,861,864 | 66,911,093 | 60,030,717 |
| Oats | Bush. | 15,767,264 | 7,875,030 | 4,302,346 | 3,731,591 |
| Rice | Lbs. | 290,442,558 | 10,221,640 | 440,855,398 | 19,313,001 |
| Rye | Bush. | 29,903,602 | 33,008,013 | 45,735,052 | 92,734,052 |
| Wheat | Bush. | 208,321,091 | 279,656,478 | 293,267,637 | 689,813,094 |
| Flour | Bbls. | 15,796,819 | 97,386,091 | 16,179,956 | 154,524,355 |
| Beef, canned | Lbs. | 3,738,486 | 970,854 | 10,762,986 | 2,510,713 |
| Oleo oil | Lbs. | 117,174,260 | 12,366,568 | 106,414,800 | 15,211,998 |
| Hams and shoulders | Lbs. | 276,641,786 | 55,217,249 | 172,011,676 | 40,088,562 |
| Lard, compounds | Lbs. | 30,328,176 | 3,515,468 | 42,155,971 | 6,099,914 |
| Milk condensed | Lbs. | 288,628,398 | 31,500,349 | 266,506,031 | 41,044,704 |
| Crude mineral oil | Gals. | 378,975,150 | 16,366,428 | 355,200,756 | 29,137,765 |
| Illuminating oil | Gals. | 807,701,055 | 76,389,046 | 833,194,727 | 129,089,900 |
| Lubricating oil | Gals. | 322,872,204 | 78,109,826 | 333,457,872 | 137,069,081 |
| Gasoline, naphtha | Gals. | 550,478,181 | 117,630,281 | 642,214,254 | 180,614,999 |
| Residuum, fuel oil | Tons. | 15,834 | 354,669 | 37,182 | 582,283 |

## IMPORTS AND EXPORTS OF DAIRY PRODUCTS, YEAR ENDING JUNE 30, 1922.

Imports—Butter, 9,551,292 lbs. ($3,257,498); cream (fresh), $294,218; milk and cream, condensed
cheese, 34,270,604 lbs. ($10,815,835); milk and (sweetened), 79,524,643 lbs. ($11,675,489); milk
cream, fresh, 4,536,379 gal. ($3,131,592); milk, and cream (evaporated), 197,786,194 lbs. ($18,362,-
preserved, condensed, etc., 2,037,005 lbs. ($316,788). 789; milk and cream (powdered), 11,317,561 lbs.
Exports of domestic—Eggs, 33,762,373 doz. ($1,462,071); butter, 7,511,997 lbs. ($2,869,592);
($10,015,576); eggs (dried, etc.), $131,869; milk and cheese, 7,471,452 lbs. ($1,710,963).

## IMPORTS AND EXPORTS OF BREADSTUFFS, YEAR ENDING JUNE 30, 1922.

Imports—Bread and biscuit, 1,593,555 lbs. 730); buckwheat (flour) (Jan. 1 to June 30, 1922),
($310,388); corn, 124,591 bu ($137,029); sago, 2,835,626 lbs. ($99,713); corn (grain), 176,409,614
tapioca, etc., 77,999,051 lbs. ($2,088,994); macaroni, bu. ($115,861,864); corn meal and flour, 776,207
etc., 1,991,933 lbs. ($177,354); oats, 1,733,282 bu. bbls. ($2,634,057); corn, hominy and grits (Jan. 1
($798,692); rice, 73,744,291 lbs. ($2,734,445); wheat, to June 30, 1922), 208,035,871 lbs. ($3,553,338);
14,465,509 bu. ($16,934,665); wheat flour, 619,105 oats (grain), 15,767,264 bu. ($7,875,030); oats (meal
bbls. ($3,559,501); total breadstuffs, $28,365,516. and rolled), 94,490,596 lbs. ($3,457,220); rice (July
Exports of domestic—Barley (grain), 22,400,393 1 to Dec. 31, 1921), 290,442,558 lbs. ($10,221,640);
bu. ($16,614,001); barley (malt), 5,654,195 bu. rye (grain), 29,903,602 bu. ($33,008,013); wheat
($5,824,236); buckwheat (grain) 383,494 bu. ($404,- (grain), 208,321,091 bu. ($279,656,478); wheat
(flour), 15,796,819 bbls. ($97,386,091).

## EXPORTS OF DOMESTIC FLOUR AND GRAIN FROM THE U. S.

| Year (Fiscal). | Wheat Flour. | Wheat. | Corn. | Oats. | Rye. | Barley. |
|---|---|---|---|---|---|---|
| | *Barrels.* | *Bushels.* | *Bushels.* | *Bushels.* | *Bushels.* | *Bushels.* |
| 1899..... | 18,485,690 | 139,432,815 | 174,089,094 | 30,309,778 | 10,140,866 | 2,267,403 |
| 1900..... | 18,699,194 | 101,950,389 | 209,348,284 | 41,369,415 | 2,355,792 | 23,661,663 |
| 1901..... | 18,650,979 | 132,060,667 | 177,817,956 | 37,145,812 | 2,326,882 | 6,293,207 |
| 1902..... | 17,759,203 | 154,856,102 | 26,636,552 | 9,971,139 | 2,697,863 | 8,714,268 |
| 1903..... | 19,716,484 | 114,181,420 | 74,833,237 | 4,613,809 | 5,422,731 | 8,429,141 |
| 1904..... | 16,999,432 | 44,230,169 | 55,858,965 | 1,153,714 | 765,108 | 10,881,627 |
| 1905..... | 8,826,335 | 4,394,402 | 88,807,223 | 5,479,308 | 1,423 | 10,631,655 |
| 1906..... | 13,919,048 | 34,973,291 | 117,718,657 | 46,324,935 | 1,355,528 | 17,729,360 |
| 1907..... | 15,584,667 | 76,569,423 | 83,300,708 | 4,014,042 | 749,455 | 8,238,842 |
| 1908..... | 13,927,247 | 100,371,057 | 52,445,800 | 1,158,622 | 2,419,958 | 4,349,078 |
| 1909..... | 10,521,161 | 66,923,244 | 35,853,412 | 1,510,320 | 1,272,559 | 6,580,393 |
| 1910..... | 9,040,987 | 46,679,876 | 36,802,374 | 1,685,474 | 219,756 | 4,311,556 |
| 1911..... | 10,129,435 | 23,729,302 | 63,761,458 | 2,044,912 | 2,623 | 9,399,348 |
| 1912..... | 11,006,487 | 30,160,212 | 40,038,795 | 2,171,503 | 5,548 | 1,585,242 |
| 1913..... | 11,394,805 | 91,602,374 | 49,064,967 | 33,759,177 | 1,822,962 | 17,536,703 |
| 1914..... | 11,821,461 | 92,393,775 | 9,380,855 | 1,859,949 | 2,222,934 | 6,644,747 |
| 1915..... | 16,182,765 | 259,642,533 | 48,786,551 | 96,809,551 | 12,544,888 | 26,754,522 |
| 1916..... | 15,520,669 | 173,274,015 | 38,217,012 | 95,918,884 | 14,532,437 | 27,473,160 |
| 1917..... | 11,942,778 | 149,831,427 | 64,720,842 | 88,944,401 | 13,260,015 | 16,381,077 |
| 1918..... | 21,879,951 | 34,118,853 | 40,997,827 | 105,837,309 | 11,990,123 | 26,285,378 |
| 1919..... | 24,190,092 | 178,582,673 | 16,687,538 | 96,360,974 | 27,540,188 | 20,457,781 |
| 1920..... | 21,651,961 | 122,430,724 | 14,467,926 | 33,944,740 | 37,463,285 | 26,571,284 |
| 1921..... | 16,179,956 | 293,267,637 | 66,911,093 | 4,302,346 | 45,735,052 | 20,457,198 |
| 1922..... | 15,796,819 | 208,321,091 | 176,409,614 | 15,767,264 | 29,903,602 | 22,400,393 |

## MILK AND BUTTER PRODUCED AND USED IN THE U. S.

(Data and estimates are by the U. S. Dept. of Agriculture.)

The total production of milk in the United States was 98,862,276,000 lbs. in 1921. This shows increase over 1920, when production was 89,658,000,000 lbs. On the basis of production per capita of population this amounted to an increase from 100 gals. (860 lbs.) in 1920 to 107 gals. in 1921.

Milk cows on farms increased 341,000 head during 1921, there being 24,028,000 head on Jan. 1, 1922, compared with 23,594,000 head on Jan. 1, 1921, with an average for the year of 23,811,000 head. In addition, the number of milk cows not on farms was estimated at 1,250,000.

A very great increase in the quantity of creamery butter manufactured occurred during 1921, the total production for the year being 1,054,938,000 lbs., an increase over 1920 of 191,360,000 lbs. The total production of farm and factory butter, exclusive of whey butter, for the year 1921 is estimated to have amounted to 1,705,438,000 lbs., notwithstanding the regular decrease in production of farm butter. This increase of 166,361,000 lbs. in total butter production accounts for the utilization of an additional 3,494,000,000 lbs. of milk during 1921 over the previous year.

Although there was a small decrease in the total production of cheese from 362,431,000 lbs. in 1920 to 355,838,000 lbs. in 1921, the production of whole milk American cheese alone increased from 254,684,000 lbs. to 261,727,000 lbs. during this period.

Condensed and evaporated milk production decreased 113,852,000 lbs. during 1921, dropping from 1,578,015,000 lbs. in 1920 to 1,464,163,000 lbs. Milk powder production also declined from 10,334,000 lbs. in 1920 to 4,243,000 lbs. in 1921.

The increase in the amount of whole milk used for household purposes during 1921, approximating 5,000,000,000 lbs., accounts for the largest share of the total increase over 1920 in the consumption of milk. The average consumption of milk and cream in cities was obtained from reports from 300 cities with a total population of 33,676,563, nearly one-third of the population of the United States. On the basis of this survey, the average quantity of whole milk consumed per person in the cities was estimated at 0.668 of a pint daily, and, in addition, the consumption of cream accounted for the utilization of 0.167 of a pint of milk, making a total equivalent to 0.835 of a pint of whole milk.

Combining the rural and urban consumption, the average per capita consumption of whole milk as milk and cream for household purposes was 1.08 pints daily. This is equal to 49 gals. of milk annually, which is the largest annual per capita consumption on record in this country.

Ice cream production, as indicated by reports from manufacturers, decreased 6% in 1921 compared with 1920. Applying this rate of decrease to the estimated total production of 260,000,000 gals. in 1920, the 1921 production is estimated at 244,000,000 gals.

The average yield of the 25,061,000 milk cows in the United States in 1921 was 3,945 lbs. of milk.

| States. | Milk Prod. | Butter Prod. | States. | Milk Prod. | Butter Prod. |
|---|---|---|---|---|---|
| | *Gallons.* | *Pounds.* | | *Gallons.* | *Pounds.* |
| Alabama | 93,903,677 | 28,490,181 | Nebraska | 168,083,367 | 13,761,085 |
| Arizona | 14,370,333 | 593,446 | Nevada | 6,312,105 | 266,027 |
| Arkansas | 87,623,651 | 25,571,098 | New Hampshire | 42,556,285 | 3,240,368 |
| California | 276,424,216 | 5,757,759 | New Jersey | 70,490,729 | 1,600,789 |
| Colorado | 79,492,631 | 5,775,602 | New Mexico | 12,737,649 | 1,404,138 |
| Connecticut | 54,894,287 | 1,926,127 | New York | 756,045,942 | 24,727,662 |
| Delaware | 11,356,313 | 894,883 | North Carolina | 95,747,638 | 25,551,506 |
| Dist. Col | 512,074 | 6,026 | North Dakota | 138,606,540 | 14,413,180 |
| Florida | 12,155,533 | 1,162,383 | Ohio | 396,317,787 | 30,264,265 |
| Georgia | 101,615,773 | 30,257,153 | Oklahoma | 135,820,769 | 22,214,546 |
| Idaho | 52,365,498 | 4,540,364 | Oregon | 92,844,946 | 4,177,628 |
| Illinois | 370,486,981 | 25,063,897 | Pennsylvania | 421,631,355 | 38,468,607 |
| Indiana | 238,793,861 | 18,344,239 | Rhode Island | 12,099,111 | 174,902 |
| Iowa | 361,426,362 | 25,422,675 | South Carolina | 52,954,637 | 13,846,353 |
| Kansas | 221,454,417 | 17,455,879 | South Dakota | 124,427,638 | 10,267,171 |
| Kentucky | 145,561,464 | 34,080,415 | Tennessee | 130,285,644 | 37,166,063 |
| Louisiana | 32,772,720 | 4,252,318 | Texas | 230,974,353 | 49,405,152 |
| Maine | 77,676,881 | 10,855,560 | Utah | 29,339,512 | 2,876,675 |
| Maryland | 58,754,193 | 6,162,501 | Vermont | 122,095,734 | 3,877,039 |
| Massachusetts | 76,316,309 | 2,019,231 | Virginia | 110,942,113 | 25,476,621 |
| Michigan | 382,822,631 | 25,755,423 | Washington | 140,524,518 | 5,899,678 |
| Minnesota | 475,506,689 | 20,205,076 | West Virginia | 73,690,103 | 17,715,107 |
| Mississippi | 88,191,682 | 20,758,736 | Wisconsin | 858,258,521 | 8,666,037 |
| Missouri | 228,907,721 | 29,470,763 | Wyoming | 14,613,581 | 1,422,822 |
| Montana | 51,251,095 | 5,961,336 | | | |

## AVERAGE PRICES RECEIVED BY PRODUCERS OF THE UNITED STATES.

| JAN. 15. | Hogs. | Beef Cattle. | Veal Calves. | Sheep. | Lambs. | Wool. | Milch Cows. | Horses. | Onions. | Beans. | Clover Seed. | Timothy Seed. | Alfalfa Seed. | Cotton Seed. | Bran. | Cotton Seed Meal. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916..... | 6.32 | 5.85 | 7.67 | 5.52 | 7.29 | 23.3 | 57.79 | 128 | 1.13 | 3.47 | 10.27 | 3.05 | 8.84 | 36 85 | 25.93 | 37 03 |
| 1917..... | 9.16 | 6.86 | 9.15 | 7.33 | 9.59 | 31.8 | 63.92 | 129 | 2.08 | 5.71 | 9.60 | 2.44 | 7.97 | 52.53 | 32.76 | 42 95 |
| 1918..... | 15.26 | 8.33 | 11.16 | 10 55 | 13.83 | 58.1 | 76.54 | 130 | 1.79 | 7.00 | 14.48 | 3.57 | 10 14 | 67.51 | 41 32 | 5.93 |
| 1919..... | 15.69 | 9 65 | 12.39 | 9.68 | 12.71 | 55.2 | 86.10 | 120 | 1.34 | 4 98 | 21.55 | 4.34 | 10.07 | 64.93 | 49.78 | 62.81 |
| 1920..... | 13.36 | 8.99 | 12.89 | 9.34 | 12.91 | 53.3 | 94.42 | 118 | 2.81 | 4.70 | 28.06 | 5.35 | 16.60 | 69 88 | 50.23 | 79.39 |
| 1921..... | 8.72 | 6.32 | 9.34 | 5.30 | 8.44 | 19.6 | 66.82 | 96 | 1.35 | 2.95 | 10.82 | 3.04 | 9 95 | 18.96 | 39.74 | 42.92 |
| 1922..... | 6.89 | 4.75 | 7.23 | 4 57 | 7.33 | 18.0 | 52.83 | 82 | 2.64 | 2.86 | 10.69 | 2.70 | 7.39 | 29.24 | 28.08 | 45.08 |

The figures represent cents per pound, or dollars per 100 pounds, in the cases of hogs, cattle, calves, sheep and lambs; cents per pound as to wool; dollars per head for cows and horses; dollars per bushel as to onions, beans and all seeds but cotton; dollars per ton as to bran and cottonseed meal; cottonseed prices are dollars per ton.

| JAN 1. | Wheat. | Corn. | Oats. | Barley. | Rye. | Buck-wheat. | Pota-toes. | Sweet Pota-toes. | Flax-seed. | Apples. | Hay. | Cotton | Butter. | Eggs. | Chick-ens. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916.. ... | 102.8 | 62.1 | 39.1 | 54.9 | 85.3 | 81.5 | 70.6 | 64.9 | 185.9 | 79.7 | 10.94 | 11.4 | 28.3 | 30.6 | 11.4 |
| 1917..... | 150.3 | 90.0 | 51.4 | 87.1 | 118.5 | 117.2 | 147.3 | 90.1 | 250.7 | 101.1 | 10.86 | 17.1 | 34.0 | 37.7 | 13.9 |
| 1918..... | 201.9 | 134.8 | 73.9 | 126.5 | 170.3 | 162.7 | 121.0 | 117.2 | 310.8 | 128.8 | 18.09 | 28.9 | 43.1 | 46.3 | 17.9 |
| 1919..... | 204.8 | 144.7 | 70.8 | 91.3 | 150.7 | 162.9 | 116.1 | 142.1 | 327.7 | 147.7 | 19.92 | 28.7 | 54.9 | 57.2 | 21.7 |
| 1920..... | 231.8 | 140.4 | 78.2 | 130.2 | 152.3 | 150.7 | 178.6 | 138.2 | 433.6 | 213.8 | 20.55 | 35.9 | 61.3 | 56.9 | 24.1 |
| 1921..... | 149.2 | 66.7 | 45.6 | 64.4 | 124.7 | 125.4 | 105.6 | 113.0 | 163.7 | 118.6 | 16.16 | 11.5 | 49.0 | 61.1 | 20.7 |
| 1922..... | 93.3 | 43.4 | 31.0 | 43.7 | 69.6 | 83.5 | 108.6 | 95.1 | 151.1 | 180.6 | 11.33 | 16.3 | 40.3 | 44.9 | 18.5 |

The figures represent cents a bushel for grains, potatoes, and apples; dollars a ton for flaxseed and hay; cents a lb. for cotton, butter, chickens; cents a doz. for eggs.

## UNITED STATES FARM WAGE AVERAGES BY YEARS.

| YEAR. | By the Month. | | Day Labor, Harvest. | | Day Labor, Not Harvest. | | YEAR. | By the Month. | | Day Labor, Harvest. | | Day Labor, Not Harvest. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | With Board | Witho't Board. | With Board | Witho't Board. | With Board | Witho't Board. | | With Board | Witho't Board. | With Board | Witho t Board. | With Board | Witho t Board. |
| 1894.. | $12.16 | $17.74 | $.93 | $1.13 | $.63 | $.81 | 1914.. | $21.05 | $29.88 | $1.55 | $1.91 | $1.13 | $1.45 |
| 1895.. | 12.02 | 17.69 | .92 | 1.14 | .62 | .81 | 1915.. | 21.26 | 30.15 | 1.56 | 1.92 | 1.13 | 1.47 |
| 1898.. | 13.13 | 19.38 | 1.05 | 1.30 | .72 | .96 | 1916.. | 23.25 | 32.83 | 1.69 | 2.07 | 1.26 | 1.62 |
| 1899.. | 14.07 | 20.23 | 1.12 | 1.37 | .77 | 1.01 | 1917.. | 28.87 | 40.43 | 2.08 | 2.54 | 1.56 | 2.02 |
| 1902.. | 16.40 | 22.14 | 1.34 | 1.53 | .89 | 1.13 | 1918.. | 34.92 | 47.07 | 2.65 | 3.22 | 2.07 | 2.63 |
| 1910.. | 19.21 | 27.50 | 1.45 | 1.82 | 1.06 | 1.38 | 1919.. | 39.82 | 56.29 | 3.15 | 3.83 | 2.45 | 3.12 |
| 1911.. | 20.18 | 28.77 | 1.49 | 1.85 | 1.09 | 1.42 | 1920.. | 46.89 | 64.95 | 3.60 | 4.36 | 2.86 | 3.59 |
| 1912.. | 20.81 | 29.58 | 1.54 | 1.87 | 1.14 | 1.47 | 1921.. | 30.14 | 43.32 | 2.24 | 2.79 | 1.98 | 2.22 |
| 1913.. | 21.38 | 30.31 | 1.57 | 1.94 | 1.16 | 1.50 | | | | | | | |

## AVERAGE RETAIL PRICES OF ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $1, 1913 TO 1921, AND IN JULY, 1922. (Average in U. S.)

| YEAR. | Sirloin Steak. | | Round Steak. | | Rib Roast. | | Chuck Roast. | | Plate Beef. | | Pork Chops. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Average Retail Price. | Amt. for $1. | Average Retail Price. | Amt. for $1. | Average Retail Price. | Amt. for $1. | Average Retail Price. | Amt. for $1. | Average Retail Price. | Amt. for $1. | Average Retail Price. | Amt. for $1. |
| | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* |
| 1913..... | $0.284 | 3.9 | $0.223 | 4.5 | $0.198 | 5.1 | $0.160 | 6.3 | $0.121 | 8.3 | $0.210 | 4.8 |
| 1914..... | .259 | 3.9 | .236 | 4.2 | .204 | 4.9 | .167 | 6.0 | .126 | 7.9 | .220 | 4.5 |
| 1915..... | .257 | 3.9 | .230 | 4.3 | .201 | 5.0 | .161 | 6.2 | .121 | 8.3 | .203 | 4.9 |
| 1916..... | .273 | 3.7 | .245 | 4.1 | .212 | 4.7 | .171 | 5.8 | .128 | 7.8 | .227 | 4.4 |
| 1917..... | .315 | 3.2 | .290 | 3.4 | .249 | 4.0 | .209 | 4.8 | .157 | 6.4 | .319 | 3.1 |
| 1918..... | .389 | 2.6 | .369 | 2.7 | .307 | 3.3 | .266 | 3.8 | .206 | 4.9 | .390 | 2.6 |
| 1919..... | .417 | 2.4 | .389 | 2.6 | .325 | 3.1 | .270 | 3.7 | .202 | 5.0 | .423 | 2.4 |
| 1920..... | .437 | 2.3 | .395 | 2.5 | .332 | 3.0 | .262 | 3.8 | .183 | 5.5 | .423 | 2.4 |
| 1921..... | .388 | 2.6 | .344 | 2.9 | .291 | 3.4 | .212 | 4.7 | .143 | 7.0 | .349 | 2.9 |
| 1922; July..... | .392 | 2.6 | .342 | 2.9 | .286 | 3.5 | .203 | 4.9 | .128 | 7.8 | .344 | 2.9 |

| YEAR. | Bacon. | | Ham. | | Lard. | | Hens. | | Eggs. | | Butter. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* | *Pr.doz.* | *Dozs.* | *Per lb.* | *Lbs.* |
| 1913..... | $0.270 | 3.7 | $0.269 | 3.7 | $0.158 | 6.3 | $0.213 | 4.7 | $0.345 | 2.9 | $0.383 | 2.6 |
| 1914..... | .275 | 3.6 | .273 | 3.7 | .156 | 6.4 | .218 | 4.6 | .353 | 2.8 | .362 | 2.8 |
| 1915..... | .269 | 3.7 | .261 | 3.8 | .148 | 6.8 | .208 | 4.8 | .341 | 2.9 | .358 | 2.8 |
| 1916..... | .287 | 3.5 | .294 | 3.4 | .175 | 5.7 | .236 | 4.2 | .375 | 2.7 | .394 | 2.5 |
| 1917..... | .410 | 2.4 | .382 | 2.6 | .276 | 3.6 | .286 | 3.5 | .481 | 2.1 | .487 | 2.1 |
| 1918..... | .529 | 1.9 | .479 | 2.1 | .333 | 3.0 | .377 | 2.7 | .569 | 1.8 | .577 | 1.7 |
| 1919..... | .554 | 1.8 | .534 | 1.9 | .369 | 2.7 | .411 | 2.4 | .628 | 1.6 | .678 | 1.5 |
| 1920..... | .523 | 1.9 | .555 | 1.8 | .295 | 3.4 | .447 | 2.2 | .681 | 1.5 | .701 | 1.4 |
| 1921..... | .427 | 2.3 | .488 | 2.0 | .180 | 5.6 | .397 | 2.5 | .509 | 2.0 | .517 | 1.9 |
| 1922; July..... | .406 | 2.5 | .522 | 1.9 | .172 | 5.8 | .357 | 2.8 | .360 | 2.8 | .457 | 2.2 |

| YEAR. | Cheese. | | Milk. | | Bread. | | Flour. | | Corn Meal. | | Rice. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Per lb.* | *Lbs.* | *Per qt.* | *Qts.* | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* | *Per lb.* | *Lbs.* |
| 1913..... | $0.221 | 4.5 | $0.089 | 11.2 | $0.056 | 17.9 | $0.033 | 30.3 | $0.030 | 33.3 | $0.087 | 11.5 |
| 1914..... | .229 | 4.4 | .089 | 11.2 | .063 | 15.9 | .034 | 29.4 | .032 | 31.3 | .088 | 11.4 |
| 1915..... | .233 | 4.3 | .088 | 11.4 | .070 | 14.3 | .042 | 23.8 | .033 | 30.3 | .091 | 11.0 |
| 1916..... | .258 | 3.9 | .091 | 11.0 | .073 | 13.7 | .044 | 22.7 | .034 | 29.4 | .091 | 11 0 |
| 1917..... | .332 | 3.0 | .112 | 9.0 | .092 | 10.9 | .070 | 14.3 | .058 | 17.2 | .104 | 9.6 |
| 1918..... | .359 | 2.8 | .139 | 7.2 | .098 | 10.2 | .067 | 14.9 | .068 | 14.7 | .129 | 7 8 |
| 1919..... | .426 | 2.3 | .155 | 6.5 | .100 | 10.0 | .072 | 13.9 | .064 | 15.6 | .151 | 6.6 |
| 1920..... | .416 | 2.4 | .167 | 6.0 | .115 | 8.7 | .081 | 12.3 | .065 | 15.4 | .174 | 5.7 |
| 1921..... | .340 | 2.9 | .146 | 6.8 | .099 | 10.1 | .058 | 17.2 | .045 | 22.2 | .095 | 10.5 |
| 1922; July..... | .315 | 3.2 | .128 | 7.8 | .088 | 11.4 | .052 | 19.2 | .039 | 25.6 | .096 | 10.4 |

## VALUE OF FARM CROPS BY STATES IN 1919.

(U. S. Census does not include products of forests, nurseries, and greenhouses.)

| DIVISION AND STATE. | Total. | Cereals. | Hay and Forage. | Vegetables, Incl. Potatoes. | All Other. |
|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| United States | 14,755,364,894 | 6,941,257,254 | 2,523,050,224 | 1,302,199,688 | 3,988,857,728 |
| NEW ENGLAND: | | | | | |
| Maine | 100,152,324 | 5,616,507 | 29,568,372 | 57,681,901 | 7,285,544 |
| New Hampshire | 23,509,665 | 1,456,628 | 13,616,378 | 5,228,489 | 3,208,170 |
| Vermont | 47,999,600 | 5,171,758 | 29,581,464 | 7,387,254 | 5,859,124 |
| Massachusetts | 53,700,925 | 3,411,343 | 20,149,137 | 15,348,069 | 14,792,376 |
| Rhode Island | 5,340,378 | 665,745 | 2,319,136 | 1,480,326 | 875,171 |
| Connecticut | 44,472,644 | 4,457,809 | 13,711,567 | 7,218,194 | 19,085,074 |
| MIDDLE ATLANTIC: | | | | | |
| New York | 417,046,864 | 82,524,839 | 169,494,524 | 104,070,460 | 60,957,041 |
| New Jersey | 87,484,185 | 20,902,859 | 14,017,095 | 40,669,147 | 11,895,085 |
| Pennsylvania | 409,968,877 | 187,178,692 | 115,341,367 | 73,626,686 | 33,822,132 |
| EAST NORTH CENTRAL: | | | | | |
| Ohio | 607,037,562 | 391,834,355 | 130,187,929 | 43,365,158 | 41,650,120 |
| Indiana | 497,229,719 | 378,981,813 | 79,874,640 | 21,254,878 | 17,118,388 |
| Illinois | 864,737,833 | 684,753,430 | 120,790,711 | 31,351,407 | 27,842,285 |
| Michigan | 404,014,810 | 170,897,885 | 105,280,992 | 65,096,550 | 62,739,383 |
| Wisconsin | 445,347,868 | 170,196,910 | 164,993,480 | 77,613,026 | 32,544,452 |
| WEST NORTH CENTRAL: | | | | | |
| Minnesota | 506,020,233 | 302,729,120 | 115,665,984 | 68,912,550 | 18,712,579 |
| Iowa | 890,391,299 | 696,022,846 | 146,959,888 | 28,305,846 | 19,102,719 |
| Missouri | 559,047,854 | 394,195,226 | 95,897,050 | 30,556,949 | 38,398,629 |
| North Dakota | 301,782,935 | 215,764,634 | 56,555,024 | 13,725,227 | 15,738,050 |
| South Dakota | 311,006,809 | 220,890,085 | 71,988,845 | 10,700,773 | 7,427,106 |
| Nebraska | 519,729,771 | 395,917,589 | 96,965,224 | 17,040,475 | 9,806,483 |
| Kansas | 588,923,248 | 457,902,638 | 105,123,767 | 15,786,842 | 10,110,001 |
| SOUTH ATLANTIC: | | | | | |
| Delaware | 23,058,906 | 9,638,010 | 4,366,174 | 6,271,714 | 2,783,008 |
| Maryland | 109,858,608 | 55,845,785 | 16,245,825 | 25,419,167 | 12,347,831 |
| District of Columbia | 307,614 | 26,958 | 39,004 | 227,882 | 13,770 |
| Virginia | 292,824,260 | 108,723,914 | 41,847,594 | 55,400,097 | 86,852,655 |
| West Virginia | 96,537,459 | 42,447,028 | 23,746,574 | 16,715,867 | 13,627,990 |
| North Carolina | 503,229,313 | 94,616,625 | 18,966,611 | 35,784,948 | 353,861,129 |
| South Carolina | 437,121,837 | 61,401,182 | 11,778,637 | 23,374,542 | 340,567,476 |
| Georgia | 540,613,626 | 96,516,194 | 17,284,086 | 31,815,857 | 394,997,489 |
| Florida | 80,256,806 | 14,528,809 | 2,510,772 | 24,937,211 | 38,280,014 |
| E. SOUTH CENTRAL: | | | | | |
| Kentucky | 347,338,888 | 151,792,740 | 43,399,964 | 26,163,576 | 125,982,608 |
| Tennessee | 318,285,307 | 144,778,157 | 49,649,657 | 27,947,250 | 95,910,243 |
| Alabama | 304,348,638 | 82,675,266 | 13,938,036 | 28,239,206 | 179,496,130 |
| Mississippi | 336,207,156 | 71,484,048 | 14,744,951 | 26,711,190 | 223,266,967 |
| W. SOUTH CENTRAL: | | | | | |
| Arkansas | 340,813,256 | 86,996,422 | 22,760,223 | 23,635,595 | 207,421,016 |
| Louisiana | 206,182,548 | 80,166,279 | 7,083,068 | 19,297,120 | 99,636,081 |
| Oklahoma | 550,084,742 | 276,229,521 | 50,072,900 | 17,516,349 | 206,265,972 |
| Texas | 1,071,542,103 | 332,571,641 | 73,324,319 | 39,187,581 | 626,458,562 |
| MOUNTAIN: | | | | | |
| Montana | 69,975,185 | 22,432,106 | 36,115,771 | 5,982,389 | 5,444,919 |
| Idaho | 126,495,111 | 43,155,745 | 50,802,765 | 15,677,765 | 16,858,836 |
| Wyoming | 30,270,630 | 5,412,775 | 20,612,504 | 2,727,416 | 1,517,935 |
| Colorado | 181,065,239 | 63,380,214 | 60,769,080 | 24,804,225 | 32,111,720 |
| New Mexico | 40,619,634 | 18,220,404 | 12,852,751 | 1,684,129 | 7,862,350 |
| Arizona | 42,481,230 | 5,464,931 | 10,658,211 | 1,794,699 | 24,563,389 |
| Utah | 58,037,057 | 12,388,557 | 24,759,397 | 5,615,888 | 15,303,225 |
| Nevada | 13,980,303 | 1,454,350 | 10,964,159 | 1,384,421 | 177,373 |
| PACIFIC: | | | | | |
| Washington | 227,212,008 | 104,886,261 | 47,717,065 | 18,322,982 | 56,285,700 |
| Oregon | 131,884,639 | 53,980,152 | 41,835,706 | 11,762,494 | 24,306,287 |
| California | 589,757,377 | 108,570,469 | 96,121,846 | 47,377,921 | 337,687,141 |

Vegetables include potatoes and sweet potatoes. Hay and forage include $206,934,650 of corn cut for forage.

The 1919 figures include the value of corn cut for forage, which crop was not reported to any extent in 1909. The value of corn cut for forage in the United States in 1919 was $206,934,650, or 8.2 per cent. of the total value of hay and forage.

**Forest Products of Farms**—Value of in 1919: Sold, or cut and held for sale, $217,716,046; used on farm, $176,605,782.

**Nursery and Greenhouse Products**—Value of in 1919: Nursery, $20,434,389; greenhouse, $77,380,230, of which $61,892,352 was from flowers and flowering plants, and $15,487,878 from vegetables and vegetable plants.

In New York State, nursery products sold for $2,310,253; greenhouse products for $8,689,325.

### INCREASE OF VALUE IN FARM CROPS.

The total value of farm crops harvested in 1919 (excluding forest products and nursery and greenhouse products) was $14,755,364,894, as against $5,231,850,683 in 1909. These figures represent an increase of $9,523,514,211, or 182 per cent., for the decade. This increase in the value of farm crops is due mainly to the fact that the prices of crops were unusually high in the year 1919. A tabulation of the quantities of all the important crops harvested in 1919, with values computed on the basis of 1909 prices, indicates an increase of 8.6 per cent. So much of the increase in value, therefore, may be attributed to increased production and the remainder to higher prices.

### VALUE OF FARM CROPS IN 1909.

(Figures represent dollars.)

Cereals, total, 2,655,539,714; corn, 1,438,553,919; wheat, 657,656,801; oats, 414,697,422; other cereals, 154,631,572.

Hay and forage, excluding corn cut for forage, 826,401,175.

Vegetables, total, 418,110,154. Potatoes (white), 166,423,910; sweet potatoes and yams, 35,429,176; other vegetables, 216,257,068.

Tobacco, 704,302,856.

Cotton (including cottonseed), 824,696,287.

All other crops, 392,800,497.

Total of all crops, 5,231,850,683.

## WHEAT AND CORN CROPS IN THE UNITED STATES.

| Year. (Cal.) | Wheat. | | | Corn. | | |
|---|---|---|---|---|---|---|
| | Acres. | Bushels | Dollars. | Acres. | Bushels. | Dollars. |
| 1900 | 42,495,000 | 522.230,000 | 323,515,000 | 83,321,000 | 2,105.103,000 | 751.220,000 |
| 1901 | 49,896,000 | 748.460,000 | 467,360,000 | 91,350,000 | 1,522.520,000 | 921.556,000 |
| 1902 | 46,202,000 | 670,063,000 | 422,224,000 | 94,044,000 | 2.523,648,000 | 1,017.017,000 |
| 1903 | 49,465,000 | 637,822,000 | 443,025,000 | 88,092,000 | 2.244,177,000 | 952,869,000 |
| 1904 | 44,075.000 | 552,400,000 | 510,490,000 | 92,232,000 | 2,467,481,000 | 1,087,461,000 |
| 1905 | 47,854,000 | 692,979,000 | 518,373,000 | 94,011,000 | 2,707 994,000 | 1,116,697.000 |
| 1906 | 47 306,000 | 735,261,000 | 490,333,000 | 96.738,000 | 2,927,416,000 | 1,166.626.000 |
| 1907 | 45.211,000 | 634,087,000 | 554,437,000 | 99,931,000 | 2,592,320,000 | 1,336 901.000 |
| 1908 | 47,557.000 | 664,602,000 | 616,826,000 | 101.788,000 | 2,668,651,000 | 1,616.145,000 |
| 1909 | 44,261,000 | 683,366,000 | 673,659,000 | 98,383,000 | 2,552,190,000 | 1,477,223,000 |
| 1910 | 45,681,000 | 635,121,000 | 561,051,000 | 104,035,000 | 2,886,260,000 | 1,384,817,000 |
| 1911 | 49,543,000 | 621,338,000 | 543,063,000 | 105,825.000 | 2,531,488.000 | 1,565.258,000 |
| 1912 | 45,814,000 | 730,267,000 | 555,280,000 | 107,083,000 | 3,124,746,000 | 1,520,454,000 |
| 1913 | 50,184,000 | 763,380,000 | 610,122,000 | 105,820,000 | 2,446,988,000 | 1,692,092.000 |
| 1914 | 53,541,000 | 891,017,000 | 878,680,000 | 103,435,000 | 2,672,804,000 | 1,722,070,000 |
| 1915 | 59,898,000 | 1,025,000,000 | 930,302,000 | 106,197,000 | 2,994,793,000 | 1,722,680,000 |
| 1916 | 52,785.000 | 636,616,000 | 1,025,765,000 | 105,954,000 | 2,566,927,000 | 2,295,783.000 |
| 1917 | 45,089,000 | 636,655,000 | 1,278,112,000 | 116,730,000 | 3,065,233,000 | 3,920,228,000 |
| 1918 | 59,181,000 | 921,438,000 | 1,881,826,000 | 104,467,000 | 2,502,665,000 | 3,416,240,000 |
| 1919 | 73,156,967 | 951,331,017 | 2,074,078,801 | 87,666,910 | 2,355,593,173 | 3,507,797,102 |
| 1920 | 61,143,000 | 833,027,000 | 1,197,263,000 | 101,699,000 | 3,208.584,000 | 2,150,332,000 |
| 1921 | 62,408,000 | 794,893,000 | 737,068,000 | 103,850,000 | 3,080,372,000 | 1,302,670,000 |
| 1922 | 56,770,000 | 818,000,000 | 720,600,000 | 103,234,000 | 2,875,000,000 | 1,801,900,000 |

The 1922 wheat and corn figures are September estimates of the U. S. Dept. of Agriculture.
Winter wheat production in 1921 was 587,032,000 bushels; spring wheat, 207,861,000 bushels.
It is estimated that the ear worm, in 1921, damaged 175,612,000 bushels of corn.

## YIELDS OF OATS AND RYE IN THE UNITED STATES.

| Year. (Cal.) | Oats. | | | Rye. | | |
|---|---|---|---|---|---|---|
| | Acres. | Bushels. | Dollars. | Acres. | Bushels. | Dollars. |
| 1900 | 27,365,000 | 809,126,000 | 208,669,000 | 1,591,000 | 23,996,000 | 12,295,000 |
| 1901 | 28,541,000 | 736,809,000 | 293,659,000 | 1,988,000 | 30,345,000 | 16,910,000 |
| 1902 | 28,653,000 | 987,843,000 | 303,585,000 | 1,979,000 | 33,631,000 | 17,081,000 |
| 1903 | 27,638,000 | 784,094,000 | 267,662,000 | 1,907,000 | 29,363,000 | 15,994,000 |
| 1904 | 27,843,000 | 894,596,000 | 279,900,000 | 1,793,000 | 27,242,000 | 18,748,000 |
| 1905 | 28,047,000 | 953,216,000 | 277,048,000 | 1,730.000 | 28,486,000 | 17,414,000 |
| 1906 | 30,959,000 | 964,905,000 | 306,293,000 | 2,002.000 | 33.375.000 | 19,671,000 |
| 1907 | 31,837,000 | 754,443,000 | 334,568,000 | 1,926,000 | 31,566.000 | 23,068,000 |
| 1908 | 32,344,000 | 807,156,000 | 381,171,000 | 1,948.000 | 31,851.000 | 23,455,000 |
| 1909 | 35,159,000 | 1,007,143,000 | 405,121,000 | 2,196,000 | 29,520,000 | 21,163,000 |
| 1910 | 37,548,000 | 1,186,341,000 | 408,388,000 | 2,185,000 | 34,897,000 | 24,953,000 |
| 1911 | 37,763,000 | 922,298,000 | 414,663,000 | 2,127,000 | 33,119,000 | 27,557,000 |
| 1912 | 37,917,000 | 1,418,337,000 | 452,469,000 | 2,117,000 | 35,664,000 | 23,636,000 |
| 1913 | 38,399,000 | 1,121,768,000 | 439,596,000 | 2,557,000 | 41,381,000 | 26,220,000 |
| 1914 | 38,442,000 | 1,141,060,000 | 499,431,000 | 2,541,000 | 42,779,000 | 37,018,000 |
| 1915 | 40,996,000 | 1,549,030,000 | 559,506,000 | 3,129,000 | 54,050,000 | 45,083,000 |
| 1916 | 41,539,000 | 1,251,837,000 | 656,179,000 | 3,213,000 | 48,862,000 | 59,676,000 |
| 1917 | 43,553,000 | 1,592,740,000 | 1,061,474,000 | 4,317,000 | 62,933,000 | 104,447,000 |
| 1918 | 44,349,000 | 1,538,124,000 | 1,090,322,000 | 6,391,000 | 91,041,000 | 138,038,000 |
| 1919 | 37,842,925 | 1,055,095,513 | 855,255,468 | 7,682,708 | 75,774,308 | 119,041,000 |
| 1920 | 42,491,000 | 1,496,281,000 | 688,311,000 | 4,409,000 | 60,490,000 | 76,693,000 |
| 1921 | 44,826,000 | 1,060,737,000 | 321,540,000 | 4,228,000 | 57,918,000 | 40,680,000 |
| 1922 | 41,822,000 | 1,255,000,000 | 404,100,000 | 5,148,000 | 79,600,000 | 50,300,000 |

The 1922 oats and rye figures are September estimates of the U. S. Dept. of Agriculture.

## BARLEY AND WHITE POTATO CROPS IN THE UNITED STATES.

| Year. (Cal.) | Barley. | | | Potatoes. | | |
|---|---|---|---|---|---|---|
| | Acres. | Bushels. | Dollars. | Acres. | Bushels. | Dollars. |
| 1900 | 2.894,000 | 58,926,000 | 24,075,000 | 2.611,000 | 210.927,000 | 90,811,000 |
| 1901 | 4,296,000 | 109,933,000 | 49,705,000 | 2,864,000 | 187,598,000 | 143,979,000 |
| 1902 | 4,661,000 | 134,954,000 | 61,899,000 | 2,966,000 | 284,633,000 | 134,111,000 |
| 1903 | 4,993,000 | 131,861,000 | 60,166,000 | 2,917,000 | 247.128,000 | 151,638,000 |
| 1904 | 5,146,000 | 139,749,000 | 58,652,000 | 3,016,000 | 332.830,000 | 150,673,000 |
| 1905 | 5,096,000 | 136,551,000 | 54,993,000 | 2,997,000 | 260,741,000 | 160,821,000 |
| 1906 | 6,324,000 | 178,916,000 | 74,236,000 | 3,013,000 | 308.038,000 | 157,547,000 |
| 1907 | 6,448,000 | 153,597,000 | 102,290,000 | 3,128,000 | 298,262,000 | 184,184,000 |
| 1908 | 6,646,000 | 166,756,000 | 92,442,000 | 3,257,000 | 278,985,000 | 197,039,000 |
| 1909 | 7,699,000 | 173,344,000 | 93,539,000 | 3,669,000 | 389,195,000 | 210,662,000 |
| 1910 | 7,743,000 | 173,832,000 | 100,426,000 | 3,720,000 | 349,032,000 | 194,566,000 |
| 1911 | 7,627,000 | 160,240,000 | 139,182,000 | 3,619,000 | 292,737,000 | 233,778,000 |
| 1912 | 7,530,000 | 223,824,000 | 112,957,000 | 3,711,000 | 420,647,000 | 212,550,000 |
| 1913 | 7,499,000 | 178,189,000 | 95,731,000 | 3,668,000 | 331,525,000 | 227,903,000 |
| 1914 | 7,565,000 | 194,953,000 | 105,903,000 | 3,711,000 | 409,921,000 | 199,460,000 |
| 1915 | 7,148,000 | 228,851,000 | 118,172,000 | 3,734,000 | 359,721,000 | 221,992,000 |
| 1916 | 7,757,000 | 182,309,000 | 160,646,000 | 3,550,000 | 286,953,000 | 417,063,000 |
| 1917 | 8,933,000 | 211,759,000 | 240,758,000 | 4,384,000 | 442,108,000 | 547,774,000 |
| 1918 | 9,740,000 | 256,225,000 | 234,942,000 | 4,295,000 | 411,860,000 | 491,527,000 |
| 1919 | 6,474,462 | 122,060,377 | 151,419,000 | 3,258,192 | 290,754,580 | 640,192,621 |
| 1920 | 7,600,000 | 189,332,000 | 135,083,000 | 3,657,000 | 403,296,000 | 461,778,000 |
| 1921 | 7,240,000 | 151,181,000 | 63,788,000 | 3,815,000 | 346,823,000 | 385,192,000 |
| 1922 | 7,550,000 | 194,000,000 | 88,500,000 | 4,228,000 | 438,000,000 | 385,400,000 |

The 1922 barley and potato figures are September estimates of the U. S. Dept. of Agriculture.
Sweet potato production in 1921 was 98,660,000 bushels; flaxseed, 8,112,000 bushels.

## COTTON STATISTICS.

RAW COTTON PRODUCTION IN U. S. (EXCL. LINTERS): ALSO EXPORTS AND IMPORTS.

| Year. | Produced. | Aver. Value a Lb. | Exported. | Imported. | Year. | Produced. | Aver. Value a Lb. | Exported. | Imported. |
|---|---|---|---|---|---|---|---|---|---|
| | *500-lb. bales* | *Cents.* | *Pounds.* | *Pounds.* | | *500-lb. bales* | *Cents.* | *Pounds.* | *Pounds.* |
| 1800.. | 73,222 | 44.0 | 17,789,803 | 4,239,987 | 1906.. | 13,273,809 | 11.5 | 3,634,045,170 | 70,963,633 |
| 1810.. | 177,824 | 15.5 | 93,261,462 | 345,223 | 1907.. | 11,107,179 | 12.1 | 4,518,217,220 | 104,791,784 |
| 1820.. | 334,728 | 14.3 | 127,860,152 | ..... | 1908.. | 13,241,799 | 10.6 | 3,816,998,963 | 71,022,855 |
| 1830.. | 732,218 | 9.7 | 298,459,102 | 415,307 | 1909.. | 10,004,949 | 12.7 | 4,447,985,202 | 86,518,024 |
| 1840.. | 1,347,640 | 9.5 | 743,941,061 | 2,774,722 | 1910.. | 11,608,616 | 15.1 | 3,206,708,226 | 86,037,691 |
| 1850.. | 2,136,083 | 12.1 | 635,381,604 | 269,114 | 1911.. | 15,692,701 | 13.0 | 4,033,940,915 | 113,768,313 |
| 1860.. | 3,841,416 | 13.0 | 1,767,686,338 | 2,005,529 | 1912.. | 13,703,421 | 11.5 | 5,535,125,429 | 109,780,073 |
| 1870.. | 4,024,527 | 17.0 | 958,558,523 | 1,698,133 | 1913.. | 14,156,486 | 12.8 | 4,562,295,675 | 121,852,016 |
| 1880.. | 6,356,998 | 11.3 | 1,822,061,114 | 3,547,792 | 1914.. | 16,134,930 | 11.1 | 4,760,940,538 | 123,346,899 |
| 1890.. | 8,562,089 | 8.6 | 2,471,799,853 | 8,606,049 | 1915.. | 11,191,820 | 10.1 | 4,403,578,499 | 185,204,579 |
| 1900.. | 10,123,027 | 9.3 | 3,100,583,188 | 67,398,521 | 1916.. | 11,449,930 | 14.5 | 3,084,070,125 | 232,801,062 |
| 1901.. | 9,509,745 | 8.1 | 3,330,890,448 | 46,631,283 | 1917.. | 11,302,375 | 23.5 | 3,088,080,786 | 147,061,635 |
| 1902.. | 10,630,945 | 8.2 | 3,500,778,763 | 98,715,680 | 1918.. | 12,040,532 | 31.7 | 2,320,511,655 | 103,325,647 |
| 1903.. | 9,851,129 | 12.2 | 3,543,043,022 | 74,874,426 | 1919.. | 11,420,763 | 32.3 | 3,367,677,985 | 175,358,368 |
| 1904.. | 13,438,012 | 8.7 | 3,063,192,760 | 48,840,590 | 1920.. | 13,439,603 | 33.8 | 3,179,313,336 | 299,994,378 |
| 1905.. | 10,575,017 | 9.8 | 4,304,848,903 | 60,508,598 | 1921.. | 7,953,641 | 35.7 | 3,339,113,489 | 138,948,612 |

Of the 1921 cotton crop, 2,198,158 bales (500-lbs.) were produced in Texas; 813,014 in Mississippi; 796,936 in Arkansas; 787,084 in Georgia; 776,222 in North Carolina; 754,560 in South Carolina; 580,222 in Alabama; 481,286 in Oklahoma; 301,950 in Tennessee; 278,858 in Louisiana; 69,931 in Missouri; 45,323 in Arizona; 34,109 in California; 16,368 in Virginia; 10,905 in Florida; and 8,715 in other States, including Kentucky and New Mexico, and the linter production of Arizona, California, Florida, Illinois, and Missouri.

In 1921 the cotton mills in the United States consumed 5,408,979 bales of 500 lbs. of which the Southern mills used 3,151,954 bales.

There are over 36,000,000 active cotton spindles in mills in the United States.

Production of cotton seed oil in 1921 was 123,815,000 gallons; cake and meal, 1,352,000 short tons.

Loss of cotton, due to boll weevil insects in the fields, in 1921 was 6,277,000 bales.

## WOOL STATISTICS OF THE UNITED STATES.

| Year (Fiscal.) | Production. | Exports of Domestic. | Domestic Retained for Consumpt'n. | Imports. | Exports of Foreign. | Foreign Retained for Consumpt'n. |
|---|---|---|---|---|---|---|
| | *Pounds.* | *Pounds.* | *Pounds.* | *Pounds.* | *Pounds.* | *Pounds.* |
| 1900 | 288,636,621 | 2,200,309 | 286,436,312 | 155,928,455 | 5,702,251 | 150,226,204 |
| 1901 | 302,502,328 | 199,565 | 302,302,763 | 103,583,505 | 3,590,502 | 99,993,003 |
| 1902 | 316,341,032 | 123,278 | 316,217,754 | 166,576,966 | 3,104,663 | 163,472,303 |
| 1903 | 287,450,000 | 518,919 | 286,931,081 | 177,137,796 | 2,992,995 | 174,144,801 |
| 1904 | 291,783,032 | 319,750 | 291,463,282 | 173,742,834 | 2,863,053 | 170,879,781 |
| 1905 | 295,488,438 | 123,951 | 295,364,487 | 249,135,746 | 2,437,697 | 246,698,049 |
| 1906 | 298,915,130 | 192,481 | 298,722,649 | 201,688,668 | 5,450,378 | 196,238,290 |
| 1907 | 298,294,750 | 214,840 | 298,079,910 | 203,847,545 | 3,231,908 | 200,615,637 |
| 1908 | 311,138,321 | 182,458 | 310,955,863 | 125,980,524 | 5,684,357 | 120,296,167 |
| 1909 | 328,110,749 | 28,376 | 328,082,373 | 266,409,304 | 3,495,599 | 262,913,705 |
| 1910 | 321,362,750 | 47,520 | 321,315,230 | 263,928,232 | 4,007,953 | 259,920,279 |
| 1911 | 318,547,900 | No exports | 318,547,900 | 137,647,641 | 8,205,699 | 129,441,942 |
| 1912 | 304,043,400 | No exports | 304,043,400 | 193,400,713 | 1,719,870 | 191,680,843 |
| 1913 | 296,175,300 | 77,047 | 296,098,253 | 195,293,255 | 4,432,404 | 190,860,851 |
| 1914 | 290,192,000 | 335,348 | 289,856,652 | 247,648,869 | 1,204,835 | 246,444,034 |
| 1915 | 285,726,000 | 8,158,300 | 277,567,700 | 308,083,429 | 7,259,934 | 300,823,495 |
| 1916 | 288,490,000 | 4,418,915 | 284,071,085 | 534,828,022 | 1,803,570 | 533,024,452 |
| 1917 | 281,892,000 | 2,148,350 | 279,743,650 | 372,372,218 | 1,830,374 | 370,541,844 |
| 1918 | 256,870,000 | 993,143 | 255,876,857 | 379,129,934 | 1,046,866 | 378,083,068 |
| 1919 | 228,795,191 | 545,663 | 264,792,337 | 422,414,983 | 605,372 | 421,809,611 |
| 1920 | 259,307,000 | 6,990,669 | 252,416,331 | 427,578,038 | 13,273,341 | 412,316,597 |
| 1921 | 224,564,000 | 5,583,669 | 218,980,331 | 318,235,873 | 5,588,129 | 312,647,744 |
| 1922 | 235,500,000 | 920,354 | 234,579,646 | 255,087,236 | 2,954,869 | 252,132,367 |

Production figures exclude pulled wool, estimated at 42,500,000 lbs. for 1922.

The number of woollen mills in the United States exceeds 1,000, and there are about 80,000 looms, over 8,000 of which are used in making carpets and rugs. The number of active spinning spindles exceeds 4,000,000, pretty evenly divided between woollens and worsteds. There are usually from 250,000 to 500,000 idle spindles.

## SILK STATISTICS OF THE UNITED STATES.

| Year (Fiscal.) | Raw Silk Imports. | | Spun Silk Imports (Entered for Consumption). | | Imports of Silk Manufactures. |
|---|---|---|---|---|---|
| | *Pounds.* | *Dollars.* | *Pounds.* | *Dollars.* | *Dollars.* |
| 1900 | 11,259,310 | 44,549,672 | 2,336,946 | 3,555,237 | 31,129,017 |
| 1910 | 20,363,327 | 65,424,784 | 3,159,595 | 5,054,174 | 32,635,827 |
| 1911 | 22,379,998 | 72,713,984 | 3,236,334 | 5,696,788 | 32,137,837 |
| 1912 | 21,609,520 | 67,173,382 | 3,260,428 | 5,754,256 | 27,204,364 |
| 1913 | 26,049,472 | 82,147,523 | 3,417,226 | 6,072,272 | 27,590,478 |
| 1914 | 28,594,672 | 97,828,243 | 3,054,071 | 5,718,631 | 35,454,786 |
| 1915 | 26,030,925 | 80,531,785 | 2,026,479 | 3,766,019 | 25,042,670 |
| 1916 | 33,070,902 | 119,484,223 | 3,411,710 | 6,718,911 | 31,911,793 |
| 1917 | 33,868,885 | 156,085,649 | 3,580,188 | 10,381,375 | 40,322,840 |
| 1918 | 34,846,197 | 183,076,241 | 2,502,157 | 7,429,616 | 30,899,004 |
| 1919 | 34,299,044 | 202,606,580 | 1,555,060 | 6,375,649 | 29,349,198 |
| 1920 | 47,127,122 | 437,939,485 | 3,392,205 | 15,015,787 | 87,729,166 |
| 1921 | 29,462,745 | 181,882,615 | 2,082,229 | 7,950,360 | 55,348,266 |
| 1922 | 48,178,964 | 300,445,363 | 1,487,089 | 4,435,942 | 40,337,844 |

## 1920 CENSUS SUMMARY ON SILK INDUSTRY IN THE U. S.

(1914 Figures in Parentheses.)

Number of establishments, 1,369 (902); persons engaged, 147,709 (115,571); capital, $532,732,163 ($210,071,679); salaries and wages, $134,597,292 ($57,615,374); cost of materials in 1919, $388,469,022 ($144,442,321); value of products in 1919, $688,469,523 ($254,011,257); number of active broad silk looms, 87,215 (73,504); number of active ribbon looms, 9,223 (11,554); number of winding spindles, 896,888 (710,102); producing spindles, 2,669,459 (2,159,271); primary horsepower, 176,825 (116,924); raw silk used, lbs., 25,890,728 (22,374,700).

## SUGAR STATISTICS.

(Data by Willett & Gray, N. Y.; A. Bouchereau, New Orleans; U. S. Dept. of Agriculture.)

| Year (Fiscal). | U. S. Cane Sugar Prod. | U. S. Beet Sugar Production. | U. S. Total Production. | U. S. Cane Sugar Imports. | | Cane Sugar Exports From U. S. | World's Production of Sugar. |
|---|---|---|---|---|---|---|---|
| | *Pounds.* | *Pounds.* | *Pounds.* | *Pounds.* | *Dollars.* | *Pounds.* | *Pounds.* |
| 1870..... | 87,043,000 | 896,000 | 87,929,000 | 1,196,773,569 | 56,923,745 | 22,760,904 | 5,411,840,000 |
| 1880..... | 178,872,000 | 2,688,000 | 181,560,000 | 1,829,291,684 | 80,087,720 | 40,640,206 | 7,288,960,000 |
| 1890..... | 301,284,395 | 4,934,720 | 306,219,115 | 2,934,011,560 | 96,094,532 | 47,495,577 | 12,772,480,000 |
| 1900..... | 322,549,011 | 163,458,075 | 486,007,086 | 4,018,086,530 | 100,250,974 | 26,918,380 | 19,369,920,640 |
| 1910..... | 750,400,000 | 1,024,938,000 | 1,775,338,000 | 4,094,545,936 | 106,349,005 | 189,304,952 | 33,415,267,200 |
| 1911..... | 710,080,000 | 1,020,344,000 | 1,730,424,000 | 3,937,978,265 | 96,691,096 | 89,436,445 | 38,083,411,200 |
| 1912..... | 721,748,160 | 1,199,000,000 | 1,920,748,160 | 4,104,618,393 | 115,515,079 | 102,915,741 | 35,585,303,040 |
| 1913..... | 325,147,200 | 1,385,112,000 | 1,710,259,200 | 4,740,041,488 | 103,639,823 | 66,569,033 | 40,787,743,360 |
| 1914..... | 601,074,880 | 1,466,802,000 | 2,067,876,880 | 5,066,821,873 | 101,649,375 | 96,862,462 | 41,972,098,560 |
| 1915..... | 493,239,040 | 1,444,108,000 | 1,937,347,040 | 5,420,981,867 | 173,992,603 | 601,103,749 | 41,511,919,680 |
| 1916..... | 277,240,320 | 1,748,440,000 | 2,025,680,320 | 5,633,161,749 | 208,769,399 | 1,685,195,537 | 37,069,126,080 |
| 1917..... | 621,799,360 | 1,641,314,000 | 2,263,113,360 | 5,329,587,360 | 230,574,221 | 1,268,306,254 | 38,053,064,000 |
| 1918..... | 491,697,920 | 1,530,414,000 | 2,022,111,920 | 4,898,277,025 | 236,105,886 | 587,572,855 | 38,749,126,080 |
| 1919..... | 568,796,480 | 1,521,900,000 | 2,090,696,480 | 5,831,982,457 | 308,346,986 | 1,118,872,723 | 36,596,602,560 |
| 1920..... | 244,250,000 | 2,180,416,000 | 2,424,290,000 | 7,577,698,325 | 684,579,477 | 1,444,030,665 | 34,296,245,760 |
| 1921..... | 460,000,000 | 2,016,000,000 | 2,476,000,000 | 6,984,195,961 | 660,110,123 | 767,229,231 | 36,827,954,240 |
| 1922..... | 454,234,000 | 1,348,000,000 | 1,802,234,000 | 8,464,305,446 | 200,772,997 | 2,033,682,510 | 39,177,600,000 |

The 1922 U. S. cane sugar production figures do not include Texas.

**Sugar Consumption in the U. S.**—(1921), 10,548,451,000 lbs. (97.8 lbs. per capita, as against 58.8 lbs. per capita in 1900). The average net cash price of granulated sugar in 1921 was 6.2 cents a pound.

### IMPORTS AND EXPORTS OF SUGAR, ETC., IN DETAIL.

(For year ended June 30, 1922. Values are in parentheses.)

Imports—Cane sugar (from Cuba), 7,720,255,237 lbs. ($171,300,590); cane sugar (from Philippines), 538,468,567 lbs. ($21,656,224); cane sugar (from Dominica), 93,067,270 lbs. ($2,502,158); cane sugar (from Central America), 43,738,907 lbs. ($1,219,396); molasses, 87,911,060 gals. ($1,673,354); beet sugar, 29,387 lbs. ($1,164); maple sugar and maple syrup, 3,672,489 lbs. ($341,861); sugar candy and confectionery, 870,305 lbs. ($261,872).

Exports of domestic—sugar, 2,002,038,450 lbs. ($77,447,331); molasses, 5,774,935 gals. ($696,916); confectionery, including sweet chocolate, $1,718,665; chewing gum, $824,186; maple sugar and maple syrup (Jan. 1 to June 30, 1922), 242,056 lbs. ($46,214); honey, 2,406,922 lbs. ($261,899); glucose (corn syrup), 258,447,893 lbs. ($6,109,862); grape sugar (corn sugar), 15,534,234 lbs. ($448,244); syrup, 6,717,062 gals. ($1,808,758).

### THE SUGAR INDUSTRY IN THE U. S.

Practically all of the cane sugar is manufactured in La. Ohio, Utah and Wis., and other States, including Col., Idaho, Ill. and Neb. Beet sugar is manufactured in Cal., Mich.

| | Total. | | Beet Sugar. | | Cane Sugar. | | Sugar Refining. | |
|---|---|---|---|---|---|---|---|---|
| | 1919. | 1914. | 1919. | 1914. | 1919. | 1914. | 1919. | 1914. |
| Estab'm'ts. | 307 | 259 | 85 | 60 | 202 | 181 | 20 | 18 |
| Persons eng | 42,156 | 26,739 | 14,190 | 9,634 | 7,045 | 4,544 | 20,921 | 12,561 |
| Propr'tors. | 172 | 181 | 1 | 1 | 165 | 172 | 6 | 8 |
| Sal. empl's | 5,900 | 3,676 | 2,408 | 1,636 | 779 | 740 | 2,713 | 1,300 |
| Wage earn | 36,084 | 22,882 | 11,781 | 7,997 | 6,101 | 3,632 | 18,202 | 11,253 |
| Primary h.p | 281,706 | 239,617 | 127,394 | 76,705 | 101,861 | 113,246 | 52,541 | 49,666 |
| Capital... | *478,242,631* | *315,677,669* | *224,584,679* | *142,181,326* | *55,117,127* | *32,996,522* | *198,540,825* | *140,499,819* |
| Sal., wages. | *54,163,542* | *21,242,971* | *20,336,074* | *8,864,853* | *5,674,817* | *2,052,521* | *28,152,651* | *10,325,597* |
| Salaries... | *11,535,591* | *5,252,014* | *4,427,956* | *2,268,649* | *1,665,448* | *491,145* | *5,442,187* | *2,502,220* |
| Wages... | *42,627,951* | *15,990,957* | *15,908,118* | *6,606,204* | *4,009,369* | *1,561,376* | *22,710,464* | *7,823,377* |
| Cont. work. | *891,660* | *279,915* | *796,772* | *247,657* | *27,366* | *11,988* | *67,522* | *20,270* |
| Rent, taxes. | *19,154,128* | *2,014,111* | *11,450,299* | *807,223* | *1,142,247* | *263,820* | *6,561,582* | *943,068* |
| Cost of mat | *793,316,541* | *321,442,937* | *87,029,144* | *41,399,361* | *44,143,416* | *15,958,218* | *662,143,981* | *264,085,358* |
| Val. of prod | *937,883,918* | *373,639,298* | *149,155,892* | *62,605,210* | *67,741,320* | *21,635,378* | *730,986,706* | *289,398,715* |
| Sugar: | | | | | | | | |
| Short tons | 4,468,860 | 4,341,408 | 721,909 | 743,473 | 225,498 | 264,801 | 3,521,453 | 3,333,134 |
| Value.... | *888,326,173* | *363,034,123* | *138,099,693* | *58,590,466* | *36,659,085* | *18,947,683* | *713,567,395* | *285,495,974* |

Figures in italics in above table represent dollars.

## UNITED STATES COFFEE STATISTICS.

| Year (Fiscal.) | Imports. | | Exports. | | Retained for Consumption. | | Average Price Per Pound. | Consumption Per Capita. |
|---|---|---|---|---|---|---|---|---|
| | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. | | |
| | *Pounds.* | *Dollars.* | *Pounds.* | *Dollars.* | *Pounds.* | *Dollars.* | *Cents.* | *Lbs.* |
| 1900..... | 761,715,403 | 67,829,710 | 21,819,383 | 2,379,750 | 739,896,020 | 65,449,960 | 8.9 | 10.13 |
| 1910..... | 873,983,689 | 69,504,647 | 13,569,288 | 1,513,684 | 860,414,401 | 67,990,963 | 7.9 | 9.33 |
| 1911..... | 878,322,468 | 90,949,963 | 8,371,003 | 1,096,052 | 869,951,465 | 89,853,911 | 10.3 | 9.28 |
| 1912..... | 887,747,747 | 118,233,958 | 7,196,311 | 1,085,562 | 880,551,436 | 117,148,390 | 13.3 | 9.23 |
| 1913..... | 866,053,699 | 119,449,045 | 7,134,641 | 1,139,134 | 858,919,058 | 118,309,911 | 13.8 | 8.85 |
| 1914..... | 1,006,362,294 | 111,454,240 | 13,811,301 | 2,137,967 | 992,550,993 | 109,316,273 | 11.1 | 10.06 |
| 1915..... | 1,126,041,691 | 107,794,377 | 70,952,754 | 8,288,894 | 1,055,088,937 | 99,505,483 | 9.6 | 10.52 |
| 1916..... | 1,203,840,591 | 115,905,134 | 75,817,516 | 9,108,566 | 1,128,023,075 | 106,796,568 | 9.6 | 10.97 |
| 1917..... | 1,322,058,526 | 133,513,226 | 57,502,893 | 7,936,082 | 1,264,555,633 | 125,577,144 | 10.1 | 12.22 |
| 1918..... | 1,145,955,957 | 103,355,279 | 65,598,302 | 7,930,274 | 1,080,357,655 | 95,425,005 | 9.02 | 10.29 |
| 1919..... | 1,046,029,274 | 143,089,619 | 92,662,549 | 16,442,019 | 959,177,361 | 127,627,350 | 13.70 | 8.99 |
| 1920..... | 1,414,228,163 | 310,701,872 | 49,976,090 | 11,141,749 | 1,364,251,073 | 289,560,123 | 21.9 | 12.90 |
| 1921..... | 1,348,926,338 | 176,988,079 | 39,915,886 | 4,926,345 | 1,309,010,452 | 172,061,734 | 13.1 | 12.32 |
| 1922..... | 1,238,012,078 | 148,502,658 | 66,410,152 | 9,930,978 | 1,171,601,926 | 138,571,926 | 11.83 | 10.67 |

The periods relate to years ended June 30.

## UNITED STATES TEA STATISTICS.

| Year (Fiscal). | Imports. | | Exports. | | Net Imports. | | Average Price Per Pound. | Consumption Per Capita. |
|---|---|---|---|---|---|---|---|---|
| | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. | | |
| | *Pounds.* | *Dollars.* | *Pounds.* | *Dollars.* | *Pounds.* | *Dollars.* | *Cents.* | *Lbs.* |
| 1900 | 87,647,653 | 11,565,555 | 1,430,810 | 208,918 | 86,216,843 | 11,356,637 | 13.2 | 1.18 |
| 1910 | 85,626,370 | 13,671,946 | 2,328,351 | 323,084 | 83,298,019 | 13,348,862 | 16.0 | .89 |
| 1911 | 102,653,942 | 17,613,569 | 3,287,366 | 447,304 | 99,366,576 | 17,166,265 | 17.2 | 1.04 |
| 1912 | 101,406,816 | 18,207,141 | 1,011,920 | 150,405 | 100,394,896 | 18,056,736 | 18.0 | 1.05 |
| 1913 | 94,812,800 | 17,433,688 | 901,745 | 139,178 | 93,911,055 | 17,294,510 | 18.4 | .95 |
| 1914 | 91,130,815 | 16,735,302 | 983,222 | 136,781 | 90,147,593 | 16,598,521 | 18.4 | .90 |
| 1915 | 96,987,942 | 17,512,019 | 4,813,878 | 749,255 | 92,174,064 | 16,763,364 | 18.1 | .91 |
| 1916 | 109,865,935 | 20,599,857 | 790,474 | 157,736 | 109,075,461 | 20,442,121 | 18.7 | 1.07 |
| 1917 | 103,364,410 | 19,265,264 | 625,315 | 196,803 | 102,739,095 | 19,068,461 | 18.6 | .98 |
| 1918 | 151,314,932 | 30,889,030 | 3,935,967 | 1,419,571 | 147,378,965 | 29,469,459 | 20.4 | 1.38 |
| 1919 | 108,172,102 | 24,390,722 | 15,114,805 | 5,293,554 | 93,057,297 | 19,097,168 | 22.55 | 1.00 |
| 1920 | 97,826,106 | 25,454,849 | 6,654,616 | 2,144,594 | 91,171,490 | 23,310,255 | 26.0 | .86 |
| 1921 | 72,196,394 | 17,594,694 | 709,887 | 304,311 | 71,486,507 | 17,290,383 | 24.4 | .67 |
| 1922 | 86,141,949 | 18,040,476 | 2,005,446 | 408,193 | 84,136,503 | 17,632,283 | 20.96 | .77 |

Data relate to United States as a whole.

## AMERICAN TOBACCO STATISTICS.

| Year. (Cal.) | Crop yield. | | Exports, dom., leaf, unmanufactured. | | Exports, dom. m'f'd. | Imports, unmanftd. | Imports, manftd. |
|---|---|---|---|---|---|---|---|
| | Pounds. | Dollars. | Pounds. | Dollars. | Pounds. | Pounds. | Pounds. |
| 1900 | 814,345,341 | 53,661,132 | 315,787,782 | 27,656,475 | 14,147,372 | 19,198,363 | 825,198 |
| 1901 | 813,953,373 | 58,283,108 | 301,007,365 | 27,103,996 | 17,134,917 | 23,347,471 | 799,630 |
| 1902 | 821,823,963 | 57,563,510 | 368,184,084 | 35,250,893 | 11,728,588 | 28,086,233 | 971,887 |
| 1903 | 815,972,425 | 55,514,627 | 311,971,831 | 29,640,812 | 11,509,252 | 27,933,496 | 1,038,054 |
| 1904 | 720,804,449 | 58,385,160 | 334,302,091 | 29,800,816 | 13,207,666 | 31,238,590 | 1,166,776 |
| 1905 | 779,384,945 | 66,247,720 | 312,227,202 | 28,808,376 | 12,850,194 | 37,383,953 | 1,133,876 |
| 1906 | 682,428,530 | 68,232,647 | 340,742,864 | 33,377,398 | 14,024,775 | 40,483,895 | 1,146,218 |
| 1907 | 698,126,000 | 71,411,000 | 330,812,658 | 34,727,157 | 10,942,073 | 35,833,492 | 1,086,170 |
| 1908 | 718,061,000 | 74,130,185 | 287,900,946 | 30,902,900 | 10,816,137 | 38,561,206 | 1,026,723 |
| 1909 | 1,055,764,806 | 104,302,856 | 357,196,074 | 38,115,386 | 12,461,500 | 38,657,869 | 3,113,458 |
| 1910 | 1,103,415,000 | 102,142,000 | 355,327,072 | 39,255,320 | 11,735,454 | 45,433,154 | 2,033,329 |
| 1911 | 905,709,000 | 85,210,000 | 379,845,320 | 43,251,857 | 13,170,920 | 54,740,380 | 1,587,971 |
| 1912 | 962,855,000 | 104,063,000 | 418,796,906 | 49,353,595 | 14,506,241 | 67,977,118 | 2,392,089 |
| 1913 | 953,734,000 | 122,481,000 | 449,749,982 | 53,963,670 | 12,982,126 | 61,174,751 | 1,625,568 |
| 1914 | 1,034,679,000 | 101,411,000 | 348,346,091 | 44,433,829 | 10,227,119 | 45,764,728 | 1,511,249 |
| 1915 | 1,062,237,000 | 96,281,000 | 441,569,581 | 53,163,595 | 15,562,784 | 48,013,335 | 1,698,736 |
| 1916 | 1,153,278,000 | 169,008,000 | 411,598,860 | 59,954,307 | 14,884,456 | 46,136,347 | 3,063,858 |
| 1917 | 1,249,276,000 | 300,449,000 | 289,170,686 | 59,674,731 | 17,158,529 | 79,367,563 | 4,523,117 |
| 1918 | 1,439,071,000 | 402,264,000 | 625,072,853 | 189,894,417 | 27,080,518 | 83,951,103 | 4,815,978 |
| 1919 | 1,372,993,261 | 541,547,000 | 632,795,586 | 271,946,489 | ..... | 94,005,182 | 4,664,876 |
| 1920 | 1,508,064,000 | 318,201,504 | 496,878,830 | 237,051,083 | ..... | 58,923,217 | 4,975,977 |
| 1921 | 1,075,000,000 | 223,755,000 | 451,555,221 | 156,728,904 | ..... | 65,225,437 | 6,199,074 |

The 1922 tobacco crop was estimated, Sept. 1, by the Dept. of Agriculture, at 1,353,000,000 pounds. Tobacco exports and imports are of the fiscal years ending in year after year named in stub.

### TOBACCO IMPORTS AND EXPORTS.

(For year ended June 30, 1922. Values are in parentheses.)

Imports—Philippine leaf, 503,840 lbs. ($56,954); cigar leaf from other countries, 5,211,021 lbs.($10,940,393); all other leaf, 59,510,576 lbs. ($46,052,498); cigars, cheroots and cigarettes, 1,894,913 lbs. ($5,940,906).

Exports of domestic—Leaf, 451,555,221 lbs. ($156,728,904); stems, scrap, etc., 11,242,130 lbs. ($540,452); cigars and cheroots, 1,096 thousand ($23,265); cigarettes, 9,601,781 thousand ($20,645,019); plug, 3,021,907 lbs. ($1,503,359); smoking tobacco, 2,307,036 lbs. ($943,579); snuff (Jan. 1 to June 30, 1922), 4,561 lbs. ($2,776); other tobacco manufactures $445,383.

### TOBACCO MANUFACTURES IN THE UNITED STATES IN 1919.

| Industry. | Establishments. | Wage Earners. | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|
| | *No.* | *No.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Total | 10,291 | 157,097 | 604,839,572 | 123,988,084 | 483,567,754 | 1,012,933,213 |
| Tobacco, chew. and smok., and snuff | 395 | 18,324 | 188,444,100 | 12,674,736 | 130,270,388 | 239,270,718 |
| Chewing | 85 | 8,379 | 60,564,469 | 5,740,522 | 52,051,801 | 96,955,494 |
| Smoking | 199 | 8,520 | 98,539,030 | 5,765,259 | 66,648,173 | 119,282,473 |
| Snuff | 34 | 1,328 | 28,664,549 | 1,080,052 | 10,011,200 | 21,127,918 |
| All other | 47 | 97 | 676,052 | 88,903 | 1,559,214 | 1,904,833 |
| Tobacco, cigars, and cigarettes | 9,923 | 138,773 | 416,395,472 | 111,313,348 | 353,297,366 | 773,662,495 |
| Cigars | 9,778 | 114,209 | 220,708,832 | 90,418,318 | 158,815,218 | 360,396,074 |
| Cigarettes | 135 | 22,642 | 191,173,339 | 19,794,550 | 181,309,030 | 379,125,710 |
| Cigars and cigarettes | 13 | 1,832 | 4,513,301 | 1,100,480 | 13,173,148 | 34,140,711 |

Primary horsepower, 43,397.

### TYPES OF AMERICAN TOBACCO.

The leading types of tobacco held are "bright yellow," grown in Virginia, North Carolina, South Carolina, and Georgia, and "burley," grown almost entirely in Kentucky, Indiana, Ohio, and West Virginia. The production of these types is greater than that of any others, and it is therefore to be expected that they would lead in the quantities held at the several report dates.

The type of tobacco ranking third, so far as quantity is concerned, is "dark fired," which is grown in the Clarksville, Hopkinsville, and Paducah districts.

Of the "cigar" types, "Pennsylvania" led in the quantity held for the several report dates prior to January, 1921, being closely followed in this respect by the "Ohio," "Wisconsin," and "New England" types. Since that date "Wisconsin" ranks first.

## WHAT AMERICANS DRINK.

The table does not include for any year withdrawals of distilled spirits for scientific purposes and for use of the United States, or since 1906 withdrawals for denaturation, free of tax.

| Year (Fiscal). | Domestic Fruit Brandy. | Domestic, All Other Native Liquors. | Foreign Spirits. | Domestic Wines. | Foreign Wines. | Domestic Beer, Etc. | Foreign Beer, Etc. |
|---|---|---|---|---|---|---|---|
| | *Proof Gals.* | *Proof Gals.* | *Proof Gals.* | *Gallons.* | *Gallons.* | *Gallons.* | *Gallons.* |
| 1850 | ..... | 46,768,083 | 5,065,390 | 221,249 | 6,095,122 | 36,361,708 | 201,301 |
| 1860 | ..... | 83,904,258 | 6,064,393 | 1,860,008 | 8,944,679 | 100,225,879 | 1,120,790 |
| 1870 | 1,223,830 | 77,266,368 | 1,405,510 | 3,059,518 | 9,165,549 | 203,743,401 | 1,012,755 |
| 1880 | 1,438,179 | 58,950,489 | 1,643,416 | 13,781,774 | 7,077,921 | 308,197,473 | 1,469,185 |
| 1890 | 1,323,579 | 73,521,253 | 1,530,376 | 22,484,024 | 5,034,849 | 645,092,353 | 2,088,012 |
| 1900 | 1,386,361 | 94,265,035 | 1,705,468 | 26,242,492 | 3,745,975 | 1,219,070,196 | 3,316,908 |
| 1910 | 2,204,184 | 126,593,951 | 4,340,549 | 50,684,343 | 9,863,735 | 1,844,065,029 | 7,301,629 |
| 1911 | 2,434,045 | 132,315,123 | 3,836,821 | 56,655,006 | 7,204,226 | 1,959,671,296 | 7,240,458 |
| 1912 | 2,449,331 | 133,502,079 | 3,544,921 | 50,619,880 | 5,804,831 | 1,925,361,507 | 7,169,677 |
| 1913 | 2,801,767 | 140,521,880 | 4,121,981 | 48,683,849 | 6,643,612 | 2,022,678,149 | 7,669,223 |
| 1914 | 2,704,752 | 136,521,805 | 4,220,670 | 44,973,643 | 7,444,787 | 2,049,236,412 | 7,170,696 |
| 1915 | 2,516,054 | 121,690,596 | 2,952,448 | 27,255,690 | 5,656,219 | 1,852,136,960 | 3,387,324 |
| 1916 | 2,984,743 | 133,267,803 | 3,721,138 | 42,229,206 | 5,357,939 | 1,815,694,727 | 2,580,315 |
| 1917 | 3,668,669 | 161,012,068 | 3,059,588 | 37,640,495 | 5,082,881 | 1,882,770,762 | 2,300,542 |
| 1918 | See note. | 90,518,612 | 1,250,324 | 42,264,478 | 3,333,546 | 1,552,393,497 | 744,566 |
| 1919 | " " | 83,863,503 | 500,964 | 52,308,309 | 1,964,347 | 852,921,219 | 55,799 |
| 1920 | " " | 24,026,751 | 120,527 | 12,565,333 | 152,806 | 281,897,009 | 287 |
| 1921 | " " | 35,217,662 | 301,035 | 19,512,321 | 810,435 | 285,793,532 | 49 |

NOTE—Owing to changes in the internal revenue laws, spirits distilled from fruits cannot be separately stated since 1918.

Domestic beer consumed in 1921 was mostly "near beer," the U. S. Government says.

Consumption per capita in gallons: Distilled spirits (1850), 2.24; (1900), 1.28; (1917), 1.62; (1918), 0.87; (1919), 0.79; (1920), 0.22. Wines (1850), 0.27; (1900), 0.39; (1917), 0.41; (1918), 0.49; (1919), 0.51; (1920), 0.12; (1921), 0.19. Malt liquors (1850), 1.58; (1900), 16.09; (1917), 18.17; (1918), 14.77; (1919), 8.00; (1920), 2.61; (1921), 2.61. Total for all kinds (1850), 4.08; (1900), 17.76; (1917), 20.20; (1918), 16.13; (1919), 9.30; (1920), 2.95; (1921), 3.12.

## PRODUCTION OF ALCOHOLIC BEVERAGES IN THE U. S. SINCE 1900.

| Year (Fiscal). | Bourbon Whiskey. | Rye Whiskey. | Alcohol. | Rum. | Gin. | Pure, Neutral, or Cologne Spirits. | Miscellaneous. | Fruit Brandy. | Beer and Other Fermented Liquors. |
|---|---|---|---|---|---|---|---|---|---|
| | *Tax. Gallons.* | *Tax. Gallons.* | *Tax. Gallons.* | *Tax. Gallons.* | *Tax. Gallons.* | *Tax. Gallons.* | *Tax. Gallons.* | *Tax. Gallons.* | *Bbls. of 31 Gals.* |
| 1900 | 19,411,829 | 14,296,568 | 10,735,771 | 1,614,514 | 1,597,081 | 24,173,671 | 33,405,523 | 3,760,487 | 39,471,593 |
| 1901 | 26,209,804 | 18,263,709 | 10,775,117 | 1,724,582 | 1,636,299 | 30,228,804 | 35,227,657 | 4,047,602 | 40,614,258 |
| 1902 | 20,336,250 | 21,587,221 | 11,483,305 | 2,202,047 | 1,752,281 | 37,429,734 | 33,491,342 | 4,220,400 | 44,550,127 |
| 1903 | 26,068,555 | 22,407,053 | 12,034,127 | 2,247,907 | 1,913,404 | 54,620,400 | 22,198,323 | 6,430,673 | 46,720,179 |
| 1904 | 20,247,089 | 18,371,345 | 11,486,082 | 1,801,179 | 2,110,216 | 57,997,506 | 21,988,545 | 5,193,262 | 48,265,168 |
| 1905 | 26,742,168 | 20,410,422 | 11,610,799 | 1,791,987 | 2,187,709 | 60,944,811 | 23,930,831 | 4,448,584 | 49,522,029 |
| 1906 | 24,968,943 | 21,469,720 | 11,173,614 | 1,730,102 | 2,323,289 | 59,626,733 | 24,194,411 | 4,444,072 | 54,724,553 |
| 1907 | 33,090,791 | 23,550,196 | 16,123,379 | 2,022,407 | 2,647,688 | 60,802,852 | 29,911,665 | 6,138,305 | 58,622,002 |
| 1908 | 14,120,484 | 13,587,868 | 16,849,154 | 1,895,922 | 2,756,753 | 50,935,821 | 26,793,676 | 6,899,823 | 58,814,033 |

| | Whiskey. | Rum. | Gin. | Alcohol. | Commercial Alcohol. | Fruit Brandy. | Ferment'd Liquors. |
|---|---|---|---|---|---|---|---|
| | *Tax. Gallons.* | *Tax. Gallons.* | *Tax. Gallons* | *Tax. Gallons.* | *Tax. Gallons.* | *Tax. Gals* | *Tax. Gals.* |
| 1909 | 70,152,175 | 1,952,374 | 2,483,743 | 42,563,103 | 16,078,083 | 6,440,858 | 56,364,360 |
| 1910 | 82,463,894 | 2,253,950 | 2,985,435 | 50,703,846 | 17,623,867 | 7,656,434 | 59,544,775 |
| 1911 | 100,647,155 | 2,631,059 | 3,345,371 | 24,408,462 | 44,205,330 | 7,953,132 | 63,283,123 |
| 1912 | 98,209,574 | 2,832,516 | 3,577,862 | 27,629,346 | 45,869,685 | 9,321,823 | 62,176,694 |
| 1913 | 99,615,828 | 2,750,846 | 4,014,601 | 30,320,894 | 48,560,920 | 8,252,875 | 65,324,876 |
| 1914 | 88,698,797 | 3,026,085 | 4,012,542 | 31,715,199 | 47,132,535 | 7,307,897 | 66,189,473 |
| 1915 | 44,552,490 | 2,844,313 | 3,636,285 | 38,325,049 | 42,742,161 | 8,521,951 | 59,808,210 |
| 1916 | 59,240,672 | 2,986,940 | 4,118,064 | 121,799,942 | 60,919,058 | 4,159,351 | 58,633,624 |
| 1917 | 57,651,834 | 2,842,922 | 5,756,667 | 145,535,791 | 65,879,886 | 8,251,097 | 60,817,379 |
| 1918 | 17,383,511 | 1,526,743 | 4,178,538 | 125,134,648 | 25,229,215 | 5,357,325 | 50,266,216 |
| 1919 | ..... | 815,794 | ..... | 90,371,971 | 7,783,921 | 1,802,422 | 27,712,648 |
| 1920 | 234,705 | 944,916 | ..... | 90,504,807 | 7,931,363 | 1,649,446 | 9,231,280 |
| 1921 | 753,375 | 543,507 | ..... | 85,068,776 | ..... | 1,530,792 | 9,220,188 |

Production of denatured alcohol in year ended June 30, 1921, totalled, 22,388,825 wine gallons (38,812,139 proof gallons) of which, 12,392,595 wine gallons were completely denatured.

### "NEAR BEER" PRODUCTION.

(Barrels of not more than 31 gallons, year ended June 30, 1921.)

California, 246,053; Colorado, 37,218; Connecticut, 227,716; Delaware, 11,593; District of Columbia, 24,395; Georgia, 14,859; Idaho, 500; Illinois, 964,617; Indiana, 147,262; Kentucky, 130,586; Louisiana and Mississippi, 150,259; Maryland and two lower counties of Virginia, 141,026; Massachusetts, 201,630; Michigan, 193,469; Minnesota, 208,914; Missouri, 841,067; Nebraska, 31,991; Nevada, 5,677; New Jersey, 548,237; New York, 2,258,385; Ohio, 725,617; Pennsylvania, 1,286,227; Rhode Island, 82,577; Tennessee, 37,794; Texas, 60,565; Utah, 1,707; Washington, 8,145; Wisconsin, 629,049; Wyoming, 3,043—Total, 9,220,188.

### IMPORTS AND EXPORTS OF SPIRITS, WINES, AND BEVERAGES.

(For year ended June 30, 1922. Values are in parentheses.)

Imports—Malt liquors, 53 gal. ($62); brandy, 8,507 gal. ($32,210); cordials, 74,432 gal. ($214,164); gin, 10,304 gal. ($21,090); whiskey, 285,441 gal. ($1,246,263); champagne and other sparkling wines, 13,606 doz. qts. ($277,869); still wines (in casks), 492,715 gal. ($533,170); still wines (in other covers), 60,529 doz. qts. ($379,573); mineral waters, 198,239 doz. qts. ($197,083); other beverages, $324,711.

Exports of domestic—Malt beverages, 37,594 gal. ($34,146); distilled liquors, 185,910 gal. ($676,584); wines, 20,628 gal ($26,668); mineral waters (Jan. 1 to June 30, 1922), 86,813 gal. ($69,054); other beverages, $391,430.

## DISTILLED SPIRITS PRODUCED BY STATES, FISCAL YEARS.

(Source: Reports of the Commissioner of Internal Revenue, Treasury Department.)

| STATES. | 1913. | 1916. | 1917. | 1918. | 1919. | 1920. | 1921. |
|---|---|---|---|---|---|---|---|
| | *Tax. Galls.* | *Tax. Galls.* | *Tax. Galls.* | *Tax. Galls.* | *Tax. Galls.* | *Tax. Galls.* | *Tax. Galls.* |
| Ala., Miss. | 122,427 | ..... | ..... | ..... | ..... | ..... | ..... |
| Ark. | 113,103 | 178 | ..... | ..... | ..... | ..... | ..... |
| Cal., Nev. | 11,076,156 | 11,845,251 | 17,851,482 | 14,023,646 | 9,895,694 | 5,762,189 | 6,021,044 |
| Col., Wyo. | ..... | 104 | 260 | 26 | ..... | ..... | 27,518 |
| Conn. | 151,714 | 127,215 | 132,054 | 26,451 | 36,517 | ..... | 2,677 |
| R. I. | 4,212 | 237 | 224 | 2,845 | ..... | ..... | ..... |
| Fla. | 141,177 | 2,715 | ..... | ..... | ..... | ..... | ..... |
| Ga. | 218 | ..... | ..... | ..... | ..... | ..... | ..... |
| Hawaii | 30,934 | 13,672 | 14,015 | 3,935 | ..... | ..... | 176,518 |
| Ill. | 43,964,336 | 66,868,865 | 79,320,617 | 49,680,080 | 26,265,840 | 16,560,694 | 20,827,336 |
| Ind. | 28,552,317 | 51,108,395 | 43,361,276 | 15,830,930 | 1,150,952 | 2,345,680 | 6,338,481 |
| Ky. | 43,404,841 | 33,254,130 | 36,441,778 | 12,608,437 | 3,957,655 | 237,570 | 2,956,601 |
| La., Miss. | 11 322,848 | 23,291,661 | 26,545,833 | 24,406,539 | 22,135,265 | 27,350,133 | 17,906,590 |
| Md., 2 counties in Va. | 6,007,113 | 3,327,842 | 24,965,321 | 26,746,386 | 16,078,605 | 14,557,749 | 11,673,096 |
| Dist. of Col. | 635,023 | 1,664,389 | 608,812 | 749,517 | 488,215 | ..... | 905,053 |
| Mass. | 5,066,211 | 11,609,189 | 12,511,238 | 10,873,375 | 5,973,432 | 2,773,234 | 3,142,022 |
| Mich. | 2,004,580 | 2,575,375 | 819,908 | 752,745 | ..... | ..... | 1,277,427 |
| Mo. | 530,028 | 194,172 | 289,660 | 79,527 | ..... | ..... | 915,492 |
| Mont. Idaho, Utah. | ..... | 52,886 | 244,772 | 186,248 | 107,863 | ..... | ..... |
| Neb. | 2,214,558 | 2,476,219 | 2,938,594 | ..... | ..... | ..... | ..... |
| N. H., Me., Vt. | 678 | ..... | ..... | ..... | ..... | ..... | ..... |
| N. J. | 70,786 | 56,158 | 54,494 | 51 | ..... | ..... | 240,104 |
| N. Mex., Ariz. | 1,873 | 296 | 315 | ..... | ..... | ..... | ..... |
| N. Y. | 10,057,414 | 13,802,024 | 13,856,054 | 10,544,901 | 6,956,437 | 3,014,051 | 2,546,740 |
| N. C. | 2,208 | ..... | ..... | ..... | ..... | ..... | ..... |
| Ohio. | 11,268,793 | 12,448,348 | 10,114,573 | 3,314,103 | 1,263,875 | 931,337 | 2,748,021 |
| Ore. | 259 | ..... | ..... | ..... | ..... | ..... | ..... |
| Pa. | 11,679,566 | 14,408,130 | 12,190,764 | 7,293,914 | 5,877,816 | 7,895,085 | 8,902,776 |
| S. C. | 548,614 | 1,179,890 | 1,159,309 | 943,566 | 378,227 | 689,195 | 322,524 |
| Tenn. | 1,956 | ..... | ..... | ..... | ..... | ..... | ..... |
| Tex. | 622 | ..... | 13,905 | 7,281 | ..... | ..... | ..... |
| Va. | 1,437,649 | 547,560 | 122,957 | ..... | ..... | ..... | ..... |
| Wash., Alaska. | 448,963 | 392 | ..... | ..... | ..... | ..... | 12,938 |
| W. Va. | 296,403 | ..... | ..... | ..... | ..... | ..... | ..... |
| Wis. | 2,448,678 | 2,428,480 | 2,527,249 | 759,294 | 212,146 | 214,769 | 663,515 |
| Total. | 193,606,258 | 253,283,273 | 286,085,464 | 178,833,799 | 100,778,541 | 82,331,687 | 87,896,450 |

Minnesota, 349,977 gallons (1921), not named in above table, is included in 1921 total.

## MATERIALS USED IN PROD. OF DISTILLED SPIRITS, YEAR ENDED JUNE 30, 1920.

| STATES. | Corn. | Rye. | Malt. | Other Materials. | Molasses. | D. S. L. | Totals. | |
|---|---|---|---|---|---|---|---|---|
| | *Bushels.* | *Bushels.* | *Bushels.* | *Bushels.* | *Gallons.* | *Gallons.* | *Bushels.* | *Gallons.* |
| California. | 912 | ..... | ..... | ..... | 7,161,493 | ..... | 912 | 7,161,493 |
| District of Columbia. | 29,919 | ..... | 48,117 | 25,506 | 941,452 | ..... | 103,542 | 941,452 |
| Illinois. | 826,584 | 2,398 | 96,051 | ..... | 15,566,894 | ..... | 925,033 | 15,566,894 |
| Indiana. | 106,157 | 1,736 | 11,701 | 581 | 2,418,799 | ..... | 120,175 | 2,418,799 |
| Kentucky. | ..... | ..... | ..... | ..... | 230,002 | ..... | ..... | 230,002 |
| Louisiana. | ..... | ..... | ..... | 497 | 35,452,193 | 6,399,904 | 497 | 41,852,097 |
| Maryland. | ..... | ..... | 129 | ..... | 19,289,961 | ..... | 129 | 19,289,961 |
| Massachusetts. | ..... | ..... | ..... | ..... | 3,655,426 | ..... | ..... | 3,655,426 |
| New York. | ..... | ..... | ..... | ..... | 16,655,995 | ..... | ..... | 16,655,995 |
| Ohio. | 56,305 | ..... | 13,060 | ..... | 993,379 | ..... | 69,365 | 993,379 |
| Pennsylvania. | ..... | 45,360 | 6,492 | ..... | 10,733,713 | ..... | 52,302 | 10,733,713 |
| South Carolina. | ..... | ..... | ..... | 1,891 | 33,378 | 12,927,430 | 1,891 | 12,960,808 |
| Wisconsin. | 37,642 | 583 | 39,072 | 23,285 | ..... | ..... | 100,582 | ..... |
| Total. | 1,057,519 | 50,077 | 215,072 | 51,760 | 113,132,685 | 19,327,334 | 1,374,428 | 132,460,019 |
| Total for fiscal year 1919. | 3,890,347 | 25,304 | 573,246 | 85,624 | 123,498,693 | 9,801,335 | 4,574,521 | 133,300,028 |

"Other materials" (1920) includes 22,433 bushels of barley, 581 bushels of oats, and 28,746 bushels of other materials. "D. S. L." means dilute saccharine liquid.

## GRAIN USED IN MAKING BEER IN UNITED STATES, YEAR ENDED JUNE 30, 1920.

| MATERIALS. | Pounds. | MATERIALS. | Pounds. | MATERIALS. | Pounds. |
|---|---|---|---|---|---|
| Malt. | 293,423,712 | Other cereals. | 483,477 | Other materials. | 4,822,391 |
| Corn and corn prods. | 48,551,910 | Sugar or syrup. | 23,354,072 | | |
| Rice. | 9,357,668 | Hops. | 6,440,894 | Total. | 386,434,124 |

## LIQUOR AND BEVERAGE INDUSTRY IN THE U. S., 1919.

| INDUSTRY. | Establishments | Wage Earners. | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|
| | *No* | *No* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Total. | 6,354 | 55,442 | 781,571,615 | 66,139,716 | 222,776,314 | 603,895,215 |
| Liquors, distilled. | 34 | 1,380 | 45,618,110 | 1,716,699 | 19,655,522 | 31,854,085 |
| Alcohol, incl. pure, neutral, or cologne spirits | 28 | 1,263 | 43,098,323 | 1,566,839 | 18,550,756 | 30,133,408 |
| Rum, whiskey, and other distilled liquors. | 6 | 117 | 2,519,787 | 149,860 | 1,104,766 | 1,720,677 |
| Liquors, malt. | 729 | 34,259 | 583,429,947 | 45,170,432 | 94,792,659 | 379,905,085 |
| Liquors, vinous. | 342 | 1,011 | 14,855,481 | 1,013,898 | 8,115,841 | 17,454,194 |
| Malt. | 55 | 1,352 | 34,329,495 | 1,845,210 | 31,612,707 | 39,340,414 |
| Mineral and soda waters. | 5,194 | 17,440 | 102,838,682 | 16,393,477 | 68,599,585 | 135,341,437 |
| Mineral and carbonated waters. | 5,025 | 16,199 | 85,805,164 | 15,072,293 | 60,829,621 | 122,594,632 |
| Fruit beverages. | 84 | 868 | 13,026,812 | 901,401 | 5,925,525 | 9,464,785 |
| All other. | 85 | 373 | 4,006,606 | 419,783 | 1,844,439 | 3,282,020 |

## FISHERIES OF THE UNITED STATES.

(Compiled by the Bureau of Fisheries, Department of Commerce.)

| Sections. | Vessels Employed. | | Persons Employed. | Capital Invested. | Value of Products. |
|---|---|---|---|---|---|
| | No. | Tons. | | | |
| South Atlantic States (1918) | 261 | 5,597 | 15,046 | $7,423,971 | $5,348,616 |
| Gulf States (1918) | 533 | 8,655 | 14,888 | 6,537,859 | 6,510,310 |
| Middle Atlantic States (1908) | 3,165 | 45,208 | 54,163 | 11,105,000 | 16,302,000 |
| New England States (1919) | 978 | 27,313 | 30,767 | 40,597,097 | 19,838,657 |
| Great Lakes (1917) | 587 | 7,877 | 9,221 | 10,555,669 | 6,297,969 |
| Mississippi River and Tributaries (1908) | 39 | 273 | 11,825 | 1,440,000 | 3,125,000 |
| Pacific Coast States (1915) | 1,038 | 24 683 | 28,936 | 24,025,172 | 9,300,672 |
| Alaska Territory (1920) | 788 | 90,672 | 27,482 | 70,986,221 | 41,492,124 |
| Total | 7,389 | 210,278 | 192,328 | $172,670,989 | $108,215,348 |

The Alaska seal herd (1921) numbered 587,820; 23,000 were killed for skins.

Hudson River shad fishery (1920), 199,844 lbs. ($56,309).

The Pacific Coast salmon pack in 1920 was 6,289,321 cases. Of the total pack 4,395,937 cases came from Alaska, 1,187,616 from British Columbia, 166,520 from Puget Sound, and 481,545 from Columbia River.

The U. S. Bureau of Fisheries, in 1921, distributed 1,109,637,130 fish eggs; 3,626,262,730 small fry, and 226,589,545 fingerlings and yearlings. Chief varieties were: flounder, cod, pollock, whitefish, haddock, pike, perch, buffalo fish and cisco.

### FISH IMPORTS AND EXPORTS.

(For the year ended June 30, 1922. Values in parentheses.)

Imports—Cod, haddock, hake, and pollock (cured or preserved), 53,706,375 lbs. ($3,241,824); fish in oil, 20,174,952 lbs. ($3,848,400); herring, 64,073,724 lbs. ($3,435,383); mackerel, 12,505,648 lbs. ($988,-132); all other cured, 12,240,690 lbs. ($1,724,537); halibut (fresh), 26,536,184 lbs. ($3,165,740); salmon (fresh), 11,699,953 lbs. ($1,113,902); smelts (fresh), 8,273,758 lbs. ($1,057,916); all other, fresh, 72,976,-400 lbs. ($5,122,088); crab meat, 3,677 629 lbs. ($1,600,484); lobsters (canned), 1,894,896 lbs. ($991,608); lobsters (all other), 7,072,424 lbs. ($1,-234,611); shrimps and turtles, $744,295.

Exports of domestic—Salmon (canned), 69,213,635 lbs. ($9,239,217); sardines (Jan. 1 to June 30, 1922), 7,040,787 lbs. ($594,849); oysters, $529,016; total fish, all kinds, $16,846,314.

## BIRD COUNT IN THE UNITED STATES.

(By the Chief of the Bureau of Biological Survey, United States Department of Agriculture.)

It has been ascertained through these counts that birds in the agricultural districts in the Northeastern United States average slightly more than a pair to the acre, though in parts of the arid West and on the treeless plains this number dwindles to an average of half a pair, or even less, to the acre.

By far the most abundant birds in the United States are the robin and the English sparrow, but several others are common enough to make their total numbers run well into the millions. The counts so far show that the most abundant bird on farms in the Northeastern States is the robin; next to this is the English sparrow, and following these are the catbird, brown thrasher, house wren, kingbird and bluebird, in the order named. The densest bird population anywhere recorded is near Washington, D. C., where a careful count showed, in 1915, one hundred and thirty-five pairs of forty species on five acres. Two city blocks, well furnished with trees, in the city of Aiken, S. C., harbored sixty-five pairs on ten acres.

Some species of ducks and geese and other water birds, together with certain land birds, are decidedly on the increase, while others, some few, appear to be steadily decreasing; but as a whole the bird population seems to be now on the increase. A few species, however, such as the trumpeter swan, Eskimo curlew, Carolina paroquet, and the ivory-billed woodpecker seem to be rapidly decreasing in numbers and may be on the verge of extinction.

### NATIONAL BIRD RESERVATIONS.

| Name. | Established. | Name. | Established. | Name. | Established. |
|---|---|---|---|---|---|
| Pelican Island, Fla. | 1903 | Lock-Katrine, Wyo. | 1908 | Culebra, P. R. | 1909 |
| Breton Island, La. | 1904 | Hawaiian Islands. | 1909 | Farallon, Cal. | 1909 |
| Stump Lake, N. D. | 1905 | Salt River, Ariz. | 1909 | Pribilof, Alaska | 1909 |
| Huron Islands, Mich. | 1905 | East Park, Cal. | 1909 | Bogoslof, Alaska | 1909 |
| Siskiwit Islands, Mich. | 1905 | Deer Flat, Idaho | 1909 | Clear Lake, Cal. | 1911 |
| Passage Key, Fla. | 1905 | Willow Creek Mont. | 1909 | Forrester Island, Alaska | 1912 |
| Indian Key, Fla. | 1906 | Carlsbad, N. M. | 1909 | Hazy Islands, Alaska | 1912 |
| Tern Islands, La. | 1907 | Rio Grande, N. M. | 1909 | Niobrara, Neb. | 1912 |
| Shell Keys, La. | 1907 | Cold Springs, Ore. | 1909 | Green Bay, Wis. | 1912 |
| Three Arch Rocks, Ore. | 1907 | Belle Fourche, S. D. | 1909 | Chamisso Island, Alaska | 1912 |
| Flattery Rocks, Wash. | 1907 | Strawberry Valley, Utah | 1909 | Pishkun, Mont. | 1912 |
| Quillayute Needles, Wash. | 1907 | Keechelus, Wash. | 1909 | Desecheo Island, P. R. | 1912 |
| Copalis Rock, Wash. | 1907 | Kachess, Wash. | 1909 | Gravel Island Wis. | 1913 |
| East Timbalier, La. | 1907 | Clealum, Wash. | 1909 | Aleutian Islands, Alaska | 1913 |
| Mosquito Inlet, Fla. | 1908 | Bumping Lake, Wash. | 1909 | Walker Lake, Ark. | 1913 |
| Tortugas Keys, Fla. | 1908 | Conconully Wash. | 1909 | Petit Bois Isl., Ala., Miss. | 1913 |
| Key West, Fla. | 1908 | Pathfinder, Wyo. | 1909 | Anaho Island, Nev. | 1913 |
| Klamath Lake, Ore. | 1908 | Shoshone, Wyo. | 1909 | Smith Island, Wash. | 1914 |
| Lake Malheur, Ore. | 1908 | Minidoka, Idaho | 1909 | Ediz Hook, Wash. | 1915 |
| Chase Lake, N. D. | 1908 | Bering Sea, Alaska | 1909 | Dungeness Spit, Wash. | 1915 |
| Pine Island, Fla. | 1908 | Tuxedni, Alaska | 1909 | Big Lake, Ark. | 1915 |
| Palma Sola, Fla. | 1908 | St. Lazaria, Alaska | 1909 | Goat Island, Cal. | 1916 |
| Matlacha Pass, Fla. | 1908 | Yukon Delta, Alaska | 1909 | North Platte, Neb. | 1916 |
| Island Bay, Fla. | 1908 | | | | |

### BIRD RESERVATIONS OF NAT. ASSOC. OF AUDUBON SOCIETIES.

Pass A'Loutre Mud Lumps, La.
Freeman's Rock, Me.
Stratton Island, Me.
Little Duck Island, Me.
Matinicus Rock, Me.
Great Duck Island, Me.
Moosehead Lake, Me.
Nash Island, Me.
Old Man's Land, Me.
Cranberry Island, Me.
Wepecket Island, Mass
Huron Islands, Mich.
Cobb Island, Va.
Metrie Island, Me.
Orange Lake, Fla.
Micanopy Rookery, Fla.
Stagger's Prairie, Fla.
Fowler's Prairie, Fla.
Orange Creek, Fla.
Sampson Lake, Fla.
Long Pond, Fla.
Buzzard Island, S. C.
Bird Island, La.
Ray's Lake, La.
Montgomery Prairie, Fla.
San Sebastian Rookeries, Fla.
Craney Island, N. C.
Bird Pond, Fla.
Hogtown Creek, Fla.
Bear Lake, Fla.
Wallace Bay, Fla.
River Styx, Fla.

## MINERAL PRODUCTS—STATES THEY COME FROM.

| Mineral. | Chief Producing States. |
|---|---|
| Aluminum | N. Y., Tenn., N. C. |
| Antimonial lead | Not separable by States. |
| Antimony ore | Nev., Alaska, Idaho. |
| Arsenious oxide | Not separable by States. |
| Asbestos | Ariz., Ga., Cal., Md. |
| Asphalt | Tex., Cal., Okla., Ill. |
| Barytes (crude) | Ga., Mo., Tenn., Ky. |
| Bauxite | Ark., Ga., Ala., Tenn. |
| Borax (crude) | Cal. |
| Bromine | Mich., Ohio, W. Va. |
| Cadmium | Not separable by States. |
| Calcium-magnes. chloride | Mich., Ohio, W. Va., Cal. |
| Cement | Pa., Ind., Mo., Cal. |
| Chromic iron ore | Cal., Ore., Alaska, N. C. |
| Clay: Products | Ohio, Pa., N. J., Ill. |
| Raw | Mo., Pa., N. J., Ohio. |
| Coal: Bituminous | Pa., W. Va., Ill., Ohio. |
| Anthracite | Pa. |
| Coke | Pa., Ala., Ohio, Ind. |
| Copper | Ariz., Mont., Mich., Utah. |
| Diatomaceous (infusorial) earth and tripoli | Cal., Pa., Ill., Mo. |
| Emery and corundum | N. Y., N. C., Va. |
| Feldspar | Me., N. C., Pa., N. Y. |
| Ferroalloys | Pa., N. Y., Va., Ala. |
| Fluorspar | Ill., Ky., Col., N. Mex. |
| Fuller's earth | Fla., Ga., Tex., Ark. |
| Garnet, for abras. purposes | N. Y., N. H., N. C. |
| Gems and precious stones | Mont., Nev., Cal., Ariz. |
| Gold | Cal., Col., Alaska, Nev. |
| Graphite | Ala., N. Y., Pa., R. I. |
| Grindstones-pulpstones | Ohio, W. Va., Mich. |
| Gypsum | N. Y., Iowa, Mich., Ohio. |
| Iron: Ore | Minn., Mich., Ala., N. Y. |
| Pig | Pa., Ohio, Ill., Ala. |
| Lead | Mo., Idaho, Utah, Okla. |
| Lime | Pa., Ohio, Va., Mo. |
| Magnesite (crude) | Cal., Wash. |
| Manganese ore | Mont., Cal., Ariz., Nev. |
| Mica | N. C., N. H., Va., Ga. |
| Millstones | N. Y., Va., N. C. |
| Mineral paints: Nat. pig. | Canvass discontinued. |
| Zinc and lead pigments | Pa., Wis., Kan., Mo. |
| Mineral waters | Wis., N. Y., Cal., Me. |
| Natural gas | W. Va., Pa., Ohio, Okla. |
| Natural-gas gasoline | Okla., W. Va., Cal., Pa. |
| Nickel | Not separable by States. |
| Oilstones, etc | Ala., Ind., Ohio, Vt. |
| Peat | N. J., Ill., Cal., Mass. |
| Petroleum | Okla., Cal., Kan., Tex. |
| Phosphate rock | Fla., Tenn., S. C., Ky. |
| Platinum, allied metals | Nev., Cal., Wyo., Alaska. |
| Potash | Neb., Cal., Utah, Wis. |
| Pumice | Kan., Neb., Cal. |
| Pyrite | Va., N. Y., Cal., Ga. |
| Quicksilver | Cal., Tex., Nev., Ore. |
| Salt | Mich., N. Y., Ohio, Kan. |
| Sand and gravel | Pa., Ohio, Ill., N. J. |
| Sand-lime brick | Mich., Minn., N. Y., Pa. |
| Silica (quartz) | Conn., Md., Tenn., Wis. |
| Silver | Utah, Mont., Idaho, Nev. |
| Slate | Pa., Vt., Me., Va. |
| Stone | Pa., Ohio, Vt., Mich. |
| Sulphur | La., Tex., Wyo., Nev. |
| Suphur. acid from copper and zinc sm | Pa., Ill., Ohio, Tenn. |
| Talc and soapstone | N. Y., Vt., Va., Cal. |
| Thorium miner. (monazite) | N. C. |
| Tin | Alaska, S. D., S. C. |
| Titanium ore (rutile) | Va. |
| Tungsten ore | Cal., Col., Ariz., Nev. |
| Uranium-vanadium mins. | Col., Utah. |
| Zinc | N. J., Mo., Mont., Okla. |

## MINERAL PRODUCING STATES AND THEIR LEADING MINERAL PRODUCTS.

| State. | Principal Mineral Products. | State. | Principal Mineral Products. |
|---|---|---|---|
| Ala. | Coal, iron ore, clay products, cement. | Mont. | Copper, zinc, silver, coal. |
| Alaska. | Copper, gold, silver, coal. | Neb. | Potash, clay products, stone, sand, gravel. |
| Ariz. | Copper, silver, gold, lead. | Nev. | Copper, silver, gold, lead. |
| Ark. | Coal, bauxite, natural gas, clay products. | N. H. | Stone, clay products, mica, sand, gravel. |
| Cal. | Petroleum, gold, copper, natural gas. | N. J. | Zinc, clay products, cement, sand, gravel. |
| Col. | Coal, gold, zinc, silver. | N. M. | Copper, coal, zinc, silver. |
| Conn. | Clay products, stone, lime, sand, gravel. | N. Y. | Clay products, iron ore, cement, salt. |
| Del. | Stone, clay prod., sand, gravel, min. water. | N. C. | Stone, clay products, mica, iron ore. |
| D. of C. | Clay prod. sand-lime brick, stone, min. wat. | N. D. | Coal, clay prod., min. wat., sand-lime brick. |
| Fla. | Phosph. rock, stone, fuller's earth, clay prod. | Ohio. | Coal, clay products, petroleum, natural gas. |
| Ga. | Clay products, stone, iron ore, cement. | Okla. | Petrol., nat.-gas gasoline, zinc, coal. |
| Idaho. | Lead, silver, zinc, copper. | Ore. | Gold, copper, chromite, cement. |
| Ill. | Coal, petroleum, clay products, cement. | Pa. | Coal, clay products, cement, natural gas. |
| Ind. | Coal, cement, clay products, stone. | R. I. | Stone, clay products, graphite, mineral wat. |
| Iowa. | Coal, clay products, cement, gypsum. | S. C. | Clay prod., stone, phosph. rock, min. water. |
| Kan. | Petroleum, coal, natural gas, zinc. | S. D. | Gold, tungsten ore, stone, silver. |
| Ky. | Coal, petroleum, clay products, fluorspar. | Tenn. | Coal, zinc, copper, clay products. |
| La. | Petrol., sulphur, nat. gas., nat.-gas. gasoline. | Tex. | Petroleum, sulphur, coal, natural gas. |
| Me. | Stone, lime, clay products, slate. | Utah. | Copper, lead, silver, coal. |
| Md. | Coal, clay prod., cement, sand and gravel. | Vt. | Stone, slate, talc, lime. |
| Mass. | Stone, clay products, lime, sand, gravel. | Va. | Coal, lime, clay products, stone. |
| Mich. | Copper, iron ore, salt, cement. | Wash. | Coal, clay products, magnesite. |
| Minn. | Iron ore, clay prod., cement, manganif. ore. | W. Va. | Coal, natural gas, petroleum, clay products. |
| Miss. | Clay prod., sand, gravel, min. water, stone. | Wis. | Zinc, iron ore, stone, mineral water. |
| Mo. | Lead, zinc, coal, clay products. | Wyo. | Coal, petroleum, iron ore, nat.-gas gasoline. |

## VALUE OF MINE AND QUARRY PRODUCTS OF THE U. S.

(From data of the Geological Survey.)

| Year. | Metallic. | Non-Metallic. | Other and Total. | Year. | Metallic. | Non-Metallic. | Other and Total. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* | *Dollars.* |
| 1880 | 187,881,000 | 173,582,000 | 367,463,000 | 1910 | 749,879,000 | 1,237,668,000 | 1,987,844,000 |
| 1890 | 303,440,000 | 310,995,000 | 615,429,000 | 1911 | 680,907,000 | 1,242,942,000 | 1,924,081,000 |
| 1900 | 513,732,000 | 594,204,000 | 1,108,936,000 | 1912 | 862,008,000 | 1,375,420,000 | 2,237,794,000 |
| 1901 | 493,314,000 | 660,764,000 | 1,155,078,000 | 1913 | 878,869,000 | 1,554,298,000 | 2,433,545,000 |
| 1902 | 604,517,000 | 722,434,000 | 1,327,951,000 | 1914 | 686,639,000 | 1,424,063,000 | 2,111,172,000 |
| 1903 | 588,753,000 | 905,628,000 | 1,495,381,000 | 1915 | 991,730,000 | 1,400,484,000 | 2,394,644,000 |
| 1904 | 501,114,000 | 857,667,000 | 1,359,181,000 | 1916 | 1,620,745,000 | 1,884,413,000 | 3,508,439,000 |
| 1905 | 702,585,000 | 920,780,000 | 1,623,765,000 | 1917 | 2,086,234,000 | 2,900,462,000 | 4,992,496,000 |
| 1906 | 886,180,000 | 1,014,500,000 | 1,900,880,000 | 1918 | 2,153,318,000 | 3,380,478,000 | 5,540,496,000 |
| 1907 | 904,108,000 | 1,165,376,000 | 2,069,570,000 | 1919 | 1,351,600,000 | 3,257,900,000 | 4,613,000,000 |
| 1908 | 550,768,000 | 1,040,761,000 | 1,591,773,000 | 1920 | 1,724,300,000 | 4,977,500,000 | 6,951,410,000 |
| 1909 | 754,944,000 | 1,131,866,000 | 1,887,107,000 | 1921 | 657,540,000 | 686,830,000 | 4,056,000,000 |

## QUARRY ACCIDENTS IN THE U. S.

Killed (1913) 183; (1914) 180; (1915) 148; (1916) 173; (1917) 131; (1918) 125; (1919) 123; (1920) 178. Injured (1913) 7,739; (1914) 7,836; (1915) 9,671; (1916) 13,427; (1917) 13,242; (1918) 8,719; (1919) 9,199; (1920) 11,217.

Number killed per thousand 300-day workers (1913) 2.10; (1914) 2.64; (1915) 1.80; (1916) 2.26; (1917) 1.83; (1918) 2.11; (1919) 1.93; (1920) 2,31.

## MINE AND QUARRY PRODUCTION IN U. S.—1920, 1921.

(Compiled by the Geological Survey. Metallic products are in *Italics.*)

| PRODUCT. | Unit of Measure. | 1921 Quan'ty | 1921 Value. | 1920 Quan'ty | 1920 Value. |
|---|---|---|---|---|---|
| | | | *Dollars.* | | *Dollars.* |
| *Aluminum* | Pound | | 10,906,000 | | 41,375,000 |
| *Antimonial lead* | Short ton (2000 lbs.) | 10,064 | 870,059 | 12,535 | 1,963,255 |
| *Antimony* | " " " | 1,589 | 157,629 | 2,785 | 473,450 |
| Arsenious Oxide | " " " | 4,786 | 717,700 | 11,502 | 2,021,356 |
| Asbestos | " " " | 831 | 336,968 | 1,648 | 678,231 |
| Asphalt | " " " | 920,632 | 11,033,804 | 898,993 | 13,199,365 |
| Barytes (crude) | " " " | 66,369 | 531,958 | 228,113 | 2,142,464 |
| *Bauxite* | Long " (2240 lbs.) | 139,550 | 889,800 | 521,308 | 3,247,345 |
| Borates | Short " | 50,000 | 1,600,000 | 120,320 | 2,173,000 |
| Bromine | Pound | 711,953 | 172,759 | 1,160,584 | 745,381 |
| *Cadmium* | " | 65,101 | 63,799 | 129,283 | 151,261 |
| Calcium-Magnesium Chloride | Short ton | 23,672 | 510,723 | 27,849 | 539,471 |
| Cement | 376-lb. bbl | 95,820,997 | 178,981,533 | 97,079,200 | 195,589,915 |
| *Chromite* | Long ton | 282 | 2,900 | 2,502 | 44,857 |
| Clay products | | | | | 373,670,102 |
| Clay, raw | Short ton | 1,716,746 | 6,025,300 | 3,116,212 | 11,614,288 |
| Coal, Penn. anthracite | Long " | 80,799,867 | 452,304,903 | 79,998,437 | 434,252,198 |
| Coal, bituminous | Short " | 406,925,000 | 1,237,000,000 | 568,666,683 | 2,129,933,000 |
| Coke | " " | 25,479,000 | | 51,345,043 | 494,246,254 |
| *Copper* | Pound | 505,586,098 | 65,221,000 | 1,209,061,040 | 222,467,000 |
| Diatomaceous earth and tripoli | Short ton | 67,474 | 895,629 | 102,155 | 1,649,370 |
| Emery | " " | 305 | 2,250 | 2,327 | 21,685 |
| Feldspar | " " | 102,889 | 617,652 | 151,817 | 851,123 |
| *Ferro alloys* | Long ton | | | 612,808 | 77,519,367 |
| Fluorspar | Short " | 34,960 | 724,094 | 186,778 | 4,718,547 |
| Fuller's earth | " " | 105,609 | 1,973,848 | 128,487 | 2,506,189 |
| Garnet, for abrasives | " " | 3,048 | 260,687 | 5,476 | 434,425 |
| Gems and precious stones | | | 518,230 | | 265,205 |
| *Gold* | Troy ounce | 2,422,006 | 50,067,300 | 2,476,166 | 51,186,900 |
| Graphite, amorphous | Short ton | 1,842 | 20,860 | 4,694 | 49,758 |
| Graphite, crystalline | Pound | 1,189,523 | 75,664 | 9,632,360 | 576,444 |
| Grindstones and pulpstones | Short ton | 26,340 | 1,227,322 | 53,484 | 1,707,004 |
| Gypsum | " | 3,050,984 | 23,700,290 | 3,129,142 | 24,533,065 |
| *Iron, ore* | Long " | 26,652,528 | 89,745,308 | 69,281,341 | 285,006,327 |
| *Iron, pig* | " | 16,000,000 | 394,000,000 | 35,710,227 | 1,140,904,096 |
| *Lead* (refined) | Short " | 398,222 | 35,840,000 | 476,849 | 76,296,000 |
| Lime | " " | 2,531,000 | 24,536,000 | 3,570,141 | 37,543,840 |
| Magnesite (crude) | " " | 47,904 | 510,177 | 303,767 | 2,748,150 |
| *Manganese ore* (35 p. ct.) | Long " | 13,513 | 495,097 | 94,420 | 2,396,235 |
| *Manganiferous ore* (5to.35pct.) | " " | 97,099 | 255,131 | 767,664 | 2,437,798 |
| Mica, scrap | Short " | 2,577 | 56,849 | 5,723 | 167,017 |
| Mica, sheet | Pound | 741,845 | 118,513 | 1,683,480 | 546,972 |
| Millstones | | 24,524 | | 63,325 | |
| Mineral paints and pigments | Short ton | 102,463 | 14,801,032 | 143,244 | 24,564,572 |
| Mineral waters | Gallons sold | 32,000,000 | 3,750,000 | 36,218,260 | 4,860,915 |
| Natural gas | 1000 cubic feet | 807,670,000 | 200,302,000 | 798,210,000 | 166,259,000 |
| Natural gas gasoline | Gallon | 473,658,500 | 65,717,900 | 384,743,922 | 71,788,122 |
| *Nickel* | Short ton | 111 | 86,000 | 365 | 293,250 |
| Oilstones, etc | " " | 831 | 123,777 | 1,144 | 231,747 |
| Peat | " " | 30,402 | 260,119 | 73,204 | 291,732 |
| Petroleum | 42-gal. bbl | 469,639,000 | 753,300,000 | 442,929,000 | 1 360,745,000 |
| Phosphate rock | Long ton | 2,064,025 | 12,270,070 | 3,103,982 | 25,079,572 |
| *Platinum*, and allied metals | Troy ounce | 56,370 | 4,238,989 | 41,544 | 4,697,722 |
| Potash (K 2 O) | Short ton | 4,408 | 447,859 | 41,444 | 7,463,026 |
| Pumice | " | 37,108 | 158,540 | 41,838 | 114,433 |
| Pyrites | Long " | 157,118 | 711,432 | 310,777 | 1,596,961 |
| *Quicksilver* | 75-lb. flask | 35,000 | 300,595 | 109,000 | 1,066,807 |
| Salt | Short ton | 4,981,154 | 24,557,966 | 6,840,029 | 29,894,075 |
| Sand, glass | " | 1,256,000 | 2,273,000 | 2,165,926 | 4,748,690 |
| Sand, moulding, building, etc | " " | 75,093,000 | 50,302,000 | 79,875,462 | 60,912,915 |
| Sand-lime brick | Thousand | | | 169,761 | 2,490,283 |
| Silica (quartz) | Short ton | 11,252 | 84,957 | 68,190 | 320,350 |
| Silver | Troy ounce | 53,052,441 | 53,052,441 | 55,361,573 | 60,801,955 |
| Slate | | | 7,322,006 | | 8,726,442 |
| Stone | Short ton | 62,400,000 | 92,500,000 | 78,527,000 | 133,541,960 |
| Sulphur | Long ton | 954,344 | 17,000,000 | 1,517,625 | 30,000,000 |
| Sulphur acid | Short ton | | | 1,229,508 | 13,617,075 |
| Talc and soapstone | " " | 126,434 | 1,821,451 | 210,635 | 3,035,449 |
| Thorium minerals (monazite) | Pounds | | | | |
| *Tin* (metallic equivalent) | Short ton | 4 | 2,400 | 22 | 22,000 |
| *Titanium ore* | " " | | | 277 | |
| *Tungsten ore* (60 per cent.) | " " | | | 216 | 101,800 |
| *Titanium and vanadium* | " " | 8,540 | 876,000 | 35,076 | 2,401,000 |
| *Zinc* | " " | 198,232 | 19,823,000 | 450,045 | 72,907,000 |
| Total value metallic products | | | 657,540,000 | | 1,762,350,000 |
| Total value non-metallic products | | | 3,395,460,000 | | 5.184 240,000 |
| Mineral fuels (not incl. above) | | | 2,708,630,000 | | 4,162.980.000 |
| Unspecified metallic and non-metallic products (not incl. above) | | | 3,000,000 | | 4,820,000 |
| GRAND TOTAL | | | 4.056,000,000 | | 6,951,410,000 |

Some of the 1921 figures are subject to final revision.

The canvass of sulphuric acid was discontinued in 1917, when the quantity was 1,455,257 short tons (including 119,048 tons of stronger acid), and the value was $16,890,545.

"Unspecified" products in 1921 included the value of the following products: Bismuth, cadmium sulphide, chats, columbite, flint lining for tube mills iron ore sold for paint, lithium minerals, marls, pebbles for grinding, selenium, silica sand and sandstone (finely ground), sodium salts (sodium carbonate, sodium sulphate, trona, and borax) from natural sources, tellurium, and an estimate of the value of miscellaneous mineral products, statistics for which are not collected annually by the Survey.

## MINING AND QUARRYING IN THE U. S.

(U. S. Census of Manufactures, 1919.)

PRINCIPAL INDUSTRIES, BY STATES, RANKED BY VALUE OF PRODUCTS, PRODUCING ENTERPRISES.

| Industry and State. | No. Enterprises. | Wage Earners. | Value of Products. |
|---|---|---|---|
| COAL, ANTHRACITE (all in Pennsylvania) | 254 | 147,372 | $364,084,142 |
| COAL, BITUMINOUS | 6,636 | 545,798 | 1,145,977,565 |
| Pennsylvania | 1,938 | 154,992 | 362,973,952 |
| West Virginia | 926 | 87,095 | 193,108,343 |
| Illinois | 447 | 73,780 | 138,767,835 |
| Ohio | 788 | 40,452 | 77,988,602 |
| Kentucky | 635 | 39,769 | 72,432,840 |
| Indiana | 295 | 24,479 | 45,492,726 |
| Alabama | 188 | 24,648 | 45,359,441 |
| Colorado | 161 | 11,252 | 28,342,195 |
| Virginia | 108 | 11,215 | 23,763,440 |
| Wyoming | 46 | 7,091 | 18,723,451 |
| Iowa | 167 | 10,584 | 16,903,358 |
| Kansas | 129 | 8,084 | 15,748,535 |
| Oklahoma | 94 | 7,040 | 14,477,317 |
| Tennessee | 107 | 9,556 | 14,024,432 |
| Utah | 27 | 3,647 | 12,632,035 |
| Missouri | 179 | 7,285 | 12,077,845 |
| Washington | 35 | 4,413 | 10,737,656 |
| PETROLEUM AND NATURAL GAS | 9,814 | 93,205 | 931,793,423 |
| Oklahoma | 1,699 | 21,180 | 247,497,450 |
| Texas | 553 | 13,599 | 143,337,362 |
| California | 403 | 12,344 | 139,018,663 |
| West Virginia | 751 | 12,302 | 99,518,304 |
| Kansas | 613 | 6,305 | 68,515,158 |
| Pennsylvania | 3,140 | 9,065 | 66,271,961 |
| Ohio | 1,333 | 5,123 | 45,483,525 |
| Louisiana | 133 | 4,841 | 32,016,085 |
| Illinois | 236 | 2,752 | 31,263,563 |
| Kentucky | 196 | 2,119 | 23,329,521 |
| Wyoming | 39 | 2,167 | 21,959,937 |
| New York | 561 | 868 | 9,900,894 |
| Indiana | 131 | 403 | 2,604,395 |
| IRON ORE | 290 | 45,741 | 218,217,905 |
| Minnesota | 89 | 16,236 | 128,377,174 |
| Michigan | 65 | 16,160 | 60,906,692 |
| Alabama | 39 | 6,485 | 12,291,760 |
| New York | 7 | 1,811 | 5,264,443 |
| Wisconsin | 6 | 1,145 | 3,826,872 |
| COPPER | 195 | 43,717 | 181,258,087 |
| Arizona | 75 | 14,237 | 84,217,141 |
| Michigan | 22 | 12,235 | 34,476,336 |
| LEAD AND ZINC | 432 | 21,884 | 75,579,347 |
| Oklahoma | 111 | 5,253 | 18,979,726 |
| Missouri | 93 | 4,793 | 15,879,177 |
| Idaho | 20 | 1,820 | 9,529,723 |
| GOLD AND SILVER, LODE MINES | 740 | 15,436 | $58,832,330 |
| Colorado | 198 | 3,495 | 16,785,716 |
| Nevada | 148 | 2,084 | 9,687,431 |
| California | 99 | 2,881 | 8,773,757 |
| LIMESTONE | 895 | 22,069 | 52,943,924 |
| Pennsylvania | 184 | 5,573 | 12,881,213 |
| Ohio | 90 | 2,262 | 6,742,496 |
| Indiana | 67 | 1,800 | 4,619,801 |
| New York | 55 | 1,739 | 4,597,942 |
| Illinois | 41 | 1,244 | 3,776,626 |
| GRANITE | 358 | 8,049 | 18,279,345 |
| Vermont | 27 | 1,062 | 3,563,734 |
| Massachusetts | 42 | 1,034 | 2,405,165 |
| North Carolina | 16 | 959 | 1,576,250 |
| Wisconsin | 14 | 753 | 1,484,979 |
| New Hampshire | 23 | 589 | 1,427,979 |
| Maine | 42 | 747 | 1,300,996 |
| Minnesota | 27 | 392 | 1,135,391 |
| SANDSTONE | 255 | 4,287 | 10,684,969 |
| Pennsylvania | 100 | 1,673 | 3,534,563 |
| Ohio | 21 | 875 | 2 759,352 |
| Illinois | 15 | 288 | 1,329,389 |
| PHOSPHATE ROCK | 48 | 4,373 | 10,300,198 |
| Florida | 23 | 2,330 | 6,678,888 |
| Tennessee | 19 | 1,568 | 3,139,671 |
| CLAY | 345 | 5,452 | 10,086,298 |
| Pennsylvania | 62 | 1,337 | 2,546,485 |
| New Jersey | 35 | 868 | 1,482,358 |
| Missouri | 41 | 622 | 1,420,585 |
| BASALT | 163 | 3,336 | 9,657,977 |
| Pennsylvania | 29 | 721 | 2,298,791 |
| New Jersey | 36 | 637 | 1,928,025 |
| Massachusetts | 21 | 547 | 1,548,611 |
| Connecticut | 20 | 363 | 1,262,579 |
| GOLD, PLACER MINES | 112 | 1,380 | 9,368,561 |
| California | 60 | 1,102 | 7,937,654 |
| GYPSUM | 47 | 2,191 | 6,805,940 |
| New York | 6 | 400 | 1,110,463 |
| Iowa | 5 | 444 | 1,092,920 |
| SLATE | 101 | 3,513 | 5,720,792 |
| Pennsylvania | 42 | 1,892 | 2,651,533 |
| Vermont | 38 | 1,039 | 2,057,388 |
| MARBLE | 48 | 1,732 | 4,397,912 |
| Vermont | 15 | 570 | 2,108,872 |
| Tennessee | 13 | 540 | 1,088,131 |

## U. S. GOLD AND SILVER PRODUCTION, 1921, BY STATES.

| State or Territory. | Gold. | | Silver. | |
|---|---|---|---|---|
| | Fine Ozs. | Value. | Fine Ozs. | Value. |
| | | *Dollars.* | | *Dollars.* |
| Alaska | 386,927 | 7,998,500 | 753,999 | 753,999 |
| Alabama | 4 | 100 | 4 | 4 |
| Arizona | 160,498 | 3,317,800 | 2,519,200 | 2,519,200 |
| California | 728,590 | 15,061,300 | 3,606,708 | 3,606,708 |
| Colorado | 355,459 | 7,347,800 | 6,310,694 | 6,310,694 |
| Georgia | 53 | 1,100 | 3 | 3 |
| Idaho | 26,229 | 542,200 | 7,200,319 | 7,200,319 |
| Maine | 9 | 200 | ..... | ..... |
| Illinois | ..... | ..... | 1,616 | 1,616 |
| Michigan | ..... | ..... | 316,551 | 316,551 |
| Missouri | ..... | ..... | 63,470 | 63,470 |
| Montana | 83,476 | 1,725,600 | 9,677,020 | 9,677,020 |
| Nevada | 155,791 | 3,220,500 | 6,998,774 | 6,998,774 |
| N. Mexico | 9,824 | 203,100 | 579,374 | 579,374 |
| N. Car | 82 | 1,700 | 13 | 13 |
| Oregon | 39,454 | 815,600 | 53,118 | 53,118 |
| Pen'syl'a | 24 | 500 | 1,707 | 1,707 |
| S. Dakota | 315,550 | 6,523,000 | 111,670 | 111,670 |
| Tennes'ee | 241 | 5,000 | 106,664 | 106,664 |
| Texas | 116 | 2,400 | 548,827 | 548,827 |
| Utah | 91,636 | 1,894,300 | 14,028,661 | 14,028,661 |
| Virginia | 29 | 600 | 8 | 8 |
| Wash'g'n | 7,309 | 151,100 | 147,584 | 147,584 |
| Wyoming | ..... | ..... | 65 | 65 |
| Philip'nes | 60,705 | 1,254,900 | 26,392 | 26,392 |
| Total | 2,422,006 | 50,067,300 | 53,052,441 | 53,052,441 |

Gold value, $20.67 a fine ounce. Silver valued at $1.09827 per ounce, being the average of the New York price to the end of May, when the Pittman act of $1 per ounce became effective.

## GEMS AND PRECIOUS STONES FOUND IN U. S.

(The figures represent values.)

Corundum (sapphire) (1920) $214,705; (1921) $482,745.

Quartz (1920) $14,676; (1921) $11,114.

Tourmaline (1920) $4,869; (1921) $1,450.

Turquoise (1920) $16,865; (1921) $6,272.

Diamonds, opals, and topazes no longer figure to any extent in the gem discoveries in the United States.

## IMPORTS AND EXPORTS OF PRECIOUS STONES.

(For year ended June 30, 1922. Values are in parentheses.)

Imports—Diamonds (unset) 20,927 carats ($458,462); diamonds (uncut) 49,288 carats ($3,012,732); diamonds (cut but not set) 336,338 carats ($32,215,412); pearls and parts of, not strung or set, $6,011,932; other and total, $47,232,364.

Exports—Diamonds and other stones (Jan. 1 to June 30, 1922) $14,923.

## U. S. GOLD PRODUCTION, COINED, EXPORTED, IMPORTED, IN CIRCULATION.

| Year. | Produced. | Coined. | Exported. | Imported. | In Circulation. | Ratio Sil. to Gold. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | |
| 1800 | ..... | 317,760 | ..... | ..... | 16,000,000 | 15.68 |
| 1810 | 2,463 | 501,435 | ..... | ..... | 27,000,000 | 15.77 |
| 1820 | 73,112 | 1,319,030 | 10,478,059 | 8,064,890 | 22,300,000 | 15.62 |
| 1830 | 564,950 | 643,105 | 1,422,664 | 821,146 | 26,344,295 | 15.82 |
| 1840 | 11,697,829 | 1,675,483 | 3,703,373 | 3,085,157 | 79,336,916 | 15.62 |
| 1850 | 50,000,000 | 31,981,739 | 4,560,627 | 1,776,706 | 147,395,456 | 15.70 |
| 1860 | 46,000,000 | 23,473,654 | 58,446,039 | 2,508,786 | 228,304,775 | 15.29 |
| 1870 | 50,000,000 | 23,198,788 | 33,635,962 | 12,056,950 | 25,000,000 | 15.57 |
| 1880 | 36,000,000 | 62,308,279 | 3,639,025 | 80,758,396 | 225,695,779 | 18.05 |
| 1890 | 32,845,000 | 20,467,183 | 17,274,491 | 12,943,342 | 374,258,923 | 19.75 |
| 1900 | 79,171,000 | 99,272,943 | 48,266,759 | 44,573,184 | 610,806,472 | 33.23 |
| 1901 | 78,666,700 | 101,735,188 | 53,185,177 | 66,051,187 | 629,790,765 | 34.68 |
| 1902 | 80,000,000 | 47,184,853 | 48,568,950 | 52,021,254 | 632,394,289 | 39.15 |
| 1903 | 73,591,700 | 43,683,793 | 47,090,595 | 44,982,027 | 617,260,739 | 38.10 |
| 1904 | 80,464,700 | 233,402,400 | 81,459,986 | 99,055,368 | 645,817,576 | 35.70 |
| 1905 | 88,180,700 | 49,638,400 | 92,594,024 | 53,648,961 | 651,063,589 | 33.87 |
| 1906 | 94,373,800 | 77,538,045 | 38,573,591 | 96,221,730 | 668,655,075 | 30.54 |
| 1907 | 90,435,700 | 131,907,490 | 51,399,176 | 114,510,249 | 561,697,371 | 31.24 |
| 1908 | 94,560,000 | 131,638,632 | 72,432,924 | 148,337,321 | 613,244,810 | 38.64 |
| 1909 | 99,673,400 | 88,776,908 | 91,531,818 | 44,003,989 | 599,337,698 | 39.74 |
| 1910 | 96,269,100 | 104,723,735 | 118,563,215 | 43,339,905 | 590,877,993 | 38.22 |
| 1911 | 96,890,000 | 56,176,823 | 22,509,653 | 73,607,013 | 589,295,538 | 38.33 |
| 1912 | 93,451,500 | 17,498,523 | 57,328,348 | 48,936,500 | 610,724,154 | 33.62 |
| 1913 | 88,301,023 | 25,433,378 | 77,762,622 | 69,194,025 | 608,400,799 | 34.19 |
| 1914 | 94,531,800 | 53,457,817 | 112,038,529 | 66,538,659 | 611,544,681 | 37.37 |
| 1915 | 101,035,700 | 23,968,401 | 146,224,148 | 171,568,755 | 590,133,619 | 39.84 |
| 1916 | 92,590,300 | 18,525,026 | 90,249,548 | 494,009,301 | 637,250,272 | 30.11 |
| 1917 | 83,750,700 | 10,014 | 291,921,225 | 977,176,026 | 690,574,527 | 23.09 |
| 1918 | 68,646,700 | ..... | 190,852,224 | 124,413,483 | 1,114,077,426 | 21.00 |
| 1919 | 60,333,400 | ..... | 116,575,535 | 62,363,733 | 1,112,353,324 | 18.44 |
| 1920 | 51,186,900 | 16,990,000 | 466,420,606 | 150,540,200 | 834,687,970 | 20.27 |
| 1921 | 50,067,300 | 10,570,000 | 133,537,902 | 638,559,805 | 883,404,285 | 32.75 |

Note—Production and coinage are for calendar years. Exports, imports and circulation are for fiscal years ended June 30. Ratio figures are for calendar years.

The commercial ratio of silver to gold was 14.81 in 1700, and rose to 15.74 in 1799.

## U. S. SILVER PROD., COINED, EXP'T'D, IMP'T'D, IN CIRCULATION.

| Year. | Produced. | Coined. | Exported. | Imported. | In Circulation. | Quicksilver Production. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1800 | ..... | 224,296 | ..... | ..... | 16,000,000 | ..... |
| 1810 | ..... | 638,774 | ..... | ..... | 27,000,000 | ..... |
| 1820 | ..... | 501,681 | 10,478,059 | 8,064,890 | 22,300,000 | ..... |
| 1830 | 253,400 | 2,495,400 | 756,109 | 7,334,818 | 26,344,295 | ..... |
| 1840 | 252,300 | 1,726,703 | 4,713,641 | 5,797,656 | 79,336,916 | ..... |
| 1850 | 50,900 | 1,866,100 | 2,962,367 | 2,852,086 | 147,395,456 | 768,052 |
| 1860 | 156,800 | 2,259,390 | 8,100,200 | 6,041,349 | 228,304,775 | 535,500 |
| 1870 | 16,434,000 | 1,378,256 | 24,519,704 | 14,362,229 | 25,000,000 | 1,725,818 |
| 1880 | 34,717,000 | 27,411,694 | 13,503,894 | 12,223,914 | 68,622,345 | 1,857,706 |
| 1890 | 57,242,100 | 39,202,908 | 34,873,929 | 21,032,984 | 110,311,366 | 1,203,615 |
| 1900 | 35,741,100 | 36,345,321 | 56,712,275 | 35,256,302 | 142,050,334 | 1,272,566 |
| 1901 | 33,128,400 | 30,838,461 | 64,285,180 | 36,386,521 | 146,156,537 | 1,440,570 |
| 1902 | 29,415,000 | 30,028,167 | 49,732,390 | 28,232,254 | 154,468,577 | 1,481,371 |
| 1903 | 29,322,000 | 19,874,440 | 44,250,259 | 24,163,491 | 165,117,034 | 1,613,864 |
| 1904 | 33,456,024 | 15,695,610 | 49,472,702 | 27,768,814 | 166,842,169 | 1,536,203 |
| 1905 | 34,222,000 | 6,332,181 | 48,848,812 | 27,484,865 | 175,022,043 | 1,105,941 |
| 1906 | 38,256,400 | 10,651,088 | 65,869,063 | 44,442,540 | 188,630,872 | 1,030,279 |
| 1907 | 37,299,700 | 13,178,436 | 56,739,073 | 42,946,624 | 203,487,845 | 853,533 |
| 1908 | 28,050,600 | 12,391,777 | 57,921,202 | 44,658,097 | 200,506,822 | 872,446 |
| 1909 | 28,455,200 | 8,087,853 | 55,682,792 | 43,954,810 | 204,319,698 | 957,859 |
| 1910 | 30,854,500 | 3,740,468 | 55,286,861 | 45,217,194 | 208,016,245 | 958,153 |
| 1911 | 32,615,700 | 6,457,302 | 64,749,958 | 45,937,249 | 210,867,772 | 977,989 |
| 1912 | 39,197,400 | 7,340,995 | 64,890,665 | 47,050,219 | 215,373,772 | 1,053,941 |
| 1913 | 40,864,871 | 3,184,229 | 71,614,311 | 41,268,516 | 226,585,263 | 813,171 |
| 1914 | 40,067,700 | 6,083,823 | 54,965,023 | 30,326,604 | 230,266,183 | 811,680 |
| 1915 | 37,397,300 | 4,114,082 | 50,942,187 | 29,110,323 | 223,913,111 | 1,804,631 |
| 1916 | 43,953,000 | 8,880,800 | 59,291,523 | 34,154,375 | 227,864,733 | 3,768,139 |
| 1917 | 59,078,100 | 29,412,300 | 78,279,931 | 35,003,563 | 265,677,472 | 3,808,266 |
| 1918 | 66,485,129 | 25,473,029 | 139,181,399 | 70,328,153 | 294,503,829 | 3,863,752 |
| 1919 | 63,533,652 | 11,068,400 | 301,174,550 | 78,825,266 | 312,641,023 | 1,933,560 |
| 1920 | 60,801,955 | 25,057,270 | 179,037,260 | 102,900,034 | 385,083,071 | 1,041,156 |
| 1921 | 53,052,441 | 89,057,535 | 52,536,171 | 59,430,850 | 336,704,206 | 300,595 |

Note—Exports, imports and circulation are for fiscal years; other figures are for calendar years.

## GOLD AND SILVER USED IN INDUSTRIAL ARTS IN THE UNITED STATES.

| Year (Cal.) | Gold. | Silver | Year (Cal.) | Gold. | Silver. | Year (Cal.) | Gold. | Silver. |
|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Fine Ozs.* | | *Dollars.* | *Fine Ozs.* | | *Dollars.* | *Fine Ozs.* |
| 1890 | 17,655,960 | 7,138,173 | 1907 | 40,727,070 | 24,369,784 | 1915 | 37,820,027 | 29,968,115 |
| 1900 | 22,148,142 | 13,217,284 | 1908 | 31,476,091 | 23,850,828 | 1916 | 51,661,187 | 32,103,507 |
| 1901 | 23,808,956 | 14,133,694 | 1909 | 37,628,769 | 27,901,128 | 1917 | 52,915,641 | 27,039,845 |
| 1902 | 27,682,847 | 19,345,009 | 1910 | 41,787,152 | 24,789,807 | 1918 | 52,409,740 | 36,252,596 |
| 1903 | 29,063,551 | 19,968,356 | 1911 | 40,834,292 | 32,013,685 | 1919 | 75,490,349 | 32,700,521 |
| 1904 | 28,655,963 | 20,479,987 | 1912 | 43,977,257 | 29,936,320 | 1920 | 82,215,087 | 27,974,521 |
| 1905 | 33,208,615 | 23,700,677 | 1913 | 45,864,066 | 30,992,834 | 1921 | 50,674,270 | 35,867,946 |
| 1906 | 39,126,763 | 21,853,264 | 1914 | 45,520,032 | 29,309,961 | | | |

## TOTAL STOCK OF GOLD AND SILVER IN U. S.

(As estimated by the Director of the Mint from official reports.)

| Year (Fiscal). | Gold. | Silver. | Year (Fiscal). | Gold. | Silver. | Year (Fiscal). | Gold. | Silver. |
|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* |
| 1874.... | 147,379,493 | 10,355,478 | 1891.... | 646,582,852 | 522,277,740 | 1907.... | 1,466,056,632 | 705,330,224 |
| 1875.... | 121,134,906 | 19,367,995 | 1892.... | 664,275,335 | 570,313,544 | 1908.... | 1,615,140,575 | 723,594,595 |
| 1876.... | 130,056,907 | 36,415,992 | 1893.... | 597,697,685 | 615,861,484 | 1909.... | 1,640,567,131 | 733,250,073 |
| 1877.... | 167,501,472 | 56,464,.27 | 1894.... | 627,293,201 | 624,347,757 | 1910.... | 1,635,424,513 | 727,078,304 |
| 1878.... | 213,199,977 | 88,047,907 | 1895.... | 636,229,825 | 625,854,949 | 1911.... | 1,753,134,114 | 732,002,448 |
| 1879.... | 245,741,837 | 117,526,341 | 1896.... | 599,597,964 | 628,728,071 | 1912.... | 1,812,856,241 | 741,184,095 |
| 1880.... | 351,841,206 | 148,522,678 | 1897.... | 696,270,542 | 634,509,781 | 1913.... | 1,866,619,157 | 745,585,964 |
| 1881.... | 478,484,538 | 175,384,144 | 1898.... | 861,514,780 | 637,672,743 | 1914.... | 1,871,611,723 | 753,563,709 |
| 1882.... | 506,757,715 | 203,217,124 | 1899.... | 962,865,505 | 639,286,743 | 1915.... | 1,973,330,201 | 758,039,421 |
| 1883.... | 542,732,063 | 233,007,985 | 1900.... | 1,034,439,264 | 647,371,030 | 1916.... | 2,450,516,328 | 763,218,469 |
| 1884.... | 545,500,797 | 255,568,142 | 1901.... | 1,124,652,818 | 661,205,403 | 1917.... | 3,018,964,392 | 772,908,391 |
| 1885.... | 588,697,036 | 283,478,788 | 1902.... | 1,192,395,607 | 670,540,105 | 1918.... | 3,075,339,748 | 745,747,094 |
| 1886.... | 590,774,461 | 312,252,844 | 1903.... | 1,249,552,756 | 677,448,933 | 1919.... | 3,112,320,547 | 568,329,598 |
| 1887.... | 654,520,335 | 352,993,566 | 1904.... | 1,327,672,672 | 682,383,277 | 1920.... | 2,707,866,274 | 548,938,429 |
| 1888.... | 705,818,855 | 386,611,108 | 1905.... | 1,357,881,186 | 686,401,168 | 1921.... | 3,294,909,763 | 619,725,982 |
| 1889.... | 680,063,505 | 420,548,929 | 1906.... | 1,472,995,209 | 687,958,920 | 1922.... | 3,656,988,551 | 630,134,336 |
| 1890.... | 695,563,029 | 463,211,919 | | | | | | |

## BULLION VALUE OF 371¼ GRAINS OF PURE SILVER.

(This is the content of the Standard Silver Dollar.)

| Cal'd'r | Value. | Cal'd'r | Value. | Cal'd'r | Value. | Cal'd'r | Value. | Cal'd'r | Value. | Cal'd'r | Value. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| 1861... | 1.031 | 1872... | 1.022 | 1882... | .87833 | 1892... | .67401 | 1902... | .40835 | 1912... | .47543 |
| 1862... | 1.041 | 1873... | 1.00368 | 1883... | .85754 | 1893... | .60351 | 1903... | .41960 | 1913... | .48760 |
| 1863... | 1.040 | 1874... | .98909 | 1884... | .85904 | 1894... | .49097 | 1904... | .44763 | 1914... | .42810 |
| 1864... | 1.040 | 1875... | .96086 | 1885... | .82379 | 1895... | .50587 | 1905... | .47200 | 1915... | .40135 |
| 1865... | 1.035 | 1876... | .90039 | 1886... | .76931 | 1896... | .52257 | 1906... | .52353 | 1916... | .53094 |
| 1866... | 1.036 | 1877... | .92958 | 1887... | .75755 | 1897... | .46745 | 1907... | .51164 | 1917... | .69242 |
| 1867... | 1.027 | 1878... | .89222 | 1888... | .72683 | 1898... | .45640 | 1908... | .41371 | 1918... | .76142 |
| 1868... | 1.025 | 1879... | .86928 | 1889... | .72325 | 1899... | .46525 | 1909... | .40231 | 1919... | .86692 |
| 1869... | 1.024 | 1880... | .88564 | 1890... | .80927 | 1900... | .47958 | 1910... | .41825 | 1920... | .78844 |
| 1870... | 1.027 | 1881... | .87575 | 1891... | .76416 | 1901... | .46093 | 1911... | .41909 | 1921... | .48817 |
| 1871... | 1.025 | | | | | | | | | | |

## QUICKSILVER PRODUCED IN THE UNITED STATES.

(In flasks of 76.5 pounds to June, 1904; subsequently in flasks of 75 pounds.)

| Year. | Flasks. | Dollars. | Year. | Flasks. | Dollars. | Year. | Flasks. | Dollars. | Year. | Flasks. | Dollars. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1850... | 7,723 | 768,052 | 1895... | 36,067 | 1,335,922 | 1904... | 35,315 | 1,536,203 | 1913... | 20,213 | 813,171 |
| 1860... | 10,000 | 535,500 | 1896... | 30,765 | 1,075,544 | 1905... | 30,534 | 1,105,941 | 1914... | 16,548 | 811,680 |
| 1870... | 30,077 | 1,725,818 | 1897... | 26,691 | 995,040 | 1906... | 26,083 | 1,030,279 | 1915... | 21,033 | 1,804,631 |
| 1880... | 59,926 | 1,857,706 | 1898... | 31,092 | 1,188,647 | 1907... | 21,554 | 853,538 | 1916... | 29,932 | 3,768,139 |
| 1890... | 22,926 | 1,203,615 | 1899... | 30,454 | 1,452,656 | 1908... | 19,752 | 872,446 | 1917... | 36,159 | 3,808,266 |
| 1891... | 22,904 | 1,036,406 | 1900... | 28,317 | 1,272,566 | 1909... | 21,075 | 957,859 | 1918... | 32,883 | 3,863,752 |
| 1892... | 27,993 | 1,139,595 | 1901... | 29,727 | 1,440,570 | 1910... | 20,657 | 958,153 | 1919... | 21,415 | 1,933,560 |
| 1893... | 30,164 | 1,108,527 | 1902... | 34,291 | 1,481,371 | 1911... | 21,256 | 977,989 | 1920... | 13,392 | 1,066,807 |
| 1894... | 30,416 | 933,771 | 1903... | 35,634 | 1,613,864 | 1912... | 25,064 | 1,053,941 | 1921... | 6,339 | 300,595 |

There were no quicksilver imports in the year ended June 30, 1922; the exports totalled 29,650 lbs. ($19,169).

## COPPER AND LEAD PRODUCTION IN THE UNITED STATES.

(From domestic ores and base bullion.)

| Year (Cal.) | Copper. | Lead. | Year (Cal.) | Copper. | Lead. | Year (Cal.) | Copper. | Lead. |
|---|---|---|---|---|---|---|---|---|
| | *Long tons.* | *Short tons.* | | *Long tons.* | *Short tons.* | | *Long tons.* | *Short tons.* |
| 1830..... | ..... | 8,000 | 1878..... | 21,500 | 91,060 | 1900..... | 270,588 | 270.824 |
| 1840..... | 100 | 17,000 | 1879..... | 23,000 | 92,780 | 1901..... | 268,782 | 270,700 |
| 1850..... | 650 | 22,000 | 1880..... | 27,000 | 97,825 | 1902..... | 294,423 | 270,000 |
| 1855..... | 3,000 | 15,800 | 1881..... | 32,000 | 117,085 | 1903..... | 311,627 | 282,000 |
| 1860..... | 7,200 | 15,600 | 1882..... | 40,467 | 132,890 | 1904..... | 362,739 | 307,000 |
| 1861..... | 7,500 | 14,100 | 1883..... | 51,574 | 143,957 | 1905..... | 402,637 | 307,514 |
| 1862..... | 9,000 | 14,200 | 1884..... | 64,708 | 139,897 | 1906..... | 409,735 | 336,200 |
| 1863..... | 8,500 | 14,800 | 1885..... | 74,052 | 129,412 | 1907..... | 387,945 | 352,381 |
| 1864..... | 8,000 | 15,300 | 1886..... | 70,430 | 130,629 | 1908..... | 420,791 | 311,666 |
| 1865..... | 8,500 | 14,700 | 1887..... | 81 017 | 145,700 | 1909..... | 487,925 | 352,839 |
| 1866..... | 8,900 | 16,100 | 1888..... | 101,054 | 151,919 | 1910..... | 482,214 | 375,402 |
| 1867..... | 10,000 | 15,200 | 1889..... | 101,239 | 156,397 | 1911..... | 489,836 | 391,995 |
| 1868..... | 11,600 | 16,400 | 1890..... | 115,996 | 143,630 | 1912..... | 555,031 | 392,517 |
| 1869..... | 12,500 | 17,500 | 1891..... | 126,839 | 178,554 | 1913..... | 546,645 | 411,878 |
| 1870..... | 12,600 | 17,830 | 1892..... | 154,018 | 173,305 | 1914..... | 513,454 | 512,794 |
| 1871..... | 13,000 | 20,000 | 1893..... | 147,033 | 163,982 | 1915..... | 619,647 | 507,026 |
| 1872..... | 12,500 | 25,880 | 1894..... | 158,120 | 162,686 | 1916..... | 860,647 | 552,228 |
| 1873..... | 15,500 | 42,540 | 1895..... | 169,917 | 170,000 | 1917..... | 842,018 | 548,450 |
| 1874..... | 17,500 | 52,080 | 1896..... | 205,384 | 188,000 | 1918..... | 852,024 | 539,905 |
| 1875..... | 18,000 | 59,640 | 1897..... | 220,571 | 212,000 | 1919..... | 585,063 | 424,433 |
| 1876..... | 19,000 | 64,070 | 1898..... | 235,050 | 222,000 | 1920..... | 503,979 | 476,849 |
| 1877..... | 21,000 | 81,900 | 1899..... | 253,870 | 210,500 | 1921..... | 502,907 | 398,222 |

The above table does not include antimonial lead, production of which was 10,064 short tons in 1921.

## COPPER AND LEAD IMPORTS AND EXPORTS.

(Year ended June 30, 1922. Values in Parentheses.)

Imports—Copper ore, etc., 409,120 tons, containing 98,959,369 lbs. of copper ($12,001,869); unrefined copper, 184,734,976 lbs. ($21,750,504); refined copper (pigs, etc.), 274,181,835 lbs. ($32,-869,592). Lead ore and bullion (total) $3,110,734.

Exports of domestic—Copper wire and cable, $3,031,904; refined copper (pigs, etc.), 677,487,373 lbs. ($88,782,115); total, copper and manufactures of, $101,152,264. Lead (pigs, etc.), 83,473,774 lbs. ($3,907,539).

Production of lead pigments and salts in the United States in 1921 totalled over 251,000 short tons, valued at $42,000,000.

## PRODUCTION OF IRON ORE IN THE U. S.

(Ore mined; thousands of long tons.)

| Year. | United States. | Minnesota. | Michigan. | Wisconsin. | Alabama. | Tennessee. | New York. | Pennsylvania. | New Jersey. | All Other States. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1900 | 27,553 | 9,834 | 9,927 | 746 | 2,759 | 594 | 441 | 878 | 344 | 2,030 |
| 1901 | 28,887 | 11,110 | 9,654 | 739 | 2,802 | 789 | 420 | 1,041 | 402 | 1,930 |
| 1902 | 35,554 | 15,138 | 11,135 | 784 | 3,574 | 875 | 555 | 823 | 442 | 2,228 |
| 1903 | 35,019 | 15,371 | 10,600 | 675 | 3,685 | 853 | 540 | 645 | 485 | 2,165 |
| 1904 | 27,644 | 12,729 | 7,090 | 483 | 3,700 | 501 | 842 | 397 | 500 | 1,402 |
| 1905 | 42,526 | 21,735 | 10,886 | 859 | 3,783 | 735 | 1,140 | 809 | 526 | 2,053 |
| 1906 | 47,750 | 25,364 | 11,823 | 848 | 3,995 | 871 | 1,042 | 949 | 543 | 2,315 |
| 1907 | 51,721 | 28,970 | 11,830 | 839 | 4,039 | 814 | 1,375 | 837 | 550 | 2,467 |
| 1908 | 35,983 | 18,652 | 8,839 | 734 | 3,734 | 635 | 697 | 443 | 395 | 1,854 |
| 1909 | 51,294 | 28,975 | 11,900 | 1,068 | 4,321 | 658 | 1,015 | 667 | 544 | 2,146 |
| 1910 | 57,015 | 31,967 | 13,304 | 1,150 | 4,801 | 732 | 1,287 | 740 | 522 | 2,512 |
| 1911 | 43,877 | 24,645 | 10,329 | 699 | 3,828 | 464 | 1,061 | 538 | 466 | 1,847 |
| 1912 | 55,150 | 34,432 | 11,191 | 860 | 4,564 | 417 | 1,217 | 517 | 365 | 1,587 |
| 1913 | 61,980 | 38,659 | 12,841 | 1,018 | 5,216 | 370 | 1,460 | 489 | 325 | 1,602 |
| 1914 | 41,440 | 21,947 | 10,796 | 887 | 4,839 | 330 | 786 | 406 | 350 | 1,099 |
| 1915 | 55,526 | 33,465 | 12,515 | 1,095 | 5,309 | 284 | 999 | 363 | 415 | 1,081 |
| 1916 | 75,168 | 44,585 | 18,071 | 1,305 | 6,748 | 456 | 1,343 | 559 | 493 | 1,608 |
| 1917 | 75,289 | 44,595 | 17,869 | 1,202 | 7,038 | 508 | 1,304 | 547 | 490 | 1,736 |
| 1918 | 69,658 | 41,954 | 16,899 | 1,089 | 5,755 | 409 | 906 | 523 | 423 | 1,700 |
| 1919 | 60,965 | 36,001 | 15,439 | 1,087 | 5,053 | 284 | 871 | 627 | 404 | 1,199 |
| 1920 | 67,604 | 39,453 | 17,511 | 981 | 5,894 | 375 | 920 | 734 | 432 | 1,304 |

## PIG IRON MADE IN U. S., 1810-1900—GROSS TONS.

| Year. | Quantity. | Year. | Quantity. | Year. | Quantity. | Year. | Quantity. | Year. | Quantity. |
|---|---|---|---|---|---|---|---|---|---|
| 1810 | 53,908 | 1830 | 165,000 | 1850 | 563,755 | 1870 | 1,665,179 | 1890 | 9,202,703 |
| 1820 | 20,000 | 1840 | 286,903 | 1860 | 821,223 | 1880 | 3,835,191 | 1900 | 13,789,242 |

## PRODUCTION OF PIG IRON IN U. S. BY GRADES—GROSS TONS.

| Year. | Basic. | Bessemer. | Foundry. | Malleable. | Forge. | All Other. | Total, Gross Tons. |
|---|---|---|---|---|---|---|---|
| 1900 | 1,072,376 | 7,979,327 | 3,376,445 | 173,413 | 793,092 | 394,589 | 13,789,242 |
| 1901 | 1,448,850 | 9,596,793 | 3,548,718 | 256,532 | 639,454 | 388,007 | 15,878,354 |
| 1902 | 2,038,590 | 10,393,168 | 3,851,276 | 311,458 | 833,093 | 393,722 | 17,821,307 |
| 1903 | 2,040,726 | 9,989,908 | 4,409,023 | 473,781 | 783,016 | 312,798 | 18,009,252 |
| 1904 | 2,483,104 | 9,098,659 | 3,827,229 | 263,529 | 550,836 | 273,676 | 16,497,033 |
| 1905 | 4,105,179 | 12,407,116 | 4,758,038 | 635,236 | 727,817 | 358,994 | 22,992,380 |
| 1906 | 5,018,674 | 13,840,518 | 4,773,011 | 699,701 | 597,420 | 377,867 | 25,307,191 |
| 1907 | 5,375,219 | 13,231,620 | 5,151,209 | 920,290 | 683,167 | 419,856 | 25,781,361 |
| 1908 | 4,010,144 | 7,216,976 | 3,637,622 | 414,957 | 457,164 | 199,155 | 15,936,018 |
| 1909 | 8,250,225 | 10,557,370 | 5,322,415 | 658,048 | 725,624 | 281,789 | 25,795,471 |
| 1910 | 9,084,608 | 11,245,642 | 5,260,447 | 843,123 | 564,157 | 305,590 | 27,303,567 |
| 1911 | 8,520,020 | 9,409,303 | 4,468,940 | 612,533 | 408,841 | 229,910 | 23,649,547 |
| 1912 | 11,417,886 | 11,664,015 | 5,073,873 | 825,643 | 469,183 | 276,337 | 29,726,937 |
| 1913 | 12,536,693 | 11,590,113 | 5,220,343 | 993,736 | 324,407 | 300,860 | 30,966,152 |
| 1914 | 9,670,687 | 7,859,127 | 4,533,254 | 671,771 | 361,651 | 235,754 | 23,332,244 |
| 1915 | 13,093,214 | 10,523,306 | 4,843,899 | 829,921 | 316,214 | 309,659 | 29,916,213 |
| 1916 | 17,684,087 | 14,422,457 | 5,553,644 | 921,486 | 348,344 | 504,779 | 39,434,797 |
| 1917 | 17,671,662 | 13,714,732 | 5,328,258 | 1,015,579 | 345,707 | 571,459 | 38,621,216 |
| 1918 | 18,646,174 | 13,024,966 | 5,145,260 | 1,117,914 | 393,932 | 726,398 | 39,054,644 |
| 1919 | 14,494,131 | 9,975,934 | 4,916,758 | 1,009,049 | 271,286 | 318,206 | 31,015,364 |
| 1920 | 16,737,722 | 12,062,084 | 5,957,782 | 1,310,951 | 318,048 | 539,400 | 36,925,987 |
| 1921 | 7,753,071 | 5,595,215 | 2,568,136 | 457,340 | 112,748 | 201,616 | 16,688,126 |

## PRODUCTION OF PIG IRON BY STATES, 1916-1921—GROSS TONS.

| States. | 1916. | 1917. | 1918. | 1919. | 1920. | 1921. |
|---|---|---|---|---|---|---|
| Maine, Mass., Conn. | 5,719 | 10,527 | 11,485 | 13,678 | 10,281 | 2,142 |
| New York, New Jersey | 2,352,535 | 2,417,527 | 2,871,118 | 2,070,288 | 2,601,134 | 968,660 |
| Pennsylvania | 16,506,284 | 15,539,728 | 15,198,000 | 12,276,585 | 13,983,134 | 6,252,766 |
| Maryland | 501,452 | 422,212 | 373,817 | 244,002 | 523,733 | 147,189 |
| Virginia | 399,885 | 520,311 | 513,737 | 319,409 | 429,302 | 67,239 |
| Alabama | 2,762,885 | 2,953,705 | 2,587,852 | 2,130,092 | 2,392,962 | 1,207,408 |
| W. Va., Ky., Ga., Tex. | 554,590 | 561,951 | 594,675 | 413,091 | 772,379 | 264,758 |
| Tennessee | 355,374 | 369,951 | 369,822 | 190,514 | 283,207 | 19,479 |
| Ohio | 8,602,895 | 8,518,603 | 8,764,132 | 7,102,627 | 8,533,470 | 3,799,613 |
| Illinois | 3,922,512 | 3,456,915 | 3,440,307 | 2,558,213 | 3,280,875 | 1,612,033 |
| Indiana, Michigan | 2,221,708 | 2,657,503 | 3,073,599 | 2,715,659 | 2,939,521 | 1,893,611 |
| Wisconsin, Minnesota | 811,325 | 738,541 | 750,366 | 605,619 | 711,405 | 226,863 |
| Mo., Iowa, Col., Mont., Wash., Oreg., Cal. | 437,633 | 453,742 | 502,810 | 375,587 | 464,584 | 226,364 |
| Total | 39,434,797 | 38,621,216 | 39,054,644 | 31,015,364 | 36,925,987 | 16,688,126 |

## IRON AND STEEL IMPORTS AND EXPORTS.

(For year ended June 30, 1922. Values in parentheses.)

Imports—Iron ore, 264,318 tons ($1,020,370), pig iron, 82,647 tons ($3,263,635); machinery, $9,384,258; other and total, $29,660,540.

Exports of domestic—Iron ore, 478,113 tons ($2,251,834); steel rails, 240,104 tons ($10,306,346); wire and certain manufactures of (except barbed), 189,057,345 lbs. ($6,476,883); barbed wire, 93,222,312 lbs. ($3,331,193); wire nails and spikes, 114,434,174 lbs. ($3,915,945), cutlery, $4,917,296; tools, $10,339,518; hardware, $5,441,881; other and total iron and steel and manufactures of, $181,798,042.

## STEEL PRODUCED IN THE UNITED STATES.

| Year (Calendar). | Long Tons. | Year (Calendar). | Long Tons. | Year (Calendar). | Long Tons. | Year (Calendar). | Long Tons. |
|---|---|---|---|---|---|---|---|
| 1810 | 917 | 1889 | 3,385,732 | 1900 | 10,188,329 | 1911 | 28,676,106 |
| 1860 | 11,838 | 1890 | 4,277,071 | 1901 | 13,473,595 | 1912 | 31,251,303 |
| 1870 | 68,750 | 1891 | 3,904,240 | 1902 | 14,947,250 | 1913 | 31,300,874 |
| 1880 | 1,247,335 | 1892 | 4,927,581 | 1903 | 14,534,978 | 1914 | 28,513,060 |
| 1881 | 1,588,314 | 1893 | 4,019,995 | 1904 | 13,859,887 | 1915 | 32,151,036 |
| 1882 | 1,736,692 | 1894 | 4,412,032 | 1905 | 20,023,947 | 1916 | 42,773,680 |
| 1883 | 1,673,535 | 1895 | 6,114,834 | 1906 | 23,398,136 | 1917 | 45,060,607 |
| 1884 | 1,550,879 | 1896 | 5,281,689 | 1907 | 23,362,594 | 1918 | 44,462,432 |
| 1885 | 1,711,920 | 1897 | 7,156,957 | 1908 | 14,023,247 | 1919 | 34,671,232 |
| 1886 | 2,562,503 | 1898 | 8,932,857 | 1909 | 23,955,021 | 1920 | 42,132,934 |
| 1887 | 3,339,071 | 1899 | 10,639,857 | 1910 | 26,094,919 | 1921 | 19,743,797 |
| 1888 | 2,899,440 | | | | | | |

Of the 1921 steel production, 2,178,818 long tons went into rails.

## COAL, COKE AND PETROLEUM EXPORTS AND IMPORTS.

| Year Ending June 30. | Anthracite. Imported. | Anthracite. Exported. | Bituminous Imported. | Bituminous Exported. | Coke Imported. | Coke Exported. | Petroleum Imported. | Petroleum Exported. |
|---|---|---|---|---|---|---|---|---|
| | *Long tons.* | *Long tons.* | *Long tons.* | *Long tons.* | *Long tons.* | *Long tons.* | *Gallons.* | *Gallons.* |
| 1900 | 156 | 1,777,319 | 1,700,765 | 5,411,329 | 56,444 | 363,202 | 2,374,229 | 975,123,476 |
| 1901 | 1 | 1,912,080 | 1,973,134 | 5,763,469 | 75,103 | 365,888 | 2,147,938 | 1,079,074,519 |
| 1902 | 295 | 1,570,490 | 1,936,290 | 5,400,694 | 99,465 | 402,495 | 3,235,467 | 1,064,233,601 |
| 1903 | 340,849 | 1,388,653 | 3,519,843 | 5,210,322 | 122,630 | 380,038 | 3,708,127 | 936,697,255 |
| 1904 | 30,873 | 2,048,154 | 1,940,962 | 6,434,713 | 123,124 | 479,431 | 4,653,508 | 1,022,116,276 |
| 1905 | 64,812 | 2,312,082 | 1,514,500 | 6,707,788 | 195,952 | 550,188 | 10,000,502 | 1,220,513,587 |
| 1906 | 36,708 | 1,970,401 | 1,818,758 | 7,155,592 | 157,577 | 679,773 | 15,452,619 | 1,269,777,645 |
| 1907 | 23,113 | 2,481,920 | 1,687,081 | 8,812,332 | 129,163 | 823,040 | 20,505,197 | 1,294,659,979 |
| 1908 | 24,907 | 3,837,778 | 1,975,625 | 9,884,957 | 119,196 | 763,809 | 9,289,376 | 1,547,402,601 |
| 1909 | 4,585 | 2,869,762 | 1,224,999 | 9,018,867 | 169,902 | 765,535 | 3,862,445 | 1,569,103,378 |
| 1910 | 1,746 | 2,953,633 | 1,623,073 | 10,413,439 | 128,197 | 872,013 | 23,996,876 | 1,502,491,933 |
| 1911 | 8,339 | 3,146,388 | 1,755,242 | 11,839,099 | 143,984 | 946,474 | 69,019,304 | 1,768,731,699 |
| 1912 | 2,189 | 2,979,102 | 1,299,106 | 14,709,847 | 65,687 | 805,819 | 309,766,030 | 1,883,479,897 |
| 1913 | 1,670 | 4,625,481 | 1,576,889 | 16,083,101 | 102,715 | 900,672 | 731,360,523 | 2,136,465,721 |
| 1914 | 8,124 | 3,959,114 | 1,348,156 | 15,704,956 | 112,528 | 742,476 | 724,446,909 | 2,240,033,652 |
| 1915 | 8,637 | 3,682,188 | 1,417,566 | 14,412,985 | 88,735 | 602,473 | 763,705,698 | 2,328,725,749 |
| 1916 | 7,216 | 3,878,478 | 1,595,119 | 18,749,694 | 59,753 | 976,398 | 890,853,850 | 2,607,482,366 |
| 1917 | 1,761 | 4,635,134 | 1,282,790 | 19,533,705 | 24,782 | 1,170,824 | 1,324,157,815 | 2,651,118,349 |
| 1918 | 11,557 | 4,842,187 | 1,391,535 | 21,051,979 | 29,097 | 1,337,321 | 1,635,597,145 | 2,714,619,746 |
| 1919 | 62,098 | 4,285,730 | 1,008,250 | 18,152,337 | 18,050 | 1,053,133 | 1,978,951,092 | 2,492,754,027 |
| 1920 | 62,950 | 4,717,462 | 1,062,889 | 22,976,325 | 29,275 | 678,870 | 2,908,749,806 | 3,098,778,060 |
| 1921 | 15,882 | 4,877,800 | 1,019,592 | 34,423,964 | 29,745 | 641,184 | 5,738,315,884 | 3,026,001,937 |
| 1922 | 12,902 | 2,992,385 | 1,244,945 | 13,035,800 | 41,576 | 297,431 | 5,892,146,605 | 2,800,223,362 |

Petroleum imports 1900-1906 are for fiscal years.

## COAL, COKE AND PETROLEUM PRODUCTION IN THE U. S.

| Year. (Calendar.) | Anthracite Produced. | Anthracite Shipped. | Bituminous Produced. | Coke Produced. | Total Coal Production. | Petroleum Produced. |
|---|---|---|---|---|---|---|
| | *Gross Tons.* | *Gross Tons.* | *Gross Tons.* | *Gross Tons.* | *Gross Tons.* | *Gallons.* |
| 1900 | 51,221,353 | 45,107,464 | 189,567,957 | 18,333,346 | 240,789,310 | 2,672,062,218 |
| 1901 | 60,242,560 | 53,568,601 | 201,632,276 | 19,460,610 | 261,874,836 | 2,914,346,148 |
| 1902 | 36,940,710 | 31,200,890 | 232,336,468 | 22,680,116 | 269,277,178 | 3,728,210,472 |
| 1903 | 66,613,454 | 59,362,831 | 252,454,775 | 22,566,322 | 319,068,229 | 4,219,376,154 |
| 1904 | 65,318,490 | 57,492,522 | 248,803,294 | 21,125,988 | 314,121,784 | 4,917,400,320 |
| 1905 | 69,339,152 | 61,410,201 | 281,306,058 | 28,777,794 | 350,645,210 | 5,658,138,360 |
| 1906 | 63,645,010 | 55,698,595 | 306,138,274 | 32,501,087 | 369,783,284 | 5,312,745,312 |
| 1907 | 76,432,421 | 67,109,393 | 352,463,493 | 36,410,325 | 428,195,914 | 6,976,004,070 |
| 1908 | 74,347,102 | 64,665,014 | 296,941,021 | 23,244,213 | 371,288,123 | 7,498,848,910 |
| 1909 | 64,619,865 | 61,969,885 | 339,057,372 | 35,102,737 | 411,441,621 | 7,693,176,708 |
| 1910 | 75,433,246 | 64,905,786 | 372,420,663 | 37,240,009 | 447,853,909 | 8,801,404,416 |
| 1911 | 80,771,488 | 69,954,299 | 362,417,017 | 31,742,401 | 443,188,505 | 9,258,874,422 |
| 1912 | 75,322,855 | 63,905,823 | 401,879,448 | 39,271,070 | 477,202,303 | 9,363,271,848 |
| 1913 | 81,718,680 | 67,773,327 | 427,174,372 | 41,338,866 | 508,893,052 | 10,434,741,660 |
| 1914 | 81,090,631 | 69,511,110 | 377,414,259 | 30,853,495 | 458,504,890 | 11,162,026,470 |
| 1915 | 79,459,876 | 67,883,776 | 395,200,380 | 37,126,026 | 474,660,256 | 11,806,372,368 |
| 1916 | 78,195,083 | 67,276,364 | 448,678,288 | 31,664,893 | 526,873,371 | 12,632,220,636 |
| 1917 | 88,939,117 | 77,133,305 | 492,670,146 | 49,648,954 | 581,609,263 | 14,083,255,242 |
| 1918 | 88,237,575 | 76,649,918 | 517,308,768 | 50,427,118 | 605,546,343 | 14,948,964,072 |
| 1919 | 78,501,931 | 66,855,311 | 408,908,482 | 44,821,000 | 487,410,413 | 15,864,198,000 |
| 1920 | 80,032,175 | 68,915,460 | 496,975,892 | 46,328,571 | 577,008,067 | 18,622,884,000 |
| 1921 | 80,779,867 | 69,554,563 | 363,325,893 | 22,749,171 | 444,105,760 | 19,724,838,000 |

Production of fuel briquets in the United States in 1921 totalled 398,949 tons, valued at $3,632,301.

## COAL-MINE FATALITIES AND PRODUCTION.

| Year. | Men Employed. | Men Killed. | Prod. Per Death. | Year. | Men Employed. | Men Killed. | Prod. Per Death. | Year. | Men Employed. | Men Killed. | Prod. Per Death. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | *S. tons.* | | | | *S. tons.* | | | | *S. tons.* |
| 1907 | 680,492 | 2,242 | 147,407 | 1912 | 722,662 | 2,419 | 220,945 | 1917 | 757,317 | 2,696 | 241,618 |
| 1908 | 690,438 | 2,445 | 167,407 | 1913 | 747,644 | 2,785 | 204,685 | 1918 | 762,426 | 2,580 | 262,873 |
| 1909 | 666,552 | 2,642 | 174,416 | 1914 | 763,185 | 2,454 | 209,261 | 1919 | 765,000 | 2,317 | 239,082 |
| 1910 | 725,030 | 2,821 | 177,808 | 1915 | 734,008 | 2,269 | 234,297 | 1920 | 775,000 | 2,271 | 284,308 |
| 1911 | 728,348 | 2,656 | 186,887 | 1916 | 720,971 | 2,226 | 265,094 | 1921 | ..... | 1,973 | 251,124 |

Coal production per wage earner in the year 1919—anthracite, 592 short tons; bituminous, 844 short tons.

## THE COAL INDUSTRY IN THE U. S.

(From the 1919 U. S. Census of Manufactures.)

Figures in italics represent dollars.

| | Total. | Anthracite. | Bituminous. | | Total. | Anthracite. | Bituminous. |
|---|---|---|---|---|---|---|---|
| Enterprises (No.) | 6,890 | 254 | 6,636 | Cont. work. | *4,413,811* | *1,567,845* | *2,855,966* |
| Mines (No.) | 8,656 | 374 | 8,282 | Sup., mater | *202,604,245* | *60,171,694* | *142,432,551* |
| | | | | Fuel, purch. power | *50,483,121* | *13,305,952* | *37,177,169* |
| Land...acres | 8,522,727 | 261,355 | 8,261,372 | Royal., rent | *34,061,654* | *11,766,598* | *22,295,056* |
| No. in indust | 738,490 | 154,882 | 583,608 | Taxes | *48,768,359* | *14,060,963* | *34,707,396* |
| Wage earn's. | 693,170 | 147,372 | 545,798 | Expend. for devel. (incl. above) | *36,234,369* | *6,189,990* | *30,044,379* |
| Surface | 155,364 | 46,618 | 108,746 | Val. of prod. | *1,510,061,707* | *364,084,142* | *1,145,977,565* |
| Und. gr'nd. | 614,282 | 105,625 | 508,657 | Coal: | | | |
| Pow.(ag.hp.) | 3,055,195 | 899,783 | 2,155,412 | Short tons | 548,596,344 | 88,170,508 | 460,425,836 |
| Capital | *2,338,813,162* | *433,868,039* | *1,904,450,123* | Val., mine | *1,508,267,421* | *363,944,774* | *1,144,322,647* |
| Chief expen.: | | | | Oth. prod'ts | *1,794,286* | *139,368* | *1,654,918* |
| Salaries | *81,664,507* | *12,995,469* | *68,669,038* | | | | |
| Wages | *892,890,541* | *210,289,473* | *682,601,068* | | | | |

In addition to mines, the anthracite enterprises reported 245 breakers, 79 washeries, and 81 dredges.

Anthracite in the above table means Pennsylvania anthracite.

Non-producing enterprises, not included in the above, numbered 26, operating 24,707 acres, with $5,617,170 capital, and $1,252,604 expenditures in 1919.

Bituminous coal production in 1919 in short tons in chief States: Pennsylvania, 150,030,000; West Virginia, 77,617,000; Illinois, 60,331,000; Ohio, 35,141,000; Kentucky, 29,426,000; Indiana, 20,505,000; Alabama, 15,411,000; Colorado, 10,183,000.

The U. S. Census Bureau estimates that the production of coal per capita of population was, in short tons: (1879) 1.36; (1889) 2.24; (1899) 3.34; (1909) 5.01; (1919) 5.24.

## PETROLEUM AND NATURAL GAS IN 1919.

(U. S. Census of Manufactures.)

| Field. | Productive Wells (Dec. 31) | Value of Products. | Petroleum. | | Natural Gas. | |
|---|---|---|---|---|---|---|
| | | | Barrels (42 Gallons). | Value. | M Cubic Feet. | Value. |
| | *No.* | *Dolls.* | *No.* | *Dolls.* | *No.* | *Dolls.* |
| United States | 257,673 | 931,294,423 | 350,112,253 | 694,626,948 | 961,095,000 | 155,910,032 |
| Appalachian field | 142,947 | 239,244,405 | 28,270,079 | 103,436,170 | 549,557,285 | 113,393,144 |
| Kentucky | 5,214 | 23,329,521 | 7,926,199 | 20,990,629 | 9,152,172 | 1,468,455 |
| New York | 14,186 | 9,900,894 | 846,860 | 3,480,075 | 19,114,349 | 6,142,385 |
| Ohio, eastern | 18,850 | 40,223,725 | 4,916,347 | 17,395,082 | 90,507,882 | 20,797,429 |
| Pennsylvania | 77,325 | 66,271,961 | 6,680,350 | 27,615,663 | 140,687,082 | 32,879,813 |
| West Virginia | 27,363 | 99,518,304 | 7,900,323 | 33,954,721 | 290,095,800 | 52,105,062 |
| Lima-Indiana field | 18,186 | 6,218,317 | 2,175,370 | 5,478,202 | 2,047,837 | 692,833 |
| Indiana, east central | 1,605 | 958,517 | 181,129 | 469,079 | 1,427,588 | 488,774 |
| Ohio, northwest | 16,581 | 5,250,800 | 1,994,241 | 5,009,123 | 620,249 | 204,059 |
| Illinois and Southw't Ind. field | 17,349 | 32,909,441 | 12,235,939 | 31,126,318 | 2,499,669 | 309,842 |
| Illinois | 16,498 | 31,263,563 | 11,621,992 | 29,536,676 | 1,743,790 | 258,788 |
| Indiana, southwest | 851 | 1,645,878 | 613,947 | 1,589,642 | 755,879 | 51,054 |
| Mid-Continent field | 66,545 | 464,045,161 | 171,801,255 | 378,448,161 | 336,717,898 | 36,174,768 |
| Arkansas | 124 | 621,834 | ..... | ..... | 7,376,218 | 611,287 |
| Kansas | 12,690 | 68,515,158 | 26,526,169 | 60,577,413 | 40,183,277 | 6,812,632 |
| Louisiana, northwest | 2,332 | 29,617,206 | 13,823,370 | 23,175,689 | 67,521,467 | 4,772,203 |
| Oklahoma | 44,735 | 247,497,450 | 81,492,433 | 181,448,329 | 200,885,108 | 21,813,906 |
| Texas, northern and central | 6,664 | 117,793,513 | 49,959,283 | 113,246,730 | 20,751,828 | 2,164,740 |
| Gulf Coast field | 2,232 | 27,942,728 | 25,022,977 | 27,647,502 | 5,170,250 | 277,975 |
| Louisiana, southern | 147 | 2,398,879 | 2,010,616 | 2,297,788 | 704,042 | 99,953 |
| Texas | 2,085 | 25,543,840 | 23,012,361 | 25,349,714 | 4,466,208 | 181,022 |
| Rocky Mountain field | 1,183 | 22,371,577 | 12,880,428 | 20,423,525 | 8,014,160 | 547,646 |
| Colorado and New Mexico | 71 | 153,594 | 115,565 | 153,152 | 6,650 | 442 |
| Montana | 28 | 158,046 | 90,193 | 171,598 | 858,728 | 86,448 |
| Wyoming | 1,084 | 21,959,937 | 12,674,670 | 20,098,775 | 7,148,782 | 460,756 |
| Pacific Coast field | 9,197 | 139,018,663 | 97,711,350 | 127,429,664 | 57,015,822 | 4,508,099 |
| California | 9,197 | 139,018,663 | 97,711,350 | 127,429,664 | 57,015,822 | 4,508,099 |
| All other States | 34 | 43,131 | 14,855 | 37,406 | 72,079 | 5,725 |

Production of gasoline from natural gas in 1919 totalled 454,089,466 gallons, valued at $78,760,835.

The value of "other products" in 1919 was $3,095,608.

## U. S. TIN PLATE PRODUCTION—IMPORTS AND EXPORTS.

| Year. | Production. | Exports, Domestic. | Imports. | Year. | Production. | Exports, Domestic. | Imports. |
|---|---|---|---|---|---|---|---|
| | *Pounds.* | *Pounds.* | *Pounds.* | | *Pounds.* | *Pounds.* | *Pounds.* |
| 1900 | 808,360,000 | 319,579 | 147,963,804 | 1916 | 2,365,295,700 | 516,257,473 | 1,796,853 |
| 1910 | 1,370,788,000 | 26,168,315 | 154,565,599 | 1917 | 3,360,000,000 | 521,469,085 | 1,370,462 |
| 1911 | 1,619,005,000 | 70,199,298 | 95,319,730 | 1918 | 3,301,624,244 | 579,125,457 | 71,403 |
| 1912 | 1,756,070,000 | 181,899,366 | 6,613,253 | 1919 | 2,578,011,487 | 458,127,594 | 541,912 |
| 1913 | 2,157,055,000 | 164,362,281 | 28,344,243 | 1920 | 3,218,177,730 | 507,158,958 | 896,870 |
| 1914 | 1,845,130,000 | 105,899,762 | 48,877,947 | 1921 | 1,776,763,921 | 399,395,705 | 4,995,778 |
| 1915 | 2,085,980,000 | 179,221,644 | 10,642,237 | | | | |

Four tons of tin were produced in 1921 in Alaska; none was mined in S. Dak.

## CRUDE OR PRIMARY ZINC PRODUCTION IN THE UNITED STATES.

| Year. | Short Tons. | Year. | Short Tons. | Year. | Short Tons. | Year. | Short Tons. | Year. | Short Tons. |
|---|---|---|---|---|---|---|---|---|---|
| 1880 | 23,239 | 1903 | 159,219 | 1908 | 190,749 | 1913 | 337,252 | 1918 | 492,405 |
| 1890 | 63,683 | 1904 | 186,702 | 1909 | 230,225 | 1914 | 343,418 | 1919 | 452,272 |
| 1900 | 123,886 | 1905 | 203,849 | 1910 | 252,479 | 1915 | 458,135 | 1920 | 450,045 |
| 1901 | 140,822 | 1906 | 199,694 | 1911 | 271,621 | 1916 | 563,561 | 1921 | 198,232 |
| 1902 | 156,927 | 1907 | 223,745 | 1912 | 323,907 | 1917 | 584,597 | | |

Primary or crude zinc is made directly from the domestic ore. Production of secondary zinc (redistilled, etc.) was 33,863 short tons in 1921.

Zinc ore and pig imports in the year ended June 30, 1922, totalled 1,001,322 lb.; exports totalled 38,888,914 lb., not including about 7,000,000 lb. of sheet and dust.

## MANUFACTURES IN THE UNITED STATES, BY STATES.

| DIVISION AND STATE. | Census Yr. | Establishments. | Wage Earners. | Capital | Wages | Cost of Materials | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | *No.* | *No.* | *Dollars* | *Dollars* | *Dollars* | *Dollars* |
| United States | 1919 | 290,105 | 9,096,372 | 44,558,593,771 | 10,533,400,340 | 37,376,380,283 | 62,418,078,773 |
| | 1914 | 275,791 | 7,036,247 | 22,790 979 937 | 4,078 332 433 | 14,368 088 831 | 24,246,434 724 |
| | 1909 | 268,491 | 6,615 046 | 18 428,269 706 | 3,427,037 884 | 12,142,790,878 | 20 672,051,870 |
| | 1904 | 216,180 | 5,468,383 | 12,675,580,874 | 2,610,444 953 | 8,500,207,810 | 14 793 902,563 |
| NEW ENGLAND: | | | | | | | |
| Maine | 1919 | 2,995 | 88,651 | 419.158,006 | 94,225,346 | 254.568 523 | 456,821.783 |
| | 1914 | 3,378 | 82,149 | 233 844 434 | 43,253.703 | 117.654.909 | 200,450,118 |
| | 1909 | 3 546 | 79 955 | 202 259 592 | 37,632,284 | 97,101,224 | 176,029 393 |
| | 1904 | 3,145 | 74.958 | 143 707.750 | 32.691.759 | 80,042.090 | 144,020 197 |
| New Hampshire | 1919 | 1,499 | 83 074 | 329,166,870 | 79,326 341 | 239,527,617 | 407,204 934 |
| | 1914 | 1,736 | 78.993 | 156 748,853 | 40,642,393 | 114,993,435 | 182,843.863 |
| | 1909 | 1,961 | 78 658 | 139,989.662 | 36,200,262 | 98.157,016 | 164.581.019 |
| | 1904 | 1,618 | 65,366 | 109,495,072 | 27.693.203 | 73 216.387 | 123 610,904 |
| Vermont | 1919 | 1,790 | 33.491 | 134.314.391 | 34.083,935 | 95,172 581 | 168 108,072 |
| | 1914 | 1,772 | 32,704 | 79,846,775 | 18.617.075 | 42,705 720 | 76,990,974 |
| | 1909 | 1,958 | 33 788 | 73,470,107 | 17,271,702 | 34,822 728 | 68,309,824 |
| | 1904 | 1,699 | 33.106 | 62 658 741 | 15,221,059 | 32.429.852 | 63,083.611 |
| Massachusetts | 1919 | 11,906 | 713,836 | 2,962,108,527 | 766,623,337 | 2,260,713,036 | 4.011,181,532 |
| | 1914 | 12,013 | 606,698 | 1,548,960.733 | 341,309,517 | 931,383 793 | 1,641.373,047 |
| | 1909 | 11,684 | 584,559 | 1,279,686,558 | 301,173.464 | 830,764,943 | 1,490,529,386 |
| | 1904 | 10,723 | 488,399 | 965,948 887 | 232,388,946 | 626.410,431 | 1,124,092,051 |
| Rhode Island | 1919 | 2,466 | 139,665 | 594,337,448 | 137,495,377 | 415.989,203 | 747,322,858 |
| | 1914 | 2,190 | 113,425 | 308,444,563 | 59,366,292 | 162.425,219 | 279,545,873 |
| | 1909 | 1,951 | 113,538 | 290,901,270 | 55,234,068 | 158.191,574 | 280,343,797 |
| | 1904 | 1,617 | 97,318 | 215,901,375 | 43,112 637 | 112.872,261 | 202,109,583 |
| Connecticut | 1919 | 4,872 | 292 672 | 1,232.324,318 | 324,682,251 | 685.937.199 | 1,392,431,620 |
| | 1914 | 4,104 | 226,264 | 620,194,294 | 125,219,860 | 288,510,886 | 545,471,517 |
| | 1909 | 4,251 | 210,792 | 517,546,554 | 110,119,045 | 257,259,393 | 490,271,695 |
| | 1904 | 3,477 | 181,605 | 373,283,580 | 87,942,628 | 191,301,881 | 369,082,091 |
| MIDDLE ATLANTIC: | | | | | | | |
| New York | 1919 | 49,330 | 1,228,130 | 6 012.082,567 | 1,458,206,804 | 4,943,213,919 | 8,867,004,906 |
| | 1914 | 48,203 | 1,057,857 | 3,334,277,526 | 631,042,011 | 2,108.607.361 | 3,814,661,114 |
| | 1909 | 44,935 | 1,003,981 | 2,779.496,814 | 557,230,839 | 1,856,904,342 | 3,369,490,192 |
| | 1904 | 37,194 | 856,943 | 2,033,445,515 | 430,014,851 | 1,348,603,286 | 2,484,345,579 |
| New Jersey | 1919 | 11,057 | 508,686 | 2,835,577,127 | 600,658,345 | 2,270,473,279 | 3,672,064,987 |
| | 1914 | 9,742 | 373,605 | 1,352,381,873 | 211,136,460 | 883,464,594 | 1,406,633,414 |
| | 1909 | 8,817 | 326,223 | 977,172,141 | 169,710,033 | 720,033,399 | 1,145,529,076 |
| | 1904 | 7,010 | 266,336 | 715,060,174 | 128,168,801 | 470,449,176 | 774,369,025 |
| Pennsylvania | 1919 | 27,973 | 1,135,837 | 6.224.729,968 | 1,406,066,138 | 4,210,408,628 | 7,315,702,867 |
| | 1914 | 27,521 | 924.478 | 3.149,411,089 | 527,952,517 | 1,688,920,716 | 2,832,349,437 |
| | 1909 | 27,563 | 877,543 | 2,749,005,975 | 455,626,790 | 1,582,559,988 | 2,626,742,034 |
| | 1904 | 23,495 | 763,282 | 1,995,836,988 | 367,960,890 | 1,142,942,707 | 1,955,551,332 |
| EAST NORTH CENTRAL: | | | | | | | |
| Ohio | 1919 | 16,125 | 730,733 | 3,748,743,996 | 944,651,734 | 2,911,947,871 | 5,100,308,728 |
| | 1914 | 15,658 | 510,435 | 1,677,551,633 | 317,923,813 | 1,020,782,015 | 1,782,808,279 |
| | 1909 | 15,138 | 446,934 | 1,300,732,732 | 245,449,904 | 824,201,947 | 1,437,935,817 |
| | 1904 | 13,785 | 364,298 | 856,988,830 | 182,429,425 | 527,636,585 | 960,811,857 |
| Indiana | 1919 | 7,916 | 277,580 | 1,335,714,103 | 317,042,997 | 1,174,950,568 | 1,898,753,387 |
| | 1914 | 8,022 | 197,503 | 668,863,232 | 119,258,329 | 423,857,157 | 730,795,021 |
| | 1909 | 7,969 | 186,984 | 508,717,197 | 95,510,616 | 334,374,753 | 579,075,046 |
| | 1904 | 7,044 | 154,174 | 312,071,234 | 72,058,099 | 220,507,007 | 393,954,405 |
| Illinois | 1919 | 18,593 | 653,114 | 3,366,452,969 | 801,087,359 | 3,488,270,446 | 5,425,244,694 |
| | 1914 | 18,388 | 506,943 | 1,943,835,846 | 340,910,325 | 1,340,183,407 | 2,247,322,819 |
| | 1909 | 18,026 | 465,764 | 1,548,170,701 | 273,319,005 | 1,160,926,690 | 1,919,276,594 |
| | 1904 | 14.921 | 379,436 | 975,844,799 | 208,405,468 | 840,057,316 | 1,410,342,129 |
| Michigan | 1919 | 8,305 | 471,242 | 2,340,954,312 | 639,708,093 | 1,919,243,243 | 3,466,188,483 |
| | 1914 | 8,724 | 271,090 | 869,143,114 | 182,252,284 | 592,801,064 | 1,086,162,432 |
| | 1909 | 9,159 | 231,499 | 583,946,965 | 118,967,830 | 368,612,022 | 685,109,169 |
| | 1904 | 7,446 | 175,229 | 337,894,102 | 81,278,837 | 230,080,931 | 429,120,060 |
| Wisconsin | 1919 | 10,393 | 263,949 | 1,371,729,196 | 290,440,561 | 1,127,274,961 | 1,846,984,307 |
| | 1914 | 9,104 | 194,310 | 754,287,116 | 112,193,163 | 417,415,074 | 695,172,002 |
| | 1909 | 9,721 | 182,583 | 605,657,324 | 93,904,808 | 346,356,583 | 590,305,538 |
| | 1904 | 8,558 | 151,391 | 412,647,051 | 71,471,805 | 227,255,092 | 411,139,681 |
| WEST NORTH CENTRAL: | | | | | | | |
| Minnesota | 1919 | 6,225 | 115,623 | 690,386,486 | 127,106,505 | 883,089,777 | 1,218,129,735 |
| | 1914 | 5,974 | 92,834 | 354,434,177 | 58,507,013 | 336,849,214 | 493,354,136 |
| | 1909 | 5,561 | 84,767 | 275,416,029 | 47,470,803 | 281,622,287 | 409,419,621 |
| | 1904 | 4,756 | 69,636 | 184,903,271 | 35,843,145 | 210,553,949 | 307,858,073 |
| Iowa | 1919 | 5,683 | 80,551 | 403,205,513 | 90,117,169 | 520,240,807 | 745,472,697 |
| | 1914 | 5,614 | 63,113 | 233,128,542 | 39,859,510 | 205,451,339 | 310,749,974 |
| | 1909 | 5,528 | 61,635 | 171,218,604 | 32,541,931 | 170,707,048 | 259,237,637 |
| | 1904 | 4,785 | 49,481 | 111,427,429 | 22,997,053 | 102.843,892 | 160,572,313 |
| Missouri | 1919 | 8,592 | 195,037 | 938,760,773 | 196,515,353 | 1,056,457,164 | 1,594,208,338 |
| | 1914 | 8,386 | 152,182 | 522,548,083 | 89,197,477 | 388,714,859 | 637,952,128 |
| | 1909 | 8,375 | 152,993 | 444,343,135 | 80,842,776 | 354,411,151 | 574,111,070 |
| | 1904 | 6,464 | 133,167 | 379,368,827 | 66,644,126 | 252,258,417 | 439,548,957 |
| North Dakota | 1919 | 894 | 4,472 | 24,549,838 | 5,401,330 | 44,489,499 | 57,373,622 |
| | 1914 | 699 | 3,275 | 14,213,362 | 2,416,235 | 14,484,315 | 21,147,431 |
| | 1909 | 752 | 2,789 | 11,584,747 | 1,787,405 | 13,673,590 | 19:137,506 |
| | 1904 | 507 | 1,755 | 5,703,837 | 1,031,307 | 7,095,986 | 10,217,914 |
| South Dakota | 1919 | 1,414 | 6,382 | 30,933,030 | 7,905,426 | 42,985,870 | 62,170,782 |
| | 1914 | 898 | 3,788 | 15,059,583 | 2,628,152 | 17,079,357 | 24,138,566 |
| | 1909 | 1,020 | 3,602 | 13,017,932 | 2,297,512 | 11,476,350 | 17,870,135 |
| | 1904 | 686 | 2,492 | 7,585,142 | 1,421,680 | 8,696,831 | 13,085,333 |
| Nebraska | 1919 | 2,884 | 36,521 | 245,256,684 | 46,066,755 | 480,774,122 | 596,042,498 |
| | 1914 | 2,492 | 25,144 | 121,007,944 | 16,893,345 | 174,113,684 | 221,615,848 |
| | 1909 | 2,500 | 24,336 | 99,901,089 | 13,947,145 | 151,080,971 | 199,018,579 |
| | 1904 | 1,819 | 20,260 | 80,235,310 | 11,022,149 | 124,051,628 | 154,918,220 |
| Kansas | 1919 | 3,474 | 61,049 | 357,534,129 | 73,060,019 | 750,087,987 | 913,667,094 |
| | 1914 | 3,136 | 41,259 | 163,789,752 | 25,969,537 | 261,147,990 | 323,234,194 |
| | 1909 | 3,435 | 44,215 | 156,090,067 | 25,903,960 | 258,883,706 | 325,104,002 |
| | 1904 | 2,475 | 35,570 | 88,680,117 | 18,883,071 | 156,509,949 | 198,244,992 |

| Division and State. | Census Yr. | Establishments. | Wage Earners. | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | *No.* | *No.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| SOUTH ATLANTIC: | | | | | | | |
| Delaware | 1919 | 668 | 29,035 | 148,207,598 | 37,265,319 | 85,432,933 | 165,073,009 |
| | 1914 | 808 | 22,155 | 69,323,927 | 11,382,160 | 31,649,265 | 56,034,966 |
| | 1909 | 726 | 21,238 | 60,905,671 | 10,295,596 | 30,937,801 | 52,839,619 |
| | 1904 | 631 | 18,475 | 50,925,630 | 8,158,203 | 24,883,806 | 41,160,276 |
| Maryland | 1919 | 4,937 | 140,342 | 619,606,983 | 147,866,545 | 549,347,379 | 873,944,774 |
| | 1914 | 4,797 | 111,585 | 293,210,925 | 53,792,339 | 238,971,973 | 377,749,078 |
| | 1909 | 4,837 | 107,921 | 251,226,828 | 45,435,829 | 199,048,905 | 315,669,150 |
| | 1904 | 3,852 | 94,174 | 201,877,966 | 36,144,244 | 150,024,066 | 243,375,996 |
| District of Columbia | 1919 | 595 | 10,482 | 63,008,179 | 13,189,031 | 30,940,100 | 68,826,570 |
| | 1914 | 514 | 8,877 | 40,810,200 | 6,068,692 | 12,239,123 | 28,978,241 |
| | 1909 | 518 | 7,707 | 30,552,623 | 4,989,449 | 10,246,534 | 25,289,136 |
| | 1904 | 482 | 6,299 | 20,199,783 | 3,658,370 | 7,731,971 | 18,359,159 |
| Virginia | 1919 | 5,603 | 119,352 | 463,644,498 | 120,006,452 | 371,540,833 | 643,511,621 |
| | 1914 | 5,508 | 102,820 | 261,501,288 | 44,873,435 | 155,319,576 | 264,039,041 |
| | 1909 | 5,685 | 105,676 | 216,392,388 | 38,154,566 | 125,582,687 | 219,793,858 |
| | 1904 | 3,187 | 80,285 | 147,989,182 | 27,943,058 | 83,649,149 | 148,856,525 |
| West Virginia | 1919 | 2,785 | 83,036 | 339,189,678 | 101,840,420 | 270,940,596 | 471,970,877 |
| | 1914 | 2,749 | 71,078 | 175,995,011 | 43,784,006 | 110,033,165 | 193,511,782 |
| | 1909 | 2,586 | 63,893 | 150,922,586 | 33,000,355 | 94,877,988 | 161,949,526 |
| | 1904 | 2,109 | 43,758 | 86,820,823 | 21,153,042 | 54,419,206 | 99,040,676 |
| North Carolina | 1919 | 5,999 | 157,659 | 669,144,096 | 126,680,099 | 526,906,181 | 943,807,949 |
| | 1914 | 5,507 | 136,844 | 253,841,808 | 46,038,447 | 169,941,971 | 289,411,987 |
| | 1909 | 4,931 | 121,473 | 217,185,588 | 34,354,625 | 121,861,530 | 216,656,055 |
| | 1904 | 3,272 | 85,339 | 141,000,639 | 21,375,294 | 79,268,004 | 142,520,776 |
| South Carolina | 1919 | 2,004 | 79,450 | 374,537,636 | 62,565,413 | 227,986,384 | 381,452,984 |
| | 1914 | 1,885 | 71,824 | 203,210,875 | 24,173,101 | 91,008,996 | 138,891,202 |
| | 1909 | 1,854 | 73,046 | 173,220,870 | 20,360,750 | 66,350,874 | 113,235,945 |
| | 1904 | 1,399 | 59,441 | 113,422,224 | 13,868,950 | 49,998,626 | 79,376,262 |
| Georgia | 1919 | 4,803 | 123,441 | 448,710,194 | 101,180,339 | 440,486,057 | 693,237,096 |
| | 1914 | 4,639 | 104,461 | 258,325,811 | 38,128,407 | 160,088,609 | 253,270,511 |
| | 1909 | 4,792 | 104,588 | 202,277,665 | 34,804,818 | 116,969,764 | 202,863,262 |
| | 1904 | 3,219 | 92,749 | 135,211,551 | 27,392,442 | 83,624,504 | 151,040,455 |
| Florida | 1919 | 2,582 | 74,415 | 206,293,570 | 67,433,229 | 92,680,224 | 213,326,811 |
| | 1914 | 2,518 | 55,608 | 88,318,983 | 24,822,323 | 33,815,688 | 81,112,291 |
| | 1909 | 2,159 | 57,473 | 65,290,643 | 22,981,572 | 26,128,279 | 72,889,659 |
| | 1904 | 1,413 | 42,091 | 32,971,982 | 15,767,182 | 16,532,439 | 50,298,290 |
| EAST SOUTH CENTRAL: | | | | | | | |
| Kentucky | 1919 | 3,957 | 69,340 | 276,535,395 | 67,033,546 | 235,715,626 | 395,660,417 |
| | 1914 | 4,184 | 64,586 | 193,423,069 | 31,830,283 | 114,829,223 | 230,248,909 |
| | 1909 | 4,776 | 65,400 | 172,778,805 | 27,887,672 | 111,779,317 | 223,754,497 |
| | 1904 | 3,734 | 59,794 | 147,282,478 | 24,438,684 | 86,545,464 | 159,753,968 |
| Tennessee | 1919 | 4,589 | 95,167 | 410,203,443 | 81,355,256 | 344,766,730 | 556,253,162 |
| | 1914 | 4,775 | 74,373 | 211,423,167 | 33,082,987 | 123,430,135 | 212,071,489 |
| | 1909 | 4,609 | 73,840 | 167,923,784 | 28,251,591 | 104,015,834 | 180,216,548 |
| | 1904 | 3,175 | 60,572 | 102,439,481 | 22,805,528 | 79,351,746 | 137,960,476 |
| Alabama | 1919 | 3,654 | 107,159 | 455,592,733 | 99,065,800 | 300,664,290 | 492,730,895 |
| | 1914 | 3,242 | 78,717 | 227,505,432 | 33,896,871 | 107,411,434 | 178,797,633 |
| | 1909 | 3,398 | 72,148 | 173,130,038 | 27,298,266 | 83,442,518 | 145,961,638 |
| | 1904 | 1,882 | 62,173 | 105,382,859 | 21,878,451 | 60,458,368 | 109,169,922 |
| Mississippi | 1919 | 2,455 | 57,560 | 154,117,337 | 51,255,716 | 96,677,871 | 197,746,987 |
| | 1914 | 2,209 | 46,702 | 81,005,484 | 19,176,627 | 41,340,122 | 79,550,095 |
| | 1909 | 2,598 | 50,384 | 72,393,485 | 18,767,723 | 36,925,582 | 80,555,410 |
| | 1904 | 1,520 | 38,690 | 50,256,309 | 14,819,034 | 25,800,885 | 57,451,445 |
| WEST SOUTH CENTRAL: | | | | | | | |
| Arkansas | 1919 | 3,123 | 49,954 | 138,817,974 | 47,186,189 | 102,812,977 | 200,312,858 |
| | 1914 | 2,604 | 41,979 | 77,162,485 | 20,751,731 | 44,906,808 | 83,940,587 |
| | 1909 | 2,925 | 44,982 | 70,174,345 | 19,112,896 | 34,934,912 | 74,916,367 |
| | 1904 | 1,907 | 33,089 | 46,306,116 | 14,543,635 | 21,799,346 | 53,864,394 |
| Louisiana | 1919 | 2,617 | 98,265 | 462,209,057 | 94,405,732 | 431,403,867 | 676,189,770 |
| | 1914 | 2,211 | 77,665 | 261,635,022 | 39,544,460 | 157,886,027 | 255,312,648 |
| | 1909 | 2,516 | 76,165 | 221,816,398 | 33,385,904 | 134,864,775 | 223,948,638 |
| | 1904 | 2,091 | 55,859 | 150,810,608 | 25,315,750 | 117,035,305 | 186,379,592 |
| Oklahoma | 1919 | 2,445 | 29,503 | 277,634,318 | 35,025,942 | 312,605,829 | 401,362,869 |
| | 1914 | 2,518 | 17,443 | 65,477,654 | 11,011,043 | 70,969,750 | 102,005,693 |
| | 1909 | 2,310 | 13,143 | 38,872,938 | 7,240,177 | 34,152,894 | 53,682,405 |
| | 1904 | 1,123 | 5,456 | 16,124,417 | 2,799,402 | 16,393,952 | 24,459,107 |
| Texas | 1919 | 5,724 | 107,532 | 585,776,415 | 116,493,800 | 701,170,898 | 999,995,796 |
| | 1914 | 5,084 | 74,853 | 283,543,820 | 44,821,377 | 253,444,261 | 361,279,303 |
| | 1909 | 4,588 | 70,230 | 216,875,579 | 37,907,272 | 178,178,515 | 272,895,635 |
| | 1904 | 3,158 | 49,066 | 115,664,871 | 24,468,942 | 91,603,630 | 150,528,389 |
| MOUNTAIN: | | | | | | | |
| Montana | 1919 | 1,290 | 17,160 | 137,476,277 | 24,742,562 | 122,151,924 | 166,664,518 |
| | 1914 | 939 | 13,704 | 79,246,396 | 13,001,205 | 46,743,986 | 84,446,136 |
| | 1909 | 677 | 11,655 | 44,588,368 | 10,901,452 | 49,180,239 | 73,271,793 |
| | 1904 | 382 | 8,957 | 52,589,810 | 8,652,217 | 40,930,060 | 66,415,452 |
| Idaho | 1919 | 922 | 13,917 | 96,061,709 | 18,543,272 | 43,948,505 | 80,510,749 |
| | 1914 | 698 | 8,919 | 44,960,489 | 7,490,521 | 14,892,094 | 28,453,797 |
| | 1909 | 725 | 8,220 | 32,476,749 | 5,497,647 | 9,920,017 | 22,399,860 |
| | 1904 | 364 | 3,061 | 9,689,445 | 2,059,391 | 4,068,523 | 8,768,743 |
| Wyoming | 1919 | 576 | 6,634 | 82,287,667 | 11,188,979 | 42,250,528 | 81,445,394 |
| | 1914 | 337 | 2,989 | 29,270,117 | 2,311,754 | 5,559,387 | 11,223,415 |
| | 1909 | 268 | 2,867 | 6,195,109 | 2,080,763 | 2,608,189 | 6,249,078 |
| | 1904 | 169 | 1,834 | 2,695,889 | 1,261,122 | 1,300,773 | 3,523,260 |
| Colorado | 1919 | 2,631 | 35,254 | 243,826,617 | 42,974,879 | 174,870,275 | 275,622,335 |
| | 1914 | 2,126 | 27,278 | 181,776,339 | 20,199,754 | 89,755,302 | 136,839,321 |
| | 1909 | 2,034 | 28,067 | 162,667,801 | 19,912,342 | 80,490,904 | 130,044,312 |
| | 1904 | 1,606 | 21,813 | 107,663,500 | 15,100,365 | 63,114,397 | 100,143,999 |
| New Mexico | 1919 | 387 | 5,736 | 15,226,253 | 6,658,462 | 7,727,483 | 17,856,602 |
| | 1914 | 368 | 3,776 | 8,983,679 | 2,695,448 | 4,430,134 | 9,320,067 |
| | 1909 | 313 | 4,143 | 7,724,617 | 2,591,379 | 3,261,043 | 7,897,756 |
| | 1904 | 199 | 3,478 | 4,638,248 | 2,153,068 | 2,235,934 | 5,705,880 |
| Arizona | 1919 | 480 | 8,528 | 101,486,070 | 12,014,769 | 92,645,437 | 120,769,112 |
| | 1914 | 322 | 6,893 | 40,390,365 | 6,228,873 | 39,283,038 | 64,089,510 |
| | 1909 | 311 | 6,441 | 32,872,935 | 5,505,183 | 33,600,240 | 50,256,694 |
| | 1904 | 169 | 4,793 | 14,395,654 | 3,969,248 | 14,595,057 | 28,083,192 |

| Division and State. | Census Yr. | Establishments. | Wage Earners. | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | *No.* | *No.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Utah | 1919 | 1,160 | 18,868 | 140,785,034 | 21,454,997 | 110,154,349 | 156,933,071 |
| | 1914 | 1,109 | 13,894 | 71,843,168 | 10,852,332 | 62,233,180 | 87,112,360 |
| | 1909 | 749 | 11,785 | 52,626,640 | 8,399,634 | 41,265,661 | 61,989,277 |
| | 1904 | 606 | 8,052 | 26,004,011 | 5,157,400 | 24,939,827 | 38,926,464 |
| Nevada | 1919 | 166 | 3,119 | 16,834,561 | 4,318,022 | 16,490,617 | 22,874,311 |
| | 1914 | 180 | 3,655 | 13,590,803 | 3,577,936 | 9,316,815 | 16,083,304 |
| | 1909 | 177 | 2,257 | 9,806,597 | 1,981,762 | 8,365,939 | 11,886,828 |
| | 1904 | 115 | 802 | 2,891,997 | 693,407 | 1,627,776 | 3,096,274 |
| PACIFIC: | | | | | | | |
| Washington | 1919 | 4,918 | 132,928 | 574,235,183 | 194,968,222 | 443,177,531 | 809,622,98‹ |
| | 1914 | 3,829 | 67,205 | 277,715,262 | 51,703,052 | 136,609,309 | 245,326,45‹ |
| | 1909 | 3,674 | 69,120 | 222,261,229 | 49,766,368 | 117,887,688 | 220,746,421 |
| | 1904 | 2,751 | 45,199 | 96,952,621 | 30,087,287 | 66,166,165 | 128,821,667 |
| Oregon | 1919 | 2,707 | 58,559 | 237,254,736 | 81,093,784 | 206,206,041 | 366,782,627 |
| | 1914 | 2,320 | 28,829 | 139,500,379 | 20,931,577 | 63,257,821 | 109,761,951 |
| | 1909 | 2,246 | 28,750 | 89,081,873 | 19,901,934 | 50,552,470 | 93,004,845 |
| | 1904 | 1,602 | 18,523 | 44,023,548 | 11,443,512 | 30,596,763 | 55,525,123 |
| California | 1919 | 11,942 | 243,692 | 1,233,480,273 | 305,207,389 | 1,218,858,518 | 1,981,204,701 |
| | 1914 | 10,057 | 139,481 | 736,105,455 | 105,612,681 | 447,474,531 | 712,800,764 |
| | 1909 | 7,659 | 115,296 | 537,134,359 | 84,141,477 | 325,238,074 | 529,760,528 |
| | 1904 | 6,839 | 100,355 | 282,647,201 | 64,656,686 | 215,726,414 | 367,218,494 |

PRIMARY HORSEPOWER USED IN MANUFACTURES IN THE UNITED STATES.

| Division and State. | Census Yr. | Primary Horsepower. |
|---|---|---|
| United States | 1919 | 29,507,117 |
| | 1914 | 22,470,872 |
| | 1909 | 18,675,376 |
| | 1904 | 13,487,707 |
| NEW ENGLAND: | | |
| Maine | 1919 | 547,028 |
| | 1914 | 487,211 |
| | 1909 | 459,599 |
| | 1904 | 343,627 |
| New Hampshire | 1919 | 349,138 |
| | 1914 | 344,093 |
| | 1909 | 293,991 |
| | 1904 | 218,344 |
| Vermont | 1919 | 185,095 |
| | 1914 | 172,637 |
| | 1909 | 159,445 |
| | 1904 | 140,616 |
| Massachusetts | 1919 | 1,729,878 |
| | 1914 | 1,396,722 |
| | 1909 | 1,175,071 |
| | 1904 | 938,007 |
| Rhode Island | 1919 | 321,016 |
| | 1914 | 269,854 |
| | 1909 | 226,740 |
| | 1904 | 181,017 |
| Connecticut | 1919 | 664,691 |
| | 1914 | 453,812 |
| | 1909 | 400,275 |
| | 1904 | 304,204 |
| MIDDLE ATLANTIC: | | |
| New York | 1919 | 2,936,530 |
| | 1914 | 2,356,655 |
| | 1909 | 1,997,662 |
| | 1904 | 1,516,592 |
| New Jersey | 1919 | 1,146,744 |
| | 1914 | 793,063 |
| | 1909 | 612,293 |
| | 1904 | 436,274 |
| Pennsylvania | 1919 | 4,454,386 |
| | 1914 | 3,549,858 |
| | 1909 | 2,921,547 |
| | 1904 | 2,302,398 |
| E. NO. CENTRAL: | | |
| Ohio | 1919 | 2,897,497 |
| | 1914 | 1,993,080 |
| | 1909 | 1,583,155 |
| | 1904 | 1,116,932 |
| Indiana | 1919 | 1,095,912 |
| | 1914 | 709,703 |
| | 1909 | 633,377 |
| | 1904 | 380,758 |
| Illinois | 1919 | 1,660,918 |
| | 1914 | 1,305,930 |
| | 1909 | 1,013,071 |
| | 1904 | 741,555 |
| Michigan | 1919 | 1,202,128 |
| | 1914 | 764,183 |
| | 1909 | 598,288 |
| | 1904 | 440,890 |
| Wisconsin | 1919 | 881,007 |
| | 1914 | 682,339 |
| | 1909 | 554,179 |
| | 1904 | 440,234 |
| W. NO. CENTRAL: | | |
| Minnesota | 1919 | 473,957 |
| | 1914 | 358,737 |
| | 1909 | 297,670 |
| | 1904 | 220,934 |
| Iowa | 1919 | 242,946 |
| | 1914 | 190,049 |
| | 1909 | 155,384 |
| | 1904 | 118,065 |
| Missouri | 1919 | 477,303 |
| | 1914 | 391,385 |
| | 1909 | 340,467 |
| | 1904 | 247,861 |
| North Dakota | 1919 | 17,791 |
| | 1914 | 14,062 |
| | 1909 | 13,196 |
| | 1904 | 9,873 |
| South Dakota | 1919 | 22,191 |
| | 1914 | 16,324 |
| | 1909 | 17,666 |
| | 1904 | 11,154 |
| Nebraska | 1919 | 125,814 |
| | 1914 | 89,285 |
| | 1909 | 64,466 |
| | 1904 | 46,372 |
| Kansas | 1919 | 234,110 |
| | 1914 | 179,146 |
| | 1909 | 219,141 |
| | 1904 | 99,441 |
| SOUTH ATLANTIC: | | |
| Delaware | 1919 | 85,150 |
| | 1914 | 64,403 |
| | 1909 | 52,779 |
| | 1904 | 49,490 |
| Maryland | 1919 | 406,768 |
| | 1914 | 263,753 |
| | 1909 | 218,244 |
| | 1904 | 165,449 |
| Dist. of Columbia | 1919 | 33,079 |
| | 1914 | 24,775 |
| | 1909 | 16,563 |
| | 1904 | 12,592 |
| Virginia | 1919 | 419,946 |
| | 1914 | 337,567 |
| | 1909 | 283,928 |
| | 1904 | 176,998 |
| West Virginia | 1919 | 328,653 |
| | 1914 | 278,504 |
| | 1909 | 217,496 |
| | 1904 | 138,578 |
| North Carolina | 1919 | 549,878 |
| | 1914 | 508,085 |
| | 1909 | 378,556 |
| | 1904 | 216,622 |
| South Carolina | 1919 | 395,556 |
| | 1914 | 340,224 |
| | 1909 | 276,378 |
| | 1904 | 197,479 |
| Georgia | 1919 | 436,608 |
| | 1914 | 357,403 |
| | 1909 | 298,241 |
| | 1904 | 220,419 |
| Florida | 1919 | 139,456 |
| | 1914 | 100,071 |
| | 1909 | 89,816 |
| | 1904 | 43,413 |
| E. SO. CENTRAL: | | |
| Kentucky | 1919 | 247,573 |
| | 1914 | 238,314 |
| | 1909 | 230,224 |
| | 1904 | 174,625 |
| Tennessee | 1919 | 338,814 |
| | 1914 | 286,857 |
| | 1909 | 242,277 |
| | 1904 | 175,780 |
| Alabama | 1919 | 628,376 |
| | 1914 | 445,762 |
| | 1909 | 357,837 |
| | 1904 | 293,185 |
| Mississippi | 1919 | 200,814 |
| | 1914 | 186,434 |
| | 1909 | 206,222 |
| | 1904 | 110,338 |
| W. SO. CENTRAL: | | |
| Arkansas | 1919 | 214,194 |
| | 1914 | 177,208 |
| | 1909 | 173,088 |
| | 1904 | 109,509 |
| Louisiana | 1919 | 388,605 |
| | 1914 | 355,193 |
| | 1909 | 346,652 |
| | 1904 | 251,963 |
| Oklahoma | 1919 | 139,983 |
| | 1914 | 97,308 |
| | 1909 | 71,139 |
| | 1904 | 29,608 |
| Texas | 1919 | 443,207 |
| | 1914 | 335,791 |
| | 1909 | 282,471 |
| | 1904 | 164,637 |
| MOUNTAIN: | | |
| Montana | 1919 | 153,491 |
| | 1914 | 91,671 |
| | 1909 | 90,402 |
| | 1904 | 46,736 |
| Idaho | 1919 | 73,876 |
| | 1914 | 50,326 |
| | 1909 | 42,804 |
| | 1904 | 16,987 |
| Wyoming | 1919 | 17,869 |
| | 1914 | 10,004 |
| | 1909 | 7,628 |
| | 1904 | 3,604 |
| Colorado | 1919 | 206,309 |
| | 1914 | 162,828 |
| | 1909 | 154,615 |
| | 1904 | 124,907 |
| New Mexico | 1919 | 17,260 |
| | 1914 | 12,468 |
| | 1909 | 15,465 |
| | 1904 | 5,948 |
| Arizona | 1919 | 103,958 |
| | 1914 | 54,697 |
| | 1909 | 39,140 |
| | 1904 | 21,412 |
| Utah | 1919 | 93,942 |
| | 1914 | 59,536 |
| | 1909 | 42,947 |
| | 1904 | 19,397 |
| Nevada | 1919 | 19,874 |
| | 1914 | 18,748 |
| | 1909 | 7,765 |
| | 1904 | 2,834 |
| PACIFIC: | | |
| Washington | 1919 | 687,436 |
| | 1914 | 389,567 |
| | 1909 | 297,897 |
| | 1904 | 168,342 |
| Oregon | 1919 | 304,346 |
| | 1914 | 214,222 |
| | 1909 | 175,019 |
| | 1904 | 81,348 |
| California | 1919 | 766,016 |
| | 1914 | 491,025 |
| | 1909 | 329,100 |
| | 1904 | 210,359 |

## MANUFACTURES IN THE UNITED STATES.

(U. S. Census summary for 14 general groups of industries.)

| GROUP. | Census Yr. | Establishments. | Wage Earners. | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | *No.* | *No.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| All industries..... | 1919 | 290,105 | 9,096,372 | 44,569,593,771 | 10,533,400,340 | 37,376,380,283 | 62,418,078,773 |
| | 1914 | 275,791 | 7,036,247 | 22,790,979,937 | 4,078,332,433 | 14,368,088,831 | 24,246,434,724 |
| | 1909 | 268,491 | 6,615,046 | 18,428,269,706 | 3,427,037,884 | 12,142,790,878 | 20,672,051,870 |
| | 1904 | 216,180 | 5,468,383 | 12,675,580,874 | 2,610,444,953 | 8,500,207,810 | 14,793,902,563 |
| | 1899 | 207,514 | 4,712,763 | 8,975,256,406 | 2,008,361,119 | 6,575,851,491 | 11,406,926,701 |
| Food, kindred products | 1919 | 61,312 | 684,672 | 4,635,149,885 | 722,539,843 | 10,111,546,824 | 12,438,890,851 |
| | 1914 | 59,317 | 496,234 | 2,174,386,295 | 278,009,375 | 3,828,511,989 | 4,816,709,664 |
| | 1909 | 55,364 | 411,575 | 1,696,754,345 | 208,663,293 | 3,187,803,080 | 3,937,617,891 |
| | 1904 | 45,857 | 354,046 | 1,169,872,985 | 164,510,641 | 2,306,120,760 | 2,845,555,772 |
| | 1899 | 41,247 | 301,868 | 909,395,543 | 125,196,412 | 1,782,862,809 | 2,199,203,442 |
| Textiles, their products | 1919 | 28,552 | 1,611,309 | 6,096,161,183 | 1,482,326,820 | 5,382,079,303 | 9,216,102,814 |
| | 1914 | 23,463 | 1,507,374 | 2,836,279,203 | 676,459,736 | 2,015,501,950 | 3,447,997,219 |
| | 1909 | 22,057 | 1,445,720 | 2,507,426,804 | 595,243,129 | 1,763,267,475 | 3,086,944,186 |
| | 1904 | 17,344 | 1,163,497 | 1,758,306,330 | 422,570,250 | 1,260,405,486 | 2,168,892,154 |
| | 1899 | 17,926 | 1,028,706 | 1,353,012,264 | 343,923,166 | 906,842,395 | 1,646,733,505 |
| Iron and steel and their products | 1919 | 20,120 | 1,585,712 | 8,711,843,201 | 2,193,203,301 | 4,815,885,004 | 9,403,634,265 |
| | 1914 | 17,719 | 1,061,058 | 4,281,997,816 | 723,162,595 | 1,762,312,126 | 3,223,142,260 |
| | 1909 | 17,292 | 1,026,553 | 3,578,601,715 | 635,322,501 | 1,799,942,862 | 3,164,471,535 |
| | 1904 | 14,431 | 868,634 | 2,351,051,003 | 488,598,000 | 1,190,793,183 | 2,199,775,910 |
| | 1899 | 14,082 | 745,235 | 1,549,317,828 | 387,589,641 | 1,000,950,049 | 1,819,477,558 |
| Lumber and its remanufactures | 1919 | 39,955 | 839,008 | 2,590,045,756 | 847,031,570 | 1,359,998,567 | 3,070,072,813 |
| | 1914 | 42,036 | 833,529 | 1,723,454,491 | 440,308,223 | 762,351,252 | 1,599,711,856 |
| | 1909 | 48,539 | 911,593 | 1,570,549,441 | 424,759,396 | 717,832,741 | 1,588,274,035 |
| | 1904 | 32,501 | 734,136 | 1,009,949,596 | 335,045,449 | 517,500,837 | 1,219,748,602 |
| | 1899 | 34,954 | 671,696 | 728,367,000 | 253,176,000 | 480,930,185 | 1,007,531,824 |
| Leather and its finished products | 1919 | 6,397 | 349,362 | 1,554,502,458 | 363,453,419 | 1,713,807,336 | 2,610,230,727 |
| | 1914 | 6,758 | 307,060 | 743,347,171 | 169,357,560 | 753,135,354 | 1,104,594,557 |
| | 1909 | 5,728 | 309,766 | 659,231,312 | 155,110,878 | 669,874,518 | 992,713,322 |
| | 1904 | 5,318 | 264,459 | 451,796,131 | 120,833,174 | 480,220,706 | 724,391,050 |
| | 1899 | 5,625 | 248,626 | 334,733,718 | 101,503,379 | 396,633,189 | 582,047,900 |
| Paper and printing.... | 1919 | 36,403 | 509,875 | 2,423,400,111 | 564,509,917 | 1,306,717,793 | 3,012,583,990 |
| | 1914 | 37,196 | 452,900 | 1,433,176,595 | 296,491,824 | 580,717,205 | 1,456,046,889 |
| | 1909 | 34,828 | 415,990 | 1,133,617,756 | 242,062,243 | 451,238,634 | 1,179,285,247 |
| | 1904 | 30,803 | 351,640 | 803,662,460 | 186,422,106 | 309,012,305 | 859,814,263 |
| | 1899 | 26,627 | 298,744 | 559,400,425 | 140,754,185 | 214,565,643 | 607,907,231 |
| Liquors and beverages. | 1919 | 6,354 | 55,442 | 781,571,615 | 66,139,716 | 222,776,314 | 603,895,215 |
| | 1914 | 7,562 | 88,152 | 1,015,714,498 | 69,123,819 | 246,189,012 | 772,079,978 |
| | 1909 | 7,347 | 77,827 | 874,107,693 | 53,501,779 | 186,127,887 | 674,311,051 |
| | 1904 | 6,379 | 68,338 | 659,539,000 | 45,143,885 | 139,849,038 | 501,253,355 |
| | 1899 | 5,740 | 55,120 | 515,160,244 | 33,217,604 | 93,815,032 | 382,898,381 |
| Chemicals and allied products | 1919 | 12,224 | 427,008 | 5,617,738,265 | 493,744,382 | 3,747,674,883 | 5,610,299,073 |
| | 1914 | 12,374 | 299,569 | 3,034,208,965 | 167,494,367 | 1,289,346,253 | 2,001,634,881 |
| | 1909 | 12,060 | 267,261 | 2,167,424,898 | 129,003,274 | 931,044,053 | 1,526,598,576 |
| | 1904 | 9,826 | 227,326 | 1,588,328,000 | 102,388,000 | 633,918,838 | 1,075,519,406 |
| | 1899 | 8,928 | 196,538 | 1,163,815,794 | 77,559,918 | 451,456,110 | 761,691,003 |
| Stone, clay, and glass products | 1919 | 12,529 | 298,659 | 1,262,211,569 | 328,559,462 | 408,570,822 | 1,085,528,926 |
| | 1914 | 14,747 | 334,612 | 987,330,674 | 205,419,894 | 238,734,726 | 614,161,879 |
| | 1909 | 16,168 | 342,827 | 857,759,719 | 189,256,482 | 183,791,550 | 531,736,831 |
| | 1904 | 10,773 | 285,346 | 553,785,000 | 148,458,000 | 123,066,911 | 391,147,449 |
| | 1899 | 11,524 | 231,716 | 335,351,320 | 102,846,099 | 85,137,414 | 270,650,143 |
| Metals and metal products, other than iron and steel | 1919 | 10,667 | 339,469 | 1,796,669,418 | 394,627,827 | 1,910,034,506 | 2,760,293,568 |
| | 1914 | 10,023 | 262,154 | 1,013,631,954 | 166,894,654 | 1,023,353,386 | 1,417,042,907 |
| | 1909 | 8,783 | 249,607 | 867,406,996 | 146,793,608 | 892,065,747 | 1,240,409,831 |
| | 1904 | 5,880 | 198,531 | 571,901,706 | 110,208,073 | 633,132,869 | 895,974,681 |
| | 1899 | 5,041 | 161,463 | 372,663,407 | 81,974,056 | 472,514,295 | 690,973,960 |
| Tobacco manufactures. | 1919 | 10,291 | 157,097 | 604,839,572 | 123,988,084 | 483,567,754 | 1,012,933,213 |
| | 1914 | 13,951 | 178,872 | 303,840,252 | 77,856,100 | 207,133,584 | 490,165,222 |
| | 1909 | 15,822 | 166,810 | 245,660,484 | 69,354,594 | 177,185,621 | 416,695,104 |
| | 1904 | 16,827 | 159,406 | 323,983,000 | 62,639,000 | 126,085,608 | 331,111,181 |
| | 1899 | 14,959 | 132,526 | 111,517,318 | 47,975,331 | 92,866,542 | 263,713,173 |
| Vehicles for land transportation | 1919 | 21,152 | 495,939 | 2,423,239,470 | 689,475,462 | 2,498,225,514 | 4,058,911,515 |
| | 1914 | 9,909 | 263,076 | 803,495,818 | 197,077,133 | 586,670,103 | 1,034,497,001 |
| | 1909 | 6,562 | 202,719 | 521,456,520 | 121,047,239 | 306,536,675 | 561,763,289 |
| | 1904 | 6,058 | 136,625 | 287,847,438 | 72,659,383 | 177,640,767 | 320,623,822 |
| | 1899 | 7,338 | 133,663 | 263,873,364 | 63,231,652 | 153,253,973 | 277,485,366 |
| Railroad repair shops.. | 1919 | 2,368 | 515,709 | 776,844,315 | 726,690,466 | 547,828,694 | 1,354,446,094 |
| | 1914 | 2,011 | 365,902 | 417,706,110 | 253,149,943 | 261,438,181 | 552,617,790 |
| | 1909 | 1,686 | 304,592 | 277,216,183 | 195,830,305 | 214,581,311 | 437,563,288 |
| | 1904 | 1,226 | 247,922 | 159,792,082 | 149,166,134 | 156,568,161 | 323,212,210 |
| | 1899 | 1,400 | 180,620 | 130,255,212 | 100,411,322 | 113,809,097 | 227,484,469 |
| Miscellaneous ind'stries | 1919 | 21,781 | 1,227,111 | 5,295,376,953 | 1,537,110,071 | 2,867,666,969 | 6,180,255,709 |
| | 1914 | 18,725 | 585,755 | 2,022,410,095 | 357,527,210 | 812,693,710 | 1,716,032,621 |
| | 1909 | 16,255 | 482,208 | 1,471,055,840 | 261,089,163 | 661,498,724 | 1,333,667,684 |
| | 1904 | 12,957 | 408,477 | 985,766,146 | 201,802,858 | 445,892,341 | 936,882,208 |
| | 1899 | 12,123 | 323,242 | 648,393,059 | 149,002,354 | 330,214,758 | 660,128,746 |

Figures as to wage earners represent the average number.

Primary horsepower, total for the 14 groups—(1919) 29,507,117; (1914) 22,470,872; (1909) 18,675,376; (1904) 13,487,707; (1899) 10,097,893. The group, iron and steel and their products, in 1919 used 8,082,692 horsepower; lumber and its remanufactures, 3,417,941; textiles and their products, 3,274,090; food and kindred products, 2,571,257; paper and printing, 2,351,224; chemicals and allied products, 2,043,525; stone, clay, and glass products, 1,569,719.

**Value added by manufacture.**—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry. The best measure of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products and is termed "value added by manufacture."

## MANUFACTURING IN THE U. S., BY INDUSTRIES, IN 1919 AND 1914.

(U. S. Census figures.)

NOTE.—The figures for some industries do not represent the total production because important establishments that manufacture the same class of products may be included in other industries.

| INDUSTRY. | Census Yr. | No. of Establishments. | Wage Earners (Average Number) | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| All industries..... | 1919 | 290,105 | 9,096,372 | 44,558,593,771 | 10,533,400,340 | 37,376,380,283 | 62,418,078,77? |
| | 1914 | 275,791 | 7,036,247 | 22,790,979,937 | 4,078,332,433 | 14,368,088,831 | 24,246,434,724 |
| Aeroplanes, seaplanes, airships, and parts... | 1919 | 31 | 3,543 | 17,753,875 | 4,906,740 | 7,126,965 | 14,372,643 |
| | 1914 | 16 | 168 | 401,301 | 134,827 | 133,939 | 789,872 |
| Agricultur'l implem'nts | 1919 | 521 | 54,368 | 366,962,052 | 66,704,434 | 144,571,943 | 304,961,265 |
| | 1914 | 601 | 48,459 | 338,531,673 | 34,593,325 | 73,508,645 | 164,086,835 |
| Aluminum man'f'ctures | 1919 | 83 | 11,402 | 48,490,364 | 13,327,306 | 49,271,861 | 75,277,948 |
| | 1914 | 37 | 4,614 | 11,087,673 | 2,611,251 | 14,421,319 | 19,597,465 |
| Ammunition..... | 1919 | 42 | 22,816 | 94,558,643 | 23,587,692 | 38,101,602 | 88,038,223 |
| | 1914 | 32 | 11,493 | 37,454,175 | 6,750,986 | 16,276,575 | 30,840,472 |
| Artificial f owers..... | 1919 | 224 | 4,138 | 6,675,418 | 3,740,911 | 7,004,646 | 16,143,165 |
| | 1914 | 217 | 4,808 | 3,348,613 | 1,990,768 | 3,206,868 | 7,614,049 |
| Artificial limbs..... | 1919 | 177 | 671 | 2,231,416 | 794,525 | 774,447 | 3,271,406 |
| | 1914 | 153 | 488 | 1,002,871 | 369,289 | 315,762 | 1,498,154 |
| Artificial stone prod'cts | 1919 | 2,785 | 8,378 | 29,646,743 | 9,310,899 | 13,913,317 | 33,664,332 |
| | 1914 | 3,548 | 10,255 | 19,414,473 | 6,307,752 | 8,903,630 | 21,933,630 |
| Artists' materials..... | 1919 | 58 | 926 | 4,663,790 | 895,764 | 2,687,226 | 5,507,656 |
| | 1914 | 44 | 604 | 2,947,316 | 314,504 | 2,064,716 | 3,237,729 |
| Asbestos products not incl'g steam packing. | 1919 | 46 | 3,654 | 16,404,739 | 3,731,974 | 12,947,702 | 23,977,557 |
| | 1914 | 32 | 962 | 3,519,788 | 483,736 | 1,360,185 | 2,813,578 |
| Automobile bodies and parts..... | 1919 | 2,515 | 132,556 | 470,497,552 | 178,955,503 | 362,027,302 | 692,170,692 |
| | 1914 | 971 | 47,785 | 94,854,031 | 34,992,515 | 63,610,365 | 129,601,337 |
| Automobile repairing.. | 1919 | 15,507 | 55,061 | 141,123,954 | 71,613,471 | 87,648,853 | 224,652,159 |
| | 1914 | 3,273 | 12,562 | 17,098,052 | 10,693 | 9,133,817 | 29,105,151 |
| Automobiles..... | 1919 | 315 | 210,559 | 1,310,451,390 | 312,165,870 | 1,578,651,574 | 2,387,903,287 |
| | 1914 | 300 | 79,397 | 312,875,884 | 66,934,359 | 292,597,565 | 503,230,137 |
| Awnings, tents, sails.. | 1919 | 895 | 6,028 | 26,727,621 | 5,858,523 | 26,961,140 | 45,690,390 |
| | 1914 | 888 | 5,073 | 9,958,089 | 2,953,884 | 10,155,101 | 18,138,326 |
| Babbitt metal, solder.. | 1919 | 118 | 2,372 | 24,383,3 2 | 2,882,128 | 48,844,269 | 59,016,983 |
| | 1914 | 109 | 1,035 | 8,919,223 | 701,234 | 15,652,180 | 19,179,976 |
| Bags, oth. than pap., not made in textile mills. | 1919 | 216 | 10,756 | 79,042,143 | 7,756,582 | 176,017,560 | 214,059,474 |
| | 1914 | 138 | 9,358 | 30,878,474 | 3,788,837 | 67,021,376 | 79,049,151 |
| Bags, paper, exc. those made in paper mills.. | 1919 | 75 | 4,168 | 24,584,881 | 3,662,830 | 33,350,481 | 47,263,990 |
| | 1914 | 59 | 3,505 | 11,078,44 | 1,659,070 | 12,200,884 | 17,602,543 |
| Baking powder & yeast | 1919 | 88 | 3,331 | 43,486,136 | 3,554,534 | 26,635,429 | 46,230,312 |
| | 1914 | 124 | 2,270 | 35,271,592 | 1,241,316 | 10,894,844 | 22,339,347 |
| Baskets, and rattan & willow ware..... | 1919 | 375 | 4,533 | 7,195,394 | 3,369,086 | 4,904,241 | 11,821,167 |
| | 1914 | 419 | 4,574 | 4,590,515 | 1,922,965 | 2,999,285 | 6,578,468 |
| Bells..... | 1919 | 10 | 237 | 1,004,743 | 205,110 | 450,149 | 950,956 |
| | 1914 | 12 | 445 | 1,039,963 | 244,113 | 437,878 | 969,625 |
| Belting and hose, rub'r | 1919 | 15 | 5,826 | 45,919,568 | 6,073,539 | 18,310,401 | 34,210,540 |
| | 1914 | 18 | 5,115 | 22,436,922 | 2,902,193 | 12,967,004 | 23,560,889 |
| Belting & hose, woven, other than rubber... | 1919 | 41 | 2,479 | 17,348,974 | 2,202,188 | 11,642,011 | 19,176,277 |
| | 1914 | 31 | 952 | 4,843,370 | 459,563 | 2,868,801 | 4,440,775 |
| Belting, leather..... | 1919 | 172 | 2,765 | 27,533,899 | 3,260,439 | 28,156,711 | 40,480,654 |
| | 1914 | 151 | 2,951 | 20,138,522 | 2,069,545 | 15,480,110 | 23,035,951 |
| Billiard tables, bowling alleys, & accessories. | 1919 | 49 | 2,101 | 7,040,990 | 2,425,353 | 6,100,852 | 15,733,047 |
| | 1914 | 54 | 1,453 | 5,438,096 | 984,517 | 2,488,261 | 4,894,081 |
| Blacking, stains, and dressings..... | 1919 | 220 | 2,455 | 13,080,901 | 2,109,103 | 14,041,840 | 25,284,072 |
| | 1914 | 197 | 1,766 | 4,985,740 | 877,434 | 5,128,614 | 9,881,594 |
| Bluing..... | 1919 | 57 | 360 | 1,227,619 | 285,063 | 1,542,954 | 2,731,277 |
| | 1914 | 66 | 254 | 712,377 | 104,853 | 489,431 | 1,184,045 |
| Bone, carbon, and lamp black..... | 1919 | 35 | 675 | 9,790,167 | 808,332 | 2,848,059 | 6,186,204 |
| | 1914 | 27 | 339 | 4,995,400 | 230,821 | 686,240 | 1,463,569 |
| Bookbinding & blank-book making..... | 1919 | 1,113 | 20,361 | 43,041,207 | 18,658,821 | 23,235,171 | 66,020,677 |
| | 1914 | 1,124 | 21,693 | 29,179,790 | 11,574,723 | 13,334,207 | 38,104,368 |
| Boot & shoe cut stock, excl. that prod. in boot & shoe actories | 1919 | 252 | 9,715 | 61,747,458 | 9,124,778 | 133,887,276 | 161,203,310 |
| | 1914 | 236 | 7,819 | 30,455,245 | 4,052,123 | 51,450,498 | 59,964,523 |
| Boot & shoe findings, excl. those prod. in boot & shoe factories | 1919 | 427 | 8,941 | 28,988,416 | 8,187,196 | 40,428,347 | 62,825,408 |
| | 1914 | 369 | 6,714 | 12,562,864 | 3,225,683 | 20,304,183 | 28,303,183 |
| Boots, shoes, not incl. rubber boots & shoes | 1919 | 1,449 | 211,049 | 612,625,075 | 210,734,610 | 715,269,315 | 1,155,041,436 |
| | 1914 | 1,355 | 191,555 | 254,590,832 | 105,695,404 | 310,356,586 | 501,760,458 |
| Boots & shoes, rubber.. | 1919 | 25 | 32,875 | 131,513,436 | 30,882,722 | 50,346,880 | 116,917,434 |
| | 1914 | 23 | 18,687 | 46,051,464 | 9,986,454 | 23,956,036 | 53,822,123 |
| Boxes, cigar..... | 1919 | 189 | 5,218 | 16,611,944 | 3,512,236 | 6,336,540 | 13,110,213 |
| | 1914 | 238 | 5,835 | 5,270,193 | 2,298,842 | 4,269,486 | 8,336,907 |
| Boxes, paper and other, not elsewh're specif'd | 1919 | 1,201 | 55,862 | 131,390,783 | 43,325,554 | 101,135,292 | 206,419,343 |
| | 1914 | 1,043 | 45,311 | 60,027,412 | 18,704,790 | 36,268,370 | 74,711,047 |
| Boxes, wooden packing, except cigar boxes... | 1919 | 1,140 | 42,445 | 108,932,998 | 36,811,185 | 102,946,235 | 177,818,454 |
| | 1914 | 1,174 | 38,548 | 66,693,856 | 18,206,067 | 52,839,647 | 86,566,807 |
| Brass, bronze, and copper products..... | 1919 | 1,092 | 75,051 | 325,299,738 | 94,132,118 | 304,823,580 | 482,312,790 |
| | 1914 | 992 | 40,306 | 116,092,882 | 25,084,281 | 115,486,768 | 162,199,019 |
| Bread and other bakery products..... | 1919 | 25,095 | 141,592 | 529,265,779 | 158,237,059 | 713,239,411 | 1,151,896,318 |
| | 1914 | 25,963 | 124,052 | 271,261,625 | 76,866,613 | 274,257,468 | 491,893,025 |
| Brick & tile, terra cotta & fire-clay products.. | 1919 | 2,414 | 76,915 | 355,848,355 | 78,256,085 | 67,488,113 | 208,422,920 |
| | 1914 | 3,239 | 100,182 | 279,860,012 | 54,907,418 | 42,723,178 | 135,921,445 |
| Brooms..... | 1919 | 1,034 | 6,313 | 16,707,682 | 5,708,885 | 17,365,109 | 30,205,267 |
| | 1914 | 868 | 5,642 | 8,705,868 | 2,624,106 | 7,883,613 | 14,084,959 |
| Brushes..... | 1919 | 379 | 7,968 | 27,208,200 | 7,113,201 | 19,598,133 | 39,005,607 |
| | 1914 | 359 | 7,213 | 14,332,768 | 3,461,271 | 9,326,655 | 17,894,476 |
| Butter..... | 1919 | 3,738 | 17,641 | 162,302,108 | 18,852,729 | 514,345,739 | 583,163,011 |
| | 1914 | 4,356 | 14,149 | 59,625,448 | 10,119,478 | 212,546,847 | 243,379,371 |
| Butter, reworking..... | 1919 | 5 | 47 | 602,902 | 56,432 | 2,005,769 | 2,229,035 |
| | 1914 | 17 | 304 | 1,397,487 | 199,515 | 5,058,953 | 5,859,309 |
| Buttons..... | 1919 | 557 | 15,577 | 29,977,973 | 13,772,599 | 16,745,357 | 41,840,459 |
| | 1914 | 517 | 14,511 | 19,075,374 | 6,424,399 | 8,702,200 | 20,711,979 |

MANUFACTURING IN THE U. S., BY INDUSTRIES, IN 1919, AND 1914—*Continued.*

| INDUSTRY. | Census Yr. | No. of Establishments. | Wage Earners (Average Number) | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Candles | 1919 | 19 | 541 | 4,033,426 | 437,581 | 2,178,528 | 3,350,806 |
| | 1914 | 15 | 387 | 2,286,446 | 183,007 | 1,118,575 | 1,730,723 |
| Canning & preserving, fish | 1919 | 410 | 11,248 | 63,049,038 | 9,036,089 | 52,410,951 | 77,284,412 |
| | 1914 | 330 | 9,069 | 28,463,738 | 3,678,999 | 19,467,153 | 31,111,409 |
| Canning & preserving, fruits and vegetables | 1919 | 3,082 | 60,865 | 223,692,234 | 43,592,537 | 265,628,525 | 402,242,972 |
| | 1914 | 3,153 | 50,325 | 98,738,219 | 17,305,503 | 103,293,044 | 149,175,865 |
| Canning & preserving, oysters | 1919 | 65 | 1,189 | 2,971,876 | 468,930 | 1,582,838 | 2,976,011 |
| | 1914 | 65 | 2,087 | 2,076,607 | 423,697 | 1,225,206 | 2,238,053 |
| Card cutting and designing | 1919 | 75 | 1,148 | 2,297,970 | 958,877 | 2,298,389 | 5,323,349 |
| | 1914 | 58 | 517 | 706,293 | 264,895 | 420,736 | 1,054,904 |
| Cardboard, not made in paper mills | 1919 | 16 | 1,425 | 6,493,032 | 1,337,177 | 4,953,915 | 9,138,415 |
| | 1914 | 18 | 1,159 | 5,128,818 | 579,942 | 2,962,334 | 4,350,347 |
| Carpets and rugs, other than rag | 1919 | 75 | 22,933 | 119,196,461 | 24,216,121 | 67,118,039 | 123,253,828 |
| | 1914 | 97 | 31,309 | 85,153,828 | 14,715,615 | 42,280,223 | 69,128,185 |
| Carpets, rag | 1919 | 339 | 2,016 | 2,853,400 | 1,550,501 | 2,037,874 | 5,597,057 |
| | 1914 | 463 | 2,130 | 1,654,447 | 994,608 | 721,728 | 2,786,439 |
| Carriage and wagon materials | 1919 | 258 | 6,509 | 17,971,206 | 5,666,771 | 14,734,673 | 26,765,316 |
| | 1914 | 456 | 11,087 | 26,845,261 | 6,059,218 | 13,546,273 | 24,849,560 |
| Carriages and sleds, children's | 1919 | 103 | 6,686 | 15,215,425 | 6,229,038 | 11,700,158 | 24,506,596 |
| | 1914 | 92 | 5,900 | 9,380,127 | 3,180,705 | 5,682,489 | 11,751,623 |
| Carriages and wagons, including repairs | 1919 | 2,286 | 18,173 | 78,952,868 | 19,393,395 | 48,362,456 | 91,463,225 |
| | 1914 | 4,601 | 41,304 | 150,797,754 | 26,498,244 | 52,172,522 | 106,697,437 |
| Cars and general shop const. and repairs by electric-railroad co's | 1919 | 624 | 31,272 | 82,557,905 | 39,073,154 | 32,025,484 | 75,210,701 |
| | 1914 | 649 | 26,384 | 63,613,741 | 18,644,845 | 17,609,574 | 38,576,565 |
| Cars and general shop const. and repairs by steam-railroad com's | 1919 | 1,744 | 484,437 | 694,286,410 | 687,617,312 | 515,803,210 | 1,279,235,393 |
| | 1914 | 1,362 | 339,518 | 354,092,369 | 234,505,098 | 243,828,607 | 514,041,225 |
| Cars, electric railroad, not incl'g operations of railroad comp'nies | 1919 | 7 | 2,920 | 17,306,485 | 4,132,090 | 12,058,942 | 18,441,976 |
| | 1914 | 14 | 3,840 | 14,751,582 | 2,467,027 | 6,349,779 | 10,494,953 |
| Cars, steam railroad, not incl'g operations of railroad comp'nies | 1919 | 99 | 52,298 | 335,207,363 | 78,284,647 | 356,084,545 | 538,222,831 |
| | 1914 | 103 | 54,288 | 157,811,109 | 41,393,579 | 132,200,159 | 194,775,669 |
| Cash registers and calculating machines | 1919 | 65 | 16,544 | 82,798,293 | 22,537,265 | 10,889,998 | 83,539,025 |
| | 1914 | 52 | 8,956 | 41,074,933 | 6,110,271 | 3,992,076 | 30,519,587 |
| Cement | 1919 | 123 | 25,524 | 271,269,259 | 33,194,920 | 79,509,800 | 175,264,910 |
| | 1914 | 133 | 27,916 | 243,485,046 | 18,192,282 | 51,986,798 | 101,756,444 |
| Charcoal, not inc. prod. in lumber and wood distillation industries | 1919 | 41 | 209 | 518,762 | 156,072 | 260,322 | 589,418 |
| | 1914 | 47 | 228 | 493,717 | 80,513 | 232,618 | 402,060 |
| Cheese | 1919 | 3,530 | 3,997 | 26,022,734 | 4,808,991 | 129,425,265 | 143,455,704 |
| | 1914 | 3,082 | 2,908 | 11,139,094 | 2,955,684 | 46,758,685 | 51,744,779 |
| Chemicals | 1919 | 598 | 55,586 | 484,488,412 | 72,848,324 | 216,301,279 | 438,658,869 |
| | 1914 | 395 | 32,311 | 224,345,921 | 22,066,212 | 89,450,694 | 158,053,602 |
| Chewing gum | 1919 | 62 | 3,190 | 23,703,313 | 2,679,803 | 25,202,312 | 51,240,156 |
| | 1914 | 74 | 2,048 | 10,625,002 | 828,467 | 7,322,299 | 17,159,607 |
| China decor't'g, not inc. that done in potteries | 1919 | 43 | 244 | 470,153 | 244,211 | 310,785 | 866,762 |
| | 1914 | 51 | 295 | 463,209 | 159,471 | 330,190 | 726,960 |
| Chocolate and cocoa products | 1919 | 48 | 9,083 | 60,674,737 | 9,270,077 | 101,754,466 | 139,258,296 |
| | 1914 | 36 | 4,160 | 23,684,636 | 2,035,598 | 24,483,303 | 35,712,810 |
| Cleansing and polishing preparations | 1919 | 499 | 1,955 | 12,979,414 | 1,898,447 | 12,923,518 | 26,703,109 |
| | 1914 | 398 | 1,239 | 5,897,676 | 618,783 | 3,895,199 | 9,151,718 |
| Clocks | 1919 | 46 | 8,252 | 18,349,943 | 7,861,611 | 7,177,813 | 23,380,190 |
| | 1914 | 48 | 6,754 | 13,564,482 | 3,653,146 | 4,007,764 | 11,031,720 |
| Cloth sponging and refinishing | 1919 | 67 | 1,206 | 1,465,956 | 1,564,661 | 178,161 | 3,690,858 |
| | 1914 | 51 | 901 | 625,416 | 658,377 | 132,653 | 1,531,317 |
| Clothing, horse | 1919 | 28 | 766 | 3,704,741 | 551,278 | 3,455,686 | 6,020,612 |
| | 1914 | 37 | 1,669 | 4,482,497 | 668,305 | 3,568,769 | 5,150,482 |
| Clothing, men's | 1919 | 5,258 | 175,270 | 554,147,279 | 197,821,990 | 605,752,176 | 1,162,985,633 |
| | 1914 | 4,830 | 173,747 | 224,050,401 | 86,828,011 | 230,031,690 | 458,210,985 |
| Clothing, men's, buttonholes | 1919 | 107 | 484 | 237,066 | 514,600 | 123,266 | 1,093,644 |
| | 1914 | 139 | 672 | 326,381 | 326,322 | 30,012 | 637,728 |
| Clothing, women's | 1919 | 7,711 | 165,649 | 390,526,517 | 195,295,834 | 680,406,844 | 1,208,543,128 |
| | 1914 | 5,564 | 168,907 | 153,549,295 | 92,573,642 | 252,345,040 | 473,888,354 |
| Coal-tar products | 1919 | 183 | 15,663 | 174,991,835 | 23,402,140 | 63,996,734 | 135,482,161 |
| Coffee and spice, roasting and grinding | 1919 | 794 | 10,540 | 127,747,535 | 9,201,242 | 243,899,108 | 304,791,677 |
| | 1914 | 696 | 8,549 | 56,595,753 | 4,507,692 | 116,519,603 | 150,748,756 |
| Coffins, burial cases, & undertakers' goods | 1919 | 351 | 11,890 | 48,298,053 | 11,450,957 | 31,595,287 | 64,377,133 |
| | 1914 | 287 | 9,468 | 29,730,842 | 5,381,842 | 13,257,078 | 26,325,162 |
| Coke, not includ'g gas-house coke | 1919 | 278 | 29,319 | 365,249,622 | 42,299,292 | 224,266,674 | 316,515,838 |
| | 1914 | 231 | 21,107 | 161,561,449 | 14,288,952 | 69,138,328 | 99,275,020 |
| Collars and cuffs, men's | 1919 | 39 | 11,103 | 30,146,935 | 7,430,729 | 19,434,095 | 47,564,949 |
| | 1914 | 35 | 10,100 | 15,025,246 | 4,494,146 | 6,565,578 | 18,530,840 |
| Combs and hair pins, exc. those made from metal or rubber | 1919 | 45 | 2,229 | 3,913,266 | 1,809,453 | 3,168,818 | 6,566,365 |
| | 1914 | 66 | 2,773 | 2,959,241 | 1,393,369 | 2,852,823 | 5,478,196 |
| Condensed milk | 1919 | 401 | 13,675 | 126,952,520 | 14,277,956 | 282,595,292 | 339,506,774 |
| | 1914 | 190 | 6,002 | 35,047,852 | 3,061,919 | 55,720,103 | 69,161,000 |
| Confectionery and ice cream | 1919 | 6,624 | 95,648 | 317,043,923 | 76,159,866 | 368,809,170 | 637,209,168 |
| | 1914 | 4,754 | 61,983 | 120,544,903 | 27,488,248 | 126,464,242 | 209,668,656 |
| Cooperage | 1919 | 1,099 | 13,219 | 48,853,805 | 14,082,224 | 58,520,655 | 88,236,061 |
| | 1914 | 1,259 | 17,128 | 36,690,031 | 9,160,583 | 32,943,683 | 50,017,320 |
| Copper, tin, and sheet-iron work | 1919 | 4,796 | 27,640 | 89,944,834 | 33,866,823 | 80,898,528 | 160,313,945 |
| | 1914 | 4,527 | 28,714 | 57,395,995 | 20,517,568 | 50,174,216 | 94,890,599 |
| Cordage and twine | 1919 | 120 | 17,622 | 100,248,987 | 14,700,061 | 89,705,282 | 133,366,476 |
| | 1914 | 105 | 15,769 | 72,472,139 | 6,995,596 | 43,605,473 | 59,761,483 |
| Cordials and flavoring syrups | 1919 | 149 | 1,398 | 11,673,732 | 1,297,281 | 30,998,628 | 46,806,718 |
| | 1914 | 142 | 929 | 5,585,420 | 461,058 | 7,596,360 | 15,316,252 |
| Cork, cutting | 1919 | 62 | 3,545 | 14,570,221 | 3,387,114 | 9,134,950 | 16,282,239 |
| | 1914 | 52 | 3,454 | 7,601,536 | 1,582,431 | 4,751,440 | 7,875,407 |

Coal tar products were included in "chemicals" in 1914.

Ice cream manufacture in 1919 had 19,155 wage earners, and the value of production was $189,483,065.

MANUFACTURING IN THE U. S., BY INDUSTRIES, IN 1919 AND 1914—*Continued.*

| INDUSTRY. | Census Yr. | No. of Establishments. | Wage Earners (Average Number) | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Corsets | 1919 | 188 | 18,415 | 43,516,486 | 13,082,242 | 38,815,803 | 75,541,959 |
| | 1914 | 167 | 20,496 | 23,892,756 | 7,976,721 | 19,586,533 | 40,550,702 |
| Cotton goods | 1919 | 1,288 | 430,966 | 1,853,099,816 | 355,474,937 | 1,277,785,597 | 2,125,272,193 |
| | 1914 | 1,179 | 379,366 | 867,043,678 | 146,129,628 | 431,602,540 | 676,569,115 |
| Cotton lace | 1919 | 44 | 6,490 | 32,260,216 | 6,086,557 | 13,075,994 | 29,396,853 |
| | 1914 | 41 | 7,440 | 20,956,509 | 3,468,081 | 5,676,948 | 13,206,785 |
| Cotton small wares | 1919 | 164 | 9,396 | 29,559,474 | 7,162,218 | 24,039,951 | 40,896,835 |
| | 1914 | 108 | 6,598 | 11,764,495 | 2,824,890 | 6,243,027 | 11,525,033 |
| Crucibles | 1919 | 22 | 848 | 8,069,334 | 923,287 | 2,233,072 | 5,293,688 |
| | 1914 | 10 | 302 | 1,871,015 | 171,499 | 1,269,845 | 1,886,129 |
| Cutlery and edge tools | 1919 | 304 | 19,859 | 68,971,247 | 20,048,465 | 19,477,437 | 66,629,570 |
| | 1914 | 252 | 16,561 | 35,666,198 | 9,075,896 | 8,185,699 | 25,540,987 |
| Dairy, poultry, and apiary supplies | 1919 | 244 | 6,437 | 36,095,331 | 7,078,433 | 18,526,743 | 37,397,448 |
| | 1914 | 236 | 5,551 | 21,280,864 | 3,363,119 | 9,247,939 | 18,949,538 |
| Dental goods | 1919 | 319 | 5,224 | 17,904,790 | 4,463,840 | 16,420,429 | 29,401,896 |
| | 1914 | 172 | 3,080 | 10,948,814 | 1,616,195 | 10,714,692 | 16,159,839 |
| Drug grinding | 1919 | 31 | 1,347 | 14,991,135 | 1,526,137 | 11,556,480 | 16,937,698 |
| | 1914 | 29 | 1,059 | 8,434,036 | 583,361 | 5,215,287 | 8,080,118 |
| Druggists' preparations | 1919 | 524 | 15,568 | 102,129,257 | 12,161,925 | 55,138,475 | 114,593,486 |
| | 1914 | 416 | 9,277 | 46,638,098 | 4,754,508 | 22,934,723 | 48,009,654 |
| Dyeing and finishing textiles, excl. of that done in textile mills | 1919 | 628 | 55,985 | 229,948,486 | 57,189,978 | 174,742,815 | 323,967,683 |
| | 1914 | 507 | 48,467 | 139,193,871 | 24,872,318 | 56,705,135 | 109,291,536 |
| Dyestuffs and extracts, natural | 1919 | 144 | 4,342 | 38,689,058 | 4,734,614 | 34,592,698 | 53,744,283 |
| | 1914 | 112 | 2,839 | 21,283,974 | 1,613,116 | 13,237,995 | 20,620,336 |
| Electrical machinery, apparatus, & supplies | 1919 | 1,404 | 212,374 | 857,855,496 | 238,188,852 | 425,098,211 | 997,968,119 |
| | 1914 | 1,030 | 118,078 | 355,724,756 | 73,806,329 | 154,728,076 | 335,170,194 |
| Electroplating | 1919 | 515 | 3,024 | 4,192,989 | 3,793,605 | 2,639,248 | 10,389,617 |
| | 1914 | 479 | 2,584 | 2,842,022 | 1,712,922 | 1,335,662 | 4,773,309 |
| Emery and other abrasive wheels | 1919 | 60 | 5,601 | 34,802,542 | 5,878,748 | 12,228,187 | 30,949,270 |
| | 1914 | 49 | 2,387 | 8,224,362 | 1,490,898 | 3,006,472 | 7,129,741 |
| Enameling | 1919 | 74 | 694 | 2,083,474 | 790,308 | 949,556 | 2,644,763 |
| | 1914 | 77 | 1,314 | 2,127,973 | 649,388 | 969,514 | 2,165,582 |
| Engines, steam, gas, and water | 1919 | 370 | 77,617 | 454,124,733 | 105,435,455 | 217,550,771 | 464,774,735 |
| | 1914 | 446 | 29,657 | 131,080,145 | 21,420,737 | 31,460,227 | 72,121,112 |
| Engravers' materials | 1919 | 21 | 174 | 826,166 | 212 171 | 1,484,269 | 2,248 122 |
| | 1914 | 13 | 106 | 351,666 | 73,391 | 550,659 | 768,258 |
| Engraving and diesinking | 1919 | 478 | 1,828 | 4,695,712 | 2,321,504 | 1,927,323 | 7,339,502 |
| | 1914 | 486 | 1,536 | 1,865,298 | 1,075,721 | 596,107 | 3,133,701 |
| Engraving, steel & cop. plate, inc. plateprint'g | 1919 | 421 | 7,014 | 19,040,260 | 7,908,109 | 6,980,747 | 24,209,154 |
| | 1914 | 399 | 6,859 | 19,078,545 | 4,526,684 | 3,914,508 | 13,786,385 |
| Engraving, wood | 1919 | 55 | 235 | 338,908 | 407,215 | 219,268 | 1,153,618 |
| | 1914 | 72 | 302 | 246,268 | 310,318 | 96,384 | 719,234 |
| Envelopes | 1919 | 106 | 8,129 | 24,754,818 | 6,649,989 | 21,964,743 | 39,664,077 |
| | 1914 | 90 | 6,970 | 15,830,396 | 3,378,184 | 10,234,841 | 18,481,013 |
| Explosives | 1919 | 118 | 9,249 | 133,247,684 | 12,504,986 | 45,911,049 | 92,474,813 |
| | 1914 | 111 | 6,306 | 71,351,414 | 4,488,288 | 25,626,539 | 41,432,970 |
| Fancy articles, not elsewhere specified | 1919 | 661 | 13,961 | 32,824,988 | 12,207,913 | 32,591,073 | 64,054,481 |
| | 1914 | 493 | 7,399 | 11,878,851 | 3,566,900 | 8,428,916 | 17,658,770 |
| Feathers and plumes | 1919 | 216 | 3,504 | 6,514,809 | 3,405,765 | 6,694,596 | 15,377,953 |
| | 1914 | 239 | 4,483 | 5,395,542 | 1,988,004 | 6,102,515 | 11,450,521 |
| Felt goods | 1919 | 49 | 5,236 | 35,024,373 | 4,873,490 | 22,780,775 | 39,229,540 |
| | 1914 | 53 | 4,035 | 20,284,048 | 2,089,243 | 8,308,270 | 13,692,765 |
| Ferroalloys | 1919 | 30 | 2,344 | 42,364,729 | 3,571,487 | 28,098,576 | 38,583,984 |
| Fertilizers | 1919 | 600 | 26,296 | 311,633,259 | 25,363,132 | 185,040,522 | 281,143,587 |
| | 1914 | 784 | 22,815 | 217,064,896 | 10,532,005 | 107,554,644 | 153,196,152 |
| Files | 1919 | 50 | 5,717 | 15,692,801 | 6,192,444 | 4,227,880 | 17,616,563 |
| | 1914 | 48 | 4,349 | 11,326,666 | 2,135,436 | 1,595,225 | 5,608,157 |
| Firearms | 1919 | 26 | 11,287 | 51,917,782 | 13,333,495 | 7,613,784 | 30,181,370 |
| | 1914 | 29 | 7,064 | 15,610,809 | 5,067,053 | 2,669,618 | 10,543,753 |
| Fire extinguishers, chemical | 1919 | 32 | 777 | 3,779,785 | 751,119 | 2,693,416 | 5,563,180 |
| | 1914 | 27 | 256 | 674,765 | 200,096 | 573,975 | 1,297,723 |
| Fireworks | 1919 | 57 | 1,222 | 3,546,943 | 994,851 | 2,108,156 | 4,629,984 |
| | 1914 | 41 | 1,324 | 2,162,449 | 616,279 | 1,206,006 | 2,296,236 |
| Flags and banners | 1919 | 79 | 1,065 | 3,436,484 | 795,242 | 3,286,165 | 5,346,089 |
| | 1914 | 87 | 1,495 | 1,843,357 | 689,975 | 1,750,094 | 3,601,310 |
| Flavoring extracts | 1919 | 453 | 2,188 | 13,561,337 | 1,665,285 | 19,418,176 | 30,116,932 |
| | 1914 | 424 | 1,461 | 6,616,771 | 688,790 | 6,308,403 | 11,380,423 |
| Flax and hemp, dressed | 1919 | 20 | 420 | 2,783,958 | 447,373 | 1,708,670 | 2,369,114 |
| | 1914 | 16 | 116 | 234,619 | 45,271 | 185,247 | 282,648 |
| Flour-mill and grist-mill products | 1919 | 10,708 | 45,481 | 801,624,507 | 50,888,383 | 1,799,180,987 | 2,052,434,385 |
| | 1914 | 10,788 | 39,718 | 380,257,420 | 24,593,162 | 752,270,021 | 877,679,709 |
| Food preparations, not elsewhere specified | 1919 | 1,997 | 30,365 | 245,282,687 | 29,392,209 | 494,597,157 | 631,598,150 |
| | 1914 | 1,559 | 20,306 | 91,038,543 | 10,866,380 | 153,750,573 | 219,332,659 |
| Foundry and machine-shop products | 1919 | 10,934 | 482,767 | 2,104,980,938 | 622,571,129 | 948,069,381 | 2,289,250,859 |
| | 1914 | 10,640 | 362,471 | 1,246,042,694 | 244,146,380 | 358,121,781 | 866,544,677 |
| Foundry supplies | 1919 | 76 | 906 | 7,501,631 | 1,032,029 | 5,667,236 | 9,954,676 |
| | 1914 | 57 | 555 | 2,814,124 | 300,775 | 997,315 | 2,012,896 |
| Fuel, manufactured | 1919 | 11 | 171 | 2,908,130 | 221,545 | 1,386,394 | 1,973,877 |
| | 1914 | 14 | 141 | 1,770,550 | 111,774 | 609,068 | 862,904 |
| Fur goods | 1919 | 1,815 | 13,639 | 80,700,925 | 24,149,212 | 105,596,605 | 173,137,739 |
| | 1914 | 1,322 | 9,030 | 29,677,371 | 6,334,661 | 23,847,402 | 43,632,693 |
| Furnishing goods, men's | 1919 | 487 | 18,944 | 53,014,066 | 13,562,866 | 64,743,912 | 107,834,695 |
| | 1914 | 551 | 22,459 | 27,887,725 | 8,415,480 | 31,593,442 | 52,453,338 |
| Furniture | 1919 | 3,154 | 138,331 | 423,992,405 | 141,116,316 | 261,523,395 | 571,356,333 |
| | 1914 | 3,192 | 127,881 | 267,884,783 | 71,815,916 | 121,486,496 | 265,705,763 |
| Furs, dressed | 1919 | 141 | 5,075 | 8,867,403 | 7,098,286 | 6,338,835 | 20,384,569 |
| | 1914 | 96 | 1,525 | 2,489,888 | 922,966 | 906,036 | 2,875,036 |
| Galvanizing and other coating processes | 1919 | 52 | 1,665 | 4,316,455 | 2,247,953 | 10,532,288 | 14,475,682 |
| | 1914 | 48 | 1,580 | 4,415,885 | 922,264 | 6,292,804 | 8,480,109 |
| Gas and electric fixtures | 1919 | 341 | 9,795 | 36,872,737 | 9,802,380 | 20,258,538 | 42,267,953 |
| | 1914 | 460 | 10,913 | 27,628,569 | 6,504,150 | 14,089,527 | 28,739,937 |

Ferroalloys were included in other classifications in 1914.

MANUFACTURING IN THE U. S., BY INDUSTRIES, IN 1919 AND 1914—*Continued.*

| Industry. | Census Yr. | No. of Es ablishments. | Wage Earners (Average Number) | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Gas, illuminating and heating | 1919 | 1,022 | 42,908 | 1,465,656,265 | 52,758,628 | 157,550,882 | 329,278,908 |
| | 1914 | 1,284 | 43,792 | 1,252,421,584 | 26,801,664 | 76,779,288 | 220,237,790 |
| Gas machines, and gas and water meters | 1919 | 105 | 5,589 | 24,980,993 | 5,995,877 | 10,647,402 | 26,267,074 |
| | 1914 | 123 | 4,972 | 17,821,544 | 3,309,631 | 6,118,471 | 15,183,916 |
| Glass | 1919 | 371 | 77,520 | 215,680,436 | 87,526,625 | 90,780,124 | 261,884,080 |
| | 1914 | 348 | 74,502 | 153,925,876 | 48,655,819 | 46,016,504 | 123,085,019 |
| Glass, cutting, staining, and ornamenting | 1919 | 616 | 6,480 | 18,088,650 | 6,154,831 | 14,357,878 | 28,443,321 |
| | 1914 | 635 | 8,067 | 11,310,478 | 4,670,370 | 7,142,609 | 16,445,839 |
| Gloves & mittens, cloth | 1919 | 182 | 8,986 | 17,687,953 | 4,855,246 | 16,092,462 | 28,220,113 |
| Gloves&mittens,leather | 1919 | 355 | 10,685 | 29,870,277 | 8,150,784 | 26,286,129 | 46,940,511 |
| | 1914 | 352 | 10,668 | 17,080,398 | 4,558,360 | 12,170,694 | 21,614,109 |
| Glucose and starch | 1919 | 56 | 7,795 | 58,182,682 | 11,962,483 | 130,328,848 | 186,256,260 |
| | 1914 | 89 | 4,509 | 43,642,343 | 3,549,565 | 40,207,592 | 52,615,401 |
| Glue, not elsewhere specified | 1919 | 62 | 4,264 | 27,237,123 | 4,776,724 | 19,279,905 | 32,134,067 |
| | 1914 | 57 | 3,129 | 17,162,362 | 1,853,548 | 9,367,922 | 13,732,824 |
| Gold and silver, leaf and foil | 1919 | 87 | 920 | 1,571,557 | 983,600 | 2,655,335 | 4,461,568 |
| | 1914 | 79 | 1,135 | 1,173,621 | 498,273 | 1,452,429 | 2,432,145 |
| Gold & silver, reducing & refining, not from ore | 1919 | 87 | 644 | 9,757,415 | 843,608 | 49,736,978 | 55,483,215 |
| | 1914 | 78 | 456 | 4,406,668 | 390,865 | 25,709,133 | 28,587,558 |
| Graphite, ground and refined | 1919 | 24 | 497 | 4,302,788 | 434,317 | 1,092,684 | 2,239,587 |
| | 1914 | 11 | 250 | 3,059,226 | 181,125 | 723,190 | 1,724,330 |
| Grease and tallow, not inc. lubricat'g greases | 1919 | 482 | 6,647 | 37,360,094 | 7,954,378 | 47,756,341 | 67,265,206 |
| | 1914 | 369 | 5,106 | 18,928,178 | 3,512,085 | 17,060,872 | 24,900,519 |
| Grindstones | 1919 | 23 | 674 | 2,045,469 | 598,631 | 243,853 | 1,369,423 |
| | 1914 | 14 | 686 | 1,979,047 | 322,812 | 115,588 | 683,936 |
| Haircloth | 1919 | 18 | 425 | 2,999,150 | 425,149 | 2,259,142 | 3,315,113 |
| | 1914 | 19 | 595 | 2,945,244 | 290,280 | 1,654,006 | 2,395,486 |
| Hair work | 1919 | 198 | 1,084 | 3,580,546 | 1,064,630 | 3,829,197 | 6,963,033 |
| | 1914 | 205 | 1,193 | 2,542,585 | 580,815 | 1,528,942 | 3,334,946 |
| Hammocks | 1919 | 6 | 64 | 153,465 | 40,241 | 169,492 | 255,755 |
| | 1914 | 14 | 285 | 608,194 | 119,472 | 361,327 | 671,476 |
| Hand stamps | 1919 | 298 | 1,719 | 4,249,546 | 1,832,581 | 2,634,426 | 7,738,773 |
| | 1914 | 277 | 1,321 | 2,272,589 | 847,727 | 1,093,147 | 3,382,793 |
| Hardware | 1919 | 548 | 42,505 | 133,925,619 | 45,229,950 | 58,533,769 | 154,524,888 |
| | 1914 | 539 | 41,313 | 92,301,999 | 22,584,132 | 29,070,638 | 73,313,697 |
| Hardware, saddlery | 1919 | 37 | 3,675 | 10,991,945 | 4,043,799 | 4,281,589 | 14,136,556 |
| | 1914 | 58 | 2,511 | 5,353,299 | 1,248,441 | 1,789,944 | 4,039,971 |
| Hat and cap material | 1919 | 133 | 3,009 | 19,861,835 | 3,132,571 | 16,643,919 | 26,521,212 |
| | 1914 | 98 | 1,775 | 6,417,072 | 804,246 | 5,051,857 | 6,929,342 |
| Hats & caps, oth. than felt, straw, and wool | 1919 | 709 | 7,539 | 18,515,472 | 9,438,864 | 24,176,514 | 44,539,861 |
| | 1914 | 580 | 7,322 | 6,846,996 | 4,507,521 | 9,267,577 | 18,593,221 |
| Hats, fur-felt | 1919 | 176 | 18,510 | 58,127,770 | 19,642,531 | 40,158,019 | 82,745,308 |
| | 1914 | 224 | 21,318 | 39,401,429 | 12,070,812 | 16,947,058 | 37,349,744 |
| Hats, straw | 1919 | 148 | 7,302 | 18,560,183 | 6,604,933 | 16,910,408 | 32,187,361 |
| | 1914 | 149 | 9,483 | 12,588,754 | 5,253,028 | 14,085,786 | 25,443,501 |
| Hats, wool-felt | 1919 | 40 | 1,448 | 3,831,376 | 1,387,777 | 3,699,822 | 6,739,652 |
| | 1914 | 30 | 1,249 | 2,608,839 | 599,578 | 978,339 | 1,944,484 |
| Hones and whetstones | 1919 | 11 | 212 | 847,340 | 203,001 | 320,451 | 793,778 |
| | 1914 | 16 | 170 | 499,030 | 63,902 | 87,431 | 259,944 |
| Horseshoes, not made in steel wks. or roll'g mills | 1919 | 20 | 744 | 4,589,563 | 830,249 | 1,536,619 | 3,367,001 |
| | 1914 | 22 | 588 | 2,437,449 | 362,435 | 689,574 | 1,785,993 |
| House-furnishing goods, not elsewhere spec'f'd | 1919 | 467 | 7,853 | 32,626,867 | 6,443,915 | 39,793,962 | 60,211,804 |
| | 1914 | 370 | 6,935 | 19,014,157 | 3,306,515 | 17,730,886 | 26,452,937 |
| Ice, manufactured | 1919 | 2,867 | 30,247 | 270,725,786 | 34,001,837 | 42,877,509 | 137,004,798 |
| | 1914 | 2,543 | 23,011 | 174,308,511 | 14,840,591 | 17,755,004 | 60,386,267 |
| Ink, printing | 1919 | 90 | 1,988 | 18,702,523 | 2,574,920 | 14,661,115 | 26,244,470 |
| | 1914 | 70 | 1,391 | 11,942,807 | 1,063,959 | 6,805,874 | 13,830,312 |
| Ink, writing | 1919 | 61 | 702 | 4,803,485 | 596,168 | 3,320,346 | 6,433,941 |
| | 1914 | 54 | 512 | 2,464,261 | 262,786 | 1,236,227 | 2,783,642 |
| Instruments, profes'nal and scientific | 1919 | 351 | 15,931 | 51,570,479 | 17,499,888 | 19,494,634 | 58,136,691 |
| | 1914 | 307 | 7,107 | 16,742,326 | 4,652,105 | 5,581,722 | 17,494,729 |
| Iron and steel, blast furnaces | 1919 | 195 | 41,660 | 802,416,541 | 73,769,395 | 621,286,496 | 794,466,558 |
| | 1914 | 160 | 29,356 | 462,281,594 | 22,780,626 | 264,580,060 | 317,653,983 |
| Iron & steel, steel wks. and rolling mills | 1919 | 500 | 375,088 | 2,656,518,417 | 637,637,430 | 1,680,575,758 | 2,828,902,376 |
| | 1914 | 427 | 248,716 | 1,258,370,594 | 188,142,398 | 590,825,692 | 918,664,565 |
| Iron & steel, bolts, nuts, washers, & rivets, not made in mills | 1919 | 144 | 17,967 | 75,715,918 | 20,973,834 | 44,277,117 | 89,743,882 |
| | 1914 | 102 | 10,658 | 35,602,329 | 5,960,824 | 12,912,649 | 23,403,405 |
| Iron and steel, cast-iron pipe | 1919 | 59 | 12,625 | 42,843,026 | 14,705,398 | 25,386,552 | 50,235,101 |
| | 1914 | 59 | 12,557 | 26,984,070 | 7,075,976 | 16,930,141 | 26,659,365 |
| Iron & steel, doors and shutters | 1919 | 57 | 2,077 | 9,849,235 | 2,729,774 | 4,577,934 | 10,877,001 |
| | 1914 | 43 | 1,985 | 5,161,132 | 1,537,688 | 1,995,885 | 5,183,602 |
| Iron & steel forgings, not made in steel works or rolling mills | 1919 | 241 | 28,391 | 135,246,144 | 39,772,553 | 82,024,492 | 173,752,104 |
| | 1914 | 191 | 10,689 | 36,319,626 | 7,487,448 | 14,610,897 | 28,961,457 |
| Iron, steel, nails, spikes, cut, wrought, inc. wire nails, not made in steel works or rolling mills | 1919 | 65 | 3,355 | 13,215,785 | 3,397,562 | 8,874,747 | 17,583,344 |
| | 1914 | 64 | 2,644 | 7,883,371 | 1,507,689 | 3,594 319 | 7,198,600 |
| Iron & steel, tempering and welding | 1919 | 520 | 1,835 | 7,626,948 | 2,742,928 | 3,575,881 | 10,995,672 |
| Iron & steel, wrought pipe | 1919 | 50 | 10,426 | 72,709,472 | 14,919,676 | 51,155,653 | 81,869,115 |
| | 1914 | 36 | 8,845 | 39,407,625 | 5,750,360 | 26,295,788 | 37,655,229 |
| Ivory shell, and bone work, not including combs and hairpins | 1919 | 44 | 842 | 1,365,784 | 734,932 | 1,293,876 | 2,816,530 |
| | 1914 | 54 | 795 | 1,160, 22 | 391,338 | 958,051 | 1,895,812 |
| Japanning | 1919 | 36 | 295 | 461,561 | 260,640 | 221,901 | 771,143 |
| | 1914 | 35 | 228 | 260,719 | 149 444 | 94,584 | 381,324 |
| Jewelry | 1919 | 2,054 | 30,871 | 121,070,305 | 35,863,718 | 110,450,683 | 203,939,230 |
| | 1914 | 1,914 | 28,289 | 72,403,637 | 18,301,565 | 39,116,136 | 81,006,289 |

Cloth gloves and mittens were included in "furnishing goods, men's," in 1914.
Machine tools, and iron and steel, tempering and welding, were included in "foundry and machine shops" prior to 1919.

MANUFACTURING IN THE U. S., BY INDUSTRIES, IN 1919 AND 1914—*Continued.*

| INDUSTRY. | Census Yr. | No. of Establishments. | Wage Earners (Average Number) | Capital. | Wages. | Cost of Materials. | Value of Products |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Jewelry and instrument cases | 1919 | 142 | 2,734 | 3,697,104 | 2,147,648 | 3,505,840 | 8,126,300 |
| | 1914 | 125 | 2,393 | 2,187,328 | 1,093,672 | 1,449,848 | 3,620,838 |
| Jute goods | 1919 | 26 | 7,138 | 41,335,845 | 6,436,286 | 17,708,834 | 34,442,698 |
| | 1914 | 34 | 7,987 | 17,279,006 | 3,060,010 | 12,579,840 | 16,513,874 |
| Knit goods | 1919 | 2,050 | 172,572 | 516,457 991 | 125,199,820 | 427,095.560 | 713,139,689 |
| | 1914 | 1,622 | 150,520 | 215,826,340 | 59,758,151 | 146,687,458 | 258,912,903 |
| Labels and tags | 1919 | 119 | 5,227 | 14,118,792 | 4,549,902 | 11,274,767 | 24,243,992 |
| | 1914 | 108 | 2,600 | 5,696,747 | 1,458,777 | 2,907,876 | 6,584,058 |
| Lamps and reflectors | 1919 | 171 | 8,360 | 26,099,941 | 9,292,497 | 18 429.033 | 38 098,917 |
| | 1914 | 151 | 7,134 | 15,670,937 | 4,172,884 | 8,012.371 | 16,638,287 |
| Lapidary work | 1919 | 124 | 1,155 | 19,209,627 | 2,837,811 | 19.363,004 | 30,051,460 |
| | 1914 | 89 | 584 | 3,613,288 | 641,444 | 3,940,761 | 5,360,064 |
| Lard, not made in slaughter ng & meat-packing establishm'ts | 1919 | 6 | 13 | 40,537 | 12,154 | 175,317 | 219,660 |
| | 1914 | 6 | 19 | 123,592 | 12,268 | 101,624 | 146,873 |
| Lasts | 1919 | 64 | 2,910 | 8,177,560 | 3,415,950 | 3,932,662 | 12,470,539 |
| | 1914 | 66 | 2,094 | 4,480.609 | 1,511,299 | 1,342,720 | 4,589,215 |
| Lead, bar, pipe, and sheet | 1919 | 32 | 852 | 9,419,730 | 1,066,941 | 13,634,120 | 17,174,281 |
| | 1914 | 27 | 585 | 5 035,955 | 406 614 | 6,048,426 | 7,430,957 |
| Lea'her goods, not elsewhere speci fied | 1919 | 503 | 8,945 | 33,341,468 | 9,415,403 | 30 035,537 | 52,952,772 |
| | 1914 | 378 | 7,071 | 10,951,427 | 3,603,865 | 10,632,124 | 19,333,934 |
| Leather, tanned, curred and finished | 1919 | 680 | 72,476 | 671,341,553 | 88,205,473 | 646,521,527 | 928,591,701 |
| | 1914 | 741 | 55,936 | 332,180,085 | 31,914,497 | 284,245,420 | 367,201,705 |
| Lime | 1919 | 476 | 11,405 | 45,844,532 | 10,869.196 | 14,296,925 | 33,970,463 |
| | 1914 | 627 | 12,429 | 34,123.948 | 6,039,608 | 7,557,670 | 18,390 805 |
| Linen goods | 1919 | 10 | 1,890 | 7,527,596 | 1,635,642 | 4,190.187 | 6,998,046 |
| | 1914 | 21 | 3,567 | 8,809,869 | 1,386,117 | 4,289,104 | 6,959,708 |
| Liquors, distilled | 1919 | 34 | 1,380 | 45,618,110 | 1,716,699 | 19,655,522 | 31,854,085 |
| | 1914 | 434 | 6,295 | 91,285,028 | 3,994,469 | 40,996,781 | 206,778,708 |
| Liquors, malt | 1919 | 729 | 34.259 | 583,429,947 | 45,170,432 | 94,792.659 | 379,905,085 |
| | 1914 | 1,250 | 62,070 | 792,913,659 | 53,243,743 | 129,724.396 | 442,148,597 |
| Liquors, vinous | 1919 | 342 | 1,011 | 14,855,481 | 1,013,898 | 8,115,841 | 17,454,104 |
| | 1914 | 318 | 2,292 | 31,516,366 | 1,194,433 | 9,489,428 | 16,618,378 |
| Lithographing | 1919 | 331 | 15,618 | 60,817,330 | 18,201,089 | 27,718.217 | 73,151,115 |
| | 1914 | 336 | 15,171 | 35,685,305 | 11,861,018 | 14,017,181 | 39,135,973 |
| Locomotives, not made by railroad comp'n's | 1919 | 17 | 26,715 | 138,275,823 | 38,798,641 | 72,375,950 | 156,269,730 |
| | 1914 | 19 | 17,391 | 86,413,199 | 11,085,375 | 23,546,118 | 43,374,141 |
| Looking-glass and picture frames | 1919 | 429 | 4,708 | 10,079,709 | 4,775,227 | 7,227,232 | 18,384,562 |
| | 1914 | 438 | 4,787 | 8,049,164 | 2,850,258 | 4,468,492 | 11,014,207 |
| Lubricating greases | 1919 | 53 | 472 | 5,242,636 | 569,925 | 4,807,501 | 8,868,772 |
| | 1914 | 77 | 476 | 3,440,131 | 281,844 | 2,767,165 | 4,919,078 |
| Lumber and timber products | 1919 | 26,119 | 480,945 | 1,357,991,571 | 489,419 091 | 470,960,488 | 1,387,471,413 |
| | 1914 | 27,249 | 480,207 | 917,221,581 | 240,171,732 | 282,285,405 | 715,941,590 |
| Lumber, planing-mill products, not incl'd'g planing mills con'ct'd with sawmills | 1919 | 5,309 | 86,956 | 361,848,079 | 91,976,526 | 299,265,652 | 500,438,258 |
| | 1914 | 5,841 | 96,214 | 266,804.640 | 61,949,230 | 184,227,441 | 307,672,478 |
| Machine tools | 1919 | 403 | 53,111 | 231,039,843 | 66,178,969 | 59,034,308 | 212,400,158 |
| Malt | 1919 | 55 | 1,352 | 34,829,495 | 1,845.210 | 31,612,707 | 39,340,414 |
| | 1914 | 97 | 1,989 | 46,766,899 | 1,827.520 | 39,198,931 | 48,132,833 |
| Marble and stone work | 1919 | 4,240 | 32,768 | 112,568,533 | 38,354,822 | 49.524.341 | 129,164,653 |
| | 1914 | 4,997 | 54,981 | 118,423,292 | 37,960,517 | 37,802,335 | 107,054,593 |
| Matches | 1919 | 21 | 3,726 | 29,477,486 | 3,059,537 | 6,852,970 | 18,495,876 |
| | 1914 | 20 | 3,800 | 11,736,187 | 1,757,975 | 5,201,598 | 12,556,279 |
| Mats & matting, from cocoa fibre, grass&coir | 1919 | 12 | 1,073 | 7,190,675 | 810.607 | 2,102,580 | 4 860,855 |
| | 1914 | 12 | 869 | 5,055,114 | 455,247 | 1,170,214 | 2,235,867 |
| Mattres's& spr'g beds, not elsewhere spec'd | 1919 | 1,041 | 12,637 | 46,212,858 | 12,805,351 | 49,208,560 | 83,952,609 |
| | 1914 | 1,000 | 11,747 | 24,921,823 | 6,723,372 | 22,399,153 | 38,716,764 |
| Millinery & lace goods, not elsewhere spec'd | 1919 | 3,005 | 50,850 | 95,538,769 | 49,849,884 | 132,928.877 | 255,724,922 |
| | 1914 | 2,079 | 45,274 | 53,100,601 | 21,545,137 | 57,675,921 | 114,160,462 |
| Millstones | 1919 | 12 | 38 | 58,905 | 43,732 | 25,509 | 66,896 |
| Mineral & soda waters | 1919 | 5,194 | 17,440 | 102,838,582 | 16,393,477 | 68,599,585 | 135,341,437 |
| | 1914 | 5,463 | 15,506 | 53,232,546 | 8,863,654 | 26,779,476 | 58,401,462 |
| Minerals & earths, gr'd or otherwise treated | 1919 | 419 | 14,426 | 60,208,617 | 16,309,518 | 16,270,251 | 46,067,239 |
| | 1914 | 244 | 4,707 | 27,439,441 | 2,485,254 | 4,561,428 | 10,307,114 |
| Mirrors, framed, unf'm'd not elsewhere spec'd | 1919 | 186 | 2,599 | 9,322,060 | 2,819.140 | 12,498,733 | 20,830,775 |
| | 1914 | 182 | 3,184 | 6,517,304 | 1,967,811 | 6,013,970 | 10,189,431 |
| Models & patterns, not incl. paper patterns | 1919 | 928 | 6,949 | 11,753,992 | 10,318,104 | 6,395,834 | 25,300,389 |
| | 1914 | 762 | 4,274 | 5,534,250 | 3,103,061 | 2,045,327 | 8,604,695 |
| Motor cycles, bicycles, and parts | 1919 | 51 | 10,886 | 35,369,150 | 12,763,235 | 25,985,915 | 53,105,895 |
| | 1914 | 78 | 6,680 | 18,134,950 | 4,738,750 | 10,927,654 | 22,234,262 |
| Mucilage, paste, and other adhesives, not elsewhere specified | 1919 | 127 | 803 | 7,133,137 | 850,382 | 7,092,728 | 11,230,253 |
| | 1914 | 127 | 700 | 3,549,980 | 398,814 | 3,338,082 | 5,694,559 |
| Musical instruments & materials, not specif. | 1919 | 240 | 4,113 | 7,876,182 | 3,984,656 | 4,444,729 | 12,506,334 |
| | 1914 | 241 | 1,831 | 3,857,787 | 1,160,512 | 1,022,584 | 3,624,667 |
| Musical instruments, organs | 1919 | 68 | 1,941 | 6,770,587 | 1,978,518 | 2,217,097 | 5,973,268 |
| | 1914 | 85 | 3,063 | 8,042,405 | 1,993,415 | 2,659,980 | 6,297,348 |
| Musical instruments, pianos | 1919 | 191 | 22,957 | 116,106,536 | 25,474,200 | 54,364,656 | 107,088.050 |
| | 1914 | 255 | 23,877 | 101,746,424 | 15,704,679 | 29,091,045 | 62,775.035 |
| Mus. instrum'ts, piano and organ materials | 1919 | 113 | 11,009 | 32,323,669 | 10,467,137 | 16,693,140 | 36,789,027 |
| | 1914 | 138 | 10,616 | 21,200,965 | 5,654,557 | 9,501.766 | 19,875,762 |
| Needles, pins, & hooks and eyes | 1919 | 92 | 9,294 | 26,324,627 | 8,809,781 | 10,227,199 | 29,304,995 |
| | 1914 | 49 | 5,339 | 9,424,203 | 2,506,611 | 3,241,657 | 7,890,879 |
| Nets and seines | 1919 | 19 | 859 | 4,155,531 | 561,282 | 3,648,206 | 5,114,414 |
| | 1914 | 15 | 1,058 | 2,678,351 | 378,741 | 2,257,093 | 3,088,042 |
| Oakum | 1919 | 6 | 124 | 978,063 | 118,032 | 575,525 | 983,423 |
| | 1914 | 6 | 116 | 494,572 | 49,305 | 235,141 | 358,534 |
| Oil & cake, cottonseed | 1919 | 711 | 26,766 | 203,457,371 | 20,615,193 | 495,192,294 | 581,244,798 |
| | 1914 | 882 | 21,810 | 118,072,075 | 8,489,692 | 180,976,413 | 212,127,024 |

Lumber and timber products include "pulpwood" in 1914; not shown as a separate classification in 1919. Machine tools, tempering and welding, included in "foundry machine shops" prior to 1919. Millstones were included in "all other industries" in 1914.

MANUFACTURING IN THE U. S. BY INDUSTRIES IN 1919 AND 1914—*Continued.*

| Industry | Census Yr | No. of Establishments. | Wage Earners (Average Number) | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Oil, essential | 1919 | 78 | 321 | 6,379,910 | 391,213 | 3,903,417 | 5,698,403 |
| | 1914 | 105 | 249 | 1,616,682 | 133,272 | 1,564,835 | 2,313,606 |
| Oil, linseed | 1919 | 26 | 2,173 | 73,954,065 | 3,052,269 | 100,577,538 | 120,638,100 |
| | 1914 | 25 | 1,488 | 39,872,712 | 1,127,169 | 39,555,408 | 44,882,538 |
| Oil, not elsewhere spec. | 1919 | 280 | 5,930 | 91,475,009 | 6,141,145 | 119,270.586 | 156,479,654 |
| | 1914 | 181 | 3,558 | 27,630,458 | 1,363,301 | 26,420,275 | 38,040,152 |
| Oilcloth and linoleum, floor | 1919 | 21 | 5,414 | 49,803,688 | 6,518,089 | 30,368,703 | 52,673,206 |
| | 1914 | 18 | 4,428 | 20,292,210 | 2,604,368 | 11,251,876 | 17,602,336 |
| Oilcloth, enameled | 1919 | 11 | 1,130 | 10,782,957 | 1,200,877 | 11,140,723 | 15,436,875 |
| | 1914 | 13 | 1,223 | 7,748,968 | 608,947 | 6,523,987 | 7,996,025 |
| Oleomargarine and oth. butter substitutes | 1919 | 42 | 2,851 | 24,971,947 | 3,184,118 | 66,042,792 | 79,815,580 |
| | 1914 | 17 | 917 | 2,994,334 | 583,592 | 10,257,480 | 15,079,784 |
| Optical goods | 1919 | 506 | 14,723 | 37,739,904 | 14,388,207 | 17,785,083 | 53,717,798 |
| | 1914 | 314 | 7,919 | 17,010,783 | 4,649,406 | 6,605,548 | 18,187,965 |
| Ordnance & accessories | 1919 | 26 | 11,328 | 85,399,163 | 15,556,642 | 26,592,658 | 69,495,628 |
| Paints | 1919 | 601 | 17,485 | 177,314,815 | 19,550,371 | 165,604,116 | 256,714,379 |
| | 1914 | 585 | 13,349 | 99,673,137 | 8,315,223 | 71,588,364 | 112,408,742 |
| Paper and wood pulp | 1919 | 729 | 113,759 | 905,794,583 | 135,690,642 | 467,482,637 | 788,059,377 |
| | 1914 | 718 | 88,457 | 534,624,600 | 53,245,639 | 213,181,286 | 332,147,175 |
| Paper goods, not elsewhere specified | 1919 | 308 | 14,135 | 64,442,569 | 12,666,924 | 65,295,484 | 107,284,759 |
| | 1914 | 310 | 13,495 | 37,809,125 | 6,849,761 | 28,120,244 | 48,871,461 |
| Paper patterns | 1919 | 19 | 403 | 1,084,325 | 374,479 | 316,890 | 1,528,382 |
| | 1914 | 25 | 1,073 | 2,611,993 | 577,285 | 626,311 | 3,026,022 |
| Patent medicines and compounds | 1919 | 2,467 | 17,444 | 143,498,611 | 13,748,813 | 88,819,417 | 212,162,255 |
| | 1914 | 2,903 | 13,328 | 71,436,840 | 6,675,168 | 35,940,434 | 102,463,374 |
| Paving materials | 1919 | 889 | 16,072 | 67,421,242 | 17,169,154 | 16,019,811 | 45,740,606 |
| | 1914 | 609 | 19,540 | 57,431,939 | 11,184,030 | 14,162,839 | 35,678,054 |
| Peanuts, grading, roasting, clean'g & shell'g | 1919 | 78 | 2,460 | 10,393,512 | 1,328,712 | 28,474,052 | 33,354,377 |
| | 1914 | 61 | 2,353 | 3,615,407 | 569,409 | 12,571,391 | 14,996,369 |
| Pencils lead | 1919 | 12 | 5,970 | 29,641,044 | 5,299,050 | 9,073,563 | 24,134,159 |
| | 1914 | 14 | 4,330 | 10,669,721 | 1,944,376 | 4,564,000 | 8,328,418 |
| Pens, fountain & stylographic | 1919 | 56 | 3,207 | 9,725,362 | 2,980,663 | 5,811,419 | 15,996,808 |
| | 1914 | 55 | 1,154 | 3,269,809 | 717,533 | 1,614,145 | 6,965,174 |
| Pens, gold | 1919 | 15 | 416 | 397,954 | 517,123 | 962,410 | 1,801,460 |
| | 1914 | 12 | 246 | 408,228 | 174,209 | 301,893 | 642,461 |
| Pens, steel | 1919 | 4 | 807 | 1,311,150 | 679,405 | 398,383 | 1,679,541 |
| | 1914 | 5 | 573 | 870,601 | 243,043 | 117,113 | 513,498 |
| Perfumery & cosmetics | 1919 | 569 | 5,405 | 32,666,633 | 3,983,016 | 26,147,026 | 59,613,301 |
| | 1914 | 496 | 2,897 | 9,646,613 | 1,279,899 | 7,464,786 | 16,899,101 |
| Petroleum refining | 1919 | 320 | 58,889 | 1,170,278,189 | 89,749,637 | 1,247,908,355 | 1 632,532,766 |
| | 1914 | 176 | 25,366 | 325,646,120 | 19,397,466 | 325,264,509 | 396,361,406 |
| Phonographs & graphophones | 1919 | 166 | 28,721 | 105,241,359 | 33,963,148 | 59,740,205 | 158,547,870 |
| | 1914 | 18 | 9,381 | 33,770,511 | 6,341,495 | 7,048,040 | 27,115,916 |
| Photographic appar'tus | 1919 | 68 | 2,555 | 7,264,031 | 2,642,957 | 3,584,380 | 9,384,050 |
| | 1914 | 87 | 2,016 | 4,397,279 | 1,289,092 | 1,535,405 | 4,273,162 |
| Photographic materials | 1919 | 169 | 14,556 | 87,204,707 | 18,965,941 | 49,801,747 | 115,714,179 |
| | 1914 | 59 | 6,658 | 31,991,180 | 4,256,212 | 10,003,976 | 34,768,364 |
| Photo-engraving, not done in ptg. estab'nts | 1919 | 422 | 6,769 | 12,442,784 | 10,423,541 | 5,038,382 | 29,389,386 |
| | 1914 | 376 | 6,211 | 7,703,210 | 6,166,638 | 2,798,132 | 15,358,604 |
| Pickles, preserves, and sauces | 1919 | 723 | 16,621 | 88,703,665 | 13,346,467 | 93,037,433 | 145,784,530 |
| | 1914 | 672 | 12,590 | 43,196,381 | 5,788,825 | 35,672,506 | 60,914,532 |
| Pipes, tobacco | 1919 | 56 | 2,539 | 7,634,662 | 2,555,291 | 3,447,414 | 11,553,777 |
| | 1914 | 47 | 2,319 | 3,922,454 | 1,158,411 | 2,305,246 | 4,824,584 |
| Plated ware | 1919 | 68 | 9,492 | 34,789,823 | 10,913,091 | 17,766,536 | 41,634,585 |
| | 1914 | 72 | 8,717 | 22,215,362 | 5,000,381 | 8,304.039 | 18,484,235 |
| Plumbers' supplies, not elsewhere specified | 1919 | 214 | 13,592 | 60,980,632 | 15,962,517 | 27,797,007 | 60,055,265 |
| | 1914 | 260 | 18,479 | 48,029,113 | 11,703,328 | 18,669,833 | 43,385,888 |
| Pocketbooks | 1919 | 139 | 2,905 | 5,427,990 | 3,061,903 | 7,557,155 | 14,549,659 |
| | 1914 | 64 | 1,466 | 1,609,601 | 702,314 | 1,783,840 | 3,350,552 |
| Pottery | 1919 | 340 | 27,934 | 66,757,970 | 29,820,278 | 20,794,076 | 74,919,186 |
| | 1914 | 350 | 26,705 | 44,704,081 | 16,666,330 | 12,031,556 | 36,942,606 |
| Poultry, kill'g & dress'g, not done in slaughter & meat-pack'g estab. | 1919 | 196 | 2,140 | 8,875,942 | 2,045,043 | 36,015,817 | 41,705,079 |
| | 1914 | 116 | 1,353 | 2,281,553 | 622,278 | 11,205,603 | 12,916,608 |
| Printing & publishing, book and job | 1919 | 13,089 | 123,005 | 435,554,984 | 141,476,243 | 211,067,174 | 597,663,228 |
| | 1914 | 12,115 | 113,121 | 247,282,409 | 78,413,700 | 96,453,232 | 307,330,861 |
| Printing & publishing, music | 1919 | 160 | 899 | 8,006,122 | 926,988 | 2,123,781 | 14,592,177 |
| | 1914 | 180 | 873 | 4,260,844 | 572,985 | 1,046,630 | 7,271,266 |
| Printing & publishing, newspapers, period'ls | 1919 | 17,362 | 120,381 | 614,045,344 | 144,348,173 | 300,385,187 | 924,152,878 |
| | 1914 | 19,317 | 114,375 | 384,744,761 | 88,561,248 | 129,082,218 | 495,905,948 |
| Printing materials | 1919 | 82 | 723 | 7,245,110 | 799,402 | 1,619,718 | 4,918,799 |
| | 1914 | 94 | 423 | 1,770,980 | 340,041 | 763,212 | 2,110,814 |
| Pulp, from fiber other than wood | 1919 | 5 | 64 | 778,177 | 55,944 | 395,947 | 524,444 |
| Pulp goods | 1919 | 40 | 3,041 | 17,190,849 | 3,608,314 | 11,381,972 | 23,608,403 |
| | 1914 | 24 | 1,654 | 6,862,155 | 883,984 | 2,191,276 | 4,482,981 |
| Pumps, not including power pumps | 1919 | 127 | 5,384 | 26,660,646 | 5,968,121 | 12,161,892 | 31,656,488 |
| | 1914 | 96 | 2,134 | 6,194,272 | 1,391,460 | 2,765,270 | 6,350,411 |
| Pumps, steam & other | 1919 | 112 | 10,688 | 54,839,975 | 13,763,526 | 23,907,889 | 53,745,502 |
| | 1914 | 87 | 6,188 | 30,655,598 | 4,163,743 | 6,693,474 | 17,804,311 |
| Refrigerators | 1919 | 122 | 5,786 | 23,600,628 | 5,809,351 | 11,948,972 | 26,048,808 |
| | 1914 | 134 | 5,617 | 14,511,158 | 3,572,334 | 7,343,392 | 15,051,794 |
| Regalia, and society badges and emblems | 1919 | 115 | 2,223 | 6,257,750 | 1,800,383 | 4,287,055 | 9,395,470 |
| | 1914 | 138 | 2,010 | 4,121,694 | 979,963 | 2,205,068 | 5,025,451 |
| Rice, cleaning & polishing | 1919 | 86 | 2,113 | 23,792,509 | 1,932,196 | 76,633,816 | 90,038,412 |
| | 1914 | 59 | 1,253 | 12,626,990 | 645,863 | 20,615,860 | 23,039,294 |
| Roofing materials | 1919 | 178 | 8,871 | 57,069,224 | 10,344,043 | 52,587,777 | 85,895,359 |
| | 1914 | 170 | 4,088 | 23,645,086 | 2,642,136 | 17,604,944 | 27,977,913 |

"Oil not elsewhere specified" includes "oil, castor," and "oil, lard, not made in slaughtering and meat-packing establishments."

Ordnance and accessories were included in "all other industries" in 1914.

Pulp from fiber other than wood was included in "all other industries" in 1914.

MANUFACTURING IN THE U. S. BY INDUSTRIES, IN 1919, AND 1914—*Continued.*

| INDUSTRY. | Census Yr. | No. of Establishments. | Wage Earners (Average Number) | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Rubber tires, tubes, & rubber goods, not elsewhere specified... | 1919 | 437 | 119,848 | 782,637,722 | 156,806,828 | 525,686,309 | 987,088,045 |
| | 1914 | 301 | 50,220 | 199,183,036 | 31,278,755 | 126,111,673 | 223,610,784 |
| Rules, ivory and wood. | 1919 | 13 | 168 | 414,980 | 142,290 | 133,934 | 480,543 |
| | 1914 | 10 | 408 | 883,182 | 223,772 | 187,171 | 634,242 |
| Saddlery and harness.. | 1919 | 1,823 | 10,411 | 49,368,288 | 10,849,066 | 52,442,907 | 83,713,010 |
| | 1914 | 2,551 | 12,969 | 45,207,380 | 7,995,612 | 33,086,442 | 53,558,612 |
| Safes and vaults..... | 1919 | 38 | 2,949 | 13,023,284 | 3,233,318 | 6,608,680 | 15,293,927 |
| | 1914 | 39 | 2,972 | 9,359,733 | 1,860,203 | 2,645,835 | 7,256,792 |
| Salt..... | 1919 | 86 | 6,495 | 47,725,231 | 7,353,420 | 16,027,791 | 37,513,821 |
| | 1914 | 98 | 5,089 | 33,151,134 | 3,041,294 | 6,273,030 | 14,070,333 |
| Sand and emery paper and cloth..... | 1919 | 12 | 771 | 9,057,698 | 840,766 | 5,060,561 | 9,303,734 |
| | 1914 | 12 | 681 | 5,278,790 | 359,201 | 2,686,530 | 4,328,127 |
| Sand-lime brick..... | 1919 | 32 | 504 | 2,229,769 | 501,854 | 575,402 | 1,663,052 |
| | 1914 | 45 | 557 | 2,184,896 | 321,956 | 350,484 | 994,199 |
| Sausage, not made in slaughtering & meat-packing establish'nts | 1919 | 633 | 3,471 | 13,777,265 | 4,679,118 | 43,940,356 | 56,610,092 |
| | 1914 | 512 | 2,244 | 5,201,366 | 1,607,426 | 17,291,623 | 22,013,506 |
| Saws..... | 1919 | 112 | 5,510 | 26,665,369 | 6,280,807 | 11,792,224 | 31,460,557 |
| | 1914 | 100 | 4,560 | 15,860,308 | 3,019,497 | 4,714,186 | 12,517,165 |
| Scales and balances.... | 1919 | 79 | 5,432 | 22,924,843 | 6,533,978 | 6,993,682 | 20,641,038 |
| | 1914 | 83 | 4,467 | 13,894,989 | 2,933,696 | 3,174,467 | 9,733,721 |
| Screws, machine..... | 1919 | 143 | 10,262 | 53,569,817 | 12,104,780 | 14,983,868 | 40,015,460 |
| | 1914 | 66 | 3,643 | 9,762,011 | 2,309,634 | 3,057,968 | 7,247,502 |
| Screws, wood..... | 1919 | 11 | 4,889 | 14,632,300 | 4,864,613 | 5,551,563 | 15,459,582 |
| | 1914 | 12 | 4,446 | 10,539,484 | 1,950,498 | 2,350,156 | 6,216,940 |
| Sewing-machine cases.. | 1919 | 5 | 4,171 | 17,331,959 | 5,161,310 | 8,018,270 | 14,243,468 |
| | 1914 | 4 | 2,699 | 6,425,153 | 2,230,181 | 2,840,781 | 5,845,663 |
| Sewing machines and attachments..... | 1919 | 40 | 15,059 | 71,363,920 | 19,333,378 | 16,384,134 | 43,694,919 |
| | 1914 | 46 | 14,308 | 34,466,624 | 8,860,843 | 7,358,664 | 21,391,917 |
| Shipbuilding, steel..... | 1919 | 162 | 344,014 | 1,268,640,254 | 538,372,576 | 643,752,814 | 1,456,489,516 |
| | 1914 | 79 | 33,508 | 132,712,414 | 25,165,792 | 29,269,727 | 66,216,692 |
| Shipbuilding, wooden, incl. boat building... | 1919 | 913 | 43,432 | 120,807,566 | 59,074,072 | 66,769,862 | 165,871,745 |
| | 1914 | 1,068 | 10,981 | 23,347,524 | 7,765,364 | 9,327,243 | 22,465,379 |
| Shirts..... | 1919 | 896 | 39,603 | 102,012,047 | 25,833,855 | 127,087,745 | 205,327,133 |
| | 1914 | 792 | 51,972 | 50,943,841 | 19,169,697 | 50,664,974 | 95,815,013 |
| Show cases..... | 1919 | 119 | 1,857 | 5,377,884 | 1,995,660 | 4,032,123 | 8,294,308 |
| | 1914 | 132 | 2,257 | 4,154,731 | 1,466,223 | 2,248,276 | 5,233,225 |
| Signs and advertising novelties..... | 1919 | 779 | 10,432 | 29,249,133 | 9,715,216 | 16,071,924 | 43,343,093 |
| | 1914 | 776 | 9,566 | 21,288,019 | 5,933,044 | 9,058,788 | 24,792,210 |
| Silk goods..... | 1919 | 1,369 | 126,782 | 532,732,163 | 108,226,330 | 388,469,022 | 688,469,523 |
| | 1914 | 902 | 108,170 | 210,071,679 | 47,108,469 | 144,442,321 | 254,011,257 |
| Silversmithing & silver ware..... | 1919 | 99 | 6,453 | 34,465,322 | 7,359,409 | 13,060,929 | 29,126,133 |
| | 1914 | 108 | 7,070 | 27,941,934 | 4,795,347 | 8,275,506 | 19,786,317 |
| Slaughtering and meat-packing..... | 1919 | 1,304 | 160,996 | 1,176,483,643 | 200,489,263 | 3,782,929,533 | 4,246,290,614 |
| | 1914 | 1,279 | 98,832 | 534,273,563 | 62,135,722 | 1,441,662,658 | 1,651,965,424 |
| Smelting and refining, copper..... | 1919 | 34 | 17,345 | 308,680,268 | 25,723,371 | 584,410,173 | 651,101,591 |
| | 1914 | 37 | 17,731 | 171,419,795 | 16,149,251 | 379,157,030 | 444,021,958 |
| Smelting and refining, lead..... | 1919 | 25 | 6,438 | 115,676,768 | 9,179,615 | 179,373,646 | 196,794,519 |
| | 1914 | 22 | 7,385 | 143,249,321 | 6,134,274 | 154,014,765 | 171,578,587 |
| Smelting and refining, zinc..... | 1919 | 39 | 13,796 | 98,757,355 | 17,783,278 | 70,014,728 | 104,122,938 |
| | 1914 | 29 | 9,617 | 36,388,438 | 6,699,620 | 39,572,587 | 53,538,398 |
| Smelt'g&refin'g, metals, not elsewhere spec'd. | 1919 | 13 | 2,041 | 20,227,544 | 2,963,148 | 14,957,367 | 20,074,504 |
| Smelting and refining, not from the ore.... | 1919 | 81 | 2,167 | 22,156,513 | 3,093,140 | 40,675,880 | 50,246,088 |
| | 1914 | 84 | 2,585 | 21,455,956 | 1,884,325 | 31,250,707 | 39,902,114 |
| Soap..... | 1919 | 348 | 20,436 | 212,416,836 | 21,228,063 | 238,518,858 | 316,740,115 |
| | 1914 | 371 | 14,172 | 92,871,533 | 8,087,937 | 88,866,786 | 127,942,441 |
| Soda-water apparatus.. | 1919 | 66 | 2,599 | 14,711,872 | 3,232,398 | 6,626,868 | 15,185,370 |
| | 1914 | 67 | 2,229 | 10,418,828 | 1,661,245 | 3,883,076 | 8,781,437 |
| Sporting and athletic goods..... | 1919 | 188 | 6,412 | 19,951,458 | 5,752,963 | 11,969,388 | 23,839,991 |
| | 1914 | 162 | 5,602 | 8,468,318 | 2,770,891 | 6,951,870 | 13,234,677 |
| Springs, steel, car & carriage, not made in steel works or rolling mills | 1919 | 112 | 8,981 | 45,472,282 | 11,157,874 | 28,019,180 | 51,479,535 |
| | 1914 | 84 | 3,703 | 11,082,668 | 2,601,848 | 6,142,927 | 11,594,992 |
| Stamp'd, enam'l'd ware, not elsewhere spec'd. | 1919 | 323 | 34,248 | 132,222,094 | 34,851,311 | 65,456,652 | 143,653,877 |
| | 1914 | 270 | 28,731 | 68,979,005 | 15,242,586 | 32,472,230 | 65,121,301 |
| Stationery goods, not elsewhere specified... | 1919 | 223 | 11,261 | 36,700,909 | 9,577,867 | 28,160,239 | 58,363,244 |
| | 1914 | 189 | 7,728 | 18,186,164 | 3,791,012 | 10,762,628 | 21,903,066 |
| Statuary and art goods | 1919 | 195 | 1,466 | 3,145,853 | 1,716,067 | 1,378,540 | 5,019,521 |
| | 1914 | 190 | 1,988 | 3,394,192 | 1,582,745 | 842,289 | 3,909,569 |
| Steam fit'gs & steam & hot-water heat'g app. | 1919 | 261 | 36,686 | 133,997,464 | 45,742,525 | 72,016,393 | 160,285,488 |
| | 1914 | 295 | 26,388 | 85,852,925 | 16,737,879 | 26,921,102 | 63,922,434 |
| Steam packing..... | 1919 | 169 | 6,147 | 36,934,462 | 7,103,275 | 22,724,561 | 40,524,779 |
| | 1914 | 149 | 4,213 | 17,708,243 | 2,524,503 | 8,175,630 | 14,212,595 |
| Steel barrels, drums, & tanks, portable..... | 1919 | 33 | 3,322 | 18,218,312 | 4,435,444 | 15,151,210 | 24,942,650 |
| Stencils and brands.... | 1919 | 84 | 417 | 1,111,338 | 428,706 | 514,241 | 1,597,785 |
| | 1914 | 107 | 446 | 862,904 | 300,981 | 332,415 | 1,102,557 |
| Stereotyping and electrotyping..... | 1919 | 171 | 3,664 | 7,860,376 | 5,002,545 | 4,234,479 | 15,919,014 |
| | 1914 | 189 | 3,457 | 4,709,797 | 3,001,369 | 2,254,926 | 8,154,171 |
| Stoves and hot-air furnaces..... | 1919 | 412 | 32,868 | 122,813,373 | 41,321,133 | 54,803,316 | 145,717,963 |
| | 1914 | 438 | 29,535 | 78,523,782 | 20,777,272 | 23,801,785 | 67,941,106 |
| Stoves, gas and oil.... | 1919 | 176 | 10,565 | 45,734,309 | 12,578,830 | 24,471,970 | 55,792,029 |
| | 1914 | 113 | 7,790 | 16,646,267 | 5,088,216 | 10,153,185 | 21,448,932 |
| Structural ironwork, not made in steel works or rolling mills | 1919 | 1,146 | 43,962 | 219,470,095 | 59,920,132 | 168,800,715 | 294,962,419 |
| | 1914 | 1,235 | 47,167 | 144,092,277 | 33,428,913 | 87,621,537 | 159,377,857 |
| Sugar beet..... | 1919 | 85 | 11,781 | 224,584,679 | 15,908,118 | 87,029,144 | 149,155,892 |
| | 1914 | 60 | 7,997 | 142,181,326 | 6,606,204 | 41,399,361 | 62,605,210 |
| Sugar Cane..... | 1919 | 202 | 6,101 | 55,117,127 | 4,009,369 | 44,143,416 | 57,741,320 |
| | 1914 | 181 | 3,632 | 32,996,524 | 1,561,376 | 15,958,218 | 21,635,373 |

Smelting and refining, metals not elsewhere specified, was included in other classifications in 1914 and covers "smelting and refining, antimony," and "smelting and refining, tin," which could not be shown separately. Steel barrels, etc., was included in "foundry and machine shops" prior to 1919.

MANUFACTURING IN THE U. S., BY INDUSTRIES, IN 1919, AND 1914—*Continued.*

| INDUSTRY. | Census Yr. | No. of Establishments. | Wage Earners (Average Number) | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Sugar, refining, not including beet sugar | 1919 | 20 | 18,202 | 193,540,825 | 22,710,464 | 662,143,981 | 730,986,706 |
| | 1914 | 18 | 11,253 | 140,499,819 | 7,823,377 | 264,085,358 | 289,398,715 |
| Sulphuric, nitric and mixed acids | 1919 | 39 | 4,961 | 51,160,004 | 7,916,531 | 15,857,361 | 31,470,480 |
| | 1914 | 32 | 3,064 | 35,233,806 | 2,212,547 | 6,734,422 | 15,215,474 |
| Surgical appliances | 1919 | 268 | 6,390 | 33,063,371 | 6,084,143 | 22,213,621 | 43,533,860 |
| | 1914 | 238 | 4,282 | 11,883,283 | 2,211,246 | 7,097,532 | 14,919,984 |
| Suspenders, garters, & elastic woven goods | 1919 | 196 | 10,857 | 39,676,879 | 9,270,130 | 36,369,218 | 60,774,652 |
| | 1914 | 216 | 9,646 | 16,343,686 | 4,276,126 | 15,191,192 | 24,432,753 |
| Textile mach'y & parts | 1919 | 432 | 31,823 | 129,797,903 | 36,528,729 | 45,636,628 | 122,089,264 |
| Theatrical scenery | 1919 | 17 | 149 | 572,878 | 237,603 | 504,655 | 1,067,033 |
| | 1914 | 7 | 88 | 265,570 | 89,359 | 124,577 | 326,965 |
| Tin and other foils, not elsewhere specified | 1919 | 15 | 1,908 | 11,998,436 | 1,759,320 | 13,007,900 | 17,920,834 |
| | 1914 | 14 | 1,031 | 3,348,768 | 527,443 | 3,671,815 | 5,067,967 |
| Tin plate & terneplate | 1919 | 24 | 3,122 | 34,315,066 | 5,756,417 | 73,422,649 | 97,404,720 |
| | 1914 | 31 | 5,238 | 26,847,389 | 3,924,447 | 57,906,561 | 68,342,962 |
| Tin ware, not elsewhere specified | 1919 | 301 | 34,386 | 198,386,695 | 34,493,399 | 165,170,736 | 233,964,000 |
| | 1914 | 294 | 22,584 | 118,218,418 | 12,217,359 | 53,840,817 | 81,930,880 |
| Tobacco, chewing and smoking, and snuff | 1919 | 365 | 18,324 | 188,444,100 | 12,674,736 | 130,270,388 | 239,270,718 |
| | 1914 | 436 | 25,980 | 131,857,895 | 9,549,702 | 76,604,059 | 175,280,925 |
| Tobacco, cigars, and cigarettes | 1919 | 9,926 | 138,773 | 416,395,472 | 111,313,348 | 353,297,366 | 773,662,495 |
| | 1914 | 13,515 | 152,892 | 171,982,357 | 68,306,398 | 130,529,525 | 314,884,297 |
| Tools, not elsewhere specified | 1919 | 1,125 | 35,585 | 134,731,947 | 43,836,069 | 45,796,967 | 144,201,668 |
| | 1914 | 661 | 16,866 | 47,618,493 | 10,216,885 | 12,235,269 | 33,892,511 |
| Toys and games | 1919 | 541 | 14,201 | 27,738,500 | 11,847,277 | 19,841,498 | 45,656,803 |
| | 1914 | 290 | 7,887 | 10,483,843 | 3,498,866 | 5,779,494 | 13,756,748 |
| Trunks and valises | 1919 | 597 | 11,470 | 34,258,034 | 12,463,767 | 33,222,432 | 63,932,266 |
| | 1914 | 561 | 9,911 | 18,570,817 | 5,540,157 | 13,625,457 | 26,471,527 |
| Turpentine and rosin | 1919 | 1,191 | 28,067 | 33,595,986 | 16,972,881 | 13,929,888 | 53,051,294 |
| | 1914 | 1,394 | 34,817 | 20,744,372 | 8,582,970 | 5,535,561 | 20,990,191 |
| Type founding | 1919 | 23 | 810 | 4,428,644 | 867,517 | 943,245 | 2,089,757 |
| | 1914 | 31 | 1,054 | 5,515,662 | 1,055,861 | 1,319,331 | 2,319,381 |
| Typewriters & supplies | 1919 | 88 | 15,669 | 47,794,300 | 17,009,432 | 16,143,662 | 52,737,661 |
| | 1914 | 107 | 11,091 | 30,988,048 | 6,966,466 | 5,501,036 | 24,499,667 |
| Umbrellas and canes | 1919 | 198 | 3,368 | 15,397,275 | 3,139,662 | 15,632,989 | 25,308,826 |
| | 1914 | 265 | 4,792 | 9,469,496 | 2,167,453 | 8,591,867 | 13,813,353 |
| Upholstering materials, not elsewhere spec'd | 1919 | 163 | 4,810 | 32,556,564 | 4,687,307 | 25,448,893 | 39,389,711 |
| | 1914 | 179 | 4,426 | 15,878,593 | 2,143,567 | 10,796,288 | 16,491,556 |
| Varnishes | 1919 | 229 | 4,022 | 62,461,021 | 4,567,788 | 51,508,256 | 83,632,424 |
| | 1914 | 215 | 2,734 | 29,860,798 | 1,865,065 | 16,877,393 | 33,214,949 |
| Vault lights and ventilators | 1919 | 41 | 316 | 903,670 | 424,197 | 810,579 | 2,155,864 |
| | 1914 | 45 | 601 | 1,054,471 | 456,977 | 958,754 | 2,051,051 |
| Vinegar and cider | 1919 | 720 | 1,981 | 20,514,590 | 2,047,469 | 15,558,525 | 24,722,610 |
| | 1914 | 618 | 1,229 | 8,054,609 | 712,667 | 4,440,452 | 7,810,892 |
| Wall paper, not made in paper mills | 1919 | 48 | 4,262 | 19,921,577 | 3,882,396 | 13,152,503 | 23,047,901 |
| | 1914 | 48 | 4,738 | 17,619,896 | 2,703,175 | 8,536,255 | 15,887,123 |
| Wall plaster and composition flooring | 1919 | 161 | 5,123 | 25,307,049 | 5,833,617 | 11,821,465 | 26,874,657 |
| | 1914 | 165 | 5,389 | 29,510,972 | 3,453,450 | 7,992,749 | 16,544,475 |
| Washing machines and clothes wringers | 1919 | 105 | 5,956 | 25,986,355 | 6,431,378 | 23,388,925 | 40,771,285 |
| | 1914 | 111 | 2,302 | 7,298,057 | 1,220,882 | 4,148,481 | 7,599,802 |
| Waste | 1919 | 92 | 2,686 | 19,473,471 | 2,106,840 | 22,144,087 | 29,700,402 |
| | 1914 | 73 | 2,966 | 10,668,337 | 1,109,613 | 15,237,633 | 17,600,993 |
| Watch and clock materials, exc. watch cases | 1919 | 27 | 582 | 1,020,628 | 412,820 | 549,521 | 1,341,697 |
| | 1914 | 25 | 670 | 1,296,290 | 379,614 | 342,621 | 1,014,549 |
| Watch cases | 1919 | 33 | 3,900 | 21,790,556 | 4,000,727 | 8,205,754 | 19,618,773 |
| | 1914 | 31 | 3,514 | 11,220,024 | 1,938,358 | 4,001,595 | 7,830,987 |
| Watches | 1919 | 18 | 15,888 | 49,000,742 | 16,598,896 | 6,392,562 | 32,044,299 |
| | 1914 | 15 | 12,390 | 36,388,700 | 7,524,146 | 2,669,511 | 14,275,279 |
| Wheelbarrows | 1919 | 11 | 291 | 1,151,067 | 271,442 | 971,096 | 1,679,538 |
| | 1914 | 21 | 323 | 947,068 | 199,043 | 429,480 | 941,872 |
| Whips | 1919 | 26 | 717 | 2,461,021 | 582,230 | 1,096,642 | 2,986,285 |
| | 1914 | 40 | 1,163 | 3,049,736 | 559,448 | 1,340,943 | 3,161,910 |
| Windmills | 1919 | 31 | 1,932 | 10,004,863 | 2,145,301 | 4,960,426 | 9,932,585 |
| | 1914 | 31 | 1,955 | 6,425,729 | 1,252,330 | 2,555,121 | 5,496,591 |
| Window & door screens & weather strips | 1919 | 214 | 2,179 | 9,749,337 | 2,046,768 | 4,897,389 | 10,932,857 |
| | 1914 | 220 | 3,194 | 9,354,508 | 1,894,257 | 4,260,569 | 9,167,288 |
| Window shades and fixtures | 1919 | 287 | 4,411 | 18,698,914 | 3,669,286 | 18,249,540 | 29,190,649 |
| | 1914 | 286 | 4,077 | 11,525,919 | 2,180,585 | 11,888,569 | 17,444,120 |
| Wire | 1919 | 66 | 19,741 | 102,016,777 | 29,289,667 | 102,813,591 | 162,151,236 |
| | 1914 | 54 | 17,600 | 64,013,668 | 11,020,729 | 56,424,494 | 81,841,012 |
| Wirework, not elsewhere specified | 1919 | 558 | 15,224 | 65,290,309 | 15,565,992 | 50,710,070 | 90,549,245 |
| | 1914 | 552 | 12,126 | 38,508,819 | 6,719,222 | 24,113,708 | 41,789,394 |
| Wood distillation | 1919 | 115 | 4,946 | 42,334,503 | 5,309,689 | 20,059,651 | 32,545,314 |
| | 1914 | 95 | 2,782 | 17,562,849 | 1,564,822 | 6,495,570 | 9,882,537 |
| Wood preserving | 1919 | 73 | 3,978 | 28,138,079 | 4,342,277 | 23,241,858 | 33,239,313 |
| | 1914 | 68 | 2,830 | 20,154,830 | 1,784,690 | 16,059,754 | 21,054,857 |
| Wood, turned & carved | 1919 | 722 | 10,649 | 23,542,346 | 9,307,242 | 16,609,215 | 34,847,139 |
| | 1914 | 828 | 11,615 | 17,836,242 | 5,645,399 | 9,165,720 | 19,043,579 |
| Wooden goods, not elsewhere specified | 1919 | 245 | 6,443 | 21,110,717 | 5,661,674 | 10,173,353 | 21,793,261 |
| | 1914 | 274 | 6,418 | 10,439,768 | 2,767,359 | 4,952,335 | 10,162,236 |
| Wool pulling | 1919 | 24 | 705 | 8,853,437 | 909,788 | 12,809,592 | 17,361,231 |
| | 1914 | 34 | 708 | 3,534,203 | 452,190 | 6,632,101 | 8,272,721 |
| Wool scouring | 1919 | 33 | 2,177 | 10,049,960 | 2,896,453 | 7,228,350 | 13,679,584 |
| | 1914 | 24 | 1,059 | 3,493,474 | 616,593 | 3,176,438 | 4,565,412 |
| Wool shoddy | 1919 | 78 | 2,566 | 16,990,722 | 2,653,169 | 16,076,315 | 23,254,398 |
| | 1914 | 64 | 2,145 | 6,420,985 | 1,056,114 | 5,299,903 | 7,706,343 |
| Woolen and worsted goods | 1919 | 852 | 166,787 | 831,694,748 | 168,108,681 | 665,594,683 | 1,065,434,072 |
| | 1914 | 799 | 158,692 | 389,652,578 | 75,953,444 | 246,496,666 | 379,484,379 |
| All other industries | 1919 | 5 | 99 | 131,358 | 89,798 | 199,589 | 361,431 |
| | 1914 | 14 | 523 | 3,628,105 | 400,613 | 762,625 | 1,660,986 |

Textile machinery and parts were included in "foundry and machine shop products" prior to 1919.

"All other industries" comprises: In 1919, "straw goods, not elsewhere specified," 1 establishment; "whalebone cutting," 1; "wood carpet," 3. In 1914, "millstones," 2 establishments; "ordnance and accessories," 2; "pulp, from fibre other than wood." 3; "whalebone cutting." 1; "wood carpet," 6.

## INDUSTRIAL PLANTS BY CLASSES.

Out of a total of 290,105 manufacturing establishments in 1919, 48.9 per cent. employed only from 1 to 5 wage earners; 19.4 per cent. employed from 6 to 20; 8.7 per cent. from 21 to 50; 4.3 per cent. from 51 to 100; 3.5 per cent. from 101 to 250; 1.2 per cent. from 251 to 500; 0.6 per cent. from 501 to 1,000; and 0.4 per cent. employed over 1,000 wage earners each.

Of the total number of wage earners reported more than one-fourth (26.4 per cent.) were employed in the big establishments having over 1,000 wage earners each. More than half of the total number of wage earners (53.5 per cent.) were in establishments employing more than 250 wage earners each; 17.4 per cent. in establishments employing 101 to 250; 9.8 per cent. in establishments employing 51 to 100 each; and 19.4 per cent. in establishments employing not over 50 wage earners. The number of wage earners employed in the small establishments having from 1 to 5 wage earners each was only 3.4 per cent. of the total.

| Class of Establishment. | No. Establish'ts. | |
|---|---|---|
| | 1919. | 1914. |
| Total | 290,105 | 275,791 |
| No wage earners | 37,934 | 32,856 |
| 1 to 5 wage earners | 141,742 | 140,971 |
| 6 to 20 wage earners | 56,208 | 54,379 |
| 21 to 50 wage earners | 25,379 | 22,932 |
| 51 to 100 wage earners | 12,405 | 11,079 |
| 101 to 250 wage earners | 10,067 | 8,270 |
| 251 to 500 wage earners | 3,600 | 3,108 |
| 501 to 1,000 wage earners | 1,749 | 1,348 |
| Over 1,000 wage earners | 1,021 | 648 |

| Class of Establishment. | No. Wage Earn's. | |
|---|---|---|
| | 1919. | 1914. |
| Total | 9,096,372 | 7,036,337 |
| In establishments employing— | | |
| 1 to 5 wage earners | 311,576 | 317,216 |
| 6 to 20 wage earners | 631,290 | 606,594 |
| 21 to 50 wage earners | 829,301 | 742,529 |
| 51 to 100 wage earners | 888,344 | 791,726 |
| 101 to 250 wage earners | 1,581,557 | 1,321,077 |
| 251 to 500 wage earners | 1,251,081 | 1,075,108 |
| 501 to 1,000 wage earners | 1,205,627 | 926,828 |
| Over 1,000 wage earners | 2,397,596 | 1,255,259 |

## ELECTRIC POWER DEVELOPMENT IN THE U. S.

CENTRAL ELECTRIC STATIONS—COMPARISON OF HYDROELECTRIC AND ALL STATIONS.

| Data. | 1917. | | 1912. | | Hydro-electric Stations—Per Cent. of Total. | |
|---|---|---|---|---|---|---|
| | All Stations. | Stations Reporting Water-power of 1,000 Horsepower and Over. | All Stations. | Stations Reporting Water-power of 1,000 Horsepower and Over. | 1917. | 1912. |
| Number of stations | 6,542 | 259 | 5,221 | 225 | 4.0 | 4.3 |
| Value of plant and equipment | $3,060,392,141 | $1,396,619,224 | $2,175,678,266 | $922,954,341 | 45.6 | 42.2 |
| Total income | $526,894,240 | $157,580,682 | $302,273,398 | $72,717,582 | 29.9 | 24.1 |
| Electric service | $502,059,980 | $149,224,378 | $287,138,657 | $66,852,631 | 29.7 | 23.3 |
| All other sources | $24,834,260 | $8,356,304 | $15,134,741 | $5,864,951 | 33.6 | 38.8 |
| Total exp., inc. salaries, wages | $426,568,307 | $125,027,197 | $234,577,277 | $56,342,064 | 29.3 | 24.0 |
| Total No. persons employed | 105,541 | 25,590 | 79,335 | 17,160 | 24.2 | 21.6 |
| Prime movers—No. | 13,795 | 2,694 | 11,902 | 2,094 | 19.5 | 17.6 |
| Horsepower | 12,936,755 | 5,867,447 | 7,530,044 | 3,176,974 | 45.4 | 42.2 |
| Steam engines—No. | 5,788 | 323 | 6,813 | 327 | 5.6 | 4.8 |
| Horsepower | 1,701,677 | 196,996 | 1,895,382 | 204,673 | 11.6 | 10.8 |
| Steam turbines—No. | 1,699 | 331 | 1,034 | 190 | 19.5 | 18.4 |
| Horsepower | 6,747,399 | 1,567,207 | 3,054,396 | 680,069 | 23.2 | 22.3 |
| Water wheels & turbines—No. | 3,374 | 1,995 | 2,939 | 1,558 | 59.1 | 53.0 |
| Horsepower | 4,277,273 | 4,092,882 | 2,469,231 | 2,286,546 | 95.7 | 92.6 |
| Internal-combustion eng's—No. | 2,934 | 45 | 1,116 | 19 | 1.5 | 1.7 |
| Horsepower | 210,406 | 10,362 | 111,035 | 5,686 | 4.9 | 5.1 |
| Dynamos—No. | 13,428 | 2,427 | 12,610 | 1,932 | 18.1 | 15.3 |
| Kilowatt capacity | 8,994 407 | 3,954 294 | 5,165,439 | 1,979,397 | 44.0 | 38.3 |
| No. of kilowatt hours generated | 25,438,303,272 | 13,924,464,619 | 11,569,109,885 | 5,845,504,850 | 54.7 | 50.5 |
| Stationary motors served—No. | 555,924 | 145,032 | 435,473 | 73,645 | 26.1 | 16.9 |
| Horsepower | 9,216,330 | 3,360,371 | 4,130,619 | 1,283,769 | 36.5 | 31.1 |
| Number of customers | 7,178,703 | 1,686,284 | 3,837,518 | | 23.5 | |

ALL GENERATING STATIONS AND HYDROELECTRIC STATIONS COMPARED—1917.

| Data. | All Generating Stations. | Stations Reporting Water-power of 1,000 Horsepower and Over. | Data. | All Generating Stations. | Stations Reporting Water-power of 1,000 Horsepower and Over. |
|---|---|---|---|---|---|
| Number of plants | 5,124 | 259 | Horsepower | 4,274,479 | 4,092,882 |
| No. separate gen. sta. | 5,824 | 684 | Internal-combustion engines—No. | 2,914 | 45 |
| No. cities, towns, etc., served by gen. plants | 11,364 | 2,497 | Horsepower | 209,227 | 10,362 |
| Value plant & equip. | $2,952,423,577 | $1,396,619,224 | Kilow't cap. dynamos. | 8,943,423 | 3,954,294 |
| Total income | $494,972,405 | $157,580,682 | Output of stations | 29,807,378,386 | 16,018,906,990 |
| Light, heat & power, incl. free service | $471,063,414 | $149,224,378 | Kilowatt hours gen. | 25,438,303,272 | 13,924,464,619 |
| All other sources | $23,908,991 | $8,356,304 | Kilo. hours purchased | 4,369,075,114 | 2,094,442,371 |
| Total expenses, incl. salaries and wages | $400,445,429 | $125,027,197 | Kilo. hours sold | 24,661,331,266 | 13,148,946,560 |
| Tot. No. persons emp. | 99,666 | 25,590 | For light | 4,772,277,255 | 1,120,506,702 |
| Total horsepower | 12,875,522 | 5,867,447 | For power | 12,622,123,027 | 7,523,445,685 |
| Steam eng's & steam turbines—No. | 7,300 | 654 | To other comp'n's | 7,266,930,984 | 4,504,994,173 |
| Horsepower | 8,391,816 | 1,764,203 | Stationary Motors served—No. | 509,778 | 145,032 |
| Water wheels and turbines—No. | 3,358 | 1,995 | Horsepower | 8,765,570 | 3,360,371 |
| | | | Number of customers | 6,570,430 | 1,686,284 |

ELECTRICAL UNITS AND THEIR POPULAR DEFINITIONS.

The watt is the unit expressing electrical power as horsepower (hp) represents power in mechanics; it is equal to the product of the volts (pressure) times amperes (rate of flow). Thus, 2 volts times 2 amperes would give in a direct current circuit 4 watts. Electrical energy is sold at so much per watt hour or more generally at a given amount per kilowatt hour—which means 1,000 watt hours. This may represent 1 watt for 1,000 hours or 1,000 watts for 1 hour. 746 watts are equal to one horsepower or inversely 1 kilowatt (kw) is equal to about 1⅓ horsepower.

The horsepower represents the power required to lift a weight of 33,000 pounds 1 foot in 1 minute or 550 pounds 1 foot in 1 second.

The ohm is the unit of electrical resistance and represents the physical property of a conductor which offers a resistance to the flow of electricity, permitting just 1 ampere to flow at 1 volt of pressure. For example, 1,000 feet of copper wire of No. 10 B. and S. gauge has just 1 ohm of resistance and allows the flow of 1 ampere at 1 volt.

## PERSONS GAINFULLY OCCUPIED, BY SEX, 1880-1920.

| Sex and Census Year. | Total Population. | Population 10 Years of Age and Over. | Persons 10 Years and Over in Gainful Occupations. | | |
|---|---|---|---|---|---|
| | | | Number. | Pct. of Total Pop. | Pct. of Pop. 10 Yrs. and Over |
| BOTH. | | | | | |
| 1920 | 105,710,620 | 82,739,315 | 41,614,248 | 39.4 | 50.3 |
| 1910 | 91,972,266 | 71,580,270 | 38,167,336 | 41.5 | 53.3 |
| 1900 | 75,994,575 | 57,949,824 | 29,073,233 | 38.3 | 50.2 |
| 1890 | 62,622,250 | 47,413,559 | 23,318,183 | 37.2 | 49.2 |
| 1880 | 50,155,783 | 36,761,607 | 17,392,099 | 34.7 | 47.3 |
| MALE. | | | | | |
| 1920 | 53,900,431 | 42,289,969 | 33,064,737 | 61.3 | 78.2 |
| 1910 | 47,332,277 | 37,027,558 | 30,091,564 | 63.6 | 81.3 |
| MALE. | | | | | |
| 1900 | 38,816,448 | 29,703,440 | 23,753,836 | 61.2 | 80.0 |
| 1890 | 32,067,880 | 24,352,659 | 19,312,651 | 60.2 | 79.3 |
| 1880 | 25,518,820 | 18,735,980 | 14,744,942 | 57.8 | 78.7 |
| FEMALE | | | | | |
| 1920 | 51,810,189 | 40,449,346 | 8,549,511 | 16.5 | 21.1 |
| 1910 | 44,639,989 | 34,552,712 | 8,075,772 | 18.1 | 23.4 |
| 1900 | 37,178,127 | 28,246,384 | 5,319,397 | 14.3 | 18.8 |
| 1890 | 30,554,370 | 23,060,900 | 4,005,532 | 13.1 | 17.4 |
| 1880 | 24,636,963 | 18,025,627 | 2,647,157 | 10.7 | 14.7 |

## PERSONS 10 YEARS OF AGE AND OVER IN GAINFUL OCCUPATIONS, BY SEX AND DIVISIONS OF OCCUPATIONS.

| Sex and General Division of Occupations. | 1920. | | 1910. | |
|---|---|---|---|---|
| | Number. | Pct. Distribution. | Number. | Pct. Distribution. |
| BOTH SEXES. | | | | |
| All occupat'ns. | 41,614,248 | 100.0 | 38,167,336 | 100.0 |
| Agric., forest., animal husbandry | 10,953,158 | 26.3 | 12,659,082 | 33.1 |
| Extract. minerals | 1,090,223 | 2.6 | 965,169 | 2.5 |
| Manuf. mech. ind. | 12,818,524 | 30.8 | 10,628,731 | 27.8 |
| Transportation | 3,063,582 | 7.4 | 2,637,420 | 6.9 |
| Trade | 4,242,979 | 10.2 | 3,614,670 | 9.5 |
| Public service (not else. classified) | 770,460 | 1.9 | 459,291 | 1.2 |
| Profes'nal service | 2,143,889 | 5.2 | 1,693,361 | 4.4 |
| Dom., pers. serv. | 3,404,892 | 8.2 | 3,772,559 | 9.9 |
| Clerical oc'p't'ns. | 3,126,541 | 7.5 | 1,737,053 | 4.6 |
| MALE. | | | | |
| All occupat'ns. | 33,064,737 | 100.0 | 30,091,564 | 100.0 |
| Agric., forest., animal husbandry | 9,869,030 | 29.8 | 10,851,581 | 36.1 |
| Extract. minerals | 1,087,359 | 3.3 | 964,075 | 3.2 |
| Manuf. mech. ind. | 10,888,183 | 32.9 | 8,808,161 | 29.3 |
| Transportation | 2,850,528 | 8.6 | 2,530,795 | 8.4 |
| Trade | 3,575,187 | 10.8 | 3,146,582 | 10.5 |
| Public service (not else. classified) | 748,666 | 2.3 | 445,733 | 1.5 |
| Profes'nal service | 1,127,391 | 3.4 | 959,470 | 3.2 |
| Dom., pers. serv. | 1,217,968 | 3.7 | 1,241,338 | 4.1 |
| Clerical oc'p't'ns. | 1,700,425 | 5.1 | 1,143,829 | 3.8 |
| FEMALE. | | | | |
| All occupat'ns. | 8,549,511 | 100.0 | 8,075,772 | 100.0 |
| Agric., forest., animal husbandry | 1,084,128 | 12.7 | 1,807,501 | 22.4 |
| Extract. minerals | 2,864 | .... | 1,094 | .... |
| Manuf. mech. ind. | 1,930,341 | 22.6 | 1,820,570 | 22.5 |
| Transportation | 213,054 | 2.5 | 106,625 | 1.3 |
| Trade | 667,792 | 7.8 | 468,088 | 5.8 |
| Public service (not else. classified) | 21,794 | 0.3 | 13,558 | 0.2 |
| Profes'nal service | 1,016,498 | 11.9 | 733,891 | 9.1 |
| Dom., pers. serv. | 2,186,924 | 25.6 | 2,531,221 | 31.3 |
| Clerical oc'p't'ns. | 1,426,116 | 16.7 | 593,224 | 7.3 |

The number of wage and salary earners, in 1920, by chief classes of occupations, was as follows:

| | | | | | |
|---|---|---|---|---|---|
| Actors | 28,361 | Guards, watchmen | 115,553 | Mechanics (misc.) | 281,741 |
| Agts., canvas., collectors. | 175,772 | Housekeepers, stewards | 221,612 | Motormen | 66,519 |
| Architects | 18,185 | Hotel keepers | 55,583 | Millers (grain) | 23,372 |
| Artists, sculptors, etc. | 35,402 | Ins. agents, officials | 134,978 | Milliners | 73,255 |
| Authors | 6,668 | Janitors, sextons | 178,328 | Moulders (metal) | 123,681 |
| Barbers, manicur., hairdr. | 216,211 | Laborers (agriculture) | 4,041,627 | Musicians | 130,265 |
| Bartenders | 26,085 | Laborers (build'g trades) | 686,722 | Miners (coal) | 733,936 |
| Bankers, brokers | 161,613 | Laborers (garag., r'd, st.) | 158,482 | Miners (copper) | 36,054 |
| Bakers | 97,940 | Laborers (coal, lumber yards, warehouse) | 125,609 | Miners (gold and silver) | 32,700 |
| Boilermakers | 74,088 | Laborers (chem. plants) | 74,280 | Miners (iron) | 38,704 |
| Boarding house keepers | 133,392 | Laborers (clay, glass, stone) | 124,544 | Miners (gas and oil) | 85,550 |
| Bookkeepers | 734,688 | Laborers (food industries) | 159,535 | Nurses (trained) | 149,128 |
| Brakemen (railway) | 114,107 | Laborers (iron and steel) | 729,613 | Painters, glaziers | 323,032 |
| Builders, Contractors | 90,109 | Laborers (lumb., furnit'e) | 320,613 | Photographers | 34,259 |
| Carpenters | 887,379 | Laborers (textile) | 171,126 | Plasterers | 46,876 |
| Clerks (not in stores) | 1,487,905 | Laborers (misc. mfg. and mech. indust.) | 463,891 | Physicians, surgeons | 144,977 |
| Clerks (in stores) | 413,918 | Laborers (porters, helpers in stores) | 125,007 | Plumbers | 206,718 |
| Chauffeurs | 285,045 | Laborers (railway) | 495,713 | Policemen | 82,120 |
| Cooks | 398,475 | Laborers (in public serv.) | 106,915 | Porters (not in stores) | 83,168 |
| Clergymen | 127,270 | *Laborers* (cigars, tobacco) | 145,222 | Real estate men | 149,135 |
| Compositors (printers) | 140,165 | *Laborers* (clay, glass, stone) | 85,434 | Retailers (store keepers) | 1,328,275 |
| Commercial travellers | 179,320 | *Laborers* (clothing ind.) | 409,326 | Retailers (meat, incl. ab've) | 122,105 |
| Conductors (railway) | 74,539 | *Laborers* (food industries) | 188,895 | Retailers (groc., incl. ab've) | 239,236 |
| Conductors (trolley) | 63,760 | *Laborers* (iron and steel) | 689,980 | Restaurant keepers | 87,987 |
| College presidents, profs. | 33,407 | *Laborers* (oth. metal ind.) | 91,291 | Sailors, deck hands | 54,832 |
| Deliverymen | 170,235 | *Laborers* (lumb., furnit'e) | 168,719 | Salesmen (in stores) | 1,177,494 |
| Dentists | 56,152 | *Laborers* (print'g, pub.) | 80,403 | Saloonkeepers | 17,835 |
| Dressm'k'rs, sempstresses (not in factories) | 235,855 | *Laborers* (shoe factory) | 206,225 | Servants | 1,270,946 |
| Draymen, expressmen | 411,132 | *Laborers* (textile) | 873,224 | Stenographers, typists | 615,154 |
| Editors, reporters | 34,197 | *Laborers* (misc. industries) | 622,662 | Switchmen, yardmen | 111,565 |
| Electricians | 212,964 | Lawyers, judges | 122,519 | Tailors | 192,232 |
| Engineers (locomotive) | 109,899 | Linemen (telegr., teleph.) | 37,917 | Teachers | 761,766 |
| Engineers (stationary) | 242,096 | Longshoremen | 85,928 | Tinsmiths | 69,735 |
| Engineers (technical) | 136,121 | Lumbermen, woodchop | 205,315 | Telegraphers | 79,434 |
| Farmers, stock raisers | 6,201,261 | Manufacturers | 183,386 | Telephone operators | 190,160 |
| Firemen (not rail. or fire dept.) | 143,875 | Machinists | 801,901 | Theatre owners | 18,395 |
| Firemen (city dept.) | 50,771 | Mail carriers | 91,451 | Undertakers | 24,469 |
| Firemen (railway) | 91,347 | Masons (brick, stone) | 131,264 | Waiters | 228,985 |
| Gardener, florist, nursery | 169,390 | | | Wash women (laundries) | 120,715 |
| | | | | Wash women (not laund.) | 396,756 |
| | | | | Wholesalers, expts, impts | 73,571 |

*Laborers*, in italics, are semi-skilled.

## PRODUCTION OF LUMBER IN THE U. S.

| STATE. | QUAN. (M FT. BOARD MEASURE.) | | | STATE. | QUAN. (M FT. BOARD MEASURE) | | |
|---|---|---|---|---|---|---|---|
| | 1919. | 1914. | 1909. | | 1919. | 1914. | 1909. |
| United States. | 34,552,076 | 37,346,023 | 44,509,761 | New Hampshire. | 338,777 | 482,744 | 649,606 |
| | | | | Missouri | 321,383 | 370,571 | 660,159 |
| Washington | 4,961,220 | 3,946,189 | 3,862,916 | | | | |
| Louisiana | 3,163,871 | 3,956,434 | 3,551,918 | Montana | 287,378 | 317,842 | 308,582 |
| Oregon | 2,577,403 | 1,817,875 | 1,898,995 | Indiana | 282,487 | 298,571 | 556,418 |
| Mississippi | 2,390,135 | 2,280,966 | 2,572,669 | Ohio | 280,076 | 286,063 | 542,904 |
| Alabama | 1,798,746 | 1,494,732 | 1,691,001 | Vermont | 218,479 | 249,608 | 351,571 |
| | | | | Oklahoma | 168,403 | 200,594 | 225,730 |
| Arkansas | 1,772,157 | 1,796,780 | 2,111,300 | | | | |
| North Carolina | 1,654,435 | 2,227,854 | 2,177,715 | Massachusetts | 166,841 | 143,094 | 361,200 |
| Texas | 1,379,774 | 1,554,005 | 2,099,130 | Maryland | 113,362 | 162,097 | 267,939 |
| California | 1,259,363 | 1,303,183 | 1,143,507 | New Mexico | 86,808 | 57,167 | 91,987 |
| Florida | 1,137,432 | 1,073,821 | 1,201,734 | Connecticut | 86,708 | 81,883 | 138,371 |
| Wisconsin | 1,116,338 | 1,391,001 | 2,025,038 | Arizona | 73,655 | 78,667 | 62,731 |
| Virginia | 1,098,038 | 1,488,070 | 2,101,716 | Colorado | 64,864 | 102,117 | 141,710 |
| Georgia | 893,965 | 1,026,191 | 1,342,249 | Illinois | 64,628 | 66,227 | 170,181 |
| Michigan | 875,891 | 1,214,435 | 1,889,724 | South Dakota | 42,970 | 18,744 | 31,057 |
| Tennessee | 792,132 | 885,035 | 1,223,849 | | | | |
| | | | | New Jersey | 36,888 | 48,748 | 61,620 |
| Idaho | 765,388 | 763,508 | 645,800 | Delaware | 27,437 | 25,517 | 55,440 |
| West Virginia | 763,103 | 1,118,480 | 1,472,942 | Nevada | 20,335 | ..... | ..... |
| Minnesota | 699,639 | 1,312,230 | 1,561,508 | Iowa | 18,493 | 11,443 | 132,021 |
| Pennsylvania | 630,471 | 864,710 | 1,462,771 | | | | |
| South Carolina | 621,679 | 701,540 | 897,660 | Utah | 11,917 | 8,680 | 12,638 |
| | | | | Rhode Island | 11,030 | 15,902 | 25,489 |
| Maine | 596,116 | 992,594 | 1,111,565 | Wyoming | 8,674 | 11,852 | 28,602 |
| Kentucky | 512,078 | 596,392 | 860,712 | All other states. | 3,345 | 15,672 | 15,946 |
| New York | 357,764 | 486,195 | 681,440 | | | | |

Custom mills and mills cutting less than 50 M feet not included in 1914.
Number of active sawmills (1919) 29,534; (1909) 46,584.

### BY-PRODUCTS OF THE FORESTS.

Consumption of timber in 1919 in by-products was as follows in the United States:

Veneers, 576,581 M feet, worth $25,104,164, of which red gum supplied 198,641 M feet, worth $4,616,727; yellow pine, 67,071 M feet; birch, 54,079 M feet; Cottonwood, 36,739 M feet; tupelo, 34,175 M feet; yellow poplar, 32,653 M feet; and white oak, 30,654 M feet. Smaller quantities were used of maple, walnut, spruce, and other woods.

Dyestuffs, 950,275 tons of wood, worth $12,133,799, of which chestnut supplied 754,972 tons. The timber came mainly from Virginia, Tennessee and North Carolina.

Tanning, 609,130 tons of wood and bark, worth $12,027,687, mostly oak and hemlock.

Extracts, 794,360,977 pounds of wood, worth $34,579,165, mainly chestnut, quebracho, oak, spruce, and hemlock.

Wood used in distillation, 1,442,675 cords, of which hardwoods (mostly beech, birch and maple) supplied 1,186,477 cords. From hard woods are distilled wood alcohol, charcoal, acetates, tar and tar oils. Wood alcohol produced for sale in 1919 totalled 6,980,693 gallons. From soft woods are distilled rosin, turpentine, tar, tar oils, charcoal, and wood creosote.

Value of forest products of farms in 1919—Sold, $217,716,046; used on farms, $176,605,782. Area of merchantable timber on farms (1920) 35,270,527 acres (on 946,871 farms).

### LUMBER PRODUCTION, BY KINDS, IN U. S.

| KIND OF WOOD. | QUANTITY (M FEET B. M.). | | | KIND OF WOOD. | QUANTITY (M FEET B. M.). | | |
|---|---|---|---|---|---|---|---|
| | 1919. | 1914. | 1909. | | 1919. | 1914. | 1909. |
| Total | 34,552,076 | 37,346,023 | 44,509,761 | Cedar | 332,234 | 499,903 | 346,008 |
| | | | | Yellow poplar | 328,538 | 519,221 | 858,500 |
| Yellow pine | 13,062,938 | 14,472,804 | 16,277,185 | White fir | 223,422 | 112,627 | 89,318 |
| Douglas fir | 5,902,169 | 4,763,693 | 4,856,378 | Elm | 194,417 | 214,294 | 347,456 |
| Oak | 2,708,280 | 3,278,908 | 4,414,457 | Basswood | 183,562 | 264,656 | 399,151 |
| W'n yellow pine. | 1,755,015 | 1,327,365 | 1,499,985 | | | | |
| Hemlock | 1,754,998 | 2,165,728 | 3,051,399 | Hickory | 170,013 | 116,113 | 333,929 |
| | | | | Ash | 154,931 | 189,499 | 291,209 |
| White pine | 1,723,642 | 2,632,587 | 3,900,034 | Cottonwood | 144,155 | 195,198 | 265,600 |
| Spruce | 979,968 | 1,245,614 | 1,748,547 | Tupelo | 143,730 | 124,480 | 96,676 |
| Maple | 857,489 | 909,743 | 1,106,604 | Sugar pine | 133,658 | 136,159 | 97,191 |
| Red gum | 851,431 | 675,380 | 706,945 | | | | |
| Cypress | 656,212 | 1,013,013 | 955,635 | Balsam fir | 68,030 | 125,212 | 108,702 |
| | | | | Walnut | 39,218 | 25,573 | 46,108 |
| Chestnut | 545,696 | 540,591 | 663,891 | Sycamore | 28,114 | 22,773 | 56,511 |
| Redwood | 410,442 | 535,199 | 521,630 | Lodge-pole pine. | 16,281 | 18,374 | 23,733 |
| Larch | 388,121 | 358,561 | 421,214 | All other | 61,308 | 55,624 | 62,151 |
| Birch | 375,079 | 430,667 | 452,370 | | | | |
| Beech | 358,985 | 376,464 | 511,244 | | | | |

*Redwood* is cut only in Cal. *Sugar Pine* almost all comes from Cal.; *Lodge-pole Pine* from Col. and Wyo.

In 1919 there were produced in the United States, 1,724,078,000 laths and 9,192,704,000 shingles.

Cordwood consumed on farms in U. S. averages 70,000,000 cords a year, worth $350.000,000.

Red oak, when first cut, weighs 5,800 lbs. a cord; chestnut 4,900; cottonwood, 4,200.

### PAPER AND PULP PRODUCTION IN THE UNITED STATES.

| | 1921. | 1920. | 1919. | | 1921. | 1920. | 1919. |
|---|---|---|---|---|---|---|---|
| | *Short t.* | *Short t.* | *Short t.* | | *Short t.* | *Short t.* | *Short t.* |
| Newsprint | 1,226,189 | 1,511,968 | 1,374,517 | Fine | 242,485 | 389,322 | 343,762 |
| Standard News | 1,130,943 | 1,380,239 | 1,227,180 | Tissue | 148,142 | 177,447 | 155,400 |
| Book paper | 725,992 | 1,104,464 | 914,823 | Hanging | 69,725 | 113,824 | 92,136 |
| Paper board | 1,664,931 | 2,313,449 | 1,950,037 | Felt and building | 286,111 | 366,941 | 281,962 |
| Box board | 1,122,336 | 1,378,166 | ..... | Other grades | 210,274 | 313,387 | 208,093 |
| Wrapping | 651,605 | 831,889 | 694,207 | Total, all grades | 5,356,317 | 7,334,614 | 6,190,361 |
| Bag | 130,863 | 211,923 | 175,424 | Pulp | 2,801,438 | 3,807,656 | 3,384,768 |

Paper imports (1921) newsprint, 1,584,962,674 lbs. ($79,123,368); all other and total, value, $92,462,472.
Paper exports (1921) newsprint, 33,641,462 lbs. ($2,162,975); all other and total, value, $49,494,822.
Wood pulp (1921) exports, 28,483 net tons; imports, 697,100 net tons.

## PAPER AND PRINTING, 1919.

| INDUSTRY. | Establishments. | Wage Earners. | Capital. | Wages. | Cost of Materials. | Value of Products. |
|---|---|---|---|---|---|---|
| | *No.* | *Av. No.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| **Total** | 36,403 | 509,875 | 2,423,400,111 | 564,509,917 | 1,306,717,793 | 3,012,583,990 |
| Paper and wood pulp | 729 | 113,759 | 905,794,583 | 135,690,642 | 467,482,637 | 788,059,377 |
| Paper exclusively | 497 | 51,043 | 363,382,919 | 58,324,653 | 237,402,880 | 374,362,494 |
| Pulp exclusively | 61 | 5,807 | 42,081,327 | 6,524,555 | 22,686,708 | 35,884,802 |
| Paper and pulp | 171 | 56,909 | 500,330,337 | 70,841,434 | 207,393,049 | 377,812,081 |
| Manufactures of paper | 1,919 | 90,497 | 269,167,170 | 73,525,732 | 240,589,961 | 440,866,307 |
| Bags, pap., exc. those made in pap. mills | 75 | 4,168 | 24,584,881 | 3,662,830 | 33,350,481 | 47,263,990 |
| Boxes, pap. & oth., not elsewh. specified | 1,201 | 55,862 | 131,390,783 | 43,325,554 | 101,135,292 | 206,419,343 |
| Shipping containers, corrug. & fibre | 162 | 11,586 | 43,235,991 | 10,128,512 | 38,741,081 | 67,585,184 |
| Set up paper boxes | 865 | 34,189 | 52,184,477 | 24,081,287 | 39,606,724 | 93,382,066 |
| Cartons | 127 | 6,729 | 25,712,904 | 6,305,476 | 16,544,361 | 33,330,163 |
| Paper cans and tubes | 20 | 1,652 | 6,368,291 | 1,453,466 | 3,410,823 | 6,615,949 |
| All other | 27 | 1,706 | 3,889,120 | 1,356,813 | 2,832,303 | 5,505,981 |
| Labels and tags | 119 | 5,227 | 14,118,792 | 4,549,902 | 11,274,767 | 24,243,992 |
| Paper patterns | 19 | 403 | 1,084,325 | 374,479 | 316,890 | 1,528,382 |
| Card cutting and designing | 75 | 1,148 | 2,297,970 | 958,877 | 2,298,389 | 5,323,349 |
| Cardboard, not made in paper mills | 16 | 1,425 | 6,493,032 | 1,337,177 | 4,953,915 | 9,138,415 |
| Envelopes | 106 | 8,129 | 24,754,818 | 6,649,089 | 21,964,743 | 39,064,077 |
| Paper goods, not elsewhere specified | 308 | 14,135 | 64,442,569 | 12,666,924 | 65,295,484 | 107,284,759 |
| *Playing cards* | 8 | 1,832 | 6,149,513 | 1,559,638 | 3,030,439 | 10,663,733 |
| *All other* | 300 | 12,303 | 58,293,056 | 11,107,286 | 62,265,045 | 96,621,026 |
| Printing and publishing | 32,476 | 287,278 | 1,191,505,247 | 331,519,423 | 571,510,277 | 1,699,789,229 |
| Printing and publishing, book and job | 13,089 | 123,005 | 446,554,984 | 141,476,243 | 211,067,174 | 597,663,228 |
| Job printing | 11,951 | 113,901 | 353,005,583 | 131,316,152 | 190,145,145 | 487,074,733 |
| Book publishing and printing | 142 | 5,653 | 29,559,985 | 5,611,804 | 10,325,818 | 29,759,696 |
| Book publishing without printing | 687 | 713 | 54,258,490 | 605,606 | 9,615,249 | 71,974,342 |
| Linotype work and typesetting | 309 | 2,738 | 9,730,926 | 3,942,681 | 980,962 | 8,854,457 |
| Printing and publishing, music | 160 | 899 | 8,006,122 | 926,988 | 2,123,781 | 14,592,177 |
| Printing and publishing | 27 | 815 | 2,866,830 | 850,265 | 1,086,950 | 3,814,950 |
| Publishing without printing | 133 | 84 | 5,139,292 | 76,623 | 1,036,831 | 10,777,227 |
| Print'g & publish'g, newsp. & period'ls | 17,362 | 120,381 | 614,045,344 | 144,348,173 | 300,385,187 | 924,152,878 |
| Printing and publishing | 1,346 | 49,653 | 285,605,477 | 66,045,755 | 168,289,962 | 441,418,613 |
| Print'g, publish'g, and job print'g | 12,420 | 68,389 | 266,816,289 | 75,055,330 | 102,446,618 | 315,829,398 |
| Publishing without printing | 3,596 | 2,339 | 61,623,578 | 3,247,088 | 29,648,607 | 166,904,867 |
| Bookbinding and blank-book making | 1,113 | 20,361 | 43,041,207 | 18,658,821 | 23,235,171 | 66,020,677 |
| Engraving, steel and copper plate, including plate printing | 421 | 7,014 | 19,040,260 | 7,908,109 | 6,980,747 | 24,209,154 |
| Lithographing | 331 | 15,618 | 60,817,330 | 18,201,089 | 27,718,217 | 73,151,115 |
| Indust. relat'g to print. & pub | 1,231 | 14,079 | 37,011,534 | 19,891,724 | 13,982,415 | 60,821,176 |
| Engraving and diesinking | 478 | 1,878 | 4,695,712 | 2,391,504 | 1,927,323 | 7,350,602 |
| Engraving, wood | 55 | 235 | 338,908 | 407,215 | 219,268 | 1,153,618 |
| Photo-eng. not done in print. estab | 422 | 6,769 | 12,442,784 | 10,423,541 | 5,038,382 | 29,389,386 |
| Stereotyping and electrotyping | 171 | 3,664 | 7,860,376 | 5,002,545 | 4,234,479 | 15,919,014 |
| Printing materials | 82 | 723 | 7,245,110 | 799,402 | 1,619,718 | 4,918,799 |
| Type founding | 23 | 810 | 4,428,644 | 867,517 | 943,245 | 2,089,757 |
| Wall pap., not made in pap. mills | 48 | 4,262 | 19,921,577 | 3,882,396 | 13,152,503 | 23,047,901 |

Primary horsepower, 2,351,224, of which 362,123 is in printing and publishing.

## CHILD LABOR IN THE U. S., 1920.

| OCCUPATIONS. | Both Sexes. | Male. | Female. |
|---|---|---|---|
| Tot. pop. 10 to 15 yrs. | 12,502,582 | 6,294,985 | 6,207,597 |
| Total no. gainf. occup. | 1,060,858 | 714,248 | 346,610 |
| Agric., forest., animal husbandry, total | 647,309 | 459,238 | 188,071 |
| Farm labor, home f'm | 569,824 | 396,191 | 173,633 |
| Farm lab., w'k'g out | 63,990 | 51,000 | 12,990 |
| All other agric., etc | 13,495 | 12,047 | 1,448 |
| Extract. of miner, tot. | 7,191 | 7,045 | 146 |
| Coal-mine operat | 5,850 | 5,743 | 107 |
| All oth. extract. min. | 1,341 | 1,302 | 39 |
| Manuf. & mech. indus | 185,337 | 104,335 | 81,002 |
| Apprentices | 19,323 | 15,924 | 3,399 |
| Labor's & semiskilled operatives (n.o.s.): | | | |
| Build. & hand tr'de | 7,476 | 7,009 | 467 |
| Clothing indust | 11,757 | 2,288 | 9,469 |
| Food industries | 9,934 | 4,633 | 5,301 |
| Iron, steel indust | 12,904 | 10,617 | 2,287 |
| Lumb., furnit. ind | 10,585 | 9,159 | 1,426 |
| Shoe factories | 7,545 | 4,374 | 3,171 |
| Textile industries | 54,649 | 21,917 | 32,732 |
| Cotton mills | 21,875 | 10,498 | 11,377 |
| Knitting mills | 7,991 | 2,087 | 5,904 |
| Silk mills | 10,023 | 3,220 | 6,803 |
| Wool & worst m'ls | 7,077 | 3,009 | 4,068 |
| All oth. text. mills | 7,683 | 3,103 | 4,580 |
| All other industries | 21,519 | 12,112 | 9,407 |
| Oth. manuf. & mech. industries | 29,645 | 16,302 | 13,343 |
| Transportation | 18,912 | 15,617 | 3,295 |
| Trade, total | 63,368 | 49,234 | 14,134 |
| Clerks in stores | 15,049 | 9,139 | 5,910 |
| Newsboys | 20,706 | 20,513 | 193 |
| Salesmen & saleswomen (stores) | 15,321 | 8,569 | 6,752 |
| All oth. tr'de occup. | 12,292 | 11,013 | 1,279 |
| Pub. serv. (not elsewhere classified) | 1,130 | 1,085 | 45 |
| Professional service | 3,465 | 1,979 | 1,486 |
| Domestic & personal service, total | 54,006 | 16,082 | 37,924 |
| Servants | 38,180 | 7,604 | 30,576 |
| All oth. domest. & personal service | 15,826 | 8,478 | 7,348 |
| Clerical occup., total | 80,140 | 59,633 | 20,507 |
| Clerks (exc. stores) | 22,521 | 13,928 | 8,593 |
| Mes'g'r, bundle & office boys & girls | 48,028 | 43,721 | 4,307 |
| Stenogs & typists | 5,674 | 678 | 4,996 |
| Oth. clerical occup. | 3,917 | 1,306 | 2,611 |

Messengers do not include *telegraph*. Many *clerks* probably are *salesmen*.

The "gainfully occupied" children consist mainly of (1) those working on their own account, such as newsboys, and (2) employees working for gain.

The total number of children gainfully occupied was only slightly more than half as large in 1920 as in 1910, the decrease having been 46.7 per cent. For the several broad groups of occupations the rates of increase or decrease were as follows: Agriculture, forestry, and animal husbandry, decrease of 54.8 per cent.; extraction of minerals, decrease of 60.2 per cent.; manufacturing and mechanical industries, decrease of 29 per cent.; transportation, decrease of 9.1 per cent.; trade, decrease of 10.4 per cent.; public service (not elsewhere classified), increase of 110.4 per cent.; professional service, decrease of 2.8 per cent.; domestic and personal service, decrease of 51.9 per cent.; clerical occupations, increase of 12.9 per cent.

## OCCUPATIONS OF CHILDREN IN THE U. S.

(U. S. Census Data.)

| Division and State. | Males 10 to 15 Yrs. of Age, 1920 | | Males 10 to 15 Yrs. of Age, 1910 | | Females 10 to 15 Yrs. of Age, 1920 | | Females 10 to 15 Yrs. of Age, 1910 | |
|---|---|---|---|---|---|---|---|---|
| | Total No. | No. in Gainful Occup. | Total No. | No. in Gainful Occup. | Total No. | No. in Gainful Occup. | Total No. | No. in Gainful Occup. |
| United States | 6,294,985 | 714,248 | 5,464,228 | 1,353,139 | 6,207,597 | 346,610 | 5,364,137 | 637,086 |
| NEW ENGLAND: | | | | | | | | |
| Maine | 41,486 | 1,853 | 38,826 | 3,710 | 41,343 | 732 | 38,454 | 1,716 |
| New Hampshire | 22,825 | 1,002 | 21,710 | 2,222 | 22,866 | 524 | 21,725 | 1,537 |
| Vermont | 19 638 | 935 | 19,107 | 1,967 | 18,941 | 342 | 18,541 | 598 |
| Massachusetts | 197,205 | 19,714 | 169,990 | 19,172 | 196,821 | 14,009 | 170,042 | 13,573 |
| Rhode Island | 31,346 | 4,476 | 28,055 | 4,350 | 32,393 | 4,093 | 28,299 | 3,726 |
| Connecticut | 71,722 | 6,488 | 57,034 | 6,675 | 71,545 | 5,071 | 56,825 | 4,693 |
| MIDDLE ATLANTIC: | | | | | | | | |
| New York | 532,343 | 29,382 | 466,895 | 39,357 | 527,292 | 20,464 | 467,191 | 25,737 |
| New Jersey | 170,747 | 14,196 | 136,309 | 14,948 | 170,438 | 11,828 | 135,993 | 10,844 |
| Pennsylvania | 498,750 | 33,453 | 424,564 | 64,007 | 498,166 | 22,218 | 422,043 | 32,888 |
| EAST NORTH CENTRAL: | | | | | | | | |
| Ohio | 300,942 | 15,230 | 255,713 | 31,906 | 295,799 | 2,889 | 252,063 | 10,940 |
| Indiana | 163,834 | 12,428 | 154,238 | 27,688 | 160,145 | 4,483 | 150,889 | 6.005 |
| Illinois | 351,552 | 23,870 | 311,761 | 41,912 | 347,758 | 13,063 | 309,401 | 14,598 |
| Michigan | 194,494 | 9,891 | 155,502 | 14,512 | 189,719 | 3,263 | 152,193 | 4,781 |
| Wisconsin | 155,746 | 10,982 | 148,401 | 16,985 | 152,722 | 4,702 | 145,206 | 6,913 |
| WEST NORTH CENTRAL: | | | | | | | | |
| Minnesota | 140,111 | 6.528 | 129,031 | 14,707 | 137,417 | 1,743 | 125,902 | 3,657 |
| Iowa | 136,380 | 7,481 | 134,077 | 20,777 | 133,837 | 1,640 | 131,631 | 3,608 |
| Missouri | 199,657 | 16,893 | 195,183 | 44,373 | 196,025 | 5,694 | 192,136 | 8,329 |
| North Dakota | 44,613 | 2,215 | 35,848 | 5,929 | 43,270 | 601 | 34,148 | 1,423 |
| South Dakota | 39,830 | 2,138 | 36,521 | 6,953 | 38,597 | 417 | 34,672 | 1,256 |
| Nebraska | 78,981 | 4,366 | 73,615 | 10,865 | 76,939 | 920 | 71,826 | 1,439 |
| Kansas | 106,417 | 6,224 | 101,656 | 16,997 | 105,289 | 1,046 | 99,138 | 1,733 |
| SOUTH ATLANTIC: | | | | | | | | |
| Delaware | 12,008 | 952 | 11,826 | 2,753 | 11,801 | 454 | 11,259 | 903 |
| Maryland | 82,847 | 8,255 | 77,358 | 16,336 | 81,699 | 4,045 | 76,730 | 7,831 |
| District of Columbia | 17,149 | 1,272 | 14,405 | 913 | 18,081 | 599 | 15,060 | 432 |
| Virginia | 157,364 | 19,931 | 142,317 | 47,204 | 154,551 | 5,562 | 138,920 | 14.675 |
| West Virginia | 96,362 | 5,979 | 79,343 | 20,548 | 94,937 | 1,452 | 75,658 | 3,254 |
| North Carolina | 188,538 | 40,945 | 159,276 | 91,649 | 184,946 | 21,217 | 155,495 | 52,983 |
| South Carolina | 130,337 | 37,411 | 114,019 | 66,382 | 129,867 | 26,109 | 112,093 | 50,370 |
| Georgia | 215,008 | 58,761 | 189,378 | 101,648 | 212,227 | 30,173 | 183,323 | 59,941 |
| Florida | 61,924 | 7,924 | 47,724 | 17,096 | 61,928 | 2,940 | 47,041 | 7,828 |
| EAST SOUTH CENTRAL: | | | | | | | | |
| Kentucky | 161,285 | 22,550 | 152,511 | 53,838 | 157,123 | 4,204 | 148,441 | 10,854 |
| Tennessee | 164,155 | 30,670 | 147,323 | 64,035 | 159,393 | 9,167 | 141,992 | 19,921 |
| Alabama | 175,571 | 53,844 | 152,170 | 94,126 | 173,966 | 30,553 | 146,795 | 60,586 |
| Mississippi | 139,770 | 44,711 | 131,833 | 83,256 | 136,012 | 25,643 | 127,525 | 55,274 |
| WEST SOUTH CENTRAL: | | | | | | | | |
| Arkansas | 130,853 | 32,092 | 107,875 | 60,109 | 128,740 | 16,048 | 105,917 | 32,341 |
| Louisiana | 128,369 | 21,928 | 114,766 | 38,830 | 129,683 | 10,346 | 114,171 | 20,902 |
| Oklahoma | 147,067 | 17,079 | 112,344 | 35,383 | 142,466 | 5,902 | 107,760 | 10,728 |
| Texas | 324,739 | 54,531 | 274,522 | 114,443 | 317,847 | 26,341 | 266,745 | 59,937 |
| MOUNTAIN: | | | | | | | | |
| Montana | 30,450 | 1,165 | 17,894 | 1,448 | 29,595 | 237 | 17,330 | 316 |
| Idaho | 27,823 | 1,421 | 19,526 | 2,424 | 26,818 | 187 | 18,249 | 274 |
| Wyoming | 10,509 | 513 | 6,511 | 755 | 9,878 | 95 | 6,243 | 111 |
| Colorado | 52,681 | 3,615 | 41,983 | 4,683 | 52,109 | 943 | 40,988 | 1,181 |
| New Mexico | 24,082 | 1,729 | 20,811 | 4,942 | 23,950 | 466 | 20,020 | 864 |
| Arizona | 19,318 | 1,810 | 11,166 | 1,297 | 18,960 | 901 | 10,369 | 376 |
| Utah | 30,564 | 2,126 | 23,897 | 2,811 | 30,111 | 235 | 23,406 | 420 |
| Nevada | 3,444 | 136 | 3,022 | 235 | 3,271 | 33 | 2,805 | 51 |
| PACIFIC: | | | | | | | | |
| Washington | 69,714 | 3,836 | 56,392 | 4,424 | 68,931 | 814 | 54,930 | 1,042 |
| Oregon | 41,134 | 2,088 | 33,959 | 2,970 | 40,366 | 374 | 32,800 | 535 |
| California | 153,301 | 7,229 | 106,001 | 8,589 | 151,019 | 1,828 | 103,754 | 2,662 |

Of the males in the U. S. 10 to 15 years of age 11.3 per cent. were gainfully occupied in 1920, as against 24.8 per cent. in 1910; 26.1 in 1900; 25.9 in 1890; and 24.4 in 1880., Of the females, 5.6 per cent. worked in 1920, as against 11.9 per cent. in 1910; 10.2 in 1900; 10.0 in 1890; and 9.0 in 1880.

Of the 1,060,858 persons 10 to 15 years old in 1920 earning wages, 647,309 were employed in agriculture, 7,191 in the extraction of minerals, 185,337 in manufacturing and mechanical industries, 18,912 in transportation, 63,368 in trade, 1,130 in public service, 3,465 in professional service, 54,006 in domestic and personal service, and 80,140 in clerical occupations.

Of the workers above enumerated, 527,176 were native white children of native parentage; 175,060 were native white children of foreign or mixed parentage; 38,692 were children born abroad; 317,231 were Negro children; 2,359 were Indians; 158 were Chinese; and 169 were Japanese.

Child workers in the large cities number as follows: New York, 18,341; Chicago, 10,461; Philadelphia, 5,996; Boston, 2,866; St. Louis, 4,074; Baltimore, 3,734; New Orleans, 2,862; Milwaukee, 2,540; Detroit, 1,900; San Francisco, 914. The highest percentage of child labor is in Fall River (19.4); New Bedford (18.6), and Atlanta (17.2). In New York City the percentage is 6.3; in Chicago, 8.0; in Philadelphia, 6.4.

## INDIAN POPULATION OF U. S., 1837-1922.

| Year | Number. | Year | Number. | Year | Number. | Year | Number. | Year | Number. | Year | Number. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1837 | 302,498 | 1877 | 276,540 | 1887 | 243,299 | 1896 | 248,354 | 1905 | 284,079 | 1914 | 331,250 |
| 1850 | 388,229 | 1878 | 276,595 | 1888 | 246,036 | 1897 | 248,813 | 1906 | 291,581 | 1915 | 333,010 |
| 1853 | 400,764 | 1879 | 278,628 | 1889 | 250,483 | 1898 | 262,965 | 1907 | 298,472 | 1916 | 335,753 |
| 1855 | 314,622 | 1880 | 322,534 | 1890 | 248,253 | 1899 | 267,905 | 1908 | 300,412 | 1917 | 335,993 |
| 1857 | 379,264 | 1881 | 328,258 | 1891 | 246,834 | 1900 | 270,544 | 1909 | 300,545 | 1918 | 336,243 |
| 1860 | 254,300 | 1882 | 326,039 | 1892 | 248,340 | 1901 | 269,388 | 1910 | 304,950 | 1919 | 333,702 |
| 1865 | 294,574 | 1883 | 331,972 | 1893 | 249,366 | 1902 | 270,238 | 1911 | 322,715 | 1920 | 336,337 |
| 1870 | 313,712 | 1884 | 330,776 | 1894 | 251,907 | 1903 | 263,233 | 1912 | 327,425 | 1921 | 340,838 |
| 1875 | 305,068 | 1885 | 344,064 | 1895 | 248,340 | 1904 | 274,206 | 1913 | 330,639 | 1922 | 340,917 |
| 1876 | 291,882 | 1886 | 334,735 | | | | | | | | |

## POPULATION OF THE UNITED STATES 1790-1920.

| STATE. | 1790. | 1800. | 1810. | 1820. | 1830. | 1840. | 1850. |
|---|---|---|---|---|---|---|---|
| Alabama | ..... | ..... | ..... | 127,901 | 309,527 | 500,756 | 771,623 |
| Arkansas | ..... | ..... | 1,062 | 14,273 | 30,388 | 97,574 | 209,897 |
| California | ..... | ..... | ..... | ..... | ..... | ..... | 92,597 |
| Connecticut | 237,946 | 251,002 | 261,942 | 275,248 | 297,675 | 309,978 | 370,792 |
| Delaware | 59,096 | 64,273 | 72,674 | 72,749 | 76,748 | 78,085 | 91,532 |
| District of Columbia | ..... | 14,093 | 24,023 | 33,039 | 39,834 | 43,712 | 51,687 |
| Florida | ..... | ..... | ..... | ..... | 34,730 | 54,477 | 87,445 |
| Georgia | 82,548 | 162,686 | 252,433 | 340,989 | 516,823 | 691,392 | 906,185 |
| Idaho | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Illinois | ..... | ..... | 12,282 | 55,211 | 157,445 | 476,189 | 851,470 |
| Indiana | ..... | 5,641 | 24,520 | 147,178 | 348,031 | 685,866 | 988,416 |
| Iowa | ..... | ..... | ..... | ..... | ..... | 43,112 | 192,214 |
| Kentucky | 73,677 | 220,955 | 406,511 | 564,317 | 687,917 | 779,828 | 982,405 |
| Louisiana | ..... | ..... | 76,556 | 153,407 | 215,739 | 352,411 | 517,762 |
| Maine | 96,540 | 151,719 | 228,705 | 298,335 | 399,455 | 501,793 | 583,169 |
| Maryland | 319,728 | 341,548 | 380,546 | 407,350 | 447,040 | 470,019 | 583,034 |
| Massachusetts | 378,787 | 422,845 | 472,040 | 523,287 | 610,408 | 737,699 | 994,514 |
| Michigan | ..... | ..... | 4,762 | 8,896 | 31,639 | 212,267 | 397,654 |
| Minnesota | ..... | ..... | ..... | ..... | ..... | ..... | 6,077 |
| Mississippi | ..... | 8,850 | 40,352 | 75,448 | 136,621 | 375,651 | 606,526 |
| Missouri | ..... | ..... | 19,783 | 66,586 | 140,455 | 383,702 | 682,044 |
| New Hampshire | 141,885 | 183,858 | 214,460 | 244,161 | 269,328 | 284,574 | 317,976 |
| New Jersey | 184,139 | 211,149 | 245,562 | 277,575 | 320,823 | 373,306 | 489,555 |
| New Mexico | ..... | ..... | ..... | ..... | ..... | ..... | 61,547 |
| New York | 340,120 | 589,051 | 959,049 | 1,372,812 | 1,918,608 | 2,428,921 | 3,097,394 |
| North Carolina | 393,751 | 478,103 | 555,500 | 638,829 | 737,987 | 753,419 | 869,039 |
| North Dakota | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Ohio | ..... | 45,365 | 230,760 | 581,434 | 937,903 | 1,519,467 | 1,980,329 |
| Oregon | ..... | ..... | ..... | ..... | ..... | ..... | 13,294 |
| Pennsylvania | 434,373 | 602,365 | 810,091 | 1,049,458 | 1,348,233 | 1,724,033 | 2,311,786 |
| Rhode Island | 68,825 | 69,122 | 76,931 | 83,059 | 97,199 | 108,830 | 147,545 |
| South Carolina | 249,073 | 345,591 | 415,115 | 502,741 | 581,185 | 594,398 | 668,507 |
| South Dakota | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Tennessee | 35,691 | 105,602 | 261,727 | 422,823 | 681,904 | 829,210 | 1,002,717 |
| Texas | ..... | ..... | ..... | ..... | ..... | ..... | 212,592 |
| Utah | ..... | ..... | ..... | ..... | ..... | ..... | 11,380 |
| Vermont | 85,425 | 154,465 | 217,895 | 235,981 | 280,652 | 291,948 | 314,120 |
| Virginia | 747,610 | 880,200 | 974,600 | 1,065,366 | 1,211,405 | 1,239,797 | 1,421,661 |
| Wisconsin | ..... | ..... | ..... | ..... | ..... | 30,945 | 305,391 |
| Total | 3,929,214 | 5,308,483 | 7,239,881 | 9,638,453 | 12,866,020 | 17,069,453 | 23,191,876 |

## POPULATION OF THE UNITED STATES, 1790-1920—CONTINUED.

| STATE. | 1860. | 1870. | 1880. | 1890. | 1900. | 1910. | 1920. |
|---|---|---|---|---|---|---|---|
| Alabama | 964,201 | 996,992 | 1,262,505 | 1,513,401 | 1,828,697 | 2,138,093 | 2,348,174 |
| Arizona | ..... | 9,658 | 40,440 | 88,248 | 122,931 | 204,354 | 334,162 |
| Arkansas | 435,450 | 484,471 | 802,525 | 1,128,211 | 1,311,564 | 1,574,449 | 1,752,204 |
| California | 379,994 | 560,247 | 864,694 | 1,213,398 | 1,485,953 | 2,377,549 | 3,426,861 |
| Colorado | 34,277 | 39,864 | 194,327 | 413,249 | 539,700 | 799,024 | 939,629 |
| Connecticut | 460,147 | 537,454 | 622,700 | 746,258 | 908,420 | 1,114,756 | 1,380,631 |
| Delaware | 112,216 | 125,015 | 146,608 | 168,493 | 184,735 | 202,322 | 223,003 |
| District of Columbia | 75,080 | 131,709 | 177,624 | 230,392 | 278,718 | 331,069 | 437,571 |
| Florida | 140,424 | 187,748 | 269,493 | 391,422 | 528,542 | 752,619 | 968,470 |
| Georgia | 1,057,286 | 1,184,109 | 1,542,180 | 1,837,353 | 2,216,331 | 2,609,121 | 2,895,832 |
| Idaho | ..... | 14,999 | 32,610 | 88,548 | 161,772 | 325,594 | 431,866 |
| Illinois | 1,711,951 | 2,539,891 | 3,077,871 | 3,826,352 | 4,821,550 | 5,638,591 | 6,485,280 |
| Indiana | 1,350,428 | 1,680,637 | 1,978,301 | 2,192,404 | 2,516,462 | 2,700,876 | 2,930,390 |
| Iowa | 674,913 | 1,194,020 | 1,624,615 | 1,912,297 | 2,234,858 | 2,224,771 | 2,404,021 |
| Kansas | 107,206 | 364,399 | 996,096 | 1,428,108 | 1,470,495 | 1,690,949 | 1,769,257 |
| Kentucky | 1,155,684 | 1,321,011 | 1,648,690 | 1,858,635 | 2,147,174 | 2,289,905 | 2,416,630 |
| Louisiana | 708,002 | 726,915 | 939,946 | 1,118,588 | 1,381,625 | 1,656,388 | 1,798,509 |
| Maine | 628,279 | 626,915 | 648,936 | 661,086 | 694,466 | 742,371 | 768,014 |
| Maryland | 687,049 | 780,894 | 934,943 | 1,042,390 | 1,188,044 | 1,295,346 | 1,449,661 |
| Massachusetts | 1,231,066 | 1,457,351 | 1,783,085 | 2,238,947 | 2,805,346 | 3,366,416 | 3,852,356 |
| Michigan | 749,113 | 1,184,059 | 1,636,937 | 2,093,890 | 2,420,982 | 2,810,173 | 3,668,412 |
| Minnesota | 172,023 | 439,706 | 780,773 | 1,310,283 | 1,751,394 | 2,075,708 | 2,387,125 |
| Mississippi | 791,305 | 827,922 | 1,131,597 | 1,289,600 | 1,551,270 | 1,797,114 | 1,790,618 |
| Missouri | 1,182,012 | 1,721,295 | 2,168,380 | 2,679,185 | 3,106,665 | 3,293,335 | 3,404,055 |
| Montana | ..... | 20,595 | 39,159 | 142,924 | 243,329 | 376,053 | 548,889 |
| Nebraska | 28,841 | 122,993 | 452,402 | 1,062,656 | 1,066,300 | 1,192,214 | 1,296,372 |
| Nevada | 6,857 | 42,491 | 62,266 | 47,355 | 42,335 | 81,875 | 77,407 |
| New Hampshire | 326,073 | 318,300 | 346,991 | 376,530 | 411,588 | 430,572 | 443,083 |
| New Jersey | 672,035 | 906,096 | 1,131,116 | 1,444,933 | 1,883,669 | 2,537,167 | 3,155,900 |
| New Mexico | 93,516 | 91,874 | 119,565 | 160,282 | 195,310 | 327,301 | 360,350 |
| New York | 3,880,735 | 4,382,759 | 5,082,871 | 6,003,174 | 7,268,894 | 9,113,614 | 10,385,227 |
| North Carolina | 992,622 | 1,071,361 | 1,399,750 | 1,617,949 | 1,893,810 | 2,206,287 | 2,559,123 |
| North Dakota | ..... | ..... | ..... | 190,983 | 319,146 | 577,056 | 646,872 |
| Ohio | 2,339,511 | 2,665,260 | 3,198,062 | 3,672,329 | 4,157,545 | 4,767,121 | 5,759,394 |
| Oklahoma | ..... | ..... | ..... | 258,657 | 790,391 | 1,657,155 | 2,028,283 |
| Oregon | 52,465 | 90,923 | 174,768 | 317,704 | 413,536 | 672,765 | 783,389 |
| Pennsylvania | 2,906,215 | 3,521,951 | 4,282,891 | 5,258,113 | 6,302,115 | 7,665,111 | 8,720,017 |
| Rhode Island | 174,620 | 217,353 | 276,531 | 345,506 | 428,556 | 542,610 | 604,397 |
| South Carolina | 703,708 | 705,606 | 995,577 | 1,151,149 | 1,340,316 | 1,515,400 | 1,683,724 |
| South Dakota | 4,837 | 14,181 | 135,177 | 348,600 | 401,570 | 583,888 | 636,547 |
| Tennessee | 1,109,801 | 1,258,520 | 1,542,359 | 1,767,518 | 2,020,616 | 2,184,789 | 2,337,885 |
| Texas | 604,215 | 818,579 | 1,591,749 | 2,235,527 | 3,048,710 | 3,896,542 | 4,663,228 |
| Utah | 40,273 | 86,786 | 143,963 | 210,779 | 276,749 | 373,351 | 449,396 |
| Vermont | 315,098 | 330,551 | 332,286 | 332,422 | 343,641 | 355,956 | 352,428 |
| Virginia | 1,596,318 | 1,225,163 | 1,512,565 | 1,655,980 | 1,854,184 | 2,061,612 | 2,309,187 |
| Washington | 11,594 | 23,955 | 75,116 | 357,232 | 518,103 | 1,141,990 | 1,356,621 |
| West Virginia | ..... | 442,014 | 618,457 | 762,794 | 958,800 | 1,221,119 | 1,463,701 |
| Wisconsin | 775,881 | 1,054,670 | 1,315,497 | 1,693,330 | 2,069,042 | 2,333,860 | 2,632,067 |
| Wyoming | ..... | 9,118 | 20,789 | 62,555 | 92,531 | 145,965 | 194,402 |
| Total | 31,443,321 | 38,558,371 | 50,155,783 | 62,947,714 | 75,994,575 | 91,972,266 | 105,710,620 |

## RANK OF THE STATES IN POPULATION, 1790-1920.

(Data by the U. S. Census Bureau.)

| STATE. | 1790. | 1800. | 1810. | 1820. | 1830. | 1840. | 1850. | 1860. | 1870. | 1880. | 1890. | 1900. | 1910. | 1920. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | ..... | ..... | ..... | 19 | 15 | 12 | 12 | 13 | 16 | 17 | 17 | 18 | 18 | 18 |
| Arizona | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 46 | 44 | 47 | 47 | 46 | 46 |
| Arkansas | ..... | ..... | 26 | 26 | 28 | 25 | 26 | 25 | 26 | 25 | 24 | 25 | 25 | 25 |
| California | ..... | ..... | ..... | ..... | ..... | ..... | 29 | 26 | 24 | 24 | 22 | 21 | 12 | 8 |
| Colorado | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 38 | 41 | 35 | 31 | 32 | 32 | 33 |
| Connecticut | 8 | 8 | 9 | 14 | 16 | 20 | 21 | 24 | 25 | 28 | 29 | 29 | 31 | 29 |
| Delaware | 16 | 17 | 19 | 22 | 24 | 26 | 30 | 32 | 35 | 38 | 43 | 45 | 47 | 47 |
| Dist. of Columbia | ..... | 19 | 22 | 25 | 25 | 28 | 33 | 35 | 34 | 36 | 40 | 41 | 43 | 42 |
| Florida | ..... | ..... | ..... | ..... | 26 | 27 | 31 | 31 | 33 | 34 | 32 | 33 | 33 | 32 |
| Georgia | 13 | 12 | 11 | 11 | 10 | 9 | 9 | 11 | 12 | 13 | 12 | 11 | 10 | 12 |
| Idaho | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 44 | 46 | 46 | 46 | 45 | 43 |
| Illinois | ..... | ..... | 24 | 24 | 20 | 14 | 11 | 4 | 4 | 4 | 3 | 3 | 3 | 3 |
| Indiana | ..... | 21 | 21 | 18 | 13 | 10 | 7 | 6 | 6 | 6 | 8 | 8 | 9 | 11 |
| Iowa | ..... | ..... | ..... | ..... | ..... | 29 | 27 | 20 | 11 | 10 | 10 | 10 | 15 | 16 |
| Kansas | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 33 | 29 | 20 | 19 | 22 | 22 | 24 |
| Kentucky | 14 | 9 | 7 | 6 | 6 | 6 | 8 | 9 | 8 | 8 | 11 | 12 | 14 | 15 |
| Louisiana | ..... | ..... | 18 | 17 | 19 | 19 | 18 | 17 | 21 | 22 | 25 | 23 | 24 | 22 |
| Maine | 11 | 14 | 14 | 12 | 12 | 13 | 16 | 22 | 23 | 27 | 30 | 31 | 34 | 35 |
| Maryland | 6 | 7 | 8 | 10 | 11 | 15 | 17 | 19 | 20 | 23 | 27 | 26 | 27 | 28 |
| Massachusetts | 4 | 5 | 5 | 7 | 8 | 8 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 6 |
| Michigan | ..... | ..... | 25 | 27 | 27 | 23 | 20 | 16 | 13 | 9 | 9 | 9 | 8 | 7 |
| Minnesota | ..... | ..... | ..... | ..... | ..... | ..... | 36 | 30 | 28 | 26 | 20 | 19 | 19 | 17 |
| Mississippi | ..... | 20 | 20 | 21 | 22 | 17 | 15 | 14 | 18 | 18 | 21 | 20 | 21 | 23 |
| Missouri | ..... | ..... | 23 | 23 | 21 | 16 | 13 | 8 | 5 | 5 | 5 | 5 | 7 | 9 |
| Montana | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 43 | 45 | 45 | 43 | 40 | 39 |
| Nebraska | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 39 | 36 | 30 | 26 | 27 | 29 | 31 |
| Nevada | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 41 | 40 | 43 | 49 | 49 | 49 | 49 |
| New Hampshire | 10 | 11 | 16 | 15 | 18 | 22 | 22 | 27 | 31 | 31 | 33 | 37 | 39 | 41 |
| New Jersey | 9 | 10 | 12 | 13 | 14 | 18 | 19 | 21 | 17 | 19 | 18 | 16 | 11 | 10 |
| New Mexico | ..... | ..... | ..... | ..... | ..... | ..... | 32 | 34 | 37 | 41 | 44 | 44 | 44 | 44 |
| New York | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| North Carolina | 3 | 4 | 4 | 4 | 5 | 7 | 10 | 12 | 14 | 15 | 16 | 15 | 16 | 14 |
| North Dakota | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 42 | 45 | 40 | 42 | 40 | 37 | 36 |
| Ohio | ..... | 18 | 13 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| Oklahoma | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 39 | 30 | 23 | 21 |
| Oregon | ..... | ..... | ..... | ..... | ..... | ..... | 34 | 36 | 38 | 37 | 38 | 36 | 35 | 34 |
| Pennsylvania | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Rhode Island | 15 | 16 | 17 | 20 | 23 | 24 | 28 | 29 | 32 | 33 | 36 | 35 | 38 | 38 |
| South Carolina | 7 | 6 | 6 | 8 | 9 | 11 | 14 | 18 | 22 | 21 | 23 | 24 | 26 | 26 |
| South Dakota | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 35 | 38 | 36 | 37 |
| Tennessee | 17 | 15 | 10 | 9 | 7 | 5 | 5 | 10 | 9 | 12 | 13 | 14 | 17 | 19 |
| Texas | ..... | ..... | ..... | ..... | ..... | ..... | 25 | 23 | 19 | 11 | 7 | 6 | 5 | 5 |
| Utah | ..... | ..... | ..... | ..... | ..... | ..... | 35 | 37 | 39 | 39 | 41 | 42 | 41 | 40 |
| Vermont | 12 | 13 | 15 | 16 | 17 | 21 | 23 | 28 | 30 | 32 | 37 | 39 | 42 | 45 |
| Virginia | 1 | 1 | 1 | 2 | 3 | 4 | 4 | 5 | 10 | 14 | 15 | 17 | 20 | 20 |
| Washington | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 40 | 42 | 42 | 34 | 34 | 30 | 30 |
| West Virginia | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 27 | 29 | 28 | 28 | 28 | 27 |
| Wisconsin | ..... | ..... | ..... | ..... | ..... | 30 | 24 | 15 | 15 | 16 | 14 | 13 | 13 | 13 |
| Wyoming | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 47 | 47 | 48 | 48 | 48 | 48 |
| GEOGRAPHIC DIVS. | | | | | | | | | | | | | | |
| New England | 2 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 |
| Middle Atlantic | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 |
| East No. Central | ..... | 5 | 5 | 5 | 5 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 2 |
| West No. Central | ..... | ..... | 7 | 7 | 7 | 7 | 7 | 6 | 5 | 4 | 3 | 4 | 4 | 4 |
| South Atlantic | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 3 |
| East So. Central | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 |
| West So. Central | ..... | ..... | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 6 | 6 | 5 | 5 |
| Mountain | ..... | ..... | ..... | ..... | ..... | ..... | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| Pacific | ..... | ..... | ..... | ..... | ..... | ..... | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |

### NOTES ON THE ABOVE TABLE.

For 1890 the rank of Arizona advances from 48 to 47 and that of Oklahoma advances from 46 to 39 when the population specially enumerated in Indian Territory and on Indian reservations is included.

North Dakota included in South Dakota in 1860, 1870, and 1880.

The ranking of Oklahoma in 1900 was 38 and Indian Territory 39. The present ranking for the same census is based on the combined population of Oklahoma and Indian Territory.

For 1890 the rank of South Dakota advances from 37 to 35 when the population specially enumerated on Indian reservations is included.

### U. S. POPULATION GROWTH, IN PERCENTAGES.

The growth of the country's population, exclusive of the outlying possessions, is shown in the following table:

| CENSUS YEAR. | Population. | Increase. | Per Cent. | CENSUS YEAR. | Population. | Increase. | Per Cent. |
|---|---|---|---|---|---|---|---|
| 1920 | 105,710,620 | 13,738,354 | 14.9 | 1850 | 23,191,876 | 6,122,423 | 35.9 |
| 1910 | 91,972,266 | 15,977,691 | 21.0 | 1840 | 17,069,453 | 4,203,433 | 32.7 |
| 1900 | 75,994,575 | 13,046,861 | 20.7 | 1830 | 12,866,020 | 3,227,567 | 33.5 |
| 1890 | 62,947,714 | 12,791,931 | 25.5 | 1820 | 9,638,453 | 2,398,572 | 33.1 |
| 1880 | 50,155,783 | 11,597,412 | 30.1 | 1810 | 7,239,881 | 1,931,398 | 36.4 |
| 1870 | 38,558,371 | 7,115,050 | 22.6 | 1800 | 5,308,483 | 1,379,269 | 35.1 |
| 1860 | 31,443,321 | 8,251,445 | 35.6 | 1790 | 3,929,214 | ..... | ..... |

## DENSITY OF POPULATION PER SQUARE MILE IN UNITED STATES.

(NOTE—In computing density of population for the United States, the areas and population of Alaska, Hawaii, and Porto Rico in 1900, 1910, and 1920, of Alaska and Hawaii in 1890, and of Indian Territory in 1860, 1870, and 1880, are not considered.)

| STATE. | 1800. | 1810. | 1820. | 1830. | 1840. | 1850. | 1860. | 1870. | 1880. | 1890. | 1900. | 1910. | 1920. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | ..... | ..... | 2.5 | 6.0 | 11.5 | 15.0 | 18.8 | 19.4 | 24.6 | 29.5 | 35.7 | 41.7 | 45.8 |
| Alaska | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .1 | .1 | .1 | .1 |
| Arizona | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .1 | .4 | .8 | 1.1 | 1.8 | 2.9 |
| Arkansas | ..... | ..... | .1 | .6 | 1.9 | 4.0 | 8.3 | 9.2 | 15.3 | 21.5 | 25.0 | 30.0 | 33.4 |
| California | ..... | ..... | ..... | ..... | ..... | .6 | 2.4 | 3.6 | 5.5 | 7.8 | 9.5 | 15.3 | 22.0 |
| Colorado | ..... | ..... | ..... | ..... | ..... | ..... | .3 | .4 | 1.9 | 4.0 | 5.2 | 7.7 | 9.1 |
| Connecticut | 52.1 | 54.3 | 57.1 | 61.8 | 64.3 | 76.9 | 95.5 | 111.5 | 129.2 | 154.8 | 188.5 | 231.3 | 286.4 |
| Delaware | 32.7 | 37.0 | 37.0 | 39.1 | 39.7 | 46.6 | 57.1 | 63.6 | 74.6 | 85.7 | 94.0 | 103.0 | 113.5 |
| Dist. Columbia | 156.6 | 266.9 | 367.1 | 442.6 | 485.7 | 891.2 | 1,294.5 | 2,270.7 | 3,062.5 | 3,972.3 | 4,645.3 | 5,517.8 | 7,292.9 |
| Florida | ..... | ..... | ..... | .6 | 1.0 | 1.6 | 2.6 | 3.4 | 4.9 | 7.1 | 9.6 | 13.7 | 17.7 |
| Georgia | 1.5 | 4.3 | 5.8 | 8.8 | 11.8 | 15.4 | 18.0 | 20.2 | 26.3 | 31.3 | 37.7 | 44.4 | 49.3 |
| Hawaii | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 14.0 | 23.9 | 29.8 | 39.7 |
| Idaho | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .2 | .4 | 1.1 | 1.9 | 3.9 | 5.2 |
| Illinois | ..... | .1 | 1.0 | 2.8 | 8.5 | 15.2 | 30.6 | 45.4 | 55.0 | 68.3 | 86.1 | 100.6 | 115.7 |
| Indiana | ..... | .6 | 4.1 | 9.6 | 19.1 | 27.5 | 37.6 | 46.8 | 55.1 | 61.1 | 70.1 | 74.9 | 81.3 |
| Iowa | ..... | ..... | ..... | ..... | .2 | 3.5 | 12.1 | 21.5 | 29.2 | 34.4 | 40.2 | 40.0 | 43.2 |
| Kansas | ..... | ..... | ..... | ..... | ..... | ..... | 1.3 | 4.5 | 12.2 | 17.5 | 18.0 | 20.7 | 21.6 |
| Kentucky | 5.5 | 10.1 | 14.0 | 17.1 | 19.4 | 24.4 | 28.8 | 32.9 | 41.0 | 46.3 | 53.4 | 57.0 | 60.1 |
| Louisiana | ..... | 2.2 | 3.4 | 4.8 | 7.8 | 11.4 | 15.6 | 16.0 | 20.7 | 24.6 | 30.4 | 36.5 | 39.6 |
| Maine | 5.1 | 7.7 | 10.0 | 13.4 | 16.8 | 19.5 | 21.0 | 21.0 | 21.7 | 22.1 | 23.2 | 24.8 | 25.7 |
| Maryland | 34.4 | 38.3 | 41.0 | 45.0 | 47.3 | 58.6 | 69.1 | 78.6 | 94.0 | 104.9 | 119.5 | 130.3 | 145.8 |
| Massachusetts | 52.6 | 58.7 | 65.1 | 75.9 | 91.7 | 123.7 | 153.1 | 181.3 | 221.8 | 278.5 | 349.0 | 418.8 | 479.2 |
| Michigan | ..... | .1 | ..... | .2 | 3.7 | 6.9 | 13.0 | 20.2 | 28.5 | 36.4 | 42.1 | 48.9 | 63.8 |
| Minnesota | ..... | ..... | ..... | ..... | ..... | ..... | 2.1 | 5.4 | 9.7 | 16.2 | 21.7 | 25.7 | 29.5 |
| Mississippi | .3 | .4 | 1.6 | 2.9 | 8.1 | 13.1 | 17.1 | 17.9 | 24.4 | 27.8 | 33.5 | 38.8 | 38.6 |
| Missouri | ..... | ..... | ..... | 2.1 | 5.6 | 9.9 | 17.2 | 25.0 | 31.6 | 39.0 | 45.2 | 47.9 | 49.5 |
| Montana | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .1 | .3 | 1.0 | 1.7 | 2.6 | 3.8 |
| Nebraska | ..... | ..... | ..... | ..... | ..... | ..... | .2 | 1.6 | 5.9 | 13.8 | 13.9 | 15.5 | 16.9 |
| Nevada | ..... | ..... | ..... | ..... | ..... | ..... | .1 | .4 | .6 | .4 | .4 | .7 | .7 |
| New Hampsh'e | 20.4 | 23.7 | 27.0 | 29.8 | 31.5 | 35.2 | 36.1 | 35.2 | 38.4 | 41.7 | 45.6 | 47.7 | 49.1 |
| New Jersey | 28.1 | 32.7 | 3C.9 | 42.7 | 49.7 | 65.2 | 89.4 | 120.6 | 150.5 | 192.3 | 250.7 | 337.7 | 420.0 |
| New Mexico | ..... | ..... | ..... | ..... | ..... | .3 | .4 | .7 | 1.0 | 1.3 | 1.6 | 2.7 | 2.9 |
| New York | 12.4 | 20.1 | 28.8 | 40.3 | 51.0 | 65.0 | 81.4 | 92.0 | 106.7 | 126.0 | 152.5 | 191.2 | 217.9 |
| North Carolina | 9.8 | 11.4 | 13.1 | 15.1 | 15.5 | 17.8 | 20.4 | 22.0 | 28.7 | 33.2 | 38.9 | 45.3 | 52.5 |
| North Dakota | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2.7 | 4.5 | 8.2 | 9.2 |
| Ohio | 1.1 | 5.7 | 14.5 | 23.3 | 37.3 | 48.6 | 57.4 | 65.4 | 78.5 | 90.1 | 102.1 | 117.0 | 141.4 |
| Oklahoma | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2.0 | 10.3 | 23.9 | 29.2 |
| Oregon | ..... | ..... | ..... | ..... | ..... | .5 | 1.0 | 1.8 | 3.3 | 4.3 | 7.0 | 8.2 | |
| Pennsylvania | 13.4 | 18.1 | 23.4 | 30.1 | 38.5 | 51.6 | 64.8 | 78.6 | 95.5 | 117.3 | 140.6 | 171.0 | 194.5 |
| Porto Rico | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 277.5 | 325.5 | 377.8 |
| Rhode Island | 64.8 | 72.1 | 77.8 | 91.1 | 102.0 | 138.3 | 163.7 | 203.7 | 259.2 | 323.8 | 401.6 | 508.5 | 566.4 |
| South Carolina | 11.3 | 13.6 | 16.5 | 19.J | 19.5 | 21.9 | 23.1 | 23.1 | 32.6 | 37.7 | 44.0 | 49.7 | 55.2 |
| South Dakota | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 4.5 | 5.2 | 7.6 | 8.3 |
| Tennessee | 2.5 | 6.3 | 10.1 | 16.4 | 19.9 | 24.1 | 26.6 | 30.2 | 37.0 | 42.4 | 48.5 | 52.4 | 56.1 |
| Texas | ..... | ..... | ..... | ..... | ..... | .8 | 2.3 | 3.1 | 6.1 | 8.5 | 11.6 | 14.8 | 17.8 |
| Utah | ..... | ..... | ..... | ..... | ..... | ..... | .3 | 1.1 | 1.8 | 2.6 | 3.4 | 4.5 | 5.5 |
| Vermont | 16.9 | 25.9 | 25.9 | 30.8 | 32.0 | 34.4 | 34.5 | 36.2 | 36.4 | 36.4 | 37.7 | 39.0 | 38.6 |
| Virginia | 13.7 | 15.2 | 16.6 | 18.9 | 19.3 | 22.1 | 24.8 | 30.4 | 37.6 | 41.1 | 46.1 | 51.2 | 57.4 |
| Washington | ..... | ..... | ..... | ..... | ..... | ..... | .1 | .4 | 1.1 | 5.3 | 7.8 | 17.1 | 20.3 |
| West Virginia | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 18.4 | 25.7 | 31.8 | 39.9 | 50.8 | 60.9 |
| Wisconsin | ..... | ..... | ..... | ..... | .4 | 5.5 | 14.0 | 19.1 | 23.8 | 30.6 | 37.4 | 42.2 | 47.6 |
| Wyoming | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .1 | .2 | .6 | .9 | 1.5 | 2.0 |
| United States | 6.1 | 4.3 | 5.5 | 7.3 | 9.7 | 7.9 | 10.6 | 13.0 | 16.9 | 21.2 | 25.6 | 30.9 | 35.5 |

Dakota Territory, 0.9 in 1880; 0.1 in 1870; 0.02 in 1860. Indian Territory, 12.7 in 1900; 5.9 in 1890.

*Density of Population in 1790*—Conn., 49.4; Del., 30.1; Ga., .6; Ky., 1.8; Me., 3.2; Md., 32.0; Mass., 47.1; N. H., 15.7; N. J., 24.5; N. Y., 7.1; N. C., 8.1; Pa., 9.7; R. Isl., 64.5; S. C., 8.2; Tenn., .8; Vt., 9.4; Va., 11.6—U. S., 4.5.

### POPULATION PER SQUARE MILE, FOR STATES IN ORDER OF RANK, 1920.

| STATE. | Pop. Per Sq.M | STATE. | Pop. Per Sq.M | STATE. | Pop. Per Sq.M | STATE. | Pop. Per Sq.M | STATE. | Pop. Per Sq.M | STATE. | Pop. Per Sq.M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R. I. | 566.4 | Ill. | 115.7 | S. C. | 55.2 | La. | 39.6 | Kan. | 21.6 | Ore. | 8.2 |
| Mass. | 479.2 | Del. | 113.5 | N. C. | 52.5 | Miss. | 38.6 | Wash. | 20.3 | Utah. | 5.5 |
| N. J. | 420.0 | Ind. | 81.3 | Mo. | 49.5 | Vt. | 38.6 | Tex. | 17.8 | Idaho. | 5.2 |
| Conn. | 286.4 | Mich. | 63.8 | Ga. | 49.3 | Ark. | 33.4 | Fla. | 17.7 | Mont. | 3.8 |
| N. Y. | 217.9 | W. Va. | 60.9 | N. H. | 49.1 | Minn. | 29.5 | Neb. | 16.9 | Ariz. | 2.9 |
| Pa. | 194.5 | Ky. | 60.1 | Wis. | 47.6 | Okla. | 29.2 | N. Dak. | 9.2 | N. Mex. | 2.9 |
| Md. | 145.8 | Va. | 57.4 | Ala. | 45.8 | Me. | 25.7 | Col. | 9.1 | Wyo. | 2.0 |
| Ohio. | 141.4 | Tenn. | 56.1 | Iowa. | 43.2 | Cal. | 22.0 | S. Dak. | 8.3 | Nev. | 0.7 |

The combined population (42,453,437) of the 10 States having more than 100 inhabitants per square mile and of the District of Columbia in 1920 constituted slightly more than two-fifths (40.2 per cent.) of the total population of the United States, while their combined land area (222,675 square miles) represented hardly more than one-fourteenth (7.5 per cent.) of the entire land area of the country.

The 11 States having fewer than 10 inhabitants per square mile are all west of the Mississippi River, 8 being in the Mountain Division (constituting its entire area), 2 in the West North Central Division, and 1 in the Pacific Division. The combined land area of these 11 States (1,101,667 square miles) forms almost three-eighths (37 per cent.) of the entire land area of the United States, while their combined population (5,402,909) represented only about one-twentieth (5.1 per cent.) of the total population of the country in 1920.

## POPULATION URBAN AND RURAL.

(U. S. Census Returns. Urban includes places of 2,500 or more inhabitants.)

| STATE. | Population, 1920. | | Population, 1910. | | Per Ct. Urban. | | Population, 1900. | |
|---|---|---|---|---|---|---|---|---|
| | Urban. | Rural. | Urban. | Rural. | 1920. | 1910. | Urban. | Rural. |
| United States | 54,304,603 | 51,406,017 | 42,166,120 | 49,806,146 | 51.4 | 45.8 | 30,797,185 | 45,197,390 |
| Alabama | 509,317 | 1,838,857 | 370,431 | 1,767,662 | 21.7 | 17.3 | 216,714 | 1,611,983 |
| Arizona | 117,527 | 216,635 | 63,260 | 141,094 | 35.2 | 31.0 | 19,495 | 103,436 |
| Arkansas | 290,497 | 1,461,707 | 202,081 | 1,371,768 | 16.6 | 12.9 | 111,733 | 1,109,831 |
| California | 2,331,729 | 1,095,132 | 1,469,739 | 907,310 | 68.0 | 61.8 | 777,699 | 707,354 |
| Colorado | 453,259 | 486,370 | 404,840 | 394,184 | 48.2 | 50.7 | 260,651 | 279,049 |
| Connecticut | 936,339 | 444,292 | 999,339 | 114,917 | 67.8 | 65.6 | 792,595 | 115,825 |
| Delaware | 120,767 | 102,236 | 97,085 | 105,237 | 54.2 | 48.0 | 85,717 | 99,018 |
| District of Columbia | 437,571 | ..... | 331,069 | ..... | 100.0 | 100.0 | 278,718 | ..... |
| Florida | 355,825 | 612,645 | 219,080 | 533,539 | 36.7 | 29.1 | 107,031 | 421,511 |
| Georgia | 727,859 | 2,167,973 | 538,650 | 2,070,471 | 25.1 | 20.6 | 346,382 | 1,869,949 |
| Idaho | 119,037 | 312,829 | 69,898 | 255,696 | 27.6 | 21.5 | 10,003 | 151,769 |
| Illinois | 4,403,153 | 2,082,127 | 3,476,929 | 2,161,662 | 67.9 | 61.7 | 2,616,368 | 2,205,182 |
| Indiana | 1,482,855 | 1,447,535 | 1,143,835 | 1,657,041 | 50.6 | 42.4 | 862,689 | 1,653,773 |
| Iowa | 875,495 | 1,528,526 | 680,054 | 1,544,717 | 36.4 | 30.6 | 572,385 | 1,659,467 |
| Kansas | 617,964 | 1,151,293 | 493,790 | 1,197,159 | 34.9 | 29.2 | 330,903 | 1,139,592 |
| Kentucky | 633,543 | 1,783,087 | 555,442 | 1,784,468 | 26.2 | 24.3 | 467,668 | 1,679,506 |
| Louisiana | 628,163 | 1,170,346 | 496,516 | 1,159,872 | 34.9 | 30.0 | 366,288 | 1,015,337 |
| Maine | 299,569 | 468,445 | 381,443 | 360,928 | 39.0 | 35.3 | 337,390 | 357,076 |
| Maryland | 869,422 | 580,239 | 658,192 | 637,154 | 60.0 | 50.8 | 591,205 | 596,838 |
| Massachusetts | 3,650,248 | 202,108 | 3,126,307 | 241,049 | 94.8 | 92.8 | 2,567,098 | 238,248 |
| Michigan | 2,241,560 | 1,426,832 | 1,327,044 | 1,483,129 | 61.1 | 47.2 | 932,323 | 1,468,689 |
| Minnesota | 1,091,493 | 1,335,532 | 850,294 | 1,225,414 | 44.1 | 41.0 | 598,100 | 1,153,294 |
| Mississippi | 240,121 | 1,550,497 | 207,311 | 1,589,803 | 13.4 | 11.5 | 120,035 | 1,431,255 |
| Missouri | 1,586,903 | 1,817,152 | 1,388,817 | 1,894,518 | 46.6 | 42.5 | 1,128,104 | 1,458,561 |
| Montana | 172,011 | 376,878 | 133,420 | 242,633 | 31.3 | 35.5 | 84,554 | 158,775 |
| Nebraska | 405,306 | 891,056 | 310,852 | 881,362 | 31.3 | 26.1 | 252,702 | 813,508 |
| Nevada | 15,254 | 62,153 | 13,367 | 68,508 | 19.7 | 16.3 | 7,195 | 35,140 |
| New Hampshire | 279,761 | 163,322 | 255,099 | 175,478 | 63.1 | 59.2 | 226,269 | 185,319 |
| New Jersey | 2,474,936 | 680,964 | 1,907,210 | 629,957 | 78.4 | 75.2 | 1,329,162 | 554,507 |
| New Mexico | 64,960 | 295,390 | 46,571 | 280,730 | 18.0 | 14.2 | 27,381 | 167,929 |
| New York | 8,589,844 | 1,795,383 | 7,185,494 | 1,928,120 | 82.7 | 78.8 | 5,298,111 | 1,970,783 |
| North Carolina | 490,370 | 2,068,753 | 318,474 | 1,887,813 | 19.2 | 14.4 | 186,790 | 1,707,020 |
| North Dakota | 88,239 | 554,633 | 63,236 | 513,820 | 13.6 | 11.0 | 23,413 | 295,733 |
| Ohio | 3,677,136 | 2,082,258 | 2,665,143 | 2,101,978 | 63.8 | 55.9 | 1,998,382 | 2,150,163 |
| Oklahoma | 539,480 | 1,488,803 | 320,155 | 1,337,000 | 26.6 | 19.3 | 88,417 | 731,974 |
| Oregon | 391,019 | 392,370 | 307,000 | 365,705 | 49.9 | 45.6 | 133,180 | 280,356 |
| Pennsylvania | 5,007,315 | 3,112,202 | 4,630,669 | 3,034,442 | 64.3 | 60.4 | 3,448,610 | 2,853,505 |
| Rhode Island | 589,180 | 15,217 | 524,054 | 17,956 | 97.5 | 96.7 | 407,647 | 20,909 |
| South Carolina | 293,987 | 1,389,737 | 224,832 | 1,290,568 | 17.5 | 14.8 | 171,256 | 1,169,060 |
| South Dakota | 101,872 | 534,675 | 76,673 | 507,215 | 16.0 | 13.1 | 40,938 | 360,634 |
| Tennessee | 611,226 | 1,726,659 | 441,045 | 1,743,744 | 26.1 | 20.2 | 326,639 | 1,693,977 |
| Texas | 1,512,689 | 3,150,539 | 938,104 | 2,958,438 | 32.4 | 24.1 | 520,759 | 2,527,951 |
| Utah | 315,584 | 233,812 | 172,934 | 200,417 | 48.0 | 46.3 | 105,427 | 171,322 |
| Vermont | 109,976 | 242,452 | 168,943 | 187,013 | 31.2 | 27.8 | 139,180 | 204,461 |
| Virginia | 673,984 | 1,635,203 | 476,529 | 1,585,083 | 29.2 | 23.1 | 340,067 | 1,514,117 |
| Washington | 748,735 | 607,886 | 605,530 | 536,460 | 55.2 | 53.0 | 241,477 | 306,626 |
| West Virginia | 369,007 | 1,094,694 | 228,242 | 992,877 | 25.2 | 18.7 | 125,465 | 833,335 |
| Wisconsin | 1,244,568 | 1,387,499 | 1,004,320 | 1,329,540 | 47.3 | 43.0 | 790,213 | 1,278,829 |
| Wyoming | 57,348 | 137,054 | 43,221 | 102,744 | 29.5 | 29.6 | 26,657 | 65,874 |

## DISTRIBUTION OF POPULATION IN CITIES AND IN RURAL TERRITORY.

| CLASS OF PLACES. | 1920. | | 1910. | | 1900. | | 1890. | |
|---|---|---|---|---|---|---|---|---|
| | No. Places. | Populat'n. | No. Places. | Populat'n. | No. Places. | Populat'n. | No. Places. | Populat'n. |
| Total pop. of the U. S. | .... | 105,710,620 | ..... | 91,972,266 | ..... | 75,994,575 | ..... | 62,947,714 |
| Urban territory | 2,787 | 54,304,603 | 2,313 | 42,166,120 | 1,801 | 30,380,433 | 1,417 | 22,298,359 |
| Places of 1,000,000 or more | 3 | 10,145,532 | 3 | 8,501,174 | 3 | 6,429,474 | 3 | 3,662,115 |
| Places of 500,000-1,000,000 | 9 | 6,223,769 | 5 | 3,010,667 | 3 | 1,645,087 | 1 | 806,343 |
| Places of 250,000 to 500,000 | 13 | 4,540,838 | 11 | 3,949,838 | 9 | 2,861,296 | 7 | 2,447,608 |
| Places of 100,000 to 250,000 | 43 | 6,519,187 | 31 | 4,840,458 | 23 | 3,272,490 | 17 | 2,781,894 |
| Places of 50,000 to 100,000 | 76 | 5,265,747 | 59 | 4,178,915 | 40 | 2,709,338 | 30 | 2,022,822 |
| Places of 25,000 to 50,000 | 143 | 5,075,041 | 119 | 4,026,045 | 82 | 2,800,627 | 66 | 2,268,786 |
| Places of 10,000 to 25,000 | 459 | 6,942,742 | 367 | 5,524,434 | 280 | 4,338,250 | 228 | 3,429,247 |
| Places of 5,000 to 10,000 | 721 | 4,997,794 | 612 | 4,254,856 | 468 | 3,220,766 | 339 | 2,372,717 |
| Places of 2,500 to 5,000 | 1,320 | 4,593,953 | 1,106 | 3,879,732 | 893 | 3,103,105 | 726 | 2,506,827 |
| Rural territory | ..... | 51,406,017 | ..... | 49,806,146 | ..... | 45,614,142 | ..... | 40,649,355 |
| Inc. places less than 2,500 | 12,905 | 8,959,241 | 11,532 | 8,169,149 | 8,930 | 6,301,533 | 6,490 | 4,757,974 |
| Other rural territory | ..... | 42,436,776 | ..... | 41,636,997 | ..... | 39,312,609 | ..... | 35,891,381 |

The total number of places of certain classes for the United States as a whole is less than the sum of the numbers shown for the individual States of the country, for the reason that each of three cities lies in two adjoining States, namely, Bristol (Va. and Tenn.), Texarkana (Ark. and Tex.), and Union City (Ind. and Ohio), and is counted in each State. Moreover, one of these cities, Bristol, lies in two geographic divisions (South Atlantic and East South Central), and is counted in both. Each of these cities consists of two incorporated municipalities, but each is, from the statistical standpoint, one city and should be classed according to its total population. In each case that part of the population living in each State, whatever its number, is credited to the group of cities to which, according to its total population, the city belongs. Classed in this manner, Bristol fell in 1920 and 1910 in the class of cities having 10,000 to 25,000 inhabitants, and in 1900 and 1890 in the 5,000-10,000 class; Texarkana fell, in 1920, 1910, and 1900, in the 10,000-25,000 class, and in 1890 in the 5,000-10,000 class; and Union City fell at each census from 1890 to 1920 in the 2,500-5,000 class.

The number of incorporated places cannot be exactly determined from the returns of the 1890 census, at which incorporated places were not distinguished from unincorporated ones, and very small places, whether incorporated or not, were not enumerated separately. It has been assumed that those places were incorporated in 1890 which were returned separately in that year and were returned in 1900 as incorporated.

The item (1920) "Incorporated places of less than 2,500" includes 48 places not returned separately.

## U. S. POPULATION BY COLOR AND RACE, 1920.

| DIVISION AND STATE. | WHITE. | | NEGRO. | | INDIAN. | | CHINESE. | | JAPANESE. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1920. | 1910. | 1920. | 1910. | 1920. | 1910. | 1920. | 1910. |
| United States.... | 94,820,915 | 81,731,957 | 10,463,131 | 9,827,763 | 244,437 | 265,683 | 61,639 | 71,531 | 111,010 | 72,157 |
| GEOGRAPHIC DIV. | | | | | | | | | | |
| New England.... | 7,316,079 | 6,480,514 | 79,051 | 66,306 | 1,715 | 2,076 | 3,602 | 3,499 | 347 | 272 |
| Middle Atlantic... | 21,641,840 | 18,880,452 | 600,183 | 417,870 | 5,940 | 7,717 | 8,812 | 8,189 | 3,266 | 1,643 |
| East No. Central. | 20,938,862 | 17,927,622 | 514,554 | 300,836 | 15,695 | 18,255 | 5,043 | 3,415 | 927 | 482 |
| West No. Central. | 12,225,387 | 11,351,621 | 278,521 | 242,662 | 37,263 | 41,406 | 1,678 | 1,195 | 1,215 | 1,000 |
| South Atlantic... | 9,648,940 | 8,071,603 | 4,325,120 | 4,112,488 | 13,673 | 9,054 | 1,824 | 1,582 | 360 | 156 |
| East So. Central.. | 6,367,547 | 5,754,326 | 2,523,532 | 2,652,513 | 1,623 | 2,612 | 542 | 414 | 35 | 26 |
| West So. Central.. | 8,115,727 | 6,721,491 | 2,063,579 | 1,984,426 | 60,618 | 76,767 | 1,534 | 1,303 | 578 | 428 |
| Mountain..... | 3,212,899 | 2,520,455 | 30,801 | 21,467 | 76,899 | 75,338 | 4,339 | 5,614 | 10,792 | 10,447 |
| Pacific..... | 5,353,634 | 4,023,873 | 47,790 | 29,195 | 31,011 | 32,458 | 34,265 | 46,320 | 93,490 | 57,703 |
| NEW ENGLAND. | | | | | | | | | | |
| Maine..... | 765,695 | 739,995 | 1,310 | 1,363 | 839 | 892 | 161 | 108 | 7 | 13 |
| New Hampshire. | 442,331 | 429,906 | 621 | 564 | 28 | 34 | 95 | 67 | 8 | 1 |
| Vermont..... | 351,817 | 354,298 | 572 | 1,621 | 24 | 26 | 11 | 8 | 4 | 3 |
| Massachusetts.... | 3,803,524 | 3,324,926 | 45,466 | 38,055 | 555 | 688 | 2,544 | 2,582 | 191 | 151 |
| Rhode Island.... | 593,980 | 532,492 | 10,036 | 9,529 | 110 | 284 | 225 | 272 | 35 | 33 |
| Connecticut..... | 1,358,732 | 1,098,897 | 21,046 | 15,174 | 159 | 152 | 566 | 462 | 102 | 71 |
| MIDDLE ATLANTIC. | | | | | | | | | | |
| New York..... | 10,172,027 | 8,966,845 | 198,483 | 134,191 | 5,503 | 6,046 | 5,793 | 5,266 | 2,686 | 1,247 |
| New Jersey..... | 3,037,087 | 2,445,894 | 117,132 | 89,760 | 100 | 168 | 1,190 | 1,139 | 325 | 206 |
| Pennsylvania..... | 8,432,726 | 7,467,713 | 284,568 | 193,919 | 337 | 1,503 | 1,829 | 1,784 | 255 | 190 |
| EAST NO. CENTRAL. | | | | | | | | | | |
| Ohio..... | 5,571,893 | 4,654,897 | 186,187 | 111,452 | 151 | 127 | 941 | 569 | 130 | 76 |
| Indiana..... | 2,849,071 | 2,639,961 | 80,810 | 60,320 | 125 | 279 | 283 | 276 | 81 | 38 |
| Illinois..... | 6,299,333 | 5,526,962 | 182,274 | 109,049 | 194 | 188 | 2,776 | 2,103 | 472 | 285 |
| Michigan..... | 3,601,627 | 2,785,247 | 60,082 | 17,115 | 5,614 | 7,519 | 792 | 241 | 184 | 49 |
| Wisconsin..... | 2,616,938 | 2,320,555 | 5,201 | 2,900 | 9,611 | 10,142 | 251 | 226 | 60 | 34 |
| WEST NO. CENTRAL | | | | | | | | | | |
| Minnesota..... | 2,368,936 | 2,059,227 | 8,809 | 7,084 | 8,761 | 9,053 | 508 | 275 | 85 | 67 |
| Iowa..... | 2,384,181 | 2,209,191 | 19,005 | 14,973 | 529 | 471 | 235 | 97 | 29 | 36 |
| Missouri..... | 3,225,044 | 3,134,932 | 178,241 | 157,452 | 171 | 313 | 412 | 535 | 135 | 99 |
| North Dakota... | 639,954 | 569,855 | 467 | 617 | 6,254 | 6,486 | 124 | 39 | 72 | 59 |
| South Dakota... | 619,147 | 563,771 | 832 | 817 | 16,384 | 19,137 | 142 | 121 | 38 | 42 |
| Nebraska..... | 1,279,219 | 1,180,293 | 13,242 | 7,689 | 2,888 | 3,502 | 189 | 112 | 804 | 590 |
| Kansas..... | 1,708,906 | 1,634,352 | 57,925 | 54,030 | 2,276 | 2,444 | 68 | 16 | 52 | 107 |
| SOUTH ATLANTIC. | | | | | | | | | | |
| Delaware..... | 192,615 | 171,102 | 30,335 | 31,181 | 2 | 5 | 43 | 30 | 8 | 4 |
| Maryland..... | 1,204,737 | 1,062,639 | 244,479 | 232,250 | 32 | 55 | 371 | 378 | 29 | 24 |
| Dist. of Columbia. | 326,860 | 236,128 | 109,966 | 94,446 | 37 | 68 | 461 | 369 | 103 | 47 |
| Virginia..... | 1,617,909 | 1,389,809 | 690,017 | 671,096 | 824 | 539 | 278 | 154 | 56 | 14 |
| West Virginia... | 1,377,235 | 1,156,817 | 86,345 | 64,173 | 7 | 36 | 98 | 90 | 10 | 3 |
| North Carolina... | 1,783,779 | 1,500,511 | 763,407 | 697,843 | 11,824 | 7,851 | 88 | 80 | 24 | 2 |
| South Carolina... | 818,538 | 679,161 | 864,719 | 835,843 | 304 | 331 | 93 | 57 | 15 | 8 |
| Georgia..... | 1,689,114 | 1,431,802 | 1,206,365 | 1,176,987 | 125 | 95 | 211 | 233 | 9 | 4 |
| Florida..... | 638,153 | 443,634 | 329,487 | 308,669 | 518 | 74 | 181 | 191 | 106 | 50 |
| EAST SO. CENTRAL. | | | | | | | | | | |
| Kentucky..... | 2,180,560 | 2,027,951 | 235,938 | 261,656 | 57 | 234 | 62 | 52 | 9 | 12 |
| Tennessee..... | 1,885,993 | 1,711,432 | 451,758 | 473,088 | 56 | 216 | 57 | 43 | 8 | 8 |
| Alabama..... | 1,447,032 | 1,228,832 | 900,652 | 908,282 | 405 | 909 | 59 | 62 | 18 | 4 |
| Mississippi..... | 853,962 | 786,111 | 935,184 | 1,009,487 | 1,105 | 1,253 | 364 | 257 | ..... | 2 |
| WEST SO. CENTRAL. | | | | | | | | | | |
| Arkansas..... | 1,279,757 | 1,131,026 | 472,220 | 442,891 | 106 | 460 | 113 | 62 | 5 | 9 |
| Louisiana..... | 1,096,611 | 941,086 | 700,257 | 713,874 | 1,066 | 780 | 387 | 507 | 57 | 31 |
| Oklahoma..... | 1,821,194 | 1,444,531 | 149,408 | 137,612 | 57,337 | 74,825 | 261 | 139 | 67 | 48 |
| Texas..... | 3,918,165 | 3,204,848 | 741,694 | 690,049 | 2,109 | 702 | 773 | 595 | 449 | 340 |
| MOUNTAIN. | | | | | | | | | | |
| Montana..... | 534,260 | 360,580 | 1,658 | 1,834 | 10,956 | 10,745 | 872 | 1,285 | 1,074 | 1,585 |
| Idaho..... | 425,668 | 319,221 | 920 | 651 | 3,098 | 3,488 | 585 | 859 | 1,569 | 1,363 |
| Wyoming..... | 190,146 | 140,318 | 1,375 | 2,235 | 1,343 | 1,486 | 252 | 246 | 1,194 | 1,596 |
| Colorado..... | 924,103 | 783,415 | 11,318 | 11,453 | 1,383 | 1,482 | 291 | 373 | 2,464 | 2,300 |
| New Mexico..... | 334,673 | 304,594 | 5,733 | 1,628 | 19,512 | 20,573 | 171 | 248 | 251 | 258 |
| Arizona..... | 291,449 | 171,468 | 8,005 | 2,009 | 32,989 | 29,201 | 1,137 | 1,305 | 550 | 371 |
| Utah..... | 441,901 | 366,583 | 1,446 | 1,144 | 2,711 | 3,123 | 342 | 371 | 2,936 | 2,110 |
| Nevada..... | 70,699 | 74,276 | 346 | 513 | 4,907 | 5,240 | 689 | 927 | 754 | 864 |
| PACIFIC. | | | | | | | | | | |
| Washington.... | 1,319,777 | 1,109,111 | 6,883 | 6,058 | 9,061 | 10,997 | 2,363 | 2,709 | 17,387 | 12,929 |
| Oregon..... | 769,146 | 655,090 | 2,144 | 1,492 | 4,590 | 5,090 | 3,090 | 7,363 | 4,151 | 3,418 |
| California..... | 3,264,711 | 2,259,672 | 38,763 | 21,645 | 17,360 | 16,371 | 28,812 | 36,248 | 71,952 | 41,356 |

Not included in the above are (1910 figures in parentheses): Filipinos, 5,603 (160); Hindus, 2,507 (2,545); Koreans, 1,224 (462); Siamese, Hawaiians, Malays, Maoris, and Samoans, 154 (8)—Total, 9,488.

## MALES AND FEMALES, 21 YEARS OF AGE AND OVER, 1920.

| STATE. | Males. | Females. | STATE. | Males. | Females. | STATE. | Males. | Females. |
|---|---|---|---|---|---|---|---|---|
| Ala..... | 573,892 | 569,503 | Me..... | 241,778 | 233,413 | Okla..... | 550,172 | 471,416 |
| Ariz..... | 109,361 | 78,568 | Md..... | 433,857 | 428,534 | Ore..... | 270,953 | 224,015 |
| Ark..... | 452,177 | 415,115 | Mass..... | 1,172,359 | 1,239,148 | Pa..... | 2,586,323 | 2,452,768 |
| Cal..... | 1,250,880 | 1,067,150 | Mich..... | 1,192,158 | 1,023,278 | R. I..... | 179,720 | 188,917 |
| Col..... | 303,782 | 260,747 | Minn..... | 738,332 | 642,502 | S. C..... | 389,199 | 390,792 |
| Conn..... | 424,216 | 413,858 | Miss..... | 441,331 | 434,775 | S. Dak..... | 188,882 | 155,964 |
| Del..... | 70,580 | 65,941 | Mo..... | 1,038,472 | 1,000,342 | Tenn..... | 609,547 | 605,400 |
| D. C..... | 139,800 | 165,455 | Mont..... | 184,699 | 135,863 | Tex..... | 1,284,412 | 1,146,303 |
| Fla..... | 280,600 | 256,014 | Neb..... | 390,287 | 348,023 | Utah..... | 120,875 | 107,807 |
| Ga..... | 711,760 | 709,846 | Nev..... | 33,313 | 18,905 | Vt..... | 110,378 | 106,664 |
| Idaho..... | 132,959 | 101,117 | N. H..... | 141,204 | 139,822 | Va..... | 613,653 | 593,421 |
| Ill..... | 2,028,852 | 1,915,345 | N. J..... | 960,837 | 937,047 | Wash..... | 482,137 | 374,942 |
| Ind..... | 909,203 | 870,617 | N. Mex..... | 102,522 | 82,664 | W. Va..... | 403,572 | 348,772 |
| Iowa..... | 737,829 | 690,853 | N. Y..... | 3,255,503 | 3,259,178 | Wis..... | 800,258 | 727,403 |
| Kan..... | 534,187 | 489,957 | N. C..... | 603,683 | 607,044 | Wyo..... | 69,857 | 45,882 |
| Ky..... | 657,883 | 631,613 | N. Dak..... | 178,148 | 144,770 | | | |
| La..... | 469,669 | 454,515 | Ohio..... | 1,847,319 | 1,711,162 | U. S. total.. | 31,403,370 | 29,483,150 |

## U. S. POPULATION, MALE AND FEMALE.

(U. S. Census Returns, Jan. 1, 1920.)

| Divisions and States. | Total Population. | | Native Whites. | | Foreign-born Whites. | | Negroes. | |
|---|---|---|---|---|---|---|---|---|
| | Males. | Females. | Males. | Females. | Males. | Females. | Males. | Females |
| United States | 53,900,431 | 51,810,189 | 40,902,333 | 40,205,828 | 7,528,322 | 6,184,432 | 5,209,436 | 5,253,695 |
| GEOGRAPHIC DIVISIONS: | | | | | | | | |
| New England | 3,672,591 | 3,728,318 | 2,682,175 | 2,763,250 | 945,736 | 924,918 | 40,155 | 38,896 |
| Middle Atlantic | 11,206,445 | 11,054,699 | 8,272,922 | 8,456,343 | 2,617,566 | 2,295,009 | 301,147 | 299,036 |
| East North Central | 11,035,047 | 10,440,502 | 8,938,715 | 8,776,868 | 1,809,334 | 1,413,945 | 273,026 | 241,528 |
| West North Central | 6,459,067 | 6,085,182 | 5,514,722 | 5,338,704 | 779,022 | 562,939 | 143,762 | 134,759 |
| South Atlantic | 7,035,843 | 6,954,420 | 4,708,147 | 4,624,873 | 185,143 | 130,777 | 2,133,377 | 2,191,743 |
| East South Central | 4,471,690 | 4,421,617 | 3,184,419 | 3,111,189 | 46,093 | 29,846 | 1,243,795 | 1,279,737 |
| West South Central | 5,265,829 | 4,976,395 | 3,943,100 | 3,713,294 | 260,777 | 198,556 | 1,029,457 | 1,034,122 |
| Mountain | 1,789,299 | 1,543,802 | 1,443,336 | 1,313,338 | 271,373 | 181,852 | 19,726 | 11,075 |
| Pacific | 2,964,626 | 2,602,245 | 2,211,797 | 2,107,969 | 617,278 | 416,590 | 24,991 | 22,799 |
| NEW ENGLAND: | | | | | | | | |
| Maine | 388,752 | 379,262 | 331,648 | 326,698 | 55,807 | 51,542 | 716 | 594 |
| New Hampshire | 222,112 | 220,971 | 174,823 | 176,275 | 46,844 | 44,389 | 333 | 288 |
| Vermont | 178,854 | 173,574 | 154,793 | 152,498 | 23,711 | 20,815 | 320 | 252 |
| Massachusetts | 1,890,014 | 1,962,342 | 1,330,998 | 1,394,992 | 533,319 | 544,215 | 22,912 | 22,554 |
| Rhode Island | 297,524 | 306,873 | 205,967 | 214,514 | 86,164 | 87,335 | 5,096 | 4,940 |
| Connecticut | 695,335 | 685,296 | 483,946 | 498,273 | 199,891 | 176,622 | 10,778 | 10,268 |
| MIDDLE ATLANTIC: | | | | | | | | |
| New York | 5,187,350 | 5,197,877 | 3,638,435 | 3,747,480 | 1,442,575 | 1,343,537 | 95,418 | 103,065 |
| New Jersey | 1,590,075 | 1,565,825 | 1,139,491 | 1,158,983 | 391,655 | 346,958 | 57,432 | 59,700 |
| Pennsylvania | 4,429,020 | 4,290,997 | 3,494,996 | 3,549,880 | 783,336 | 604,514 | 148,297 | 136,271 |
| EAST NORTH CENTRAL: | | | | | | | | |
| Ohio | 2,955,980 | 2,803,414 | 2,463,320 | 2,429,876 | 391,344 | 287,353 | 100,160 | 86,027 |
| Indiana | 1,489,074 | 1,441,316 | 1,358,645 | 1,339,558 | 88,180 | 62,688 | 41,817 | 38,993 |
| Illinois | 3,304,833 | 3,180,467 | 2,260,509 | 2,241,873 | 657,230 | 549,687 | 93,835 | 88,439 |
| Michigan | 1,928,436 | 1,739,976 | 1,476,459 | 1,398,533 | 413,206 | 312,899 | 34,249 | 25,833 |
| Wisconsin | 1,356,718 | 1,275,349 | 1,089,782 | 1,067,028 | 258,740 | 201,388 | 2,965 | 2,236 |
| WEST NORTH CENTRAL: | | | | | | | | |
| Minnesota | 1,245,537 | 1,141,588 | 957,140 | 925,632 | 278,588 | 207,576 | 4,851 | 3,958 |
| Iowa | 1,229,392 | 1,174,629 | 1,091,646 | 1,066,888 | 127,065 | 98,582 | 10,121 | 8,884 |
| Missouri | 1,723,319 | 1,680,736 | 1,528,279 | 1,510,739 | 103,418 | 82,608 | 90,991 | 87,250 |
| North Dakota | 341,673 | 305,199 | 262,645 | 245,806 | 75,386 | 56,117 | 276 | 191 |
| South Dakota | 337,120 | 299,427 | 280,587 | 256,169 | 47,610 | 34,781 | 475 | 357 |
| Nebraska | 672,805 | 623,567 | 578,953 | 550,614 | 84,277 | 65,375 | 7,309 | 5,933 |
| Kansas | 909,221 | 860,036 | 815,472 | 782,856 | 62,678 | 47,900 | 29,739 | 28,186 |
| SOUTH ATLANTIC: | | | | | | | | |
| Delaware | 113,755 | 109,248 | 86,680 | 86,125 | 11,369 | 8,441 | 15,655 | 14,680 |
| Maryland | 729,455 | 720,206 | 550,973 | 551,587 | 54,628 | 47,549 | 123,453 | 121,026 |
| District of Columbia | 203,543 | 234,028 | 136,889 | 161,423 | 15,142 | 13,406 | 50,855 | 59,111 |
| Virginia | 1,168,492 | 1,140,695 | 806,082 | 781,042 | 19,051 | 11,734 | 42,536 | 347,481 |
| West Virginia | 763,100 | 709,601 | 673,959 | 641,370 | 41,910 | 19,996 | 47,129 | 39,216 |
| North Carolina | 1,279,062 | 1,280,061 | 894,690 | 881,990 | 4,341 | 2,758 | 373,965 | 389,442 |
| South Carolina | 838,293 | 845,431 | 411,728 | 450,409 | 4,095 | 2,306 | 422,185 | 442,534 |
| Georgia | 1,444,823 | 1,451,009 | 844,105 | 828,823 | 10,004 | 6,182 | 590,443 | 615,922 |
| Florida | 495,320 | 473,150 | 303,041 | 292,104 | 24,603 | 18,405 | 167,156 | 162,331 |
| EAST SOUTH CENTRAL: | | | | | | | | |
| Kentucky | 1,227,494 | 1,189,136 | 1,091,374 | 1,058,406 | 17,479 | 13,301 | 118,548 | 117,390 |
| Tennessee | 1,173,967 | 1,163,918 | 942,203 | 928,312 | 9,021 | 6,457 | 222,639 | 229,119 |
| Alabama | 1,173,105 | 1,175,069 | 722,414 | 706,956 | 10,625 | 7,037 | 439,779 | 460,873 |
| Mississippi | 897,124 | 893,494 | 428,428 | 417,515 | 4,968 | 3,051 | 462,829 | 472,355 |
| WEST SOUTH CENTRAL: | | | | | | | | |
| Arkansas | 895,228 | 856,976 | 649,578 | 616,204 | 8,591 | 5,384 | 236,895 | 235,325 |
| Louisiana | 903,335 | 895,174 | 530,699 | 521,050 | 26,808 | 18,063 | 344,794 | 355,463 |
| Oklahoma | 1,058,044 | 970,239 | 927,760 | 853,466 | 24,931 | 15,037 | 76,294 | 73,114 |
| Texas | 2,409,222 | 2,254,006 | 1,835,072 | 1,722,574 | 200,447 | 160,072 | 371,474 | 370,220 |
| MOUNTAIN: | | | | | | | | |
| Montana | 299,941 | 248,948 | 233,363 | 207,277 | 58,229 | 35,391 | 962 | 696 |
| Idaho | 233,919 | 197,947 | 205,259 | 181,446 | 24,877 | 14,086 | 585 | 335 |
| Wyoming | 110,359 | 84,043 | 90,567 | 74,324 | 16,934 | 8,321 | 863 | 512 |
| Colorado | 492,731 | 446,898 | 416,026 | 391,123 | 68,219 | 48,735 | 5,834 | 5,484 |
| New Mexico | 190,456 | 169,894 | 158,505 | 147,091 | 16,845 | 12,232 | 4,593 | 1,140 |
| Arizona | 183,602 | 150,560 | 114,688 | 98,662 | 44,657 | 33,442 | 5,859 | 2,146 |
| Utah | 232,051 | 217,345 | 196,357 | 189,089 | 30,875 | 25,580 | 834 | 612 |
| Nevada | 46,240 | 31,167 | 31,571 | 24,326 | 10,737 | 4,065 | 196 | 150 |
| PACIFIC: | | | | | | | | |
| Washington | 734,701 | 621,920 | 558,575 | 511,147 | 153,118 | 96,937 | 3,957 | 2,926 |
| Oregon | 416,334 | 367,055 | 344,849 | 322,146 | 62,310 | 39,841 | 1,197 | 947 |
| California | 1,813,591 | 1,613,270 | 1,308,373 | 1,274,676 | 401,850 | 279,812 | 19,837 | 18,926 |

### NUMBER OF MALES TO 100 FEMALES IN U. S. POPULATION.

| States. | 1920. | 1910. | 1900. | States. | 1920. | 1910. | 1900. | States. | 1920. | 1910. | 1900. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ala. | 99.8 | 101.0 | 100.5 | Me. | 102.5 | 103.2 | 102.2 | Okla. | 109.0 | 113.7 | 115.3 |
| Ariz. | 121.9 | 138.2 | 140.4 | Md. | 101.3 | 98.9 | 98.4 | Ore. | 113.4 | 133.2 | 129.0 |
| Ark. | 104.5 | 106.0 | 106.1 | Mass. | 96.3 | 96.7 | 95.1 | Pa. | 103.2 | 105.9 | 103.5 |
| Cal. | 112.4 | 125.5 | 123.5 | Mich. | 110.8 | 107.3 | 106.6 | R. I. | 97.0 | 99.3 | 96.5 |
| Col. | 110.3 | 116.9 | 120.9 | Minn. | 109.1 | 114.6 | 113.9 | S. C. | 99.2 | 98.5 | 98.4 |
| Conn. | 101.5 | 102.3 | 100.0 | Miss. | 100.4 | 101.6 | 101.5 | S. Dak. | 112.6 | 118.9 | 116.6 |
| Del. | 104.1 | 104.6 | 104.0 | Mo. | 102.5 | 105.1 | 105.6 | Tenn. | 100.9 | 102.1 | 102.2 |
| D. C. | 87.0 | 91.3 | 90.0 | Mont. | 120.5 | 152.1 | 160.3 | Tex. | 106.9 | 107.4 | 107.4 |
| Fla. | 104.7 | 110.0 | 108.7 | Neb. | 107.9 | 111.2 | 112.5 | Utah | 106.8 | 111.5 | 104.9 |
| Ga. | 99.6 | 100.1 | 99.1 | Nev. | 148.4 | 179.2 | 153.0 | Vt. | 103.0 | 105.3 | 103.9 |
| Idaho | 118.2 | 132.5 | 136.5 | N. H. | 100.5 | 100.9 | 99.6 | Va. | 102.4 | 100.9 | 99.7 |
| Ill. | 103.9 | 106.8 | 105.3 | N. J. | 101.5 | 102.9 | 100.0 | Wash. | 118.1 | 136.3 | 142.2 |
| Ind. | 103.3 | 105.0 | 104.4 | N. Mex. | 112.8 | 115.3 | 114.4 | W. Va. | 108.9 | 111.6 | 108.6 |
| Iowa. | 104.7 | 106.6 | 107.6 | N. Y. | 99.8 | 101.2 | 98.9 | Wis. | 106.4 | 107.4 | 106.6 |
| Kan. | 105.7 | 110.0 | 109.5 | N. C. | 99.9 | 99.2 | 98.3 | Wyo. | 131.3 | 168.8 | 169.4 |
| Ky. | 103.2 | 103.0 | 103.1 | N. Dak. | 112.0 | 122.4 | 125.3 | Whole U. S. | 104.0 | 106.0 | 104.4 |
| La. | 100.9 | 101.7 | 101.1 | Ohio | 105.4 | 104.4 | 102.3 | | | | |

Ratio of males to females, whole U. S., prior years: (1820) 103.3; (1830) 103.1; (1840) 103.7; (1850) 104.3; (1860) 104.7; (1870) 102.2; (1880) 103.6; (1890) 105.0.

In 1920 in the U. S., there were 104.4 white males to each 100 white females; there were 99.2 negro males to each 100 negro females.

## DWELLINGS AND FAMILIES IN THE UNITED STATES.

The following table presents statistics as to dwellings and families for the United States as a whole for each census year from 1850 to 1920.

| Census Year. | Population. | Number of Dwellings. | Number of Families. | Persons to a Dwelling. | Persons to a Family. | Families to a Dwelling. |
|---|---|---|---|---|---|---|
| 1850 | 19,987,563 | 3,362,337 | 3,598,240 | 5.9 | 5.6 | 1.07 |
| 1860 | 27,489,561 | ..... | 5,210,934 | ..... | 5.3 | ..... |
| 1870 | 38,558,371 | ..... | 7,579,363 | ..... | 5.1 | ..... |
| 1880 | 50,155,783 | 8,955,812 | 9,945,316 | 5.6 | 5.0 | 1.11 |
| 1890 | 62,622,250 | 11,483,318 | 12,690,152 | 5.5 | 4.9 | 1.11 |
| 1900 | 75,994,575 | 14,430,145 | 16,187,715 | 5.3 | 4.7 | 1.12 |
| 1910 | 91,972,266 | 17,805,845 | 20,255,555 | 5.2 | 4.5 | 1.14 |
| 1920 | 105,710,620 | 20,697,204 | 24,351,676 | 5.1 | 4.3 | 1.18 |

Population total, 1890, is exclusive of population (325,464) specially enumerated in Indian Territory and on Indian Reservations, for which statistics of dwellings and families are not available.

### DWELLINGS AND FAMILIES, BY URBAN AND RURAL COMMUNITIES.

| Division, State, and Class of Community. | 1920. | | | 1910. | | | Persons to a Dwelling. | | Persons to a Family. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Population. | Dwellings. | Families. | Population. | Dwellings. | Families. | 1920. | 1910. | 1920. | 1910. |
| United States.. | 105,710,620 | 20,697,204 | 24,351,676 | 91,972,266 | 17,805,845 | 20,255,555 | 5.1 | 5.2 | 4.3 | 4.5 |
| Urban..... | 54,304,603 | 9,484,550 | 12,803,047 | 42,166,120 | 7,160,349 | 9,395,436 | 5.7 | 5.9 | 4.2 | 4.5 |
| Rural..... | 51,406,017 | 11,212,654 | 11,548,629 | 49,806,146 | 10,645,496 | 10,860,119 | 4.6 | 4.7 | 4.5 | 4.6 |

### DWELLINGS AND FAMILIES IN THE UNITED STATES, 1920.

| Division and State. | Population. | Dwellings. | Families. | Division and State. | Population. | Dwellings. | Families. |
|---|---|---|---|---|---|---|---|
| United States... | 105,710,620 | 20,697,204 | 24,351,676 | GEOG. DIVS. SOUTH ATLANTIC. | | | |
| GEOG. DIVS. | | | | Delaware..... | 223,003 | 47,868 | 52,070 |
| New England.... | 7,400,909 | 1,255,964 | 1,703,812 | Maryland..... | 1,449,661 | 288,261 | 324,742 |
| Middle Atlantic... | 22,261,144 | 3,566,549 | 5,085,080 | Dist. of Col..... | 437,571 | 72,175 | 96,194 |
| East No. Central.. | 21,475,543 | 4,385,541 | 5,143,913 | Virginia..... | 2,309,187 | 450,229 | 483,363 |
| West No. Central.. | 12,544,249 | 2,716,968 | 2,957,849 | West Virginia.... | 1,463,701 | 293,002 | 310,098 |
| South Atlantic.... | 13,990,272 | 2,781,684 | 2,991,623 | North Carolina... | 2,559,123 | 495,269 | 513,377 |
| East So. Central.. | 8,893,307 | 1,867,167 | 1,997,381 | South Carolina... | 1,683,724 | 330,500 | 349,126 |
| West So. Central.. | 10,242,224 | 2,110,879 | 2,242,810 | Georgia..... | 2,895,832 | 586,509 | 628,525 |
| Mountain..... | 3,336,101 | 743,775 | 803,853 | Florida..... | 968,470 | 217,871 | 234,133 |
| Pacific..... | 5,566,871 | 1,268,677 | 1,445,350 | EAST SO. CENTRAL. | | | |
| NEW ENGLAND. | | | | Kentucky..... | 2,416,630 | 510,981 | 546,306 |
| Maine..... | 768,014 | 162,304 | 186,106 | Tennessee..... | 2,337,885 | 488,392 | 519,108 |
| New Hampshire.. | 443,083 | 92,184 | 108,334 | Alabama..... | 2,348,174 | 480,392 | 508,769 |
| Vermont..... | 352,428 | 77,158 | 85,804 | Mississippi..... | 1,790,618 | 387,402 | 403,198 |
| Massachusetts.... | 3,852,356 | 597,052 | 874,798 | WEST SO. CENTRAL. | | | |
| Rhode Island..... | 604,397 | 98,861 | 137,160 | Arkansas..... | 1,752,204 | 375,316 | 390,960 |
| Connecticut..... | 1,380,631 | 228,405 | 311,610 | Louisiana..... | 1,798,509 | 370,377 | 389,913 |
| MIDDLE ATLANTIC. | | | | Oklahoma..... | 2,028,283 | 418,557 | 444,524 |
| New York..... | 10,385,227 | 1,325,114 | 2,441,125 | Texas..... | 4,663,228 | 946,629 | 1,017,413 |
| New Jersey..... | 3,155,900 | 515,211 | 721,841 | MOUNTAIN. | | | |
| Pennsylvania..... | 8,720,017 | 1,726,224 | 1,922,114 | Montana..... | 548,889 | 130,670 | 139,912 |
| EAST NO. CENTRAL. | | | | Idaho..... | 431,866 | 95,299 | 100,500 |
| Ohio..... | 5,759,394 | 1,216,542 | 1,414,068 | Wyoming..... | 194,402 | 44,710 | 48,476 |
| Indiana..... | 2,930,390 | 696,466 | 737,707 | Colorado..... | 939,629 | 211,103 | 230,843 |
| Illinois..... | 6,485,280 | 1,190,414 | 1,534,077 | New Mexico..... | 360,350 | 78,024 | 83,706 |
| Michigan..... | 3,668,412 | 755,931 | 862,745 | Arizona..... | 334,162 | 73,673 | 80,208 |
| Wisconsin..... | 2,632,067 | 526,188 | 595,316 | Utah..... | 449,396 | 89,587 | 98,346 |
| WEST NO. CENTRAL. | | | | Nevada..... | 77,407 | 20,709 | 21,862 |
| Minnesota..... | 2,387,125 | 469,652 | 526,026 | PACIFIC. | | | |
| Iowa..... | 2,404,021 | 559,188 | 586,070 | Washington..... | 1,356,621 | 304,735 | 342,228 |
| Missouri..... | 3,404,055 | 717,256 | 829,043 | Oregon..... | 783,389 | 185,081 | 202,890 |
| North Dakota.... | 646,872 | 129,904 | 134,881 | California..... | 3,426,861 | 778,861 | 900,232 |
| South Dakota.... | 636,547 | 136,512 | 142,793 | | | | |
| Nebraska..... | 1,296,372 | 288,390 | 303,436 | | | | |
| Kansas..... | 1,769,257 | 416,065 | 435,600 | | | | |

### EXCESS OF FAMILIES OVER DWELLINGS.

(U. S. Census Figures as of January 1, 1920.)

| Division and State. | Number. 1920. | Per Cent. of Total Families. | Division and State. | Number. 1920. | Per Cent. of Total Families. | Division and State. | Number. 1920. | Per Cent. of Total Families. |
|---|---|---|---|---|---|---|---|---|
| United States.. | 3,654,472 | 15.0 | WEST NO. CENTRAL: | | | E. SO. CEN.—*Cont.* | | |
| | | | Minnesota..... | 56,374 | 10.7 | Alabama..... | 28,377 | 5.6 |
| NEW ENGLAND: | | | Iowa..... | 26,882 | 4.6 | Mississippi..... | 15,796 | 3.9 |
| Maine..... | 23,802 | 12.8 | Missouri..... | 111,787 | 13.5 | W. SO. CENTRAL: | | |
| N. Hampshire.. | 16,150 | 14.9 | North Dakota.. | 4,976 | 3.7 | Arkansas..... | 15,644 | 4.0 |
| Vermont..... | 8,646 | 10.1 | South Dakota.. | 6,281 | 4.4 | Louisiana..... | 19,536 | 5.0 |
| Massachusetts.. | 277,746 | 31.7 | Nebraska..... | 15,046 | 5.0 | Oklahoma..... | 25,967 | 5.8 |
| Rhode Island... | 38,299 | 27.9 | Kansas..... | 19,535 | 4.5 | Texas..... | 70,784 | 7.0 |
| Connecticut.... | 83,205 | 26.7 | SOUTH ATLANTIC: | | | MOUNTAIN: | | |
| | | | Delaware..... | 4,202 | 8.1 | Montana..... | 9,242 | 6.6 |
| MIDDLE ATLANTIC: | | | Maryland..... | 36,481 | 11.2 | Idaho..... | 5,201 | 5.2 |
| New York..... | 1,116,011 | 45.7 | Dist of Col.... | 24,019 | 25.0 | Wyoming..... | 3,766 | 7.8 |
| New Jersey.... | 206,630 | 28.6 | Virginia..... | 33,134 | 6.9 | Colorado..... | 19,740 | 8.6 |
| Pennsylvania. | 195,890 | 10.2 | West Virginia.. | 17,096 | 5.5 | New Mexico.... | 5,682 | 6.8 |
| | | | North Carolina. | 18,108 | 3.5 | Arizona..... | 6,535 | 8.1 |
| EAST NO. CENTRAL: | | | South Carolina. | 18,626 | 5.3 | Utah..... | 8,759 | 8.9 |
| Ohio..... | 197,526 | 14.0 | Georgia..... | 42,016 | 6.7 | Nevada..... | 1,153 | 5.3 |
| Indiana..... | 41,241 | 5.6 | Florida..... | 16,262 | 6.9 | PACIFIC: | | |
| Illinois..... | 343,663 | 22.4 | EAST SO. CENTRAL: | | | Washington.... | 37,493 | 11.0 |
| Michigan..... | 106,814 | 12.4 | Kentucky..... | 35,325 | 6.5 | Orgon..... | 17,809 | 8.8 |
| Wisconsin..... | 69,128 | 11.6 | Tennessee..... | 30,716 | 5.9 | California..... | 121,371 | 13.5 |

## AGES OF MARRIED PERSONS: 1920 AND 1910.

(By the U. S. Census Bureau.)

The U. S. census figures of Jan. 1, 1920, establish beyond question the interesting fact that there has been a significant increase during recent years in the proportion of married persons among the younger element of the population. The number of married men 18 years of age increased from 13,321, or 1.4 per cent. of the total male population at that age in 1910, to 24,944, or 2.7 per cent. of the corresponding total, in 1920; the number of married men 19 years of age increased from 33,566, or 3.8 per cent., to 58,909, or 6.5 per cent.; the number of married men 20 years of age increased from 77,658, or 8.6 per cent., to 105,369, or 12.5 per cent.; and the number of married men 21 years of age increased from 152,298, or 16.2 per cent., to 193,663, or 21 per cent.

The number of married women 16 years of age increased from 34,829, or 3.7 per cent. of the total female population at that age in 1910, to 41,626, or 4.2 per cent. of the corresponding total, in 1920; the number of married women 17 years of age increased from 76,683, or 8.7 per cent., to 90,930, or 9.8 per cent.; the number of married women 18 years of age increased from 166,460, or 17 per cent., to 186,645, or 19.2 per cent.; and the number of married women 19 years of age increased from 224,976, or 25.7 per cent., to 264,507, or 28.6 per cent.

For each year of age from 15 to 34 the figures for 1920 show, without exception, in the case of each sex, an increase in the proportion married as compared with 1910, the change being especially noticeable for the younger ages. For the ages from 35 to 44 inclusive, considered as a group, there was also an increase during the decade in the proportion married, but this increase was less pronounced, especially in the case of women, than the increase shown for the younger ages. Among persons at the ages of 45 and upward, considered in three groups—45 to 54, 55 to 64, and 65 and over—the proportion married was somewhat smaller in 1920 than for the corresponding groups in 1910.

The accompanying tables show the marital condition of the population of the United States in 1920, for each specified age or age group, with comparative percentages for 1910.

MARITAL CONDITION, BY AGE, FOR MALE POPULATION.

| Age. | Total Male Population at Specif'd Age: 1920. | Single. | | | Married. | | | Widowed or Divorced | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Number: 1920. | Pct. Total at Spec. Age | | Number: 1920. | Pct. Total at Spec. Age | | Number: 1920. | Pct. Total at Spec. Age | |
| | | | 1920. | 1910. | | 1920. | 1910. | | 1920. | 1910. |
| Tot. 15 yrs. & over | 36,920,663 | 12,967,565 | 35.1 | 38.7 | 21,849,266 | 59.2 | 55.8 | 1,993,592 | 5.4 | 5.0 |
| 15 years | 925,679 | 923,997 | 99.8 | 99.5 | 1,600 | 0.2 | 0.1 | 82 | ..... | ..... |
| 16 years | 976,834 | 973,468 | 99.7 | 99.2 | 3,222 | 0.3 | 0.1 | 144 | ..... | ..... |
| 17 years | 926,033 | 918,068 | 99.1 | 99.0 | 7,699 | 0.8 | 0.4 | 266 | ..... | ..... |
| 18 years | 938,646 | 909,332 | 96.9 | 98.0 | 24,944 | 2.7 | 1.4 | 770 | 0.1 | ..... |
| 19 years | 906,600 | 842,905 | 93.0 | 95.6 | 58,909 | 6.5 | 3.8 | 1,327 | 0.1 | 0.1 |
| 20 years | 843,501 | 732,213 | 86.8 | 90.6 | 105,369 | 12.5 | 8.6 | 2,426 | 0.3 | 0.2 |
| 21 years | 920,779 | 719,816 | 78.2 | 82.8 | 193,663 | 21.0 | 16.2 | 4,168 | 0.5 | 0.4 |
| 22 years | 918,849 | 648,916 | 70.6 | 75.2 | 260,530 | 28.4 | 23.8 | 6,267 | 0.7 | 0.6 |
| 23 years | 911,705 | 574,761 | 63.0 | 66.6 | 326,245 | 35.8 | 32.3 | 7,906 | 0.9 | 0.7 |
| 24 years | 932,211 | 524,917 | 56.3 | 59.4 | 394,511 | 42.3 | 39.2 | 10,024 | 1.1 | 0.9 |
| 25 years | 932,333 | 462,811 | 49.6 | 52.9 | 454,791 | 48.8 | 45.5 | 12,210 | 1.3 | 1.2 |
| 26 years | 915,495 | 403,477 | 44.1 | 47.3 | 495,955 | 54.2 | 51.0 | 13,435 | 1.5 | 1.3 |
| 27 years | 910,809 | 349,753 | 38.4 | 41.7 | 543,508 | 59.7 | 56.6 | 15,079 | 1.7 | 1.4 |
| 28 years | 943,654 | 326,839 | 34.6 | 38.1 | 595,913 | 63.3 | 60.0 | 17,402 | 1.8 | 1.6 |
| 29 years | 835,942 | 246,811 | 29.5 | 31.8 | 570,957 | 68.3 | 66.3 | 16,200 | 1.9 | 1.7 |
| 30 years | 956,557 | 277,588 | 29.0 | 31.9 | 654,280 | 68.4 | 65.6 | 22,244 | 2.3 | 2.2 |
| 31 years | 724,643 | 178,698 | 24.7 | 25.9 | 528,367 | 72.9 | 71.9 | 16,015 | 2.2 | 2.0 |
| 32 years | 826,738 | 201,562 | 24.4 | 26.1 | 602,328 | 72.9 | 71.3 | 21,073 | 2.5 | 2.3 |
| 33 years | 795,555 | 171,147 | 21.5 | 22.2 | 602,056 | 75.7 | 75.1 | 20,738 | 2.6 | 2.5 |
| 34 years | 827,280 | 166,874 | 20.2 | 21.3 | 636,323 | 76.9 | 75.9 | 22,464 | 2.7 | 2.6 |
| 35 to 44 years | 7,359,904 | 1,188,586 | 16.1 | 16.7 | 5,873,308 | 79.8 | 79.2 | 284,292 | 3.9 | 3.9 |
| 45 to 54 years | 5,653,095 | 677,420 | 12.0 | 11.1 | 4,580,056 | 81.0 | 81.5 | 386,138 | 6.8 | 7.2 |
| 55 to 64 years | 3,461,865 | 337,592 | 9.8 | 8.3 | 2,697,429 | 77.9 | 79.0 | 420,836 | 12.2 | 12.5 |
| 65 years and over | 2,483,071 | 182,211 | 7.3 | 6.2 | 1,607,187 | 64.7 | 65.6 | 687,162 | 27.7 | 27.8 |
| Age unknown | 92,875 | 27,773 | 29.9 | 25.7 | 29,113 | 31.3 | 23.9 | 4,924 | 5.3 | 4.5 |

Population total first column includes persons for whom marital condition was not reported. Where percentage is absent it is less than one-tenth of 1 per cent.

MARITAL CONDITION, BY AGE, FOR FEMALE POPULATION.

| Age. | Total Female Population at Specif'd Age: 1920. | Single. | | | Married. | | | Widowed or Divorced | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Number: 1920. | Pct. Total at Spec. Age | | Number: 1920. | Pct. Total at Spec. Age | | Number: 1920. | Pct. Total at Spec. Age | |
| | | | 1920. | 1910. | | 1920. | 1910. | | 1920. | 1910. |
| Tot. 15 yrs. & over | 35,177,515 | 9,616,902 | 27.3 | 29.7 | 21,318,933 | 60.6 | 58.9 | 4,190,929 | 11.9 | 11.2 |
| 15 years | 935,766 | 922,433 | 98.6 | 98.3 | 12,834 | 1.4 | 1.2 | 499 | 0.1 | 0.1 |
| 16 years | 995,124 | 953,230 | 95.7 | 95.5 | 41,626 | 4.2 | 3.7 | 1,268 | 0.1 | 0.1 |
| 17 years | 929,140 | 835,418 | 89.9 | 90.5 | 90,930 | 9.8 | 8.7 | 2,792 | 0.3 | 0.2 |
| 18 years | 971,400 | 776,931 | 80.0 | 82.1 | 186,645 | 19.2 | 17.0 | 5,554 | 0.6 | 0.5 |
| 19 years | 924,334 | 649,638 | 70.3 | 73.2 | 264,507 | 28.6 | 25.7 | 8,143 | 0.9 | 0.7 |
| 20 years | 937,601 | 562,965 | 60.0 | 62.4 | 360,112 | 38.4 | 36.2 | 12,385 | 1.3 | 1.1 |
| 21 years | 900,933 | 473,019 | 52.5 | 54.9 | 412,235 | 45.8 | 43.5 | 14,020 | 1.6 | 1.3 |
| 22 years | 968,431 | 434,966 | 44.9 | 47.3 | 512,587 | 52.9 | 50.7 | 19,141 | 2.0 | 1.7 |
| 23 years | 969,884 | 371,616 | 38.3 | 40.6 | 574,133 | 59.2 | 57.2 | 22,726 | 2.3 | 2.0 |
| 24 years | 973,127 | 321,485 | 33.0 | 35.5 | 624,630 | 64.2 | 62.0 | 25,724 | 2.6 | 2.3 |
| 25 years | 990,861 | 287,842 | 29.0 | 31.4 | 672,240 | 67.8 | 65.7 | 29,541 | 3.0 | 2.7 |
| 26 years | 937,840 | 236,899 | 25.3 | 27.1 | 669,538 | 71.4 | 69.9 | 30,197 | 3.2 | 2.8 |
| 27 years | 880,836 | 194,201 | 22.0 | 23.8 | 655,125 | 74.4 | 72.9 | 30,610 | 3.5 | 3.1 |
| 28 years | 942,759 | 190,285 | 20.2 | 21.9 | 715,183 | 75.9 | 74.4 | 36,375 | 3.9 | 3.6 |
| 29 years | 795,962 | 139,058 | 17.5 | 18.6 | 624,315 | 78.4 | 77.6 | 31,907 | 4.0 | 3.7 |
| 30 years | 995,298 | 184,062 | 18.5 | 20.4 | 762,156 | 76.6 | 74.7 | 48,033 | 4.8 | 4.8 |
| 31 years | 681,985 | 98,967 | 14.5 | 15.2 | 552,979 | 81.1 | 80.7 | 29,617 | 4.3 | 4.0 |
| 32 years | 812,005 | 119,743 | 14.7 | 15.8 | 651,391 | 80.2 | 79.4 | 40,202 | 5.0 | 4.7 |
| 33 years | 726,524 | 92,550 | 12.7 | 13.6 | 597,208 | 82.2 | 81.5 | 36,197 | 5.0 | 4.9 |
| 34 years | 724,598 | 92,797 | 12.8 | 13.8 | 592,120 | 81.7 | 80.9 | 39,192 | 5.4 | 5.3 |
| 35 to 44 years | 6,760,934 | 767,882 | 11.4 | 11.4 | 5,426,434 | 80.3 | 80.1 | 560,520 | 8.3 | 8.4 |
| 45 to 54 years | 4,845,398 | 464,838 | 9.6 | 8.5 | 3,587,794 | 74.0 | 74.8 | 787,620 | 16.3 | 16.6 |
| 55 to 64 years | 3,069,807 | 257,029 | 8.4 | 7.1 | 1,878,478 | 61.2 | 62.2 | 929,813 | 30.3 | 30.7 |
| 65 years and over | 2,450,144 | 173,442 | 7.1 | 6.3 | 830,160 | 33.9 | 35.0 | 1,440,230 | 58.8 | 58.4 |
| Age unknown | 55,824 | 15,606 | 28.0 | 26.9 | 23,473 | 42.0 | 38.5 | 8,783 | 15.7 | 17.3 |

Population total first column includes persons for whom marital condition was not reported.

## MARITAL CONDITION OF MALES IN U. S., 1920.

(15 Years of Age and Over.)

| Division and State. | Total. | Single. | Married. | Widowed. | Divorced. | Marital Condition Not Reported. |
|---|---|---|---|---|---|---|
| United States | 36,920,663 | 12,967,565 | 21,849,266 | 1,758,308 | 235,284 | 110,240 |
| NEW ENGLAND: | | | | | | |
| Maine | 279,478 | 92,085 | 166,171 | 18,123 | 2,628 | 471 |
| New Hampshire | 161,931 | 54,688 | 94,791 | 10,324 | 1,762 | 366 |
| Vermont | 127,905 | 41,894 | 76,310 | 8,372 | 1,171 | 158 |
| Massachusetts | 1,347,788 | 496,697 | 775,687 | 67,582 | 5,825 | 1,997 |
| Rhode Island | 210,543 | 77,269 | 121,208 | 10,711 | 1,226 | 129 |
| Connecticut | 486,474 | 173,286 | 288,047 | 22,195 | 1,796 | 1,150 |
| MIDDLE ATLANTIC: | | | | | | |
| New York | 3,732,828 | 1,350,088 | 2,183,536 | 173,113 | 10,166 | 15,925 |
| New Jersey | 1,110,387 | 382,481 | 672,749 | 50,577 | 2,593 | 1,987 |
| Pennsylvania | 3,020,287 | 1,056,294 | 1,802,422 | 144,894 | 10,978 | 5,699 |
| EAST NORTH CENTRAL: | | | | | | |
| Ohio | 2,125,426 | 712,996 | 1,290,796 | 101,596 | 17,225 | 2,813 |
| Indiana | 1,059,899 | 327,582 | 663,577 | 55,549 | 10,339 | 2,852 |
| Illinois | 2,347,493 | 830,251 | 1,387,092 | 107,204 | 16,587 | 6,359 |
| Michigan | 1,371,116 | 474,065 | 820,071 | 62,418 | 12,358 | 2,204 |
| Wisconsin | 940,800 | 359,883 | 531,148 | 41,590 | 5,475 | 2,704 |
| WEST NORTH CENTRAL: | | | | | | |
| Minnesota | 868,738 | 365,880 | 460,829 | 35,687 | 4,134 | 2,208 |
| Iowa | 865,407 | 303,626 | 512,060 | 40,733 | 6,944 | 2,014 |
| Missouri | 1,216,243 | 406,275 | 733,960 | 62,793 | 9,895 | 3,320 |
| North Dakota | 214,001 | 87,934 | 116,254 | 7,765 | 815 | 1,233 |
| South Dakota | 224,873 | 89,284 | 123,995 | 9,000 | 1,272 | 1,322 |
| Nebraska | 461,298 | 169,428 | 267,199 | 19,715 | 3,231 | 1,725 |
| Kansas | 630,130 | 210,101 | 382,569 | 30,744 | 5,244 | 1,472 |
| SOUTH ATLANTIC: | | | | | | |
| Delaware | 81,611 | 27,815 | 48,850 | 4,264 | 307 | 375 |
| Maryland | 512,513 | 184,547 | 297,995 | 26,771 | 2,440 | 760 |
| District of Columbia | 159,013 | 60,976 | 88,698 | 7,616 | 884 | 839 |
| Virginia | 751,890 | 275,096 | 437,936 | 34,381 | 2,940 | 1,487 |
| West Virginia | 487,684 | 172,948 | 291,096 | 19,674 | 2,434 | 1,532 |
| North Carolina | 756,631 | 257,881 | 463,809 | 31,539 | 1,322 | 2,080 |
| South Carolina | 492,228 | 168,536 | 300,701 | 21,413 | 597 | 981 |
| Georgia | 884,801 | 283,338 | 554,356 | 42,314 | 3,242 | 1,551 |
| Florida | 332,678 | 107,201 | 203,029 | 19,131 | 2,096 | 1,221 |
| EAST SOUTH CENTRAL: | | | | | | |
| Kentucky | 705,502 | 260,277 | 487,561 | 41,289 | 5,138 | 1,237 |
| Tennessee | 745,280 | 235,742 | 465,672 | 38,823 | 3,971 | 1,072 |
| Alabama | 710,229 | 226,392 | 444,168 | 34,420 | 3,486 | 1,763 |
| Mississippi | 548,321 | 171,768 | 344,614 | 27,769 | 2,665 | 1,505 |
| WEST SOUTH CENTRAL: | | | | | | |
| Arkansas | 555,957 | 171,241 | 349,040 | 30,594 | 3,954 | 1,128 |
| Louisiana | 575,500 | 201,248 | 342,062 | 27,170 | 2,519 | 2,501 |
| Oklahoma | 671,835 | 219,012 | 412,202 | 32,252 | 5,423 | 2,946 |
| Texas | 1,571,981 | 554,494 | 923,968 | 75,984 | 10,967 | 6,568 |
| MOUNTAIN: | | | | | | |
| Montana | 209,491 | 84,007 | 113,159 | 8,590 | 2,324 | 1,411 |
| Idaho | 156,167 | 59,795 | 87,969 | 6,409 | 1,667 | 327 |
| Wyoming | 79,366 | 33,171 | 41,408 | 3,180 | 966 | 641 |
| Colorado | 350,813 | 123,473 | 200,800 | 17,592 | 944 | 4,570 |
| New Mexico | 123,167 | 45,425 | 68,973 | 7,583 | 9,444 | 242 |
| Arizona | 127,117 | 51,329 | 67,735 | 6,182 | 1,166 | 705 |
| Utah | 146,262 | 53,294 | 86,397 | 5,078 | 1,246 | 247 |
| Nevada | 36,464 | 16,851 | 16,723 | 1,560 | 741 | 589 |
| PACIFIC: | | | | | | |
| Washington | 546,019 | 212,021 | 298,950 | 23,915 | 8,602 | 2,531 |
| Oregon | 308,126 | 112,181 | 175,423 | 14,474 | 5,633 | 415 |
| California | 1,400,972 | 535,419 | 765,451 | 67,626 | 21,568 | 10,908 |

## MARITAL CONDITION OF FEMALES IN U. S., 1920.

(15 Years of Age and Over.)

| Division and State. | Total. | Single. | Married. | Widowed. | Divorced. | Marital Condition Not Reported. |
|---|---|---|---|---|---|---|
| United States | 35,177,515 | 9,616,902 | 21,318,933 | 3,917,625 | 273,304 | 50,751 |
| NEW ENGLAND: | | | | | | |
| Maine | 271,764 | 72,159 | 162,623 | 34,017 | 2,685 | 280 |
| New Hampshire | 161,208 | 46,292 | 92,353 | 20,431 | 1,845 | 287 |
| Vermont | 123,982 | 32,397 | 74,505 | 15,989 | 1,014 | 77 |
| Massachusetts | 1,425,443 | 490,170 | 758,897 | 167,253 | 8,000 | 1,123 |
| Rhode Island | 219,409 | 74,098 | 118,772 | 24,577 | 1,834 | 128 |
| Connecticut | 479,332 | 145,537 | 278,227 | 52,826 | 2,063 | 679 |
| MIDDLE ATLANTIC: | | | | | | |
| New York | 3,767,540 | 1,164,525 | 2,134,604 | 448,670 | 13,562 | 6,179 |
| New Jersey | 1,092,623 | 311,293 | 653,587 | 123,076 | 3,297 | 1,370 |
| Pennsylvania | 2,897,294 | 834,987 | 1,730,057 | 316,993 | 12,508 | 2,749 |
| EAST NORTH CENTRAL: | | | | | | |
| Ohio | 1,990,701 | 507,550 | 1,241,451 | 221,755 | 18,466 | 1,479 |
| Indiana | 1,021,915 | 244,659 | 650,187 | 114,244 | 10,723 | 2,102 |
| Illinois | 2,242,120 | 617,873 | 1,353,118 | 247,985 | 19,275 | 3,869 |
| Michigan | 1,198,037 | 285,297 | 782,648 | 115,412 | 10,768 | 912 |
| Wisconsin | 869,060 | 261,200 | 517,771 | 82,642 | 5,858 | 1,589 |
| WEST NORTH CENTRAL: | | | | | | |
| Minnesota | 774,433 | 248,592 | 450,785 | 68,945 | 4,843 | 1,268 |
| Iowa | 819,947 | 224,706 | 505,294 | 81,118 | 7,510 | 1,319 |
| Missouri | 1,186,407 | 308,051 | 724,886 | 139,774 | 11,639 | 2,057 |
| North Dakota | 181,450 | 54,685 | 113,843 | 11,618 | 735 | 569 |
| South Dakota | 197,812 | 53,858 | 121,408 | 13,862 | 1,128 | 556 |
| Nebraska | 419,146 | 113,837 | 263,890 | 37,298 | 3,368 | 723 |
| Kansas | 587,284 | 146,614 | 375,790 | 58,857 | 5,504 | 519 |

MARITAL CONDITION OF FEMALES IN U. S., 1920—*Continued.*

| Division and State. | Total. | Single. | Married. | Widowed. | Divorced. | Marital Condition Not Reported. |
|---|---|---|---|---|---|---|
| SOUTH ATLANTIC: | | | | | | |
| Delaware | 77,105 | 19,962 | 47,469 | 9,094 | 358 | 222 |
| Maryland | 506,559 | 147,204 | 294,043 | 62,087 | 2,700 | 535 |
| District of Columbia | 188,466 | 70,330 | 88,602 | 27,761 | 1,381 | 392 |
| Virginia | 730,985 | 211,140 | 432,557 | 82,483 | 3,898 | 907 |
| West Virginia | 431,564 | 110,169 | 280,811 | 36,995 | 2,635 | 954 |
| North Carolina | 769,185 | 225,149 | 460,742 | 79,118 | 2,325 | 1,851 |
| South Carolina | 504,018 | 143,457 | 298,648 | 59,805 | 1,325 | 753 |
| Georgia | 900,117 | 225,856 | 551,522 | 115,829 | 5,926 | 984 |
| Florida | 312,798 | 69,294 | 199,842 | 40,565 | 2,562 | 535 |
| EAST SOUTH CENTRAL: | | | | | | |
| Kentucky | 770,695 | 195,055 | 481,060 | 87,378 | 6,392 | 810 |
| Tennessee | 749,045 | 190,536 | 461,883 | 89,285 | 6,676 | 665 |
| Alabama | 720,780 | 182,268 | 440,207 | 90,369 | 6,649 | 1,287 |
| Mississippi | 554,325 | 138,410 | 342,029 | 67,665 | 5,197 | 1,024 |
| WEST SOUTH CENTRAL: | | | | | | |
| Arkansas | 525,477 | 116,084 | 344,325 | 58,954 | 5,370 | 744 |
| Louisiana | 571,339 | 155,276 | 338,897 | 71,278 | 4,416 | 1,472 |
| Oklahoma | 594,679 | 132,818 | 402,363 | 51,984 | 5,886 | 1,128 |
| Texas | 1,439,534 | 361,939 | 902,689 | 157,022 | 15,564 | 2,320 |
| MOUNTAIN: | | | | | | |
| Montana | 160,625 | 37,036 | 108,119 | 13,388 | 1,821 | 261 |
| Idaho | 123,287 | 28,124 | 84,554 | 9,391 | 1,146 | 72 |
| Wyoming | 54,109 | 11,120 | 38,172 | 4,089 | 660 | 128 |
| Colorado | 307,458 | 73,098 | 198,193 | 34,186 | 4,058 | 923 |
| New Mexico | 103,503 | 24,993 | 66,677 | 10,832 | 942 | 159 |
| Arizona | 95,671 | 20,170 | 63,685 | 10,808 | 852 | 156 |
| Utah | 133,642 | 35,127 | 83,713 | 13,168 | 1,531 | 103 |
| Nevada | 21,731 | 4,196 | 14,463 | 2,415 | 500 | 157 |
| PACIFIC: | | | | | | |
| Washington | 438,357 | 100,343 | 287,871 | 41,889 | 7,816 | 438 |
| Oregon | 261,847 | 60,142 | 170,069 | 26,514 | 4,988 | 134 |
| California | 1,210,607 | 289,196 | 733,632 | 162,871 | 23,105 | 1,803 |

## THE SPAN OF LIFE IS GROWING IN THE U. S.

Data is official and is based on the 1920 Federal Census. The figures in the columns headed "males" and "females" show to what age the average person in the State named may expect to live.

WHITE (EXCEPT IN HAWAII).

| Rank. | Area. | Males. | Rank. | Area. | Females |
|---|---|---|---|---|---|
| 1 | Kansas | 59.73 | 1 | Kansas | 60.89 |
| 2 | Wisconsin | 58.77 | 2 | Wisconsin | 60.70 |
| 3 | Minnesota | 58.54 | 3 | Minnesota | 60.58 |
| 4 | Tennessee | 58.49 | 4 | Washington | 60.44 |
| 5 | Oregon, Washington | 57.82 | 5 | Oregon | 60.31 |
| | | | 6 | Washington, D. C. | 59.83 |
| 6 | Kentucky | 57.61 | 7 | Missouri | 58.95 |
| 7 | North Carolina | 57.55 | 8 | Tennessee | 58.42 |
| 8 | Indiana | 56.84 | 9 | Utah | 58.41 |
| 9 | Virginia | 56.75 | 10 | Virginia | 58.35 |
| 10 | Missouri | 56.74 | 11 | California | 58.32 |
| 11 | Ohio | 56.18 | 12 | Ohio | 58.27 |
| 12 | South Carolina | 55.76 | 13 | North Carolina | 57.87 |
| 13 | Utah | 55.31 | 14 | Illinois | 57.57 |
| 14 | Aggregate | 55.23 | 15 | Kentucky | 57.53 |
| 15 | Michigan | 55.07 | 16 | Los Angeles, South Carolina | 57.51 |
| 16 | Illinois | 55.01 | | | |
| 17 | California | 54.36 | 17 | Indiana | 57.45 |
| 18 | Massachusetts | 54.00 | 18 | Aggregate | 57.41 |
| 19 | Original registration States | 53.98 | 19 | Connecticut | 56.76 |
| 20 | Connecticut | 53.84 | 20 | Massachusetts, San Francisco | 56.50 |
| 21 | Washington, D. C. | 53.83 | | | |
| 22 | New Jersey | 53.77 | 21 | New Jersey | 56.47 |
| 23 | Maryland | 53.57 | 22 | Original registration States | 56.33 |
| 24 | Los Angeles | 53.35 | 23 | St. Louis | 56.14 |
| 25 | Pennsylvania | 53.16 | 24 | Michigan | 55.94 |
| 26 | New York | 52.74 | 25 | Cleveland, Pennsylvania | 55.85 |
| 27 | St. Louis | 52.46 | | | |
| 28 | Cleveland | 52.44 | 26 | Maryland | 55.82 |
| 29 | Chicago | 52.19 | 27 | New York | 55.66 |
| 30 | Philadelphia | 52.08 | 28 | Chicago | 55.33 |
| 31 | Detroit | 52.03 | 29 | Philadelphia | 54.83 |
| 32 | San Francisco | 51.68 | 30 | Aggregate in cities | 54.77 |
| 33 | Aggregate in cities | 51.55 | 31 | New York City | 52.72 |
| 34 | New York City | 51.32 | 32 | Baltimore | 54.24 |
| 35 | Baltimore | 51.11 | 33 | New Orleans | 54.01 |
| 36 | Boston | 50.55 | 34 | Detroit | 53.43 |
| 37 | Buffalo | 49.53 | 35 | Boston | 53.32 |
| 38 | New Orleans | 49.39 | 36 | Buffalo | 52.98 |
| 39 | Japanese in Hawaii | 49.30 | 37 | Pittsburgh | 50.42 |
| 40 | Hawaii (all races) | 47.60 | 38 | Japanese in Hawaii | 47.70 |
| 41 | Pittsburgh | 47.16 | 39 | Hawaii (all races) | 47.31 |
| | | NEGRO. | | | |
| 42 | States with more than 5 per cent. Negro population | 46.25 | 40 | States with more than 5 per cent. Negro population | 45.38 |
| 43 | States with less than 4 per cent. Negro population, Original registration States | 40.14 | 41 | States with less than 4 per cent. Negro population | 42.46 |
| | | | 42 | Original registration States | 42.16 |
| 44 | Large cities | 37.96 | 43 | Large cities | 40.28 |

Original registration States include the New England States, Indiana, Michigan, New Jersey, New York, and the District of Columbia.

According to the above table a person born in Kansas has the best chance for a long life.

## U. S. POPULATION BY AGE GROUPS, 1880-1920.

(Official revised U. S. Census figures.)

THE total population according to the census, 105,710,620, included 11,573,230 children under 5 years of age, of whom 2,257,255 were infants under 1. The percentage for infants under 1 was 2.1 in 1920, as against 2.4 in 1910. The decrease in the proportions of young children and infants between 1910 and 1920 is doubtless due, in whole or in large part, to the decline in the birth rate.

The proportion of persons at and above the age of 25 has become larger from census to census since 1880, the increase between 1910 and 1920 having been especially noteworthy in the case of persons aged 45 and over.

The number of centenarians reported in 1920 was 4,267, as against 3,555 in 1910. Of the persons reported as centenarians in 1920, 1,561 were men and 2,706 were women. The greater longevity of women is also shown by the fact that, although the males outnumbered the females in the population as a whole, the women predominated in each of the 5-year age periods above 75, in both 1920 and 1910. The census takers had no means of verifying the ages of the persons enumerated by them, and consequently the age returns, especially for centenarians, are not absolutely accurate. It is probable that the number of centenarians has been somewhat overstated at every census.

| AGE PERIOD. | POPULATION. | | | | |
|---|---|---|---|---|---|
| | 1920. | 1910. | 1900. | 1890. | 1880. |
| All ages, number | 105,710,620 | 91,972,266 | 75,994,575 | 62,622,250 | 50,155,783 |
| Under 5 years | 11,573,230 | 10,631,364 | 9,170,628 | 7,634,693 | 6,914,516 |
| 5 to 14 years | 22,039,212 | 18,867,772 | 16,954,357 | 14,607,507 | 12,194,846 |
| 15 to 24 years | 18,707,577 | 18,120,587 | 14,891,105 | 12,754,239 | 10,099,187 |
| 25 to 44 years | 31,278,522 | 26,809,875 | 21,297,427 | 16,858,086 | 12,918,794 |
| 45 to 64 years | 17,030,165 | 13,424,089 | 10,399,976 | 8,188,272 | 6,304,981 |
| 65 years and over | 4,933,215 | 3,949,524 | 3,080,498 | 2,417,288 | 1,723,459 |
| Age unknown | 148,699 | 169,055 | 200,584 | 162,165 | ..... |
| All ages, per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 5 years | 10.9 | 11.6 | 12.1 | 12.2 | 13.8 |
| 5 to 14 years | 20.8 | 20.5 | 22.3 | 23.3 | 24.3 |
| 15 to 24 years | 17.7 | 19.7 | 19.6 | 20.4 | 20.0 |
| 25 to 44 years | 29.6 | 29.1 | 28.0 | 26.9 | 25.8 |
| 45 to 64 years | 16.1 | 14.6 | 13.7 | 13.1 | 12.6 |
| 65 years and over | 4.7 | 4.3 | 4.1 | 3.9 | 3.4 |
| Age unknown | 0.1 | 0.2 | 0.3 | 0.3 | ..... |

### DISTRIBUTION BY AGE PERIODS FOR EACH SEX, 1920 AND 1910.

| AGE PERIOD. | MALE. | | | | FEMALE. | | | |
|---|---|---|---|---|---|---|---|---|
| | 1920. | | 1910. | | 1920. | | 1910. | |
| | Number. | Pct. Distribution. | Number. | Pct. Distribution. | Number. | Pct. Distribution. | Number. | Pct. Distribution. |
| Total | 53,900,431 | 100.0 | 47,332,277 | 100.0 | 51,810,189 | 100.0 | 44,639,989 | 100.0 |
| Under 5 | 5,857,461 | 10.9 | 5,380,596 | 11.4 | 5,715,769 | 11.0 | 5,250,768 | 11.8 |
| Under 1 | 1,141,939 | 2.1 | 1,123,409 | 2.4 | 1,115,316 | 2.2 | 1,093,933 | 2.5 |
| 5 to 9 | 5,753,001 | 10.7 | 4,924,123 | 10.4 | 5,645,074 | 10.9 | 4,836,509 | 10.8 |
| 10 to 14 | 5,369,306 | 10.0 | 4,601,753 | 9.7 | 5,271,831 | 10.2 | 4,505,387 | 10.1 |
| 15 to 19 | 4,673,792 | 8.7 | 4,527,282 | 9.6 | 4,756,764 | 9.2 | 4,536,321 | 10.2 |
| 20 to 24 | 4,527,045 | 8.4 | 4,580,290 | 9.7 | 4,749,976 | 9.2 | 4,476,694 | 10.0 |
| 25 to 29 | 4,538,233 | 8.4 | 4,244,348 | 9.0 | 4,548,258 | 8.8 | 3,935,655 | 8.8 |
| 30 to 34 | 4,130,783 | 7.7 | 3,656,768 | 7.7 | 3,940,410 | 7.6 | 3,315,417 | 7.4 |
| 35 to 39 | 4,074,361 | 7.6 | 3,367,016 | 7.1 | 3,700,920 | 7.1 | 3,029,084 | 6.8 |
| 40 to 44 | 3,285,543 | 6.1 | 2,786,350 | 5.9 | 3,060,014 | 5.9 | 2,475,237 | 5.5 |
| 45 to 49 | 3,117,550 | 5.8 | 2,378,916 | 5.0 | 2,646,070 | 5.1 | 2,096,281 | 4.7 |
| 50 to 54 | 2,535,545 | 4.7 | 2,110,013 | 4.5 | 2,199,328 | 4.2 | 1,790,778 | 4.0 |
| 55 to 59 | 1,880,065 | 3.5 | 1,488,437 | 3.1 | 1,669,059 | 3.2 | 1,298,514 | 2.9 |
| 60 to 64 | 1,581,800 | 2.9 | 1,185,966 | 2.5 | 1,400,748 | 2.7 | 1,081,184 | 2.4 |
| 65 to 69 | 1,079,817 | 2.0 | 863,994 | 1.8 | 988,658 | 1.9 | 815,509 | 1.8 |
| 70 to 74 | 706,301 | 1.3 | 561,644 | 1.2 | 688,735 | 1.3 | 552,084 | 1.2 |
| 75 to 79 | 419,965 | 0.8 | 331,280 | 0.7 | 436,595 | 0.8 | 336,022 | 0.8 |
| 80 to 84 | 185,903 | 0.3 | 153,745 | 0.3 | 216,876 | 0.4 | 168,009 | 0.4 |
| 85 to 89 | 69,272 | 0.1 | 56,335 | 0.1 | 87,267 | 0.2 | 66,483 | 0.1 |
| 90 to 94 | 16,383 | ..... | 14,553 | ..... | 23,597 | ..... | 18,920 | ..... |
| 95 to 99 | 3,869 | ..... | 3,045 | ..... | 5,710 | ..... | 4,346 | ..... |
| 100 and over | 1,561 | ..... | 1,380 | ..... | 2,706 | ..... | 2,175 | ..... |
| Age unknown | 92,875 | 0.2 | 114,443 | 0.2 | 55,824 | 0.1 | 54,612 | 0.1 |

Less than one-tenth of 1 per cent. where there are no percentage figures given.

### U. S. POPULATION OF MILITARY AGE, 1920—18 TO 44 YEARS.

| STATE. | Males. | Females. | STATE. | Males. | Females. | STATE. | Males. | Females. |
|---|---|---|---|---|---|---|---|---|
| Ala. | 423,075 | 468,559 | Me. | 148,430 | 147,501 | Okla. | 414,772 | 393,626 |
| Ariz. | 84,965 | 66,240 | Md. | 309,676 | 307,313 | Ore. | 179,038 | 161,054 |
| Ark. | 330,492 | 342,023 | Mass. | 807,838 | 851,264 | Pa. | 1,853,104 | 1,777,532 |
| Cal. | 829,998 | 734,965 | Mich. | 854,578 | 738,522 | R. I. | 126,465 | 131,333 |
| Col. | 206,979 | 190,616 | Minn. | 526,532 | 485,140 | S. C. | 306,292 | 334,837 |
| Conn. | 299,902 | 293,609 | Miss. | 327,251 | 360,345 | S. Dak. | 140,030 | 123,268 |
| Del. | 48,236 | 45,809 | Mo. | 706,038 | 718,234 | Tenn. | 438,225 | 473,299 |
| D. of C. | 102,670 | 125,147 | Mont. | 132,569 | 108,708 | Tex. | 995,938 | 955,294 |
| Fla. | 197,886 | 202,492 | Neb. | 279,150 | 262,313 | Utah. | 92,845 | 85,337 |
| Ga. | 542,136 | 589,643 | Nev. | 22,256 | 14,297 | Vt. | 66,736 | 65,970 |
| Idaho. | 95,705 | 80,611 | N. H. | 86,923 | 87,608 | Va. | 454,990 | 457,603 |
| Ill. | 1,449,872 | 1,405,936 | N. J. | 697,019 | 684,123 | Wash. | 329,067 | 278,208 |
| Ind. | 602,798 | 594,839 | N. Mex. | 76,548 | 67,225 | W. Va. | 305,695 | 275,802 |
| Iowa. | 501,040 | 488,301 | N. Y. | 2,313,807 | 2,343,865 | Wis. | 556,518 | 523,456 |
| Kan. | 365,403 | 354,153 | N. C. | 456,568 | 491,837 | Wyo. | 54,037 | 38,429 |
| Ky. | 469,119 | 470,032 | N. Dak. | 133,575 | 119,733 | | | |
| La. | 362,226 | 375,697 | Ohio. | 1,296,399 | 1,203,564 | U. S. | 22,401,211 | 21,895,312 |

## AMERICAN CITIZENS, 21 YEARS OF AGE AND OVER, 1920.

(U. S. Census Returns, as of Jan. 1 1922.)

| DIVISION AND STATE | MALE CITIZENS (ALL RACES). | | | FEMALE CITIZENS (ALL RACES.) | | |
|---|---|---|---|---|---|---|
| | Total. | Native. | Foreign-Born Naturalized. | Total. | Native. | Foreign-Born Naturalized. |
| United States | 27,661,880 | 24,339,776 | 3,322,104 | 26,759,952 | 23,860,351 | 2,899,601 |
| GEOGRAPHIC DIVISIONS: | | | | | | |
| New England | 1,762,381 | 1,393,931 | 368,450 | 1,867,136 | 1,478,195 | 388,941 |
| Middle Atlantic | 5,436,531 | 4,368,532 | 1,067,999 | 5,523,938 | 4,562,701 | 961,237 |
| East North Central | 5,928,668 | 5,083,761 | 844,907 | 5,688,735 | 4,955,092 | 733,643 |
| West North Central | 3,548,598 | 3,004,771 | 483,827 | 3,309,510 | 2,918,658 | 390,852 |
| South Atlantic | 3,541,813 | 3,468,301 | 73,512 | 3,504,289 | 3,444,783 | 59,506 |
| East South Central | 2,264,324 | 2,242,135 | 22,189 | 2,229,936 | 2,213,597 | 16,339 |
| West South Central | 2,609,270 | 2,544,435 | 64,835 | 2,387,553 | 2,337,631 | 49,922 |
| Mountain | 926,030 | 805,724 | 120,306 | 767,348 | 676,242 | 91,106 |
| Pacific | 1,644,265 | 1,368,186 | 276,079 | 1,481,507 | 1,273,452 | 208,055 |
| NEW ENGLAND: | | | | | | |
| Maine | 210,235 | 192,163 | 18,073 | 210,798 | 188,292 | 22,506 |
| New Hampshire | 116,059 | 98,656 | 17,403 | 119,407 | 100,175 | 19,232 |
| Vermont | 99,440 | 89,895 | 9,545 | 99,173 | 88,884 | 10,289 |
| Massachusetts | 888,782 | 674,635 | 214,147 | 966,468 | 737,841 | 228,627 |
| Rhode Island | 138,721 | 100,391 | 38,330 | 149,839 | 109,799 | 40,040 |
| Connecticut | 309,143 | 238,191 | 70,952 | 321,451 | 253,204 | 68,247 |
| MIDDLE ATLANTIC: | | | | | | |
| New York | 2,521,382 | 1,915,309 | 606,073 | 2,587,163 | 2,036,121 | 551,042 |
| New Jersey | 756,600 | 597,607 | 158,993 | 768,590 | 621,548 | 147,042 |
| Pennsylvania | 2,158,549 | 1,855,616 | 302,933 | 2,168,185 | 1,905,032 | 263,153 |
| EAST NORTH CENTRAL: | | | | | | |
| Ohio | 1,639,619 | 1,482,578 | 157,041 | 1,588,675 | 1,451,760 | 136,915 |
| Indiana | 860,834 | 825,916 | 34,918 | 841,818 | 813,093 | 28,725 |
| Illinois | 1,754,451 | 1,412,206 | 342,245 | 1,708,428 | 1,410,649 | 297,779 |
| Michigan | 984,716 | 803,778 | 175,938 | 896,881 | 741,128 | 155,753 |
| Wisconsin | 689,048 | 554,283 | 134,765 | 652,933 | 538,462 | 114,471 |
| WEST NORTH CENTRAL: | | | | | | |
| Minnesota | 648,433 | 471,006 | 177,427 | 588,770 | 446,670 | 142,100 |
| Iowa | 700,356 | 616,167 | 84,189 | 666,856 | 597,734 | 69,122 |
| Missouri | 998,139 | 940,503 | 57,636 | 970,947 | 924,017 | 46,930 |
| North Dakota | 159,262 | 107,866 | 51,396 | 133,568 | 93,669 | 39,899 |
| South Dakota | 174,486 | 143,435 | 31,051 | 147,397 | 123,253 | 24,144 |
| Nebraska | 358,789 | 309,731 | 49,058 | 327,558 | 286,767 | 40,791 |
| Kansas | 509,133 | 476,063 | 33,070 | 474,414 | 446,548 | 27,866 |
| SOUTH ATLANTIC: | | | | | | |
| Delaware | 64,232 | 59,895 | 4,337 | 62,001 | 58,296 | 3,705 |
| Maryland | 408,887 | 382,671 | 26,216 | 408,867 | 385,143 | 23,724 |
| District of Columbia | 132,988 | 125,137 | 7,851 | 159,949 | 152,981 | 6,968 |
| Virginia | 603,898 | 595,439 | 8,459 | 588,652 | 582,915 | 5,737 |
| West Virginia | 373,288 | 364,947 | 8,341 | 337,596 | 331,759 | 5,837 |
| North Carolina | 601,422 | 599,515 | 1,907 | 605,921 | 604,562 | 1,359 |
| South Carolina | 387,149 | 385,211 | 1,938 | 389,820 | 388,676 | 1,144 |
| Georgia | 707,198 | 702,125 | 5,073 | 707,574 | 704,266 | 3,308 |
| Florida | 262,751 | 253,361 | 9,390 | 243,909 | 236,185 | 7,724 |
| EAST SOUTH CENTRAL: | | | | | | |
| Kentucky | 651,260 | 640,967 | 10,293 | 627,158 | 618,930 | 8,228 |
| Tennessee | 605,445 | 600,988 | 4,457 | 602,774 | 599,480 | 3,294 |
| Alabama | 568,886 | 563,808 | 5,078 | 566,643 | 563,150 | 3,493 |
| Mississippi | 438,733 | 436,372 | 2,361 | 433,361 | 432,037 | 1,324 |
| WEST SOUTH CENTRAL: | | | | | | |
| Arkansas | 448,497 | 443,883 | 4,614 | 413,078 | 410,092 | 2,986 |
| Louisiana | 453,051 | 443,621 | 9,430 | 443,827 | 437,930 | 5,897 |
| Oklahoma | 538,299 | 526,998 | 11,301 | 466,217 | 458,066 | 8,151 |
| Texas | 1,169,423 | 1,129,933 | 39,490 | 1,064,431 | 1,031,543 | 32,888 |
| MOUNTAIN: | | | | | | |
| Montana | 163,057 | 128,967 | 34,090 | 126,774 | 104,080 | 22,694 |
| Idaho | 122,475 | 108,272 | 14,203 | 97,705 | 87,991 | 9,714 |
| Wyoming | 60,293 | 52,986 | 7,307 | 43,186 | 38,461 | 4,725 |
| Colorado | 274,921 | 240,249 | 34,672 | 244,993 | 217,276 | 27,717 |
| New Mexico | 92,254 | 88,831 | 3,423 | 76,354 | 73,843 | 2,511 |
| Arizona | 80,387 | 74,298 | 6,089 | 60,431 | 55,629 | 4,802 |
| Utah | 106,448 | 90,058 | 16,390 | 100,681 | 83,857 | 16,824 |
| Nevada | 26,195 | 22,063 | 4,132 | 17,224 | 15,105 | 2,119 |
| PACIFIC: | | | | | | |
| Washington | 406,087 | 328,805 | 77,282 | 340,871 | 284,009 | 56,862 |
| Oregon | 240,083 | 208,129 | 31,954 | 210,484 | 186,866 | 23,618 |
| California | 998,095 | 831,252 | 166,843 | 930,152 | 802,577 | 127,575 |

### DEFINITION OF THE TERM "CITIZEN."

The total number of citizens, male and female, in the above table, is 54,421,832. The citizens comprise all native persons and all naturalized foreign-born persons.

Under the provisions of the naturalization laws at the time the 1910 census was taken, the citizenship status of a married woman was the same as that of her husband (but if the husband had taken out his naturalization papers only, his wife was classified in the census returns as an alien); for an unmarried woman the process of naturalization was the same as for a man; a foreign-born widow or foreign-born divorced wife of a citizen of the United States retained the citizenship status of her former husband so long as she continued to reside in this country; and a foreign-born widow or foreign-born divorced wife of an alien could become naturalized in the same manner as a man.

### WOMEN LEAD IN NATURALIZATION.

In general, the citizenship returns of 1920 show a greater proportion of women naturalized than of men. The proportion of women shown as having taken out first papers was very much smaller than the proportion shown for men. This is due to the fact that a foreign-born married woman whose husband has taken out his first papers is herself treated as an alien, so that this classification in the case of women relates only to those who are not married.

## FOREIGN-BORN WHITE POPULATION OF U. S. OF VOTING AGE.

(U. S. Census Returns, Jan. 1, 1920.)

| Division and State. | Males. | | | | Females. | | | |
|---|---|---|---|---|---|---|---|---|
| | Total. | Naturalized. | First Papers. | Alien. | Total. | Naturalized. | First Papers. | Alien. |
| UNITED STATES | 6,928,452 | 3,314,910 | 1,116,749 | 2,138,237 | 5,570,268 | 2,893,787 | 77,532 | 2,226,672 |
| GEOGRAPHIC DIVISIONS: | | | | | | | | |
| New England | 866,043 | 367,479 | 128,790 | 343,403 | 839,238 | 388,039 | 8,521 | 405,169 |
| Middle Atlantic | 2,406,973 | 1,065,415 | 374,400 | 871,498 | 2,070,839 | 959,218 | 27,693 | 956,203 |
| East North Central | 1,687,305 | 843,626 | 362,390 | 388,790 | 1,290,845 | 732,715 | 23,179 | 441,002 |
| West North Central | 738,670 | 483,501 | 100,226 | 98,487 | 553,107 | 390,615 | 7,572 | 105,135 |
| South Atlantic | 170,407 | 72,664 | 20,816 | 63,077 | 116,810 | 58,761 | 1,461 | 46,150 |
| East South Central | 39,697 | 22,056 | 3,683 | 8,079 | 27,545 | 16,279 | 297 | 6,283 |
| West South Central | 208,433 | 64,503 | 13,516 | 111,738 | 148,791 | 49,755 | 1,219 | 84,505 |
| Mountain | 241,321 | 119,979 | 30,452 | 76,754 | 152,687 | 90,885 | 1,790 | 51,321 |
| Pacific | 569,178 | 275,354 | 82,425 | 176,379 | 370,445 | 207,518 | 5,802 | 130,944 |
| NEW ENGLAND: | | | | | | | | |
| Maine | 49,355 | 18,028 | 6,553 | 21,676 | 44,974 | 22,451 | 189 | 18,751 |
| New Hampshire | 42,432 | 17,395 | 4,839 | 17,723 | 39,617 | 19,217 | 201 | 16,874 |
| Vermont | 20,462 | 9,540 | 2,106 | 7,886 | 17,770 | 10,285 | 117 | 6,377 |
| Massachusetts | 491,107 | 213,478 | 73,725 | 193,845 | 497,804 | 227,938 | 5,555 | 248,506 |
| Rhode Island | 78,118 | 38,212 | 13,521 | 23,562 | 78,748 | 39,963 | 1,232 | 33,445 |
| Connecticut | 184,568 | 70,826 | 28,046 | 78,711 | 160,334 | 68,185 | 1,227 | 81,216 |
| MIDDLE ATLANTIC: | | | | | | | | |
| New York | 1,318,883 | 604,251 | 214,958 | 446,859 | 1,209,614 | 549,557 | 19,142 | 564,261 |
| New Jersey | 360,902 | 158,727 | 60,708 | 129,137 | 314,320 | 146,789 | 3,185 | 145,890 |
| Pennsylvania | 727,194 | 302,437 | 98,734 | 295,499 | 546,844 | 262,855 | 5,366 | 246,010 |
| EAST NORTH CENTRAL: | | | | | | | | |
| Ohio | 363,500 | 156,819 | 76,524 | 114,286 | 259,017 | 136,715 | 3,350 | 104,001 |
| Indiana | 82,908 | 34,871 | 23,563 | 15,980 | 57,465 | 28,696 | 1,353 | 19,682 |
| Illinois | 613,797 | 341,910 | 125,752 | 111,348 | 504,131 | 297,536 | 8,386 | 161,042 |
| Michigan | 381,808 | 175,631 | 86,460 | 101,206 | 281,352 | 155,327 | 4,553 | 103,343 |
| Wisconsin | 245,711 | 134,720 | 50,137 | 46,007 | 188,880 | 114,441 | 5,537 | 52,936 |
| WEST NORTH CENTRAL: | | | | | | | | |
| Minnesota | 266,856 | 177,355 | 40,727 | 35,245 | 195,726 | 142,035 | 3,211 | 37,404 |
| Iowa | 121,392 | 84,160 | 11,109 | 15,384 | 93,087 | 69,111 | 781 | 13,686 |
| Missouri | 97,345 | 57,561 | 13,765 | 17,240 | 76,206 | 46,887 | 993 | 19,853 |
| North Dakota | 70,043 | 51,350 | 6,558 | 7,017 | 51,004 | 39,837 | 407 | 6,702 |
| South Dakota | 45,340 | 31,027 | 6,318 | 3,103 | 32,687 | 24,134 | 433 | 4,397 |
| Nebraska | 79,821 | 49,012 | 13,868 | 9,490 | 61,078 | 40,771 | 1,119 | 12,705 |
| Kansas | 57,876 | 33,036 | 7,881 | 11,008 | 43,333 | 27,853 | 628 | 10,388 |
| SOUTH ATLANTIC: | | | | | | | | |
| Delaware | 10,614 | 4,329 | 1,539 | 4,033 | 7,631 | 3,698 | 67 | 3,131 |
| Maryland | 50,363 | 26,077 | 8,720 | 13,720 | 43,261 | 23,687 | 647 | 16,914 |
| District of Columbia | 14,042 | 7,786 | 1,775 | 2,842 | 12,334 | 6,926 | 324 | 3,491 |
| Virginia | 17,431 | 8,356 | 2,294 | 4,792 | 10,422 | 5,703 | 108 | 3,327 |
| West Virginia | 38,471 | 8,315 | 3,105 | 23,996 | 16,994 | 5,826 | 100 | 9,386 |
| North Carolina | 4,035 | 1,886 | 285 | 1,124 | 2,453 | 1,349 | 10 | 648 |
| South Carolina | 3,850 | 1,924 | 417 | 921 | 2,091 | 1,138 | 21 | 583 |
| Georgia | 9,319 | 5,023 | 958 | 2,340 | 5,536 | 3,293 | 73 | 1,533 |
| Florida | 22,282 | 8,968 | 1,723 | 9,309 | 16,088 | 7,141 | 111 | 7,137 |
| EAST SOUTH CENTRAL: | | | | | | | | |
| Kentucky | 16,827 | 10,273 | 1,472 | 3,060 | 12,661 | 8,220 | 159 | 2,212 |
| Tennessee | 8,428 | 4,430 | 739 | 1,821 | 5,891 | 3,278 | 62 | 1,535 |
| Alabama | 9,814 | 5,031 | 1,125 | 2,030 | 6,291 | 3,472 | 59 | 1,639 |
| Mississippi | 4,628 | 2,322 | 347 | 1,168 | 2,702 | 1,309 | 17 | 897 |
| WEST SOUTH CENTRAL: | | | | | | | | |
| Arkansas | 8,166 | 4,593 | 753 | 1,319 | 5,000 | 2,976 | 64 | 1,066 |
| Louisiana | 24,848 | 9,350 | 2,121 | 10.708 | 16,380 | 5,846 | 82 | 7,586 |
| Oklahoma | 22,817 | 11,239 | 1,777 | 6,233 | 13,290 | 8,133 | 124 | 3,265 |
| Texas | 152,600 | 39,321 | 8,865 | 93,478 | 114,118 | 32,800 | 949 | 72,588 |
| MOUNTAIN: | | | | | | | | |
| Montana | 54,250 | 34,009 | 8.714 | 7,636 | 31,459 | 22,618 | 479 | 5,990 |
| Idaho | 23,366 | 14,186 | 3,156 | 4,489 | 12,804 | 9,708 | 139 | 2,217 |
| Wyoming | 15,796 | 7,289 | 2,427 | 4,791 | 7,261 | 4,719 | 72 | 1,965 |
| Colorado | 62,089 | 34,630 | 8,648 | 15,696 | 42,928 | 27,688 | 603 | 12,446 |
| New Mexico | 13,244 | 3,381 | 750 | 8,390 | 8,689 | 2,500 | 45 | 5,642 |
| Arizona | 33,582 | 5,986 | 1,801 | 24,147 | 22,391 | 4,722 | 79 | 16,638 |
| Utah | 28,791 | 16,377 | 3,563 | 7,664 | 23,463 | 16,815 | 348 | 5,320 |
| Nevada | 10,203 | 4,121 | 1,393 | 3,941 | 3,692 | 2,115 | 25 | 1,103 |
| PACIFIC: | | | | | | | | |
| Washington | 143,258 | 77,156 | 28,308 | 29,572 | 87,177 | 56,761 | 1,443 | 22,954 |
| Oregon | 58,580 | 31,899 | 11,255 | 12,800 | 36,227 | 23,581 | 726 | 10,326 |
| California | 367,340 | 166,299 | 42,862 | 134,007 | 247,041 | 127,176 | 3,633 | 97,664 |

The totals in the above table include 358,547 males and 372,276 females whose citizenship was not reported to the Census Bureau.

### COUNTRY OF BIRTH OF FOREIGN-BORN WHITES OF VOTING AGE.

(Figures show number born in the respective countries.)

| Country. | Males. | Females. | Country. | Males. | Females. | Country. | Males. | Females. |
|---|---|---|---|---|---|---|---|---|
| Africa | 2,191 | 1,407 | Finland | 80,407 | 59,606 | Poland | 602,918 | 445,132 |
| Albania | 4,543 | 547 | France | 73,937 | 66,959 | Portugal | 33,837 | 22,739 |
| America, Central & South | 9,215 | 5,331 | Germany | 873,231 | 775,653 | Roumania | 52,979 | 39,138 |
| Armenia | 23,746 | 9,780 | Greece | 135,207 | 26,308 | Russia | 682,208 | 529,129 |
| Asia Minor | 1,513 | 627 | Hungary | 196,093 | 157,699 | Scotland | 122,568 | 108,966 |
| Asia, other | 4,450 | 2,096 | Ireland | 448,573 | 573,104 | Spain | 31,540 | 9,896 |
| Atlantic Isles | 18,393 | 15,164 | Italy | 858,111 | 550,822 | Sweden | 334,849 | 270,700 |
| Australia | 5,370 | 4,352 | Jugo-Slavia | 107,974 | 47,982 | Switzerland | 65,656 | 48,736 |
| Austria | 300,899 | 227,262 | Lithuania | 79,308 | 48,334 | Syria | 28,478 | 18,097 |
| Belgium | 31,811 | 22,531 | Luxemburg | 7,484 | 4,697 | Turkey, Asia | 5,870 | 1,753 |
| Bulgaria | 9,219 | 745 | Mexico | 189,974 | 129,723 | Turkey, Eur'pe | 3,311 | 1,290 |
| Canada, Fr'ch. | 141,514 | 132,662 | Netherlands | 67,901 | 49,276 | Wales | 34,806 | 29,429 |
| Canada, others | 349,404 | 377,936 | Newfoundland | 5,689 | 6,571 | West Indies | 11,690 | 9,969 |
| Czecho-Slovak | 182,913 | 152,417 | Norway | 195,101 | 153,784 | All other | 6,295 | 4,420 |
| Denmark | 109,754 | 71,044 | Pacific Isles | 1,761 | 1,436 | | | |
| England | 392,116 | 353,282 | Palestine | 1,703 | 836 | Total | 6,928,452 | 5,570,268 |

Figures for West Indies do not include Porto Rico.

## COUNTRY OF BIRTH OF FOREIGN-BORN WHITE, 1920.

| DIVISION AND STATE. | Total Foreign-Born White. | NORTHWESTERN EUROPE. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | England. | Scotland. | Wales | Ireland. | Norway. | Sweden. | Denmark. | Netherlands. | Belgium. | Luxemburg. |
| United States | 13,712,754 | 812,828 | 254,567 | 67,066 | 1,037,233 | 363,862 | 625,580 | 189,154 | 131,766 | 62,686 | 12,585 |
| GEOGRAPHIC DIV. | | | | | | | | | | | |
| New England | 1,870,654 | 147,098 | 47,501 | 2,999 | 267,428 | 8,564 | 67,286 | 8,458 | 2,912 | 4,411 | 114 |
| Middle Atlantic | 4,912,575 | 272,752 | 83,883 | 29,185 | 472,319 | 35,362 | 83,547 | 22,991 | 27,847 | 12,478 | 1,017 |
| East No. Central | 3,223,279 | 163,892 | 51,650 | 15,226 | 135,147 | 82,137 | 165,388 | 43,018 | 59,863 | 29,706 | 5,093 |
| West No. Central | 1,371,961 | 53,523 | 17,196 | 5,693 | 49,858 | 166,280 | 187,625 | 61,748 | 24,399 | 7,159 | 4,846 |
| South Atlantic | 315,920 | 24,269 | 7,455 | 1,773 | 20,145 | 2,259 | 4,418 | 2,123 | 1,459 | 1,547 | 87 |
| East So. Central | 71,939 | 6,060 | 2,093 | 455 | 5,934 | 450 | 1,514 | 531 | 322 | 235 | 31 |
| West So. Central | 459,333 | 13,327 | 3,711 | 763 | 8,330 | 2,691 | 6,320 | 2,580 | 1,106 | 1,180 | 127 |
| Mountain | 453,225 | 44,576 | 12,986 | 4,907 | 19,634 | 17,400 | 32,232 | 17,023 | 5,252 | 1,608 | 372 |
| Pacific | 1,033,868 | 87,331 | 28,092 | 6,065 | 58,438 | 48,719 | 77,250 | 30,682 | 8,606 | 4,362 | 898 |
| NEW ENGLAND. | | | | | | | | | | | |
| Maine | 107,349 | 5,149 | 2,171 | 137 | 5,748 | 581 | 2,026 | 1,065 | 50 | 51 | 6 |
| New Hampshire | 91,233 | 4,367 | 1,823 | 51 | 7,908 | 427 | 1,886 | 204 | 177 | 478 | 5 |
| Vermont | 44,526 | 2,197 | 1,854 | 549 | 2,884 | 106 | 1,128 | 155 | 32 | 15 | 2 |
| Massachusetts | 1,077,534 | 86,895 | 28,474 | 1,367 | 183,171 | 5,491 | 38,012 | 3,629 | 2,071 | 2,497 | 33 |
| Rhode Island | 173,499 | 25,782 | 5,692 | 245 | 22,253 | 545 | 6,542 | 365 | 138 | 868 | 14 |
| Connecticut | 376,513 | 22,708 | 7,487 | 650 | 45,464 | 1,414 | 17,697 | 3,040 | 444 | 402 | 54 |
| MID. ATLANTIC. | | | | | | | | | | | |
| New York | 2,786,112 | 135,305 | 37,654 | 6,763 | 284,747 | 27,573 | 53,025 | 14,222 | 13,772 | 5,300 | 564 |
| New Jersey | 738,613 | 46,781 | 17,781 | 1,255 | 65,971 | 5,343 | 10,675 | 5,704 | 12,737 | 2,483 | 167 |
| Pennsylvania | 1,387,850 | 90,666 | 28,448 | 21,167 | 121,601 | 2,446 | 19,847 | 3,065 | 1,338 | 4,695 | 286 |
| EAST NO. CENTRAL | | | | | | | | | | | |
| Ohio | 678,697 | 43,140 | 12,148 | 7,772 | 29,262 | 1,487 | 7,266 | 2,353 | 2,529 | 1,902 | 273 |
| Indiana | 150,868 | 8,522 | 3,707 | 1,106 | 7,271 | 544 | 4,942 | 969 | 2,018 | 2,530 | 101 |
| Illinois | 1,206,951 | 54,247 | 19,598 | 3,444 | 74,274 | 27,785 | 105,577 | 17,098 | 14,344 | 11,329 | 3,211 |
| Michigan | 726,635 | 47,149 | 13,175 | 1,154 | 16,531 | 6,888 | 24,707 | 7,178 | 33,499 | 10,501 | 477 |
| Wisconsin | 460,128 | 10,834 | 3,022 | 1,750 | 7,809 | 45,433 | 22,896 | 15,420 | 7,473 | 3,444 | 1,031 |
| W. NO. CENTRAL. | | | | | | | | | | | |
| Minnesota | 486,164 | 10,958 | 3,928 | 854 | 10,289 | 90,188 | 112,117 | 16,904 | 5,380 | 2,056 | 1,782 |
| Iowa | 225,647 | 13,036 | 3,967 | 1,753 | 10,686 | 17,344 | 22,493 | 18,020 | 12,471 | 1,232 | 1,630 |
| Missouri | 186,026 | 10,400 | 2,969 | 903 | 15,022 | 610 | 4,741 | 1,688 | 906 | 1,113 | 140 |
| North Dakota | 131,503 | 2,287 | 1,229 | 120 | 1,660 | 38,190 | 10,543 | 4,552 | 903 | 456 | 229 |
| South Dakota | 82,391 | 2,943 | 832 | 346 | 1,954 | 16,813 | 8,573 | 5,983 | 3,218 | 251 | 480 |
| Nebraska | 149,652 | 6,000 | 1,695 | 547 | 5,422 | 2,165 | 18,821 | 12,338 | 846 | 551 | 301 |
| Kansas | 110,578 | 7,899 | 2,576 | 1,170 | 4,825 | 970 | 10,337 | 2,263 | 675 | 1,500 | 284 |
| SOUTH ATLANTIC. | | | | | | | | | | | |
| Delaware | 19,810 | 1,497 | 411 | 44 | 2,895 | 65 | 316 | 77 | 37 | 24 | 5 |
| Maryland | 102,177 | 5,095 | 1,692 | 499 | 6,580 | 536 | 630 | 382 | 314 | 135 | 22 |
| Dist. Columbia | 28,548 | 2,990 | 793 | 106 | 4,320 | 219 | 481 | 237 | 127 | 76 | 13 |
| Virginia | 30,785 | 3,752 | 1,327 | 163 | 1,732 | 491 | 664 | 459 | 335 | 122 | 7 |
| West Virginia | 61,906 | 3,433 | 998 | 704 | 1,459 | 51 | 326 | 121 | 66 | 938 | 6 |
| North Carolina | 7,099 | 967 | 446 | 25 | 301 | 70 | 170 | 69 | 115 | 16 | 2 |
| South Carolina | 6,401 | 491 | 190 | 10 | 442 | 85 | 133 | 76 | 30 | 61 | 1 |
| Georgia | 16,186 | 1,593 | 530 | 86 | 1,112 | 132 | 299 | 127 | 78 | 45 | 7 |
| Florida | 43,008 | 4,451 | 1,068 | 136 | 1,304 | 610 | 1,399 | 575 | 357 | 130 | 24 |
| EAST SO. CENTRAL | | | | | | | | | | | |
| Kentucky | 30,780 | 1,863 | 520 | 149 | 3,422 | 75 | 214 | 89 | 150 | 90 | 12 |
| Tennessee | 15,478 | 1,665 | 454 | 143 | 1,291 | 63 | 305 | 138 | 58 | 36 | 3 |
| Alabama | 17,662 | 1,942 | 975 | 145 | 809 | 215 | 748 | 191 | 83 | 73 | 8 |
| Mississippi | 8,019 | 590 | 144 | 18 | 412 | 97 | 247 | 113 | 31 | 36 | 8 |
| W. SO. CENTRAL. | | | | | | | | | | | |
| Arkansas | 13,975 | 1,137 | 316 | 90 | 676 | 99 | 331 | 180 | 116 | 94 | 8 |
| Louisiana | 44,871 | 1,819 | 447 | 76 | 2,000 | 555 | 522 | 331 | 260 | 350 | 9 |
| Oklahoma | 39,968 | 2,686 | 1,120 | 319 | 1,321 | 297 | 931 | 561 | 176 | 289 | 52 |
| Texas | 360,519 | 7,685 | 1,828 | 278 | 4,333 | 1,740 | 4,536 | 1,508 | 554 | 447 | 58 |
| MOUNTAIN. | | | | | | | | | | | |
| Montana | 93,620 | 8,159 | 3,279 | 879 | 7,260 | 9,962 | 7,179 | 2,990 | 1,675 | 672 | 153 |
| Idaho | 38,963 | 4,451 | 1,228 | 575 | 1,410 | 2,482 | 5,112 | 2,240 | 439 | 123 | 60 |
| Wyoming | 25,255 | 2,505 | 1,439 | 297 | 956 | 651 | 2,042 | 936 | 130 | 130 | 18 |
| Colorado | 116,954 | 9,584 | 3,357 | 1,482 | 6,191 | 1,525 | 10,112 | 2,823 | 853 | 430 | 91 |
| New Mexico | 29,077 | 888 | 440 | 78 | 434 | 128 | 310 | 115 | 70 | 76 | 6 |
| Arizona | 78,099 | 2,882 | 595 | 192 | 1,206 | 337 | 859 | 398 | 69 | 60 | 22 |
| Utah | 56,455 | 14,836 | 2,310 | 1,304 | 1,207 | 2,109 | 6,073 | 6,970 | 1,980 | 90 | 18 |
| Nevada | 14,802 | 1,271 | 338 | 100 | 970 | 206 | 545 | 551 | 36 | 27 | 4 |
| PACIFIC. | | | | | | | | | | | |
| Washington | 250,055 | 20,806 | 7,886 | 2,040 | 8,927 | 30,304 | 34,793 | 8,359 | 3,097 | 1,438 | 315 |
| Oregon | 102,151 | 7,953 | 3,609 | 592 | 4,203 | 6,955 | 10,532 | 3,602 | 917 | 722 | 140 |
| California | 681,662 | 58,572 | 16,597 | 3,433 | 45,308 | 11,460 | 31,925 | 18,721 | 4,592 | 2,202 | 443 |

The foreign-born population in 1910 totalled 13,345,545.

### TOTAL FOREIGN-BORN POPULATION OF U. S., 1920.
(U. S. Census Returns.)

| STATE. | Total. | STATE. | Total. | STATE. | Total. |
|---|---|---|---|---|---|
| Alabama | 18,027 | Maine | 107,814 | Oklahoma | 40,432 |
| Arizona | 80,566 | Maryland | 103,179 | Oregon | 107,644 |
| Arkansas | 14,137 | Massachusetts | 1,088,548 | Pennsylvania | 1,392,557 |
| California | 757,625 | Michigan | 729,292 | Rhode Island | 175,189 |
| Colorado | 119138 | Minnesota | 486,795 | South Carolina | 6,582 |
| Connecticut | 378,439 | Mississippi | 8,408 | South Dakota | 82,534 |
| Delaware | 19,901 | Missouri | 186,835 | Tennessee | 15,648 |
| District of Columbia | 29,365 | Montana | 95,591 | Texas | 363,832 |
| Florida | 53,864 | Nebraska | 150,665 | Utah | 59,200 |
| Georgia | 16,564 | Nevada | 16,003 | Vermont | 44,558 |
| Idaho | 40,747 | New Hampshire | 91,397 | Virginia | 31,705 |
| Illinois | 1,210,584 | New Jersey | 742,486 | Washington | 265,292 |
| Indiana | 151,328 | New Mexico | 29,808 | West Virginia | 62,105 |
| Iowa | 225,994 | New York | 2,825,375 | Wisconsin | 460,485 |
| Kansas | 110,967 | North Carolina | 7,272 | Wyoming | 26,567 |
| Kentucky | 30,906 | North Dakota | 131,863 | | |
| Louisiana | 46,427 | Ohio | 680,452 | Total U. S. | 13,920,692 |

Of the foreign-born population of the United States on Jan 1, 1920, those at that time naturalized totalled 6,493,088; holding first papers only, 1,223,490; aliens, 5,398,605; citizenship not reported, 805,509.

COUNTRY OF BIRTH OF FOREIGN-BORN WHITE, 1920—*Continued.*

| DIVISION AND STATE. | CENTRAL EUROPE. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Switzerland. | France. | Alsace-Lorraine. | Germany. | Poland. | Cz'cho-Slovakia. | Austria. | Hungary. | Jugo-Slavia. |
| United States | 118,659 | 118,569 | 34,321 | 1,686,102 | 1,139,978 | 362,436 | 575,625 | 397,282 | 169,437 |
| GEOGRAPHIC DIVISIONS: | | | | | | | | | |
| New England | 3,763 | 11,347 | 1,899 | 51,129 | 131,378 | 9,653 | 23,081 | 15,187 | 2,405 |
| Middle Atlantic | 30,093 | 41,438 | 13,711 | 508,226 | 515,708 | 123,863 | 310,844 | 190,224 | 48,087 |
| East North Central | 30,379 | 20,097 | 9,515 | 592,058 | 402,259 | 143,743 | 145,275 | 149,592 | 72,343 |
| West North Central | 15,838 | 7,972 | 3,460 | 293,035 | 38,262 | 50,906 | 37,504 | 17,640 | 18,189 |
| South Atlantic | 2,348 | 3,474 | 638 | 40,898 | 25,432 | 6,620 | 12,077 | 10,696 | 3,581 |
| East South Central | 2,176 | 1,569 | 622 | 16,652 | 2,590 | 617 | 2,023 | 1,829 | 766 |
| West South Central | 3,433 | 6,817 | 1,254 | 47,217 | 7,206 | 15,438 | 9,195 | 1,664 | 1,267 |
| Mountain | 6,695 | 4,273 | 692 | 33,652 | 4,675 | 5,295 | 13,070 | 3,233 | 10,771 |
| Pacific | 23,934 | 21,582 | 2,530 | 103,235 | 12,468 | 6,301 | 22,556 | 7,217 | 12,028 |
| NEW ENGLAND: | | | | | | | | | |
| Maine | 62 | 328 | 16 | 932 | 1,717 | 410 | 305 | 72 | 143 |
| New Hampshire | 72 | 227 | 61 | 1,714 | 3,997 | 75 | 389 | 66 | 120 |
| Vermont | 187 | 183 | 14 | 630 | 1,726 | 108 | 283 | 264 | 56 |
| Massachusetts | 1,368 | 6,079 | 1,041 | 22,113 | 69,157 | 2,238 | 8,098 | 1,387 | 950 |
| Rhode Island | 211 | 1,816 | 155 | 3,126 | 8,158 | 264 | 1,307 | 176 | 146 |
| Connecticut | 1,863 | 2,714 | 612 | 22,614 | 46,623 | 6,558 | 12,699 | 13,222 | 990 |
| MIDDLE ATLANTIC: | | | | | | | | | |
| New York | 15,053 | 25,050 | 7,129 | 295,650 | 247,519 | 38,247 | 151,172 | 78,374 | 8,547 |
| New Jersey | 8,165 | 7,044 | 3,121 | 92,382 | 90,419 | 16,747 | 36,917 | 40,470 | 3,313 |
| Pennsylvania | 6,875 | 9,344 | 3,461 | 120,194 | 177,770 | 68,869 | 122,755 | 71,380 | 3,627 |
| EAST NORTH CENTRAL: | | | | | | | | | |
| Ohio | 9,656 | 4,554 | 3,502 | 111,893 | 67,579 | 42,121 | 48,073 | 73,181 | 30,377 |
| Indiana | 2,334 | 2,429 | 818 | 37,377 | 17,791 | 3,941 | 9,100 | 9,351 | 4,471 |
| Illinois | 7,837 | 8,610 | 3,383 | 205,491 | 162,405 | 66,709 | 46,457 | 34,437 | 19,285 |
| Michigan | 2,755 | 3,250 | 924 | 86,047 | 103,926 | 11,161 | 22,004 | 22,607 | 9,420 |
| Wisconsin | 7,797 | 1,254 | 888 | 151,250 | 50,558 | 19,811 | 19,641 | 10,016 | 8,874 |
| WEST NORTH CENTRAL: | | | | | | | | | |
| Minnesota | 2,720 | 1,204 | 599 | 74,634 | 18,537 | 12,626 | 11,550 | 4,277 | 10,697 |
| Iowa | 2,871 | 1,460 | 665 | 70,642 | 2,028 | 9,150 | 4,334 | 737 | 1,603 |
| Missouri | 4,934 | 2,409 | 1,416 | 55,776 | 7,636 | 4,971 | 8,676 | 8,080 | 2,327 |
| North Dakota | 506 | 269 | 81 | 11,960 | 2,236 | 2,056 | 2,059 | 2,519 | 199 |
| South Dakota | 761 | 215 | 120 | 15,674 | 792 | 2,819 | 1,151 | 585 | 470 |
| Nebraska | 1,808 | 575 | 283 | 40,969 | 4,615 | 15,818 | 4,551 | 810 | 738 |
| Kansas | 2,238 | 1,840 | 296 | 23,380 | 2,418 | 3,466 | 5,183 | 622 | 2,155 |
| SOUTH ATLANTIC: | | | | | | | | | |
| Delaware | 76 | 160 | 38 | 1,632 | 3,847 | 122 | 615 | 226 | 27 |
| Maryland | 509 | 624 | 194 | 22,032 | 12,061 | 3,553 | 3,620 | 1,947 | 359 |
| District of Columbia | 358 | 605 | 82 | 3,382 | 716 | 122 | 525 | 219 | 43 |
| Virginia | 239 | 396 | 59 | 2,802 | 1,103 | 897 | 921 | 1,293 | 127 |
| West Virginia | 545 | 509 | 124 | 3,798 | 5,799 | 1,549 | 5,115 | 6,260 | 2,802 |
| North Carolina | 72 | 127 | 9 | 703 | 210 | 20 | 149 | 66 | 29 |
| South Carolina | 31 | 72 | 6 | 1,079 | 351 | 45 | 206 | 56 | 22 |
| Georgia | 161 | 313 | 63 | 1,936 | 917 | 123 | 401 | 246 | 84 |
| Florida | 357 | 668 | 63 | 3,534 | 428 | 189 | 525 | 383 | 88 |
| EAST SOUTH CENTRAL: | | | | | | | | | |
| Kentucky | 1,315 | 533 | 451 | 11,137 | 1,037 | 240 | 906 | 1,084 | 354 |
| Tennessee | 616 | 277 | 56 | 2,159 | 841 | 82 | 398 | 326 | 37 |
| Alabama | 174 | 555 | 61 | 2,427 | 394 | 232 | 583 | 372 | 155 |
| Mississippi | 71 | 204 | 54 | 929 | 318 | 63 | 136 | 47 | 220 |
| WEST SOUTH CENTRAL: | | | | | | | | | |
| Arkansas | 736 | 300 | 87 | 3,979 | 529 | 492 | 636 | 108 | 117 |
| Louisiana | 378 | 3,743 | 439 | 5,147 | 377 | 302 | 725 | 305 | 312 |
| Oklahoma | 629 | 839 | 119 | 7,029 | 1,253 | 1,825 | 1,393 | 311 | 218 |
| Texas | 1,690 | 1,935 | 609 | 31,062 | 5,047 | 12,819 | 6,441 | 940 | 620 |
| MOUNTAIN: | | | | | | | | | |
| Montana | 1,151 | 771 | 117 | 7,873 | 1,219 | 1,895 | 3,298 | 935 | 3,782 |
| Idaho | 1,347 | 398 | 84 | 4,143 | 287 | 420 | 781 | 233 | 460 |
| Wyoming | 302 | 330 | 31 | 2,292 | 544 | 518 | 1,183 | 349 | 1,189 |
| Colorado | 1,510 | 1,155 | 265 | 11,992 | 1,867 | 1,953 | 5,722 | 1,157 | 2,109 |
| New Mexico | 148 | 331 | 46 | 1,178 | 153 | 113 | 423 | 130 | 535 |
| Arizona | 293 | 331 | 63 | 1,516 | 261 | 148 | 486 | 210 | 1,167 |
| Utah | 1,566 | 391 | 43 | 3,589 | 240 | 163 | 987 | 179 | 836 |
| Nevada | 378 | 566 | 43 | 1,069 | 104 | 85 | 190 | 40 | 693 |
| PACIFIC: | | | | | | | | | |
| Washington | 3,671 | 2,055 | 397 | 22,315 | 3,906 | 1,792 | 6,494 | 1,056 | 3,565 |
| Oregon | 4,166 | 1,004 | 269 | 13,740 | 1,480 | 1,132 | 2,798 | 909 | 1,186 |
| California | 16,097 | 18,523 | 1,864 | 67,180 | 7,082 | 3,377 | 13,264 | 5,252 | 7,277 |

COUNTRY OF ORIGIN OF *FOREIGN WHITE STOCK* IN U. S.
(U. S. Census Returns, Jan. 1, 1920.)

By *Foreign White Stock* is meant the foreign-born, plus the native white population having one or both parents foreign-born.

| COUNTRY OF ORIGIN. | Number. | COUNTRY OF ORIGIN. | Number. | COUNTRY OF ORIGIN. | Number. |
|---|---|---|---|---|---|
| Amer., Cent. & South.. | 19,487 | Greece | 212,338 | Scotland | 731,239 |
| Asia "all other" | 10,732 | Hungary | 1,110,905 | Serbia, Montenegro | 32,324 |
| Austria | 3,129,796 | Ireland | 4,136,395 | Spain | 77,944 |
| Belgium | 122,690 | Italy | 3,336,945 | Sweden | 1,457,382 |
| Bulgaria | 11,397 | Luxemburg | 43,109 | Switzerland | 327,797 |
| Canada, French | 848,309 | Mexico | 725,332 | Turkey, Asia | 164,409 |
| " other | 1,755,519 | Netherlands | 362,318 | " Europe | 23,303 |
| Denmark | 467,525 | Newfoundland | 25,448 | Wales | 230,380 |
| England | 2,307,112 | Norway | 1,023,225 | West Indies | 45,494 |
| Finland | 296,276 | Portugal | 134,794 | All other | 116,463 |
| France | 333,678 | Roumania | 134,318 | | |
| Germany | 7,259,997 | Russia | 3,871,123 | Total | 36,398,958 |

The total includes 1,502,457 whose parents were born in different foreign countries.
"All other Asia," means Asia other than Turkey. The classification by countries is pre-war. West Indies does not include Porto Rico.
Population of foreign white stock in 1910 totalled 32,243,382.

COUNTRY OF BIRTH OF FOREIGN-BORN WHITE, 1920—*Continued.*

| DIVISION AND STATE. | EASTERN EUROPE. | | | | | | SOUTHERN EUROPE. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Russia. | Lithuania. | Finland. | Roumania. | Bulgaria. | Turkey in Eur. | Greece. | Albania. | Italy. | Spain. | Portugal. | Other Europe. |
| United States | 1,400,489 | 135,068 | 149,824 | 102,823 | 10,477 | 5,284 | 175,972 | 5,608 | 1,610,109 | 49,247 | 67,453 | 5,901 |
| GEOGRAPH. DIV.: | | | | | | | | | | | | |
| New England | 147,371 | 35,361 | 19,543 | 3,128 | 214 | 631 | 32,186 | 2,819 | 238,508 | 2,856 | 38,426 | 209 |
| Mid. Atlantic | 763,891 | 48,594 | 17,431 | 55,910 | 1,338 | 2,534 | 44,531 | 1,156 | 925,222 | 16,731 | 2,848 | 1,412 |
| E. No. Central | 236,022 | 44,307 | 46,576 | 29,338 | 5,806 | 1,035 | 45,135 | 1,019 | 203,180 | 3,008 | 354 | 2,211 |
| W. No. Central | 110,766 | 2,008 | 31,635 | 6,950 | 1,095 | 124 | 11,236 | 262 | 34,488 | 775 | 56 | 465 |
| South Atlantic | 48,362 | 3,245 | 1,281 | 2,163 | 161 | 203 | 11,449 | 19 | 40,267 | 6,523 | 436 | 355 |
| E. So. Central | 7,408 | 76 | 219 | 441 | 51 | 50 | 2,014 | 23 | 8,584 | 212 | 20 | 89 |
| W. So. Central | 14,652 | 219 | 455 | 663 | 241 | 101 | 3,483 | 12 | 27,724 | 2,495 | 183 | 336 |
| Mountain | 26,690 | 280 | 7,718 | 1,053 | 821 | 72 | 9,483 | 143 | 28,497 | 4,561 | 332 | 106 |
| Pacific | 45,327 | 888 | 24,966 | 3,177 | 752 | 534 | 16,455 | 155 | 103,639 | 12,086 | 24,798 | 718 |
| NEW ENGLAND: | | | | | | | | | | | | |
| Maine | 3,763 | 1,032 | 1,393 | 67 | 5 | 66 | 1,228 | 403 | 2,797 | 33 | 143 | 10 |
| New Hampshire | 3,437 | 1,017 | 1,558 | 25 | 8 | ..... | 5,280 | 118 | 2,074 | 18 | 115 | 2 |
| Vermont | 1,333 | 67 | 476 | 19 | 3 | ..... | 167 | 6 | 4,067 | 661 | 29 | 4 |
| Massachusetts | 92,034 | 20,789 | 14,570 | 1,445 | 120 | 451 | 20,441 | 1,947 | 117,007 | 824 | 28,315 | 100 |
| Rhode Island | 8,035 | 794 | 320 | 370 | 45 | 45 | 1,219 | 142 | 32,241 | 87 | 8,624 | 11 |
| Connecticut | 38,719 | 11,662 | 1,226 | 1,202 | 33 | 69 | 3,851 | 203 | 80,322 | 1,233 | 1,200 | 82 |
| MID. ATLANTIC: | | | | | | | | | | | | |
| New York | 529,240 | 12,121 | 12,504 | 40,116 | 614 | 2,050 | 26,117 | 415 | 545,173 | 12,548 | 1,404 | 842 |
| New Jersey | 73,527 | 6,246 | 2,109 | 4,564 | 66 | 195 | 4,521 | 54 | 157,285 | 2,000 | 646 | 170 |
| Pennsylvania | 161,124 | 30,227 | 2,818 | 11,230 | 656 | 289 | 13,893 | 687 | 222,764 | 2,183 | 798 | 400 |
| E. NO. CENTRAL: | | | | | | | | | | | | |
| Ohio | 43,690 | 4,095 | 6,406 | 13,068 | 2,535 | 569 | 13,540 | 432 | 60,658 | 1,280 | 146 | 351 |
| Indiana | 7,673 | 1,445 | 237 | 2,731 | 431 | 70 | 4,182 | 74 | 6,712 | 467 | 14 | 75 |
| Illinois | 117,899 | 30,358 | 3,080 | 6,238 | 940 | 181 | 16,465 | 151 | 94,407 | 746 | 110 | 524 |
| Michigan | 45,313 | 5,475 | 30,096 | 6,331 | 1,692 | 179 | 7,115 | 261 | 30,216 | 441 | 67 | 813 |
| Wisconsin | 21,447 | 2,934 | 6,757 | 970 | 208 | 36 | 3,833 | 101 | 11,187 | 74 | 17 | 448 |
| W. NO. CENTRAL: | | | | | | | | | | | | |
| Minnesota | 16,100 | 741 | 29,108 | 2,385 | 456 | 30 | 2,391 | 41 | 7,432 | 36 | 7 | 149 |
| Iowa | 7,319 | 687 | 107 | 297 | 269 | 18 | 2,884 | 7 | 4,956 | 41 | 14 | 78 |
| Missouri | 18,769 | 417 | 98 | 1,647 | 145 | 44 | 3,022 | 202 | 14,609 | 435 | 12 | 76 |
| North Dakota | 29,617 | 32 | 1,108 | 1,811 | 31 | 17 | 420 | ..... | 176 | 6 | 2 | 25 |
| South Dakota | 11,393 | 14 | 1,085 | 154 | 97 | 5 | 375 | 1 | 413 | 5 | 4 | 27 |
| Nebraska | 15,718 | 139 | 73 | 371 | 61 | 4 | 1,504 | 9 | 3,547 | 38 | 6 | 53 |
| Kansas | 12,050 | 68 | 56 | 285 | 36 | 6 | 640 | 2 | 3,355 | 214 | 11 | 57 |
| SO. ATLANTIC: | | | | | | | | | | | | |
| Delaware | 2,244 | 90 | 52 | 110 | ..... | 3 | 286 | ..... | 4,136 | 142 | 18 | 7 |
| Maryland | 24,791 | 2,206 | 175 | 537 | 18 | 19 | 964 | 1 | 9,543 | 221 | 21 | 79 |
| Dist. of Col | 5,181 | 38 | 104 | 86 | 5 | 72 | 1,207 | 8 | 3,764 | 108 | 11 | 17 |
| Virginia | 5,421 | 71 | 240 | 165 | 17 | 32 | 1,796 | 4 | 2,435 | 263 | 95 | 82 |
| West Virginia | 3,911 | 717 | 289 | 625 | 98 | 23 | 3,186 | 2 | 14,147 | 1,540 | 14 | 71 |
| North Carolina | 932 | 29 | 15 | 31 | 1 | 17 | 551 | ..... | 453 | 16 | 10 | 7 |
| South Carolina | 1,187 | 9 | 53 | 26 | 1 | 10 | 578 | ..... | 344 | 19 | 6 | 10 |
| Georgia | 3,452 | 72 | 42 | 111 | 5 | 21 | 1,473 | 1 | 700 | 123 | 39 | 60 |
| Florida | 1,243 | 13 | 311 | 472 | 16 | 6 | 1,408 | 3 | 4,745 | 4,091 | 222 | 22 |
| E. SO. CENTRAL: | | | | | | | | | | | | |
| Kentucky | 2,736 | 56 | 50 | 192 | 28 | 22 | 401 | 1 | 1,932 | 68 | 6 | 30 |
| Tennessee | 2,262 | 8 | 33 | 93 | 5 | 5 | 491 | 22 | 2,079 | 14 | 6 | 16 |
| Alabama | 1,582 | 12 | 74 | 120 | 18 | 22 | 915 | ..... | 2,732 | 70 | 4 | 33 |
| Mississippi | 828 | 5 | 62 | 36 | ..... | 1 | 207 | ..... | 1,841 | 60 | 4 | 10 |
| W. SO. CENTRAL: | | | | | | | | | | | | |
| Arkansas | 662 | 27 | 18 | 62 | 17 | 1 | 277 | 1 | 1,314 | 22 | 4 | 10 |
| Louisiana | 1,928 | 23 | 147 | 93 | 49 | 14 | 610 | 2 | 16,264 | 1,268 | 100 | 74 |
| Oklahoma | 5,005 | 132 | 101 | 65 | 105 | 11 | 619 | 1 | 2,122 | 124 | 13 | 49 |
| Texas | 7,057 | 37 | 189 | 443 | 70 | 75 | 1,977 | 8 | 8,024 | 1,081 | 66 | 203 |
| MOUNTAIN: | | | | | | | | | | | | |
| Montana | 5,203 | 80 | 3,577 | 344 | 264 | 28 | 1,465 | 38 | 3,842 | 68 | 30 | 13 |
| Idaho | 1,458 | 9 | 989 | 104 | 39 | 5 | 716 | 42 | 1,323 | 1,416 | 39 | 6 |
| Wyoming | 1,482 | 33 | 856 | 71 | 72 | 2 | 1,236 | 5 | 1,948 | 139 | 29 | 4 |
| Colorado | 16,669 | 115 | 879 | 394 | 349 | 12 | 1,802 | 11 | 12,579 | 297 | 33 | 43 |
| New Mexico | 254 | 8 | 49 | 8 | 18 | 2 | 288 | ..... | 1,678 | 198 | 18 | 8 |
| Arizona | 816 | 16 | 407 | 51 | 28 | 10 | 329 | 6 | 1,261 | 1,013 | 30 | 8 |
| Utah | 684 | 12 | 779 | 69 | 30 | 12 | 3,029 | 41 | 3,225 | 250 | 4 | 19 |
| Nevada | 124 | 7 | 182 | 12 | 21 | 1 | 618 | ..... | 2,641 | 1,180 | 149 | 5 |
| PACIFIC: | | | | | | | | | | | | |
| Washington | 11,124 | 527 | 11,863 | 422 | 267 | 229 | 4,214 | 93 | 10,813 | 410 | 156 | 75 |
| Oregon | 6,979 | 101 | 6,050 | 352 | 214 | 41 | 1,928 | 13 | 4,324 | 553 | 125 | 34 |
| California | 27,224 | 260 | 7,053 | 2,403 | 271 | 264 | 10,313 | 49 | 88,502 | 11,123 | 24,517 | 609 |

U. S. TOTAL FOR OTHER FOREIGN-BORN, NOT IN 3 PRECEDING TABLES.

**Asia**—Armenia, 36,626; Asia Minor, 2,404; Palestine, 3,202; Syria, 51,900; Turkey in Asia, 8,610.

**America**—Canada (French), 307,786; Canada (other), 810,092; Newfoundland, 13,242; Mexico, 478,383; West Indies, except Porto Rico, 26,369; Central and South America, 20,929.

MOTHER TONGUE OF FOREIGN WHITE STOCK IN U. S., 1920.

| MOTHER TONGUE. | Number. | MOTHER TONGUE. | Number. | MOTHER TONGUE. | Number. |
|---|---|---|---|---|---|
| All mother tongues | 36,398,958 | French | 1,290,110 | Serbian | 52,208 |
| English and Celtic | 9,729,365 | Spanish | 850,848 | Montenegrin | 4,535 |
| Germanic | 8,622,498 | Portuguese | 215,728 | Bulgarian | 14,420 |
| Scandinavian | 2,972,796 | Roumanian | 91,683 | Lithuanian & Lettic | 336,600 |
| Latin and Greek | 6,036,003 | Greek | 221,770 | Unclassified: | |
| Slavic and Lettic | 5,270,581 | Slavic & Lettic: Polish | 2,436,895 | Yiddish & Hebrew | 2,043,613 |
| Unclassified | 2,956,321 | Czech | 622,796 | Magyar | 473,538 |
| Germanic: German | 8,164,109 | Slovak | 619,866 | Finnish | 265,472 |
| Dutch and Frisian | 370,499 | Russian | 731,949 | Armenian | 52,840 |
| Flemish | 87,890 | Ruthenian | 95,458 | Syrian & Arabic | 104,139 |
| Scandinavian: Swedish | 1,486,062 | Slovenian | 208,552 | Turkish | 8,505 |
| Norwegian | 1,020,788 | Serbo-Croatian: | | Albanian | 6,426 |
| Danish | 466,946 | Croatian | 140,559 | Of mixed mother tongue | 791,058 |
| Latin & Greek: Italian | 3,365,864 | Dalmatian | 3,119 | | |

## INTERSTATE MIGRATION IN THE U. S.

(By the Bureau of the Census.)

The total population of continental United States (Jan. 1, 1920), 105,710,620, comprised 71,071,013 persons who were living in the States in which they were born, 20,274,450 who were living in other States than those in which born, 13,920,692 who were born in foreign countries, and a group of 444,465 natives consisting of persons for whom the State of birth was not reported, persons born in outlying possessions or at sea under the United States flag, and American citizens born abroad. Of the total population, 67.2 per cent. were living in the States in which born, 19.2 per cent. were living in other States, 13.2 per cent. were foreign born, and four-tenths of 1 per cent were included in the group of 444,465 above mentioned. Of the total native population, 77.8 per cent. were living in the States in which born and 22.2 per cent were living in other States.

These figures do not indicate the amount of interstate migration within any definite period. They simply show, as regards the population of any State, the total net gain or loss up to the date of the census of 1920 resulting from the interstate migration of people living on that date.

On the basis of nativity the population of any State may be divided into three component parts, comprising natives of the State, natives of other States, and natives of foreign countries. The contrast between Eastern and Western States in this classification is rather striking. Thus, while the population of New York State is 63.9 per cent. native of the State, 8.3 per cent. native of other States, and 27.2 per cent. foreign born, the population of California is only 37 per cent. native of that State but is 39.8 per cent. native of other States and 22.1 per cent. foreign born. In the cases of several Western States besides California the population born in the State is less than the population born in other States.

The first of the accompanying tables shows, as regards any State, what proportion of the natives of that State have gone to other States to live, and also what proportion of the native American population resident in that State came from other States; the second table shows the number and proportion of the population of each State born in that State, in other States, and in foreign countries, respectively.

NATIVE POPULATION BY STATE OF BIRTH AND STATE OF RESIDENCE: 1920.

| State. | Born in Specified State. | | Born and Living in Specified State. | Living in Specified State. | | Gain (+) or Loss (—) Through Interstate Migration. |
|---|---|---|---|---|---|---|
| | Total. | Living in Other States | | Total. | Born in Other States | |
| UNITED STATES | 91,345,463 | 20,274,450 | 71,071,013 | 91,345,463 | 20,274,450 | ..... |
| NEW ENGLAND: | | | | | | |
| Maine | 807,012 | 208,667 | 598,345 | 656,820 | 58,475 | — 150,192 |
| New Hampshire | 391,862 | 134,788 | 257,074 | 349,024 | 91,950 | — 42,838 |
| Vermont | 406,955 | 156,417 | 250,538 | 305,286 | 54,748 | — 101,669 |
| Massachusetts | 2,693,737 | 428,450 | 2,265,287 | 2,752,529 | 487,242 | + 58,792 |
| Rhode Island | 417,677 | 92,885 | 324,792 | 427,582 | 102,790 | + 9,905 |
| Connecticut | 942,870 | 186,658 | 756,212 | 998,017 | 241,805 | + 55,147 |
| MIDDLE ATLANTIC: | | | | | | |
| New York | 8,086,198 | 1,451,729 | 6,634,469 | 7,499,992 | 865,523 | — 586,206 |
| New Jersey | 2,025,396 | 331,937 | 1,693,459 | 2,404,990 | 711,531 | + 379,594 |
| Pennsylvania | 7,907,934 | 1,342,946 | 6,564,988 | 7,309,242 | 744,254 | — 598,692 |
| EAST NORTH CENTRAL: | | | | | | |
| Ohio | 5,223,474 | 1,143,716 | 4,079,758 | 5,062,775 | 983,017 | — 160,699 |
| Indiana | 3,060,703 | 851,255 | 2,209,448 | 2,770,506 | 561,058 | — 290,197 |
| Illinois | 5,606,383 | 1,515,465 | 4,090,918 | 5,247,603 | 1,156,685 | — 358,780 |
| Michigan | 2,711,479 | 488,146 | 2,223,333 | 2,920,698 | 697,365 | + 209,219 |
| Wisconsin | 2,460,101 | 607,527 | 1,852,574 | 2,162,383 | 309,809 | — 297,718 |
| WEST NORTH CENTRAL: | | | | | | |
| Minnesota | 1,817,102 | 424,926 | 1,392,176 | 1,891,760 | 489,584 | + 74,658 |
| Iowa | 2,544,207 | 919 601 | 1,624,606 | 2,168,171 | 543,565 | — 376,036 |
| Missouri | 3,518,892 | 1,136,610 | 2,382,282 | 3,203,657 | 821,375 | — 315,235 |
| North Dakota | 405.379 | 100,700 | 304,679 | 508,771 | 204,092 | + 103,392 |
| South Dakota | 432.691 | 129,431 | 303,260 | 550,454 | 247,194 | + 117,763 |
| Nebraska | 1,066 914 | 331,472 | 735,442 | 1,138,118 | 402,676 | + 71,204 |
| Kansas | 1,535.540 | 567,702 | 967,838 | 1,649,023 | 681,185 | + 113,483 |
| SOUTH ATLANTIC: | | | | | | |
| Delaware | 207,804 | 64,841 | 142,963 | 202,008 | 59,045 | — 5,796 |
| Maryland | 1,416,193 | 308,903 | 1,107,290 | 1,343,424 | 236,134 | — 72,769 |
| District of Columbia | 226,066 | 65,957 | 160,109 | 404,331 | 244,222 | + 178,265 |
| Virginia | 2.661.359 | 682.419 | 1,973,940 | 2,272,433 | 293,493 | — 388,926 |
| West Virginia | 1,378.424 | 265,081 | 1,113,343 | 1,396,895 | 283,552 | + 18,471 |
| North Carolina | 2.835.102 | 443 844 | 2,391,258 | 2,549,254 | 157,996 | — 285,848 |
| South Carolina | 1,870.809 | 305,018 | 1,565,791 | 1,675,160 | 109,369 | — 195,649 |
| Georgia | 3.128.986 | 533.563 | 2,595,423 | 2,874,669 | 279,246 | — 254,317 |
| Florida | 652,352 | 92,249 | 560.103 | 909,727 | 349,624 | + 257,375 |
| EAST SOUTH CENTRAL: | | | | | | |
| Kentucky | 2.930 790 | 795,801 | 2,134,989 | 2,382,721 | 247,732 | — 548,069 |
| Tennessee | 2,743 221 | 748,641 | 1,994,580 | 2,316,909 | 322,329 | — 426,312 |
| Alabama | 2,607 273 | 552,000 | 2,055,273 | 2,325,254 | 269,981 | — 282,019 |
| Mississippi | 2,087,558 | 492,422 | 1,595,136 | 1,778,541 | 183,405 | — 309,017 |
| WEST SOUTH CENTRAL: | | | | | | |
| Arkansas | 1,640,814 | 443,884 | 1,196,930 | 1,730,078 | 533,148 | + 89,264 |
| Louisiana | 1,782,749 | 260,134 | 1,522,615 | 1,745,628 | 223,013 | — 37,121 |
| Oklahoma | 1,050,159 | 230,930 | 819,229 | 1,975,109 | 1,155,880 | + 924,950 |
| Texas | 3,865,863 | 559,552 | 3,306,311 | 4,274,693 | 968,382 | + 408,830 |
| MOUNTAIN: | | | | | | |
| Montana | 240.513 | 67,695 | 172.818 | 447.695 | 274,877 | + 207,182 |
| Idaho | 210.106 | 62,078 | 148 028 | 388,341 | 240,313 | + 178,235 |
| Wyoming | 81,540 | 32,558 | 48,982 | 165 812 | 116,830 | + 84,272 |
| Colorado | 473,372 | 155,866 | 317,506 | 809,585 | 492,079 | + 336,213 |
| New Mexico | 268,492 | 59,258 | 209,234 | 329 111 | 119,877 | + 60,619 |
| Arizona | 139,386 | 29,610 | 109,776 | 247 349 | 137,573 | + 107,963 |
| Utah | 408,838 | 94,832 | 314,006 | 388,005 | 73,999 | — 20,833 |
| Nevada | 48,232 | 23,471 | 24,761 | 60,495 | 35,734 | + 12,263 |
| PACIFIC: | | | | | | |
| Washington | 517,036 | 106,861 | 410,175 | 1,072,626 | 662,451 | + 555,590 |
| Oregon | 400,453 | 104,730 | 295,723 | 670,015 | 374,292 | + 269,562 |
| California | 1,409,467 | 141,224 | 1,268,243 | 2,632,194 | 1,363,951 | +1,222,727 |

MIGRANTS WHO ARE NOT INCLUDED.

Total does not include persons for whom the State of birth was not reported; persons born in outlying possessions, or at sea under U. S. flag; or American citizens born abroad.

## GROWTH OF BIGGEST U. S. CITIES 1860-1920.

(Revised United States Census Figures.)

| | 1920. | 1910. | 1900. | 1890. | 1880. | 1870. | 1860. |
|---|---|---|---|---|---|---|---|
| New York | 5,620,048 | 4,766,883 | 3,437,202 | 2,507,414 | 1,911,698 | 1,478,103 | 1,174,779 |
| Chicago | 2,701,705 | 2,185,283 | 1,698,575 | 1,099,850 | 503,185 | 298,977 | 109,260 |
| Philadelphia | 1,823,779 | 1,549,008 | 1,293,697 | 1,046,964 | 847,170 | 674,022 | 565,529 |
| Detroit | 993,678 | 465,766 | 285,704 | 205,876 | 116,340 | 79,577 | 45,619 |
| Cleveland | 796,841 | 560,663 | 381,768 | 261,353 | 160,146 | 92,829 | 43,417 |
| St. Louis | 772,897 | 687,029 | 575,238 | 451,770 | 350,518 | 310,864 | 160,773 |
| Boston | 748,060 | 670,585 | 560,892 | 448,477 | 362,839 | 250,526 | 177,840 |
| Baltimore | 733,826 | 558,485 | 508,957 | 434,439 | 332,313 | 267,354 | 212,418 |
| Pittsburgh | 588,343 | 533,905 | 451,512 | 343,904 | 235,071 | 139,266 | 77,923 |
| Los Angeles | 576,673 | 319,198 | 102,479 | 50,395 | 11,183 | 5,728 | 4,385 |
| Buffalo | 506,775 | 423,715 | 352,387 | 255,664 | 155,134 | 117,714 | 81,129 |
| San Francisco | 506,676 | 416,912 | 342,782 | 298,997 | 233,959 | 149,473 | 56,802 |
| Milwaukee | 457,147 | 373,857 | 285,315 | 204,468 | 115,587 | 71,440 | 45,246 |
| Washington, D. C. | 437,571 | 331,069 | 278,718 | 230,392 | 177,624 | 131,700 | 75,080 |
| Newark | 414,524 | 347,469 | 246,070 | 181,830 | 136,508 | 105,059 | 7,941 |
| Cincinnati | 401,247 | 363,591 | 325,902 | 296,908 | 255,139 | 216,239 | 161,044 |
| New Orleans | 387,219 | 339,075 | 287,104 | 242,039 | 216,090 | 191,418 | 168,675 |
| Minneapolis | 380,582 | 301,408 | 202,718 | 164,738 | 46,887 | 13,066 | 2,564 |
| Kansas City, Mo. | 324,410 | 248,381 | 163,752 | 132,716 | 55,785 | 32,260 | 4,418 |
| Seattle | 315,312 | 237,194 | 80,671 | 42,837 | 3,533 | 1,107 | ..... |
| Indianapolis | 314,194 | 233,650 | 169,164 | 105,436 | 75,056 | 48,244 | 18,611 |
| Jersey City | 298,103 | 267,779 | 206,433 | 163,003 | 120,722 | 82,546 | 29,226 |
| Rochester, N. Y. | 295,750 | 218,149 | 162,608 | 133,896 | 89,366 | 62,386 | 48,204 |
| Portland, Ore. | 258,288 | 207,214 | 90,426 | 46,385 | 17,577 | 8,293 | 2,874 |
| Denver | 256,491 | 213,381 | 133,859 | 106,713 | 35,629 | 4,759 | ..... |
| Toledo | 243,164 | 168,497 | 131,822 | 81,434 | 50,137 | 31,584 | 13,768 |
| Providence, R. I. | 237,595 | 224,326 | 175,597 | 132,146 | 104,857 | 68,904 | 50,666 |
| Columbus, Ohio | 237,031 | 181,511 | 125,560 | 88,150 | 51,647 | 31,274 | 18,554 |
| Louisville | 234,891 | 223,928 | 204,731 | 161,129 | 123,758 | 100,753 | 68,033 |
| St. Paul | 234,698 | 214,744 | 163,065 | 133,156 | 41,473 | 20,030 | 10,401 |
| Oakland, Calif. | 216,261 | 150,174 | 66,960 | 48,682 | 34,555 | 10,500 | 1,543 |
| Akron, Ohio | 208,435 | 69,067 | 42,728 | 27,601 | 16,512 | 10,006 | 3,477 |
| Atlanta, Ga. | 200,616 | 154,839 | 89,872 | 65,533 | 37,409 | 21,789 | 9,554 |
| Omaha, Neb. | 191,601 | 124,096 | 102,555 | 140,452 | 30,518 | 16,083 | 1,883 |
| Worcester, Mass. | 179,754 | 145,986 | 118,421 | 84,655 | 58,291 | 41,105 | 24,960 |
| Birmingham, Ala. | 178,806 | 132,685 | 38,415 | 26,178 | 3,086 | ..... | ..... |
| Syracuse, N. Y. | 171,717 | 137,249 | 108,374 | 88,143 | 51,792 | 43,051 | 28,119 |
| Richmond, Va. | 171,667 | 127,628 | 85,050 | 81,388 | 63,600 | 51,038 | 37,910 |
| New Haven, Conn. | 162,537 | 133,605 | 108,027 | 81,298 | Not separately returned | | |
| Memphis, Tenn. | 162,351 | 131,105 | 102,320 | 64,495 | 33,592 | 40,226 | 22,623 |
| San Antonio, Tex. | 161,379 | 96,614 | 53,321 | 37,673 | 20,550 | 12,256 | 8,235 |
| Dallas, Tex. | 158,976 | 92,104 | 42,638 | 38,067 | 10,358 | ..... | ..... |
| Dayton, Ohio | 152,559 | 116,577 | 85,333 | 61,220 | 38,678 | 30,473 | 20,081 |
| Bridgeport, Conn. | 143,355 | 102,054 | 70,996 | 48,866 | 27,643 | 18,969 | no sep. fig. |
| Houston, Tex. | 138,276 | 78,800 | 44,633 | 27,557 | 16,513 | 9,382 | 4,845 |
| Hartford, Conn. | 138,036 | 98,915 | 79,850 | 53,230 | 42,015 | 37,180 | no sep. fig. |
| Scranton, Pa. | 137,783 | 129,867 | 102,026 | 75,215 | 45,850 | 35,092 | 9,223 |
| Grand Rapids, Mich. | 137,634 | 112,571 | 87,565 | 60,278 | 32,016 | 16,507 | 8,085 |
| Paterson, N. J. | 135,875 | 125,600 | 105,171 | 78,347 | 51,031 | 33,579 | 19,586 |
| Youngstown, Ohio | 132,358 | 79,066 | 44,885 | 33,220 | 15,435 | 8,075 | 2,759 |
| Springfield, Mass. | 129,614 | 88,926 | 62,059 | 44,179 | 33,340 | 26,703 | 15,199 |
| Des Moines, Iowa | 126,468 | 85,368 | 62,139 | 50,093 | 22,408 | 12,035 | 3,965 |
| New Bedford, Mass. | 121,217 | 96,652 | 62,442 | 40,733 | 26,845 | 21,320 | 22,300 |
| Fall River, Mass. | 120,485 | 119,295 | 104,863 | 74,398 | 48,961 | 26,766 | 14,026 |
| Trenton, N. J. | 119,289 | 96,815 | 73,307 | 57,458 | 29,910 | 22,874 | 17,228 |
| Nashville, Tenn. | 118,342 | 110,364 | 80,865 | 76,168 | 43,350 | 25,865 | 16,988 |
| Salt Lake City | 118,110 | 92,777 | 53,531 | 44,843 | 20,768 | 12,854 | 8,236 |
| Camden, N. J. | 116,309 | 94,538 | 75,935 | 58,313 | 41,659 | 20,045 | 14,358 |
| Norfolk, Va. | 115,777 | 67,452 | 46,624 | 34,871 | 21,966 | 19,229 | 14,620 |
| Albany, N. Y. | 113,344 | 100,253 | 94,152 | 94,923 | 90,758 | 69,422 | 62,367 |
| Lowell, Mass. | 112,759 | 106,294 | 94,969 | 77,696 | 59,475 | 40,928 | 36,827 |
| Wilmington, Del. | 110,168 | 87,411 | 76,508 | 61,431 | 42,478 | 30,841 | 21,258 |
| Cambridge, Mass. | 109,694 | 104,839 | 91,886 | 70,028 | 52,669 | 39,634 | 26,060 |
| Reading, Pa. | 107,784 | 96,071 | 78,961 | 58,661 | 43,278 | 33,930 | 23,162 |
| Fort Worth, Tex. | 106,482 | 73,312 | 26,688 | 23,076 | 6,663 | ..... | ..... |
| Spokane, Wash. | 104,437 | 104,402 | 36,848 | 19,922 | ..... | ..... | ..... |
| Kansas City, Kan. | 101,177 | 82,331 | 51,418 | 38,316 | 3,200 | ..... | ..... |
| Yonkers, N. Y. | 100,176 | 79,803 | 47,931 | 32,033 | 18,892 | ..... | ..... |
| Lynn, Mass. | 99,148 | 89,336 | 68,513 | 55,727 | 38,274 | 28,233 | 19,083 |
| Duluth, Minn. | 98,917 | 78,466 | 52,969 | 33,115 | 3,483 | 3,131 | 80 |
| Tacoma, Wash. | 96,975 | 83,743 | 37,714 | 36,006 | ..... | ..... | ..... |
| Elizabeth, N. J. | 95,783 | 73,409 | 52,130 | 37,764 | 28,229 | 20,832 | 11,567 |
| Lawrence, Mass. | 94,270 | 85,892 | 62,559 | 44,654 | 39,151 | 28,921 | 17,639 |
| Utica, N. Y. | 94,156 | 74,419 | 56,383 | 44,007 | 33,914 | 28,804 | 22,529 |
| Erie, Pa. | 93,372 | 66,525 | 52,733 | 40,634 | 27,737 | 19,646 | 9,419 |
| Somerville, Mass. | 93,091 | 77,236 | 61,643 | 40,152 | 24,933 | 14,685 | 8,025 |
| Flint, Mich. | 91,599 | 38,550 | 13,103 | 9,803 | 8,409 | 5,386 | 2,950 |
| Jacksonville, Fla. | 91,558 | 57,699 | 28,429 | 17,201 | 7,650 | 6,912 | 2,118 |
| Waterbury, Conn. | 91,715 | 73,141 | 45,859 | 28,646 | 17,806 | 10,826 | ..... |
| Oklahoma City | 91,295 | 64,205 | 10,037 | 4,151 | ..... | ..... | ..... |
| Schenectady, N. Y. | 88,723 | 72,826 | 31,682 | 19,902 | 13,655 | 11,026 | 9,579 |

Brooklyn, now a Borough, was a separate city until Jan. 1, 1898. Its population has been: (1860) 279,122; (1870) 419,921; (1880) 599,495; (1890) 838,547; (1900) 1,166,582; (1910) 1,634,351; (1920) 2,018,356.

## AMERICAN CITIES AND THEIR SUBURBS.

THE following data, compiled and made public by the U. S. Census Bureau, shows the population of the chief American cities with their suburbs.

| DISTRICT. | Area in Acres, 1920. | POPULATION. | | Pct. of Increase, 1910-1920. |
|---|---|---|---|---|
| | | 1920. | 1910. | |
| NEW YORK. | | | | |
| Met'p'litan dist | 751,887.3 | 7,910,415 | 6,566,859 | 20.5 |
| City proper.. | 191,360.0 | 5,620,048 | 4,766,883 | 17.9 |
| Outside..... | 560,527.3 | 2,290,367 | 1,799,976 | 27.2 |
| City, adj. ter't'y | 875,515.2 | 8,034,349 | 6,657,946 | 20.7 |
| Adj. ter't'y.. | 684,155.2 | 2,414,301 | 1,891,063 | 27.7 |
| BALTIMORE. | | | | |
| Met'p'litan dist | 244,160.0 | 787,458 | 663,810 | 18.6 |
| City proper.. | 50,560.0 | 733,826 | 558,485 | 31.4 |
| Outside..... | 193,600.0 | 53,632 | 105,325 | —49.1 |
| City, adj. ter't'y | 432,448.0 | 814,395 | 689,841 | 18.1 |
| Adj. ter't'y.. | 381,888.0 | 80,569 | 131,356 | —38.7 |
| BOSTON. | | | | |
| Met'p'litan dist | 365,073.3 | 1,772,254 | 1,531,138 | 15.7 |
| City proper.. | 27,870.0 | 748,060 | 670,585 | 11.6 |
| Outside..... | 337,203.3 | 1,024,194 | 860,553 | 19.0 |
| City, adj. ter't'y | 392,016.6 | 1,801,320 | 1,556,671 | 15.7 |
| Adj. ter't'y.. | 364,146.6 | 1,053,260 | 886,086 | 18.9 |
| CHICAGO. | | | | |
| Met'p'litan dist | 469,569.6 | 3,178,924 | 2,455,942 | 29.4 |
| City proper.. | 123,382.9 | 2,701,705 | 2,185,283 | 23.6 |
| Outside..... | 346,186.7 | 477,219 | 270,659 | 76.3 |
| City, adj. ter't'y | 594,410.4 | 3,201,301 | 2,472,712 | 29.5 |
| Adj. ter't'y.. | 471,027.5 | 499,596 | 287,429 | 73.8 |
| DETROIT. | | | | |
| Met'p'litan dist | 175,253.8 | 1,165,153 | 514,086 | 126.6 |
| City proper.. | 49,839.0 | 993,678 | 465,766 | 113.3 |
| Outside..... | 125,414.8 | 171,475 | 48,320 | 254.9 |
| City, adj. ter't'y | 295,906.6 | 1,181,057 | 522,740 | 125.9 |
| Adj. ter't'y.. | 246,067.6 | 187,379 | 56,974 | 228.9 |

| DISTRICT. | Area in Acres, 1920. | POPULATION. | | Pct. of Increase, 1910-1920. |
|---|---|---|---|---|
| | | 1920. | 1910. | |
| LOS ANGELES. | | | | |
| Met'p'litan dist | 831,605.0 | 879,008 | 464,841 | 89.1 |
| City proper.. | 234,037.0 | 576,673 | 319,198 | 80.7 |
| Outside..... | 597,568.0 | 302,335 | 145,643 | 107.6 |
| PHILADELPHIA. | | | | |
| Met'p'litan dist | 483,439.4 | 2,407,234 | 1,983,306 | 21.4 |
| City proper.. | 81,920.0 | 1,823,779 | 1,549,008 | 17.7 |
| Outside..... | 401,519.4 | 583,455 | 434,298 | 34.3 |
| City, adj. ter't'y | 645,329.8 | 2,428,728 | 2,004,185 | 21.2 |
| Adj. ter't'y.. | 563,409.8 | 604,949 | 455,177 | 32.9 |
| PITTSBURGH. | | | | |
| Met'p'litan dist | 422,039.9 | 1,207,504 | 1,033,052 | 16.9 |
| City proper.. | 25,517.2 | 588,343 | 533,905 | 10.2 |
| Outside..... | 396,522.7 | 619,161 | 499,147 | 24.0 |
| City, adj. ter't'y | 499,223.9 | 1,216,464 | 1,041,385 | 16.8 |
| Adj. ter't'y.. | 473,706.7 | 628,121 | 507,480 | 23.8 |
| ST. LOUIS. | | | | |
| Met'p'litan dist | 197,757.1 | 952,012 | 828,733 | 14.9 |
| City proper.. | 39,040.0 | 772,897 | 687,029 | 12.5 |
| Outside..... | 158,717.1 | 179,115 | 141,704 | 26.4 |
| City, adj. ter't'y | 456,357.4 | 1,014,457 | 881,925 | 15.0 |
| Adj. ter't'y.. | 417,317.4 | 241 560 | 194,896 | 23.9 |
| S. FRAN.-OAK'D. | | | | |
| Met'p'litan dist | 286,500.8 | 891.477 | 686,873 | 29.8 |
| City proper (S. Fran.). | 26,880.0 | 506,676 | 416,912 | 21.5 |
| City proper (Oakland). | 29,248.0 | 216,261 | 150,174 | 44.0 |
| Outside..... | 230,372.8 | 168,540 | 119,787 | 40.7 |
| Cit's, adj. ter't'y | 381,880.0 | 900,921 | 692,654 | 30.1 |
| Adj. ter't'y.. | 325,752.0 | 177,984 | 125,568 | 41.7 |

### NEW YORK CITY'S SUBURBAN DISTRICT.

In another part of the ALMANAC will be found a detailed table showing the population in the Metropolitan Zone including the City of New York.

## DWELLINGS AND FAMILIES IN BIG U. S. CITIES.

(U. S. Census Figures as of Jan. 1, 1920).

| CITY. | 1920. | | |
|---|---|---|---|
| | Population. | Dwellings. | Families. |
| Akron, Ohio | 208,435 | 32,030 | 44,195 |
| Albany, N. Y. | 113,344 | 18,402 | 28,097 |
| Atlanta, Ga. | 200,616 | 38,098 | 49,523 |
| Baltimore, Md. | 733,826 | 136,324 | 166,857 |
| Birmingham, Ala. | 178,806 | 35,100 | 43,040 |
| Boston Mass. | 748,060 | 79,597 | 164,785 |
| Bridgeport, Conn. | 143,555 | 22,328 | 31,994 |
| Buffalo, N. Y. | 506,775 | 73,880 | 116,201 |
| Cambridge, Mass. | 109,694 | 15,113 | 25,203 |
| Camden, N. J. | 116,309 | 24,921 | 26,645 |
| Chicago, Ill. | 2,701,705 | 335,777 | 623,912 |
| Cincinnati, Ohio | 401,247 | 62,885 | 106,239 |
| Cleveland, Ohio | 796,841 | 116,545 | 1.2,692 |
| Columbus, Ohio | 237,031 | 51,663 | 56, 13 |
| Dallas, Tex. | 158,97[illegible] | 30,860 | 36,754 |
| Dayton, Ohio | 152,55 | 33,918 | 38,138 |
| Denver, Colo. | 256,4[illegible] | 50,636 | 61,916 |
| Des Moines, Iowa | 126,468 | 27,127 | 31,644 |
| Detroit, Mich. | 993,078 | 153,206 | 218,973 |
| Fall River, Mass. | 120,485 | 13,807 | 26,399 |
| Fort Worth, Tex. | 106,482 | 19,679 | 25,052 |
| Grand Rapids, Mich. | 137,634 | 29,157 | 33,703 |
| Hartford, Conn. | 138,036 | 16,495 | 30,813 |
| Houston, Tex. | 138,276 | 28,452 | 33,932 |
| Indianapolis, Ind. | 314,194 | 71 648 | 81,256 |
| Jersey City, N. J. | 298,103 | 31,145 | 67,288 |
| Kansas City, Kans. | 101,177 | 22,641 | 25,009 |
| Kansas City, Mo. | 324,410 | 61,321 | 82,05 |
| Los Angeles, Cal. | 576,673 | 125,004 | 1.9,476 |
| Louisville, Ky. | 234,891 | 47,449 | 60,490 |
| Lowell, Mass. | 112,759 | 17,488 | 25,034 |
| Memphis, Tenn. | 162,351 | 35,295 | 42,360 |
| Milwaukee, Wis. | 457,147 | 66,915 | 106,10. |
| Minneapolis, Minn. | 380,582 | 65,568 | 91 43 |
| Nashville, Tenn. | 118,342 | 24,992 | 30,220 |
| New Bedford, Mass. | 121,217 | 14,961 | 26,858 |
| New Haven, Conn. | 162,537 | 22,536 | 36,257 |

| CITY. | 1920. | | |
|---|---|---|---|
| | Population. | Dwellings. | Families. |
| New Orleans, La. | 387,219 | 76,969 | 85,188 |
| New York, N. Y. | 5,620,048 | 365,963 | 1,278,341 |
| Bronx | 732,016 | 33,985 | 166,260 |
| Brooklyn | 2,018,356 | 173,847 | 453,587 |
| Manhattan | 2,284,103 | 75,534 | 525,154 |
| Queens | 469,042 | 64,323 | 109,559 |
| Richmond | 116,531 | 18,274 | 23,781 |
| Newark, N. J. | 414,524 | 41,535 | 93,274 |
| Norfolk, Va. | 115,777 | 19,934 | 26,732 |
| Oakland, Cal. | 216,261 | 47,297 | 55,793 |
| Omaha, Neb. | 191,601 | 37,997 | 44,499 |
| Paterson, N. J. | 135,875 | 18,769 | 32,186 |
| Philadelphia | 1,823,779 | 352,944 | 402,946 |
| Pittsburgh | 588,343 | 93,890 | 130,274 |
| Portland, Ore. | 258,288 | 54,664 | 67,045 |
| Providence, R. I. | 237,595 | 35,634 | 54,726 |
| Reading, Pa. | 107,784 | 22,759 | 25,202 |
| Richmond, Va. | 171,667 | 30,753 | 39,191 |
| Rochester, N. Y. | 295,750 | 56,502 | 68,247 |
| St. Louis, Mo. | 772,897 | 118,102 | 190,640 |
| St. Paul, Minn. | 234,698 | 42,462 | 54,409 |
| Salt Lake City | 118,110 | 23,685 | 28,216 |
| San Antonio, Tex. | 161,379 | 30,264 | 36,405 |
| San Francisco | 506,676 | 90,132 | 123,349 |
| Scranton, Pa. | 137,783 | 23,952 | 29,768 |
| S ttle, Wash. | 315,312 | 60,516 | 80,048 |
| Spokane, Wash. | 104,437 | 22,389 | 27,178 |
| Springfield, Mass. | 129,614 | 18,945 | 30,361 |
| Syr.cuse, N. Y. | 171,717 | 28,725 | 41,558 |
| Toledo, Ohio | 243,164 | 49,501 | 57,951 |
| Trenton, N. J. | 119,289 | 22,373 | 25,319 |
| Washington, D. C. | 437,571 | 72,175 | 96,194 |
| Wil: ' gton, Del. | 110,168 | 20,876 | 24,488 |
| Worcester, Mass. | 179,754 | 19,337 | 39,230 |
| Yonkers, N. Y. | 100,176 | 10,302 | 22,126 |
| Youngstown, Ohio | 132,358 | 24,007 | 28,699 |

### EXCESS OF FAMILIES OVER DWELLINGS.

The table above shows for every large city in the country an excess of families over dwellings, which is most marked in New York City and least marked in Philadelphia.

## FOREIGN-BORN WHITES OF VOTING AGE IN U. S. CITIES.

| City. | Males. | | Females. | |
|---|---|---|---|---|
| | Total. | Naturalized. | Total. | Naturalized. |
| Akron | 22,642 | 5,951 | 11,270 | 4,343 |
| Albany | 8,392 | 5,083 | 7,596 | 5,025 |
| Atlanta | 2,476 | 1,396 | 1,796 | 1,100 |
| Baltimore | 40,496 | 20,944 | 36,151 | 19,693 |
| Birmingham | 3,199 | 1,564 | 2,271 | 1,227 |
| Boston | 109,209 | 51,418 | 111,827 | 51,404 |
| Bridgeport | 23,292 | 8,342 | 19,016 | 7,544 |
| Buffalo | 60,068 | 31,184 | 51,648 | 29,391 |
| Cambridge | 14,000 | 6,512 | 15,490 | 7,058 |
| Camden | 10,177 | 3,764 | 8,203 | 3,537 |
| Chicago | 401,965 | 214,854 | 341,838 | 192,341 |
| Cincinnati | 20,588 | 14,033 | 19,761 | 13,511 |
| Cleveland | 122,646 | 50,535 | 95,147 | 45,650 |
| Columbus | 8,402 | 4,489 | 6,324 | 3,931 |
| Dallas | 4,484 | 1,909 | 3,011 | 1,455 |
| Dayton | 6,863 | 3,520 | 5,197 | 3,115 |
| Denver | 19,728 | 12,300 | 15,554 | 10,948 |
| Des Moines | 5,833 | 3,711 | 4,605 | 3,148 |
| Detroit | 153,144 | 52,557 | 104,366 | 45,864 |
| Fall River | 18,377 | 7,205 | 19,768 | 7,654 |
| Fort Worth | 3,892 | 1,002 | 1,976 | 698 |
| Grand Rapids | 13,948 | 7,637 | 12,233 | 7,111 |
| Hartford | 19,759 | 8,381 | 17,262 | 7,904 |
| Houston | 5,878 | 2,626 | 4,245 | 2,020 |
| Indianapolis | 8,860 | 4,305 | 7,140 | 3,905 |
| Jersey City | 37,665 | 18,193 | 33,012 | 17,146 |
| Kansas City, Kan. | 6,190 | 2,160 | 4,144 | 1,896 |
| Kansas City, Mo. | 14,096 | 7,706 | 10,632 | 6,196 |
| Los Angeles | 53,626 | 24,605 | 45,084 | 22,943 |
| Louisville | 5,679 | 3,967 | 5,503 | 3,656 |
| Lowell | 17,119 | 7,090 | 17,904 | 7,628 |
| Memphis | 3,024 | 1,343 | 2,270 | 1,053 |
| Milwaukee | 56,586 | 27,448 | 45,098 | 25,481 |
| Minneapolis | 45,854 | 28,261 | 36,881 | 23,972 |
| Nashville | 1,185 | 738 | 1,012 | 626 |
| New Bedford | 20,980 | 7,571 | 21,506 | 7,706 |
| New Haven | 21,594 | 9,107 | 20,040 | 8,603 |
| New Orleans | 14,304 | 5,905 | 9,510 | 3,876 |
| New York | 927,742 | 405,009 | 870,140 | 360,255 |
| Bronx Borough | 124,230 | 65,022 | 118,863 | 58,287 |
| Brooklyn Bor. | 309,815 | 140,340 | 283,451 | 125,779 |
| Manhattan Bor. | 423,541 | 160,174 | 403,879 | 139,873 |
| Queens Bor. | 53,942 | 31,524 | 51,070 | 30,015 |
| Richmond Bor. | 16,214 | 7,949 | 12,877 | 6,301 |
| Newark | 56,524 | 24,026 | 49,435 | 22,019 |
| Norfolk | 4,059 | 1,702 | 1,887 | 1,097 |
| Oakland | 23,907 | 12,190 | 18,046 | 10,467 |
| Omaha | 18,520 | 9,320 | 14,065 | 7,890 |
| Paterson | 21,102 | 10,708 | 19,644 | 9,992 |
| Philadelphia | 188,025 | 92,819 | 173,623 | 85,864 |
| Pittsburgh | 61,394 | 31,217 | 50,513 | 28,382 |
| Portland, Ore. | 25,409 | 13,094 | 17,724 | 10,782 |
| Providence | 31,410 | 15,217 | 32,031 | 16,051 |
| Reading | 5,009 | 1,861 | 3,684 | 1,429 |
| Richmond | 2,348 | 1,175 | 1,904 | 985 |
| Rochester | 33,316 | 17,681 | 30,352 | 16,835 |
| St. Louis | 52,701 | 30,562 | 43,015 | 25,868 |
| St. Paul | 26,453 | 17,043 | 21,861 | 15,172 |
| Salt Lake City | 8,947 | 5,528 | 8,867 | 6,234 |
| San Antonio | 14,810 | 3,056 | 12,299 | 2,873 |
| San Francisco | 78,211 | 39,677 | 52,656 | 28,099 |
| Scranton | 14,247 | 7,546 | 12,440 | 7,051 |
| Seattle | 40,727 | 20,075 | 26,813 | 15,757 |
| Spokane | 8,837 | 5,555 | 6,646 | 4,692 |
| Springfield, Mass. | 14,674 | 6,206 | 14,050 | 6,559 |
| Syracuse | 16,213 | 7,853 | 13,580 | 7,921 |
| Toledo | 20,281 | 10,383 | 15,030 | 9,451 |
| Trenton | 15,075 | 5,951 | 12,016 | 5,274 |
| Washington | 14,042 | 7,786 | 12,334 | 6,926 |
| Wilmington | 8,777 | 3,488 | 6,296 | 2,982 |
| Worcester | 25,911 | 10,892 | 23,478 | 10,899 |
| Yonkers | 12,176 | 6,649 | 11,786 | 6,513 |
| Youngstown | 19,282 | 6,106 | 11,661 | 5,113 |

## FOREIGN-BORN WHITES IN U. S. CITIES—COUNTRY OF BIRTH.

(Chief nationalities only. For detailed table on New York City's foreign-born, see Index.)

| City. | Germany. | Italy. | Russia. | Poland. | Canada. | | Ireland. | England. | Sweden. | Austria. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | French. | Other. | | | | |
| Akron, Ohio | 2,867 | 3,614 | 3,056 | 1,420 | 76 | 1,069 | 863 | 2,603 | 725 | 5,344 |
| Albany, N. Y. | 8,068 | 3,403 | 2,277 | 1,414 | 244 | 598 | 3,139 | 1,057 | 127 | 338 |
| Atlanta, Ga. | 431 | 98 | 1,207 | 479 | 17 | 265 | 208 | 476 | 85 | 79 |
| Baltimore, Md. | 17,461 | 7,911 | 23,202 | 11,109 | 75 | 1,063 | 5,074 | 3,180 | 417 | 2,896 |
| Boston, Mass. | 5,915 | 38,179 | 38,021 | 7,650 | 1,743 | 40,265 | 57,011 | 12,408 | 6,780 | 1,530 |
| Bridgeport, Conn. | 1,979 | 8,789 | 5,395 | 3,061 | 398 | 1,058 | 4,800 | 3,491 | 1,783 | 2,697 |
| Buffalo, N. Y. | 20,898 | 16,411 | 6,557 | 31,406 | 177 | 15,617 | 7,264 | 6,710 | 1,143 | 2,945 |
| Camden, N. J. | 2,320 | 4,994 | 2,158 | 4,172 | 23 | 221 | 1,420 | 1,588 | 308 | 690 |
| Chicago, Ill. | 112,288 | 59,215 | 102,092 | 137,611 | 2,432 | 23,922 | 55,796 | 26,420 | 58,563 | 30,491 |
| Cincinnati, Ohio | 17,333 | 2,717 | 4,198 | 1,220 | 27 | 802 | 3,887 | 1,634 | 115 | 1,526 |
| Cleveland, Ohio | 26,476 | 18,288 | 21,502 | 35,024 | 282 | 8,218 | 9,478 | 11,092 | 2,286 | 15,228 |
| Columbus, Ohio | 4,098 | 2,290 | 1,848 | 287 | 45 | 616 | 1,286 | 1,107 | 132 | 713 |
| Dayton, Ohio | 4,119 | 514 | 1,124 | 674 | 20 | 425 | 682 | 571 | 66 | 602 |
| Denver, Colo | 4,664 | 2,871 | 5,333 | 812 | 129 | 2,973 | 3,221 | 3,556 | 3,953 | 1,390 |
| Des Moines, Iowa | 1,104 | 1,177 | 1,389 | 325 | 18 | 567 | 643 | 1,265 | 1,853 | 232 |
| Detroit, Mich. | 30,238 | 16,205 | 27,278 | 56,624 | 3,678 | 55,216 | 7,004 | 17,169 | 2,659 | 10,674 |
| Fall River, Mass. | 135 | 945 | 1,661 | 2,525 | 10,734 | 858 | 3,201 | 7,968 | 63 | 260 |
| Fort Worth, Tex. | 459 | 156 | 613 | 126 | 16 | 239 | 300 | 323 | 174 | 192 |
| Grand Rapids, Mich. | 2,433 | 525 | 1,046 | 4,269 | 91 | 2,746 | 628 | 868 | 883 | 534 |
| Hartford, Conn. | 1,820 | 7,101 | 7,654 | 4,880 | 857 | 1,520 | 6,116 | 2,049 | 2,315 | 919 |
| Houston, Tex. | 1,619 | 1,290 | 1,096 | 284 | 22 | 335 | 373 | 736 | 159 | 479 |
| Indianapolis, Ind. | 5,097 | 754 | 1,309 | 378 | 36 | 707 | 2,414 | 1,188 | 182 | 568 |
| Jersey City, N. J. | 11,113 | 14,855 | 7,016 | 12,145 | 51 | 904 | 12,451 | 3,502 | 1,076 | 3,772 |
| Kansas City, Kans. | 1,171 | 104 | 1,076 | 958 | 14 | 268 | 766 | 529 | 625 | 961 |
| Kansas City, Mo. | 3,958 | 3,318 | 3,848 | 944 | 57 | 1,577 | 2,584 | 1,926 | 1,899 | 749 |
| Los Angeles, Cal. | 10,563 | 7,930 | 9,691 | 2,205 | 554 | 13,157 | 4,932 | 11,478 | 4,998 | 2,089 |
| Louisville, Ky. | 4,748 | 535 | 1,413 | 343 | 19 | 278 | 1,576 | 502 | 68 | 246 |
| Lowell, Mass. | 133 | 431 | 916 | 2,298 | 10,180 | 3,602 | 7,453 | 3,614 | 523 | 65 |
| Memphis, Tenn. | 798 | 1,273 | 993 | 290 | 21 | 251 | 455 | 473 | 117 | 159 |
| Milwaukee, Wis. | 39,771 | 4,022 | 7,105 | 23,060 | 223 | 1,830 | 1,447 | 1,968 | 863 | 5,906 |
| Minneapolis, Minn. | 6,439 | 766 | 6,222 | 4,789 | 1,016 | 6,445 | 2,066 | 2,963 | 26,515 | 2,222 |
| Nashville, Tenn. | 286 | 91 | 493 | 185 | 3 | 95 | 288 | 229 | 13 | 67 |
| New Bedford, Mass. | 463 | 631 | 1,022 | 2,902 | 9,833 | 1,157 | 2,027 | 9,745 | 263 | 186 |
| New Haven, Conn. | 2,770 | 15,084 | 8,080 | 3,009 | 399 | 983 | 7,219 | 1,955 | 1,266 | 675 |
| New Orleans, La. | 3,418 | 7,633 | 1,348 | 230 | 70 | 525 | 1,534 | 1,206 | 317 | 484 |
| New York, N. Y. | 194,154 | 390,832 | 479,797 | 145,679 | 1,757 | 23,514 | 203,450 | 71,404 | 33,703 | 126,739 |
| Bronx Borough | 29,719 | 89,519 | 87,345 | 19,008 | 164 | 2,083 | 18,679 | 8,624 | 3,108 | 23,638 |
| Brooklyn Borough | 56,778 | 138,246 | 189,421 | 51,928 | 442 | 7,694 | 53,660 | 25,003 | 15,488 | 31,981 |
| Manhattan Bor. | 70,836 | 184,546 | 193,775 | 64,514 | 893 | 11,390 | 116,749 | 29,817 | 11,841 | 65,603 |
| Queens Borough | 32,446 | 19,794 | 7,627 | 7,778 | 199 | 1,608 | 10,618 | 6,047 | 2,373 | 4,678 |
| Richmond Bor. | 4,375 | 8,728 | 1,629 | 2,451 | 59 | 739 | 3,744 | 1,913 | 893 | 839 |
| Newark, N. J. | 14,041 | 27,465 | 19,968 | 13,702 | 108 | 1,234 | 8,840 | 5,386 | 333 | 7,897 |
| Norfolk, Va. | 325 | 516 | 1,878 | 194 | 28 | 312 | 338 | 504 | 218 | 74 |
| Oakland, Cal. | 4,661 | 5,094 | 1,062 | 503 | 177 | 3,608 | 3,656 | 4,532 | 2,663 | 986 |

FOREIGN-BORN WHITES IN U. S. CITIES—COUNTRY OF BIRTH—*Continued.*

| CITY. | Germany. | Italy. | Russia. | Poland. | CANADA. | | Ireland. | England. | Sweden. | Austria. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | French. | Other. | | | | |
| Omaha, Nebr | 4,270 | 3,108 | 3,825 | 2,374 | 65 | 1,166 | 1,904 | 1,460 | 3,708 | 1,610 |
| Paterson, N. J | 3,509 | 11,566 | 4,400 | 5,736 | 45 | 281 | 3 200 | 3 664 | 121 | 754 |
| Philadelphia, Pa | 39,766 | 63,723 | 95,744 | 31,112 | 209 | 3,927 | 64,590 | 30.844 | 2,651 | 13,387 |
| Pittsburgh, Pa | 16,028 | 15,371 | 13,837 | 15,537 | 45 | 1,444 | 13,989 | 7 374 | 1,049 | 10,072 |
| Portland, Oreg | 5,384 | 2,847 | 5,161 | 909 | 285 | 6,152 | 1,969 | 4,021 | 5,069 | 1,599 |
| Providence, R. I | 1,392 | 19,239 | 5,610 | 2,289 | 3,436 | 3,583 | 11,900 | 8,740 | 2,709 | 719 |
| Reading, Pa | 1,448 | 1,810 | 843 | 2,542 | 4 | 57 | 233 | 334 | 25 | 684 |
| Richmond, Va | 641 | 555 | 1,054 | 140 | 7 | 217 | 264 | 497 | 42 | 128 |
| Rochester, N. Y | 10,735 | 19,468 | 6,871 | 4,590 | 188 | 9,317 | 4,385 | 5,980 | 447 | 1,536 |
| St. Louis, Mo | 30,089 | 9,067 | 13,067 | 5,224 | 93 | 1,842 | 9,244 | 3,892 | 898 | 5,587 |
| St. Paul, Minn | 8,724 | 1,685 | 4,228 | 2,555 | 587 | 3,303 | 3,053 | 1,934 | 9,912 | 2,429 |
| Salt Lake City, Utah | 2,033 | 496 | 430 | 132 | 25 | 727 | 574 | 5,524 | 2,258 | 213 |
| San Antonio, Tex | 2,564 | 575 | 732 | 249 | 51 | 347 | 509 | 795 | 94 | 311 |
| San Francisco, Cal | 18,513 | 23,924 | 5,752 | 2,152 | 346 | 6,737 | 18,257 | 10,107 | 6,468 | 3,694 |
| Scranton, Pa | 2,612 | 3,433 | 3,415 | 3,267 | 11 | 201 | 3,365 | 2,313 | 78 | 2,863 |
| Seattle, Wash | 4,827 | 3,094 | 3,348 | 881 | 630 | 13,224 | 3,455 | 7,794 | 10,253 | 1,412 |
| Spokane, Wash | 1,992 | 922 | 508 | 154 | 144 | 3,692 | 717 | 1,613 | 2,580 | 288 |
| Springfield, Mass | 1,152 | 4,491 | 3,852 | 2,442 | 3,719 | 2,078 | 5,600 | 1,947 | 1,221 | 410 |
| Syracuse, N. Y | 4,751 | 6,756 | 2,791 | 4,571 | 357 | 3,116 | 3,814 | 2,321 | 166 | 868 |
| Toledo, Ohio | 8,476 | 850 | 2,069 | 10,283 | 399 | 2,745 | 1,513 | 1,816 | 273 | 1,063 |
| Trenton, N. J | 2,388 | 6,617 | 2,710 | 4,423 | 57 | 203 | 1,871 | 2,774 | 85 | 1,010 |
| Washington, D. C | 3,382 | 3,764 | 5,181 | 716 | 147 | 1,541 | 4,320 | 2,990 | 481 | 525 |
| Wilmington, Del | 1,150 | 3,444 | 1,082 | 3,742 | 17 | 205 | 2,435 | 1,032 | 223 | 473 |
| Worcester, Mass | 467 | 4,296 | 4,778 | 3,632 | 4,292 | 3,833 | 9,048 | 3,343 | 7,751 | 189 |
| Yonkers, N. Y | 2,102 | 4,507 | 1,987 | 2,568 | 45 | 529 | 4,140 | 1,796 | 362 | 2,917 |
| Youngstown, Ohio | 1,469 | 5,538 | 2,214 | 2,601 | 16 | 493 | 1,578 | 2,536 | 769 | 3,160 |

| CITY. | Hungary. | Jugo-Slavia. | Finland. | Rumania. | Greece. | Czecho-Slovakia. | Norway. | Scotland. | France. | Spain. | Denmark. | Netherlands. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Akron, Ohio | 6,989 | 1,537 | 82 | 569 | 1,939 | 463 | 145 | 729 | 304 | 281 | 205 | 166 |
| Albany, N. Y | 87 | 24 | 18 | 60 | 190 | 97 | 32 | 315 | 104 | 20 | 75 | 308 |
| Atlanta, Ga | 102 | 9 | 13 | 32 | 434 | 42 | 21 | 143 | 98 | 19 | 29 | 17 |
| Baltimore, Md | 1,393 | 251 | 114 | 459 | 695 | 2,985 | 421 | 736 | 438 | 145 | 245 | 193 |
| Boston, Mass | 360 | 135 | 562 | 673 | 3,054 | 256 | 1,875 | 5,079 | 1,008 | 326 | 935 | 691 |
| Bridgeport, Conn | 6,230 | 193 | 86 | 234 | 802 | 2,227 | 178 | 843 | 206 | 383 | 403 | 69 |
| Buffalo, N. Y | 2,736 | 361 | 163 | 581 | 574 | 514 | 325 | 1,984 | 694 | 140 | 308 | 435 |
| Camden, N. J | 197 | 172 | 107 | 80 | 77 | 85 | 205 | 359 | 125 | 8 | 65 | 28 |
| Chicago, Ill | 26,106 | 9,693 | 1,577 | 5,137 | 11,546 | 50,392 | 20,481 | 9,910 | 3,378 | 374 | 11,268 | 8,843 |
| Cincinnati, Ohio | 2,873 | 763 | 13 | 687 | 312 | 300 | 36 | 414 | 485 | 39 | 96 | 314 |
| Cleveland, Ohio | 29,724 | 15,898 | 1,122 | 4,377 | 1,605 | 23,907 | 596 | 3,418 | 644 | 162 | 620 | 1,039 |
| Columbus, Ohio | 878 | 172 | 64 | 132 | 415 | 100 | 35 | 281 | 190 | 16 | 47 | 53 |
| Dayton, Ohio | 1,921 | 411 | 14 | 176 | 3o5 | 195 | 29 | 183 | 116 | 8 | 23 | 55 |
| Denver, Colo | 487 | 238 | 110 | 277 | 768 | 301 | 536 | 1,090 | 430 | 85 | 922 | 416 |
| Des Moines, Iowa | 50 | 31 | 11 | 88 | 230 | 62 | 393 | 338 | 106 | 2 | 528 | 113 |
| Detroit, Mich | 13,564 | 3,702 | 1,785 | 4,668 | 4,628 | 3,351 | 861 | 6,933 | 1,400 | 258 | 1,505 | 1,861 |
| Fort Worth, Tex | 18 | 41 | 1 | 36 | 240 | 120 | 63 | 111 | 57 | 49 | 30 | 11 |
| Hartford, Conn | 272 | 53 | 80 | 347 | 321 | 179 | 100 | 937 | 158 | 24 | 619 | 35 |
| Indianapolis, Ind | 313 | 558 | 30 | 701 | 564 | 58 | 51 | 445 | 222 | 24 | 234 | 149 |
| Jersey City, N. J | 1,258 | 69 | 787 | 301 | 357 | 400 | 1,211 | 1,460 | 562 | 227 | 392 | 274 |
| Kansas City, Kns | 106 | 1,419 | 4 | 18 | 273 | 383 | 51 | 127 | 64 | 14 | 196 | 26 |
| Kansas City, Mo | 335 | 168 | 35 | 191 | 570 | 161 | 183 | 658 | 351 | 47 | 437 | 107 |
| Los Angeles, Cal | 1,706 | 1,453 | 530 | 927 | 1,036 | 824 | 1,669 | 2,802 | 2,349 | 810 | 2,003 | 797 |
| Louisville, Ky | 90 | 17 | 6 | 57 | 81 | 34 | 27 | 155 | 192 | 17 | 38 | 36 |
| Lowell, Mass | 19 | 155 | 30 | 17 | 3,733 | 3 | 68 | 916 | 79 | 9 | 38 | 17 |
| Memphis, Tenn | 82 | 10 | 10 | 35 | 280 | 15 | 16 | 130 | 99 | 4 | 52 | 15 |
| Milwaukee, Wis | 4,803 | 4,164 | 147 | 633 | 1,815 | 4,497 | 1,852 | 589 | 261 | 43 | 732 | 528 |
| Mine'p'lis, Minn | 571 | 163 | 1,120 | 1,484 | 873 | 1,828 | 16,389 | 1,141 | 274 | 17 | 2,531 | 407 |
| New Bedf'd, Mass | 49 | 21 | 13 | 17 | 588 | 181 | 71 | 541 | 385 | 37 | 55 | 15 |
| New Hav'n, Conn | 421 | 26 | 91 | 198 | 314 | 100 | 161 | 858 | 185 | 34 | 246 | 43 |
| New Orleans, La | 81 | 78 | 85 | 71 | 432 | 55 | 458 | 286 | 2,516 | 1,128 | 227 | 149 |
| New York, N. Y | 64,393 | 5,271 | 10,24) | 38,139 | 21,455 | 26,437 | 24,500 | 21,545 | 19,452 | 10,980 | 9,092 | 4,750 |
| Bronx Borough | 10,644 | 332 | 1,399 | 8,519 | 957 | 1,878 | 974 | 2,511 | 1,656 | 257 | 797 | 471 |
| Brooklyn Bor | 8,795 | 1,088 | 3,219 | 12,109 | 2,700 | 2,639 | 17,505 | 7,534 | 2,943 | 2,902 | 4,201 | 1,672 |
| Manhat'n Bor | 40,644 | 3,350 | 4,885 | 16,714 | 17,209 | 18,681 | 3,595 | 8,687 | 12,899 | 7,502 | 2,942 | 2,164 |
| Queens Borough | 3,555 | 353 | 455 | 734 | 401 | 2,958 | 844 | 2,060 | 1,569 | 157 | 795 | 329 |
| Richmond Bor | 755 | 148 | 372 | 63 | 188 | 281 | 1,582 | 753 | 385 | 162 | 357 | 114 |
| Newark, N. J | 4,278 | 269 | 80 | 1,307 | 1,039 | 2,158 | 179 | 2,170 | 637 | 555 | 374 | 272 |
| Norfolk, Va | 44 | 17 | 99 | 51 | 667 | 15 | 193 | 160 | 58 | 196 | 93 | 118 |
| Oakland, Cal | 388 | 866 | 390 | 96 | 928 | 170 | 1,163 | 1,700 | 1,322 | 495 | 1,764 | 309 |
| Omaha, Nebr | 534 | 351 | 26 | 288 | 423 | 4,305 | 388 | 565 | 126 | 19 | 2,875 | 126 |
| Paterson, N. J | 616 | 46 | 13 | 53 | 283 | 211 | 25 | 1,861 | 742 | 60 | 69 | 3,604 |
| Philadelphia, Pa | 11,513 | 1,099 | 727 | 5,645 | 1,814 | 2,240 | 1,255 | 8,425 | 2,875 | 638 | 1,131 | 480 |
| Pittsburgh, Pa | 4,323 | 3,784 | 109 | 1,493 | 1,363 | 3,607 | 100 | 2,758 | 913 | 53 | 104 | 90 |
| Portland, Oreg | 519 | 472 | 1,394 | 258 | 896 | 330 | 2,915 | 1,809 | 419 | 74 | 1,365 | 365 |
| Providence, R. I | 98 | 33 | 83 | 287 | 432 | 91 | 291 | 1,735 | 356 | 32 | 146 | 64 |
| Reading, Pa | 135 | 71 | ..... | 13 | 579 | 238 | 16 | 83 | 41 | 34 | 9 | 17 |
| Richmond, Va | 42 | 2 | 2 | 39 | 208 | 32 | 21 | 191 | 75 | 5 | 27 | 17 |
| Rochester, N. Y | 398 | 177 | 38 | 146 | 410 | 70 | 97 | 1,142 | 488 | 36 | 174 | 1,891 |
| St. Louis, Mo | 6,637 | 1,686 | 39 | 1,200 | 2,049 | 3,479 | 167 | 1,060 | 1,040 | 341 | 413 | 401 |
| St. Paul, Minn | 1,792 | 334 | 97 | 559 | 354 | 1,797 | 3,818 | 712 | 221 | 7 | 1,364 | 256 |
| S. Lake City, Utah | 93 | 56 | 75 | 47 | 548 | 48 | 870 | 977 | 104 | 50 | 1,611 | 874 |
| San Francisco, Cal | 1,390 | 1,320 | 1,810 | 765 | 3,204 | 757 | 3,121 | 3,569 | 6,375 | 2,500 | 3,389 | 788 |
| Scranton, Pa | 888 | 52 | 9 | 42 | 161 | 117 | 3 | 480 | 88 | 2 | 21 | 9 |
| Seattle, Wash | 350 | 654 | 2,256 | 150 | 1,399 | 302 | 9,118 | 3,195 | 608 | 167 | 2,228 | 525 |
| Spokane, Wash | 89 | 113 | 157 | 68 | 107 | 100 | 1,533 | 570 | 155 | 7 | 477 | 183 |
| Springfield, Mass | 115 | 22 | 180 | 52 | 939 | 111 | 92 | 1,309 | 162 | 15 | 84 | 38 |
| Syracuse, N. Y | 145 | 67 | 30 | 52 | 433 | 155 | 45 | 467 | 171 | 20 | 73 | 91 |
| Toledo, Ohio | 3,041 | 136 | 31 | 272 | 662 | 349 | 92 | 365 | 292 | 18 | 177 | 77 |
| Trenton, N. J | 4,042 | 501 | 11 | 395 | 127 | 1,599 | 15 | 511 | 140 | 13 | 58 | 20 |
| Washington, D. C | 219 | 43 | 104 | 86 | 1,207 | 122 | 219 | 793 | 605 | 108 | 237 | 127 |
| Wilmington, Del | 162 | 25 | 46 | 101 | 267 | 34 | 48 | 276 | 108 | 96 | 45 | 15 |
| Worcester, Mass | 25 | 23 | 2,175 | 53 | 720 | 15 | 334 | 936 | 108 | 7 | 227 | 69 |
| Yonkers, N. Y | 1,162 | 98 | 65 | 57 | 121 | 736 | 137 | 1,259 | 201 | 25 | 95 | 104 |
| Youngstown, Ohio | 2,684 | 2,579 | 22 | 1,375 | 1,297 | 2,096 | 51 | 1,024 | 92 | 83 | 47 | 45 |

Figures for France do not include Alsace-Lorraine.

## INCORPORATED PLACES OF 5,000 OR MORE INHABITANTS.

(U. S. Census of Jan. 1, 1920.)

### ALABAMA.

| Place. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Alabama City | 5,432 | 4,313 | 2,276 |
| Albany | 7,652 | 6,118 | 4,437 |
| Anniston | 17,734 | 12,794 | 9,695 |
| Bessemer | 18,674 | 10,864 | 6,358 |
| Birmingham | 178,806 | 132,685 | 38,415 |
| Dothan | 10,034 | 7,016 | 3,275 |
| Florence | 10,529 | 6,689 | 6,478 |
| Gadsden | 14,737 | 10,557 | 4,282 |
| Huntsville | 8,018 | 7,611 | 8,068 |
| Mobile | 60,777 | 51,521 | 38,469 |
| Montgomery | 43,464 | 38,136 | 30,346 |
| Selma | 15,589 | 13,649 | 8,713 |
| Sheffield | 6,682 | 4,865 | 3,333 |
| Talladega | 6,546 | 5,854 | 5,056 |
| Troy | 5,696 | 4,961 | 4,097 |
| Tuscaloosa | 11,996 | 8,407 | 5,094 |

### ARIZONA.

| | | | |
|---|---|---|---|
| Bisbee | 9,205 | 9,019 | ..... |
| Douglas | 9,916 | 6,437 | ..... |
| Globe | 7,044 | 7,083 | ..... |
| Miami | 6,689 | ..... | ..... |
| Nogales | 5,199 | 3,514 | 1,761 |
| Phoenix | 29,053 | 11,134 | 5,544 |
| Prescott | 5,010 | 5,092 | 3,559 |
| Tucson | 20,292 | 13,193 | 7,531 |

### ARKANSAS.

| | | | |
|---|---|---|---|
| Blytheville | 6,447 | 3,849 | 302 |
| Fayetteville | 5,362 | 4,471 | 4,061 |
| Fort Smith | 28,870 | 23,975 | 11,587 |
| Helena | 9,112 | 5,772 | 5,550 |
| Hot Springs | 11,695 | 14,434 | 9,973 |
| Jonesboro | 9,384 | 7,123 | 4,508 |
| Little Rock | 65,142 | 45,941 | 38,307 |
| North Little Rock | 14,048 | 11,138 | ..... |
| Paragould | 6,306 | 5,248 | 3,324 |
| Pine Bluff | 19,280 | 15,102 | 11,496 |
| Texarcana | 8,257 | 5,655 | 4,914 |
| Van Buren | 5,224 | 3,878 | 2,573 |
| West Helena | 6,226 | ..... | ..... |

### CALIFORNIA.

| | | | |
|---|---|---|---|
| Alameda | 28,806 | 23,383 | 16,464 |
| Alhambra | 9,096 | 5,021 | ..... |
| Anaheim | 5,526 | 2,628 | 1,456 |
| Bakersfield | 18,638 | 12,727 | 4,836 |
| Berkeley | 56,036 | 40,434 | 13,214 |
| Brawley | 5,389 | 881 | ..... |
| Calexico | 6,223 | 797 | ..... |
| Chico | 9,339 | 3,750 | 2,640 |
| El Centro | 5,464 | 1,640 | ..... |
| Eureka | 12,723 | 11,845 | 7,327 |
| Fresno | 45,086 | 24,892 | 12,470 |
| Glendale | 13,536 | 2,746 | ..... |
| Hanford | 5,888 | 4,829 | 2,929 |
| Long Beach | 55,593 | 17,809 | 2,252 |
| Los Angeles | 576,673 | 319,198 | 102,479 |
| Marysville | 5,461 | 5,430 | 3,497 |
| Modesto | 9,241 | 4,034 | 2,024 |
| Monrovia | 5,480 | 3,576 | 1,205 |
| Monterey | 5,479 | 4,923 | 1,748 |
| Napa | 6,757 | 5,791 | 4,036 |
| Oakland | 216,261 | 150,174 | 66,960 |
| Ontario | 7,280 | 4,274 | 722 |
| Palo Alto | 5,900 | 4,486 | 1,658 |
| Pasadena | 45,354 | 30,291 | 9,117 |
| Petaluma | 6,223 | 5,880 | 3,871 |
| Pomona | 13,505 | 10,207 | 5,526 |
| Redlands | 9,571 | 10,449 | 4,797 |
| Richmond | 16,843 | 6,802 | ..... |
| Riverside | 19,341 | 15,212 | 7,973 |
| Sacramento | 65,908 | 44,696 | 29,282 |
| San Bernardino | 18,721 | 12,779 | 6,150 |
| San Diego | 74,683 | 39,578 | 17,700 |
| San Francisco | 506,676 | 416,912 | 342,782 |
| San Jose | 39,642 | 28,946 | 21,500 |
| San Leandro | 5,703 | 3,471 | 2,253 |
| S. L. Obispo | 5,895 | 5,157 | 3,021 |
| San Mateo | 5,979 | 4,384 | 1,832 |
| San Raphael | 5,512 | 5,934 | 3,879 |
| Santa Ana | 15,485 | 8,429 | 4,933 |
| Santa Barbara | 19,441 | 11,659 | 6,587 |
| Santa Clara | 5,220 | 4,348 | 3,650 |
| Santa Cruz | 10,917 | 11,146 | 5,659 |
| Santa Monica | 15,252 | 7,847 | 3,057 |
| Santa Rosa | 8,758 | 7,817 | 6,673 |
| S. Pasadena | 7,652 | 4,649 | 1,001 |
| Stockton | 40,296 | 23,253 | 17,506 |
| Vallejo | 21,107 | 11,340 | 7,965 |
| Venice | 10,385 | 3,119 | ..... |
| Visalia | 5,753 | 4,550 | 3,085 |
| Watsonville | 5,013 | 4,446 | 3,528 |
| Whittier | 7,997 | 4,550 | 1,590 |

### COLORADO.

| Place. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Boulder | 11,006 | 9,539 | 6,150 |
| Colorado Springs | 30,105 | 29,078 | 21,085 |
| Denver | 256,491 | 213,381 | 133,859 |
| Fort Collins | 8,755 | 8,210 | 3,053 |
| Grand Junction | 8,665 | 7,754 | 3,503 |
| Greeley | 10,958 | 8,179 | 3,023 |
| Longmont | 5,848 | 4,256 | 2,201 |
| Loveland | 5,065 | 3,651 | 1,091 |
| Pueblo | 45,581 | 44,395 | 28,157 |
| Sterling | 6,415 | 3,044 | 998 |
| Trinidad | 10,906 | 10,204 | 5,345 |

### CONNECTICUT.

| | | | |
|---|---|---|---|
| Ansonia | 17,643 | 15,152 | 12,681 |
| Branfordtown | 6,627 | 6,047 | 5,706 |
| Bridgeport | 143,555 | 102,054 | 70,996 |
| Bristol | 20,620 | 9,527 | 6,268 |
| Danbury | 18,943 | 20,234 | 16,537 |
| Derby | 11,238 | 8,991 | 7,930 |
| East Hartford | 11,648 | 8,138 | 6,406 |
| Enfield | 11,719 | 9,719 | 6,699 |
| Fairfield | 11,475 | 6,134 | 4,489 |
| Greenwich | 5,939 | 3,886 | 2,420 |
| Hamden | 8,611 | 5,850 | 4,626 |
| Hartford | 138,036 | 98,915 | 79,850 |
| Huntington (Shelton) | 9,475 | 6,545 | 5,572 |
| Killingly | 8,178 | 6,564 | 6,835 |
| Manchester | 18,370 | 13,641 | 10,601 |
| Meriden | 29,867 | 27,265 | 24,296 |
| Middletown | 13,638 | 11,851 | 9,589 |
| Milford | 10,193 | 4,366 | 3,783 |
| Naugatuck | 15,051 | 12,722 | 10,541 |
| New Britain | 59,316 | 43,916 | 28,202 |
| New Haven | 162,537 | 133,605 | 108,027 |
| New London | 25,688 | 19,659 | 17,548 |
| New Milford | 4,781 | 5,010 | 4,804 |
| Norwalk | 27,743 | 24,211 | 19,932 |
| Norwich | 22,304 | 20,367 | 17,251 |
| Plainfield | 7,926 | 6,719 | 4,821 |
| Plymouth | 5,942 | 5,021 | 2,828 |
| Putnam | 7,711 | 6,637 | 6,667 |
| Rockville | 7,726 | 7,977 | 7,287 |
| Seymour | 6,781 | 4,786 | 3,541 |
| Southington | 5,085 | 3,714 | 3,411 |
| South Norwalk | (See N'rwalk) | 8,968 | 6,591 |
| Stafford | 5,407 | 5,233 | 4,297 |
| Stamford | 35,093 | 25,138 | 15,997 |
| Stonington | 10,236 | 9,154 | 8,540 |
| Stratford | 12,347 | 5,712 | 3,657 |
| Torrington (boro) | 20,623 | 15,483 | 8,360 |
| Wallingford | 9,648 | 8,690 | 6,737 |
| Waterbury | 91,715 | 73,141 | 51,139 |
| West Hartford | 8,854 | 4,808 | 3,186 |
| Willimantic | 12,230 | 11,230 | 8,937 |
| Winsted | 8,248 | 7,754 | 6,804 |

### DELAWARE.

| | | | |
|---|---|---|---|
| Wilmington | 110,168 | 87,411 | 76,508 |

### DISTRICT OF COLUMBIA.

| | | | |
|---|---|---|---|
| Washington | 437,571 | 331,069 | 278,718 |

### FLORIDA.

| | | | |
|---|---|---|---|
| Daytona | 5,445 | 3,082 | 1,690 |
| Fernandina | 5,457 | 3,482 | 3,245 |
| Gainesville | 6,860 | 6,183 | 3,633 |
| Jacksonville | 91,558 | 57,699 | 28,429 |
| Key West | 18,749 | 19,945 | 17,114 |
| Lakeland | 7,062 | 3,719 | 1,180 |
| Miami | 29,571 | 5,471 | 1,681 |
| Orlando | 9,282 | 3,894 | 2,481 |
| Palatka | 5,102 | 3,779 | 3,301 |
| Pensacola | 31,035 | 22,982 | 17,747 |
| St. Augustine | 6,192 | 5,494 | 4,272 |
| St. Petersburg | 14,237 | 4,127 | 1,575 |
| Sanford | 5,588 | 3,570 | 1,450 |
| Tallahassee | 5,637 | 5,018 | 2,981 |
| Tampa | 51,608 | 37,782 | 15,839 |
| West Palm Beach | 8,659 | 1,743 | 564 |
| West Tampa | 8,463 | 8,258 | 2,355 |

### GEORGIA.

| | | | |
|---|---|---|---|
| Albany | 11,555 | 8,190 | 4,606 |
| Americus | 9,010 | 8,063 | 7,674 |
| Athens | 16,748 | 14,913 | 10,245 |
| Atlanta | 200,616 | 154,839 | 89,872 |
| Augusta | 52,548 | 41,040 | 39,441 |
| Brunswick | 14,413 | 10,182 | 9,081 |
| Columbus | 31,125 | 20,554 | 17,614 |
| Cordele | 6,538 | 5,883 | 3,473 |
| Dalton | 5,222 | 5,324 | 4,815 |
| Decatur | 6,150 | 2,466 | 1,418 |
| Dublin | 7,707 | 5,795 | 2,987 |
| East Point | 5,241 | 3,682 | 1,315 |
| Elberton | 6,475 | 6,483 | 3,834 |

| GEORGIA—Continued. | | | |
|---|---|---|---|
| PLACE. | 1920. | 1910. | 1900. |
| Fitzgerald | 6,870 | 5,795 | 1,817 |
| Gainesville | 6,272 | 5,925 | 4,382 |
| Griffin | 8,240 | 7,478 | 6,857 |
| La Grange | 17,038 | 5,587 | 4,274 |
| Macon | 52,995 | 40,665 | 23,272 |
| Marietta | 6,190 | 5,949 | 4,446 |
| Moultrie | 6,789 | 3,349 | 2,221 |
| Newman | 7,037 | 5,548 | 3,654 |
| Rome | 13,252 | 12,099 | 7,291 |
| Savannah | 83,252 | 65,064 | 54,244 |
| Thomasville | 8,196 | 6,727 | 5,322 |
| Valdosta | 10,783 | 7,656 | 5,613 |
| Waycross | 18,068 | 14,485 | 5,919 |
| **IDAHO.** | | | |
| Boise | 21,393 | 17,358 | 5,957 |
| Burley | 5,408 | ..... | ..... |
| Caldwell | 5,106 | 3,543 | 997 |
| Cœur d'Alene | 6,447 | 7,291 | 508 |
| Idaho Falls | 8,064 | 4,827 | 1,262 |
| Lewiston | 6,574 | 6,043 | 2,425 |
| Nampa | 7,621 | 4,205 | 799 |
| Pocatello | 15,001 | 9,110 | 4,046 |
| Twin Falls | 8,324 | 5,258 | ..... |
| **ILLINOIS.** | | | |
| Alton | 24,682 | 17,528 | 14,210 |
| Aurora | 36,397 | 29,807 | 24,147 |
| Beardstown | 7,111 | 6,107 | 4,827 |
| Belleville | 24,823 | 21,122 | 17,484 |
| Belvidere | 7,804 | 7,253 | 6,937 |
| Benton | 7,201 | 2,675 | 1,341 |
| Berwyn | 14,150 | 5,841 | ..... |
| Bloomington | 28,725 | 25,768 | 23,286 |
| Blue Island | 11,424 | 8,043 | 6,114 |
| Cairo | 15,203 | 14,548 | 12,566 |
| Canton | 10,928 | 10,453 | 6,564 |
| Carbondale | 6,267 | 5,411 | 3,318 |
| Carlinville | 5,212 | 3,616 | 3,502 |
| Centralia | 12,491 | 9,680 | 8,721 |
| Champaign | 15,873 | 12,421 | 9,098 |
| Charleston | 6,615 | 5,884 | 5,488 |
| Chicago | 2,701,705 | 2,185,283 | 1,698,575 |
| Chicago Heights | 19,653 | 14,525 | 5,100 |
| Cicero | 44,995 | 14,557 | 16,310 |
| Clinton | 5,898 | 5,165 | 4,452 |
| Collinsville | 9,753 | 7,478 | 4,021 |
| Danville | 33,776 | 27,871 | 16,354 |
| Decatur | 43,818 | 31,140 | 20,754 |
| DeKalb | 7,871 | 8,102 | 5,904 |
| Dixon | 8,191 | 7,216 | 7,917 |
| Duquoin | 7,285 | 5,454 | 4,353 |
| East Moline | 8,675 | 2,665 | ..... |
| East St. Louis | 66,767 | 58,547 | 29,655 |
| Edwardsville | 5,336 | 5,014 | 4,157 |
| Eldorado | 5,004 | 3,366 | 1,445 |
| Elgin | 27,454 | 25,976 | 22,433 |
| Evanston | 37,234 | 24,978 | 19,259 |
| Forest Park | 10,768 | 6,594 | 4,085 |
| Freeport | 19,669 | 17,567 | 13,258 |
| Galesburg | 23,834 | 22,089 | 18,607 |
| Granite | 14,757 | 9,903 | 3,122 |
| Harrisburg | 7,125 | 5,309 | 2,202 |
| Harvey | 9,216 | 7,227 | 5,395 |
| Herrin | 10,986 | 6,861 | 1,559 |
| Highland Park | 6,167 | 4,209 | 2,806 |
| Hillsboro | 5,074 | 3,424 | 1,937 |
| Hoopeston | 5,451 | 4,698 | 3,823 |
| Jacksonville | 15,713 | 15,326 | 15,078 |
| Johnston | 7,137 | 3,248 | 787 |
| Joliet | 38,442 | 34,670 | 29,353 |
| Kankakee | 16,753 | 13,986 | 13,595 |
| Kewanee | 16,026 | 9,307 | 8,382 |
| La Grange | 6,525 | 5,282 | 3,969 |
| La Salle | 13,050 | 11,537 | 10,446 |
| Lincoln | 11,852 | 10,892 | 8,902 |
| Litchfield | 6,215 | 5,971 | 5,918 |
| Macomb | 6,714 | 5,774 | 5,375 |
| Marion | 9,582 | 7,093 | 2,510 |
| Matoon | 13,552 | 11,456 | 9,622 |
| Maywood | 12,072 | 8,033 | 4,532 |
| Melrose Park | 7,147 | 4,806 | 2,592 |
| Metropolis | 5,055 | 4,655 | 4,069 |
| Moline | 30,734 | 24,199 | 17,248 |
| Monmouth | 8,116 | 9,128 | 7,460 |
| Mt. Carmel | 7,456 | 6,934 | 4,311 |
| Mt. Vernon | 9,815 | 8,007 | 5,216 |
| Murphysboro | 10,703 | 7,485 | 6,463 |
| North Chicago | 5,839 | 3,306 | 1,150 |
| Oak Park | 39,858 | 19,444 | ..... |
| Ottawa | 10,816 | 9,535 | 10,588 |
| Pana | 6,122 | 6,055 | 5,530 |
| Paris | 7,985 | 7,664 | 6,105 |
| Pekin | 12,086 | 9,897 | 8,240 |
| Peoria | 76,121 | 66,950 | 56,100 |
| Peru | 8,869 | 7,984 | 6,863 |
| Pontiac | 6,664 | 6,090 | 4,266 |
| Quincy | 35,978 | 36,587 | 36,252 |

| ILLINOIS—Continued. | | | |
|---|---|---|---|
| PLACE. | 1920. | 1910. | 1900. |
| Rockford | 65,651 | 45,401 | 31,051 |
| Rock Island | 35,177 | 24,335 | 19,493 |
| Savanna | 5,237 | 3,691 | 3,325 |
| Springfield | 59,183 | 51,678 | 34,159 |
| Spring Valley | 6,493 | 7,035 | 6,214 |
| Staunton | 6,027 | 5,048 | 2,786 |
| Sterling | 8,182 | 7,467 | 6,309 |
| Streator | 14,779 | 14,253 | 14,079 |
| Taylorville | 5,806 | 5,446 | 4,246 |
| Urbana | 10,244 | 8,245 | 5,728 |
| Waukegan | 19,226 | 16,069 | 9,426 |
| West Frankfort | 8,478 | 2,111 | ..... |
| West Hammond | 7,492 | 4,948 | 2,935 |
| Willmette | 7,814 | 4,943 | 2,300 |
| Winnetka | 6,694 | 3,168 | 1,833 |
| Woodstock | 5,523 | 4,331 | 2,502 |
| Zion | 5,580 | 4,789 | ..... |
| **INDIANA.** | | | |
| Alexandria | 4,172 | 5,096 | 7,221 |
| Anderson | 29,767 | 22,476 | 20,178 |
| Bedford | 9,076 | 8,716 | 6,115 |
| Bicknell | 7,635 | 2,794 | ..... |
| Bloomington | 11,595 | 8,838 | 6,460 |
| Bluffton | 5,391 | 4,987 | 4,479 |
| Brazil | 9,293 | 9,340 | 7,786 |
| Clinton | 10,962 | 6,229 | 2,918 |
| Columbus | 8,990 | 8,813 | 8,130 |
| Connersville | 9,901 | 7,738 | 6,836 |
| Crawfordsville | 10,139 | 9,371 | 6,649 |
| East Chicago | 35,967 | 19,098 | 3,411 |
| Elkhart | 24,277 | 19,282 | 15,184 |
| Elwood | 10,790 | 11,028 | 12,950 |
| Evansville | 85,264 | 69,647 | 59,007 |
| Fort Wayne | 86,549 | 63,933 | 45,115 |
| Frankfort | 11,585 | 8,634 | 7,100 |
| Gary | 55,378 | 16,802 | ..... |
| Goshen | 9,525 | 8,514 | 7,810 |
| Greenburg | 5,345 | 5,420 | 5,034 |
| Hammond | 36,004 | 20,925 | 12,376 |
| Hartford | 6,183 | 6,187 | 5,912 |
| Huntington | 14,000 | 10,272 | 9,491 |
| Indianapolis | 314,194 | 233,650 | 169,164 |
| Jeffersonville | 10,098 | 10,412 | 10,774 |
| Kokomo | 30,067 | 17,010 | 10,609 |
| Lafayette | 22,486 | 20,081 | 18,116 |
| Laporte | 15,158 | 10,525 | 7,113 |
| Lebanon | 6,257 | 5,474 | 4,465 |
| Linton | 5,856 | 5,906 | 3,071 |
| Logansport | 21,626 | 19,050 | 16,204 |
| Madison | 6,711 | 6,934 | 7,835 |
| Marion | 23,747 | 19,359 | 17,337 |
| Michigan City | 19,457 | 19,027 | 14,850 |
| Mishawaka | 15,195 | 11,886 | 5,650 |
| Mt. Vernon | 5,284 | 5,563 | 5,132 |
| Muncie | 36,524 | 24,005 | 20,942 |
| New Albany | 22,992 | 20,629 | 20,628 |
| New Castle | 14,458 | 9,44 | 3,906 |
| Peru | 12,445 | 10,910 | 8,463 |
| Portland | 5,958 | 5,130 | 4,798 |
| Princeton | 7,132 | 6,448 | 6,041 |
| Richmond | 26,765 | 22,324 | 18,226 |
| Rushville | 5,498 | 4,925 | 4,541 |
| Seymour | 7,348 | 6,305 | 6,445 |
| Shelbyville | 9,701 | 9,500 | 7,169 |
| South Bend | 70,983 | 53,684 | 35,999 |
| Terre Haute | 66,083 | 58,157 | 36,673 |
| Valparaiso | 6,518 | 6,987 | 6,280 |
| Vincennes | 17,160 | 14,895 | 10,249 |
| Wabash | 9,872 | 8,687 | 8,618 |
| Warsaw | 5,478 | 4,430 | 3,987 |
| Washington | 8,743 | 7,854 | 8,551 |
| Whiting | 10 145 | 6,587 | 3,983 |
| **IOWA.** | | | |
| Albia | 5,067 | 4,969 | 2,889 |
| Ames | 6,270 | 4,223 | 2,422 |
| Atlantic | 5,329 | 4,560 | 5,046 |
| Boone | 12,451 | 10,347 | 8,880 |
| Burlington | 24,057 | 24,324 | 23,201 |
| Cedar Falls | 6,316 | 5,012 | 5,319 |
| Cedar Rapids | 45,566 | 32,811 | 25,656 |
| Centerville | 8,486 | 6,936 | 5,256 |
| Chariton | 5,175 | 3,794 | 3,989 |
| Charles City | 7,350 | 5,892 | 4,227 |
| Clinton | 24,151 | 25,577 | 22,698 |
| Council Bluffs | 36,162 | 29,292 | 25,802 |
| Creston | 8,034 | 6,924 | 7,752 |
| Davenport | 56,727 | 43,028 | 35,254 |
| Des Moines | 126,468 | 86,368 | 62,139 |
| Dubuque | 39,141 | 38,494 | 36,297 |
| Fairfield | 5,948 | 4,970 | 4,689 |
| Fort Dodge | 19,347 | 15,543 | 12,162 |
| Fort Madison | 12,066 | 8,900 | 9,278 |
| Grinnell | 5,362 | 5,036 | 3,860 |
| Iowa City | 11,267 | 10,091 | 7,987 |
| Keokuk | 14,423 | 14,008 | 14,641 |
| Marshalltown | 15,731 | 13,374 | 11,544 |

| IOWA—*Continued.* | | | |
|---|---|---|---|
| PLACE. | 1920. | 1910. | 1900. |
| Mason City | 20,065 | 11,230 | 6,746 |
| Muscatine | 16,068 | 16,178 | 14,073 |
| Newton | 6,627 | 4,616 | 3,682 |
| Oelwein | 7,455 | 6,028 | 5,142 |
| Oskaloosa | 9,427 | 9,456 | 9,212 |
| Ottumwa | 23,003 | 22,012 | 18,197 |
| Perry | 5,642 | 4,630 | 3,986 |
| Red Oak | 5,578 | 4,830 | 4,355 |
| Shenandoah | 5,255 | 4,976 | 3,573 |
| Sioux City | 71,227 | 47,828 | 33,111 |
| Waterloo | 36,230 | 26,693 | 12,580 |
| Webster City | 5,657 | 5,208 | 4,613 |
| **KANSAS.** | | | |
| Arkansas City | 11,253 | 7,508 | 6,140 |
| Atchison | 12,630 | 16,429 | 12,722 |
| Chanute | 10,286 | 9,272 | 4,208 |
| Coffeyville | 13,452 | 12,687 | 4,953 |
| Concordia | 4,705 | 4,415 | 3,401 |
| Dodge City | 5,061 | 3,214 | 1,942 |
| Eldorado | 10,995 | 3,129 | 3,466 |
| Emporia | 11,273 | 9,058 | 8,223 |
| Fort Scott | 10,693 | 10,463 | 10,322 |
| Galena | 4,712 | 6,996 | 10,155 |
| Hutchinson | 23,298 | 16,364 | 9,379 |
| Independence | 11,920 | 10,480 | 4,851 |
| Iola | 8,513 | 9,032 | 5,791 |
| Junction | 7,533 | 5,598 | 4,695 |
| Kansas City | 101,177 | 82,331 | 51,418 |
| Lawrence | 12,456 | 12,374 | 10,862 |
| Leavenworth | 16,912 | 19,363 | 20,735 |
| Manhattan | 7,989 | 5,722 | 3,438 |
| Newton | 9,781 | 7,862 | 6,208 |
| Ottawa | 9,018 | 7,650 | 6,934 |
| Parsons | 16,028 | 12,463 | 7,682 |
| Pittsburg | 18,052 | 14,755 | 10,112 |
| Pratt | 5,183 | 3,302 | 1,213 |
| Rosedale | 7,674 | 5,960 | 3,270 |
| Salina | 15,085 | 9,688 | 6,074 |
| Topeka | 50,022 | 43,684 | 33,608 |
| Wellington | 7,804 | 7,034 | 4,245 |
| Wichita | 72,217 | 52,450 | 24,671 |
| Winfield | 7,933 | 6,700 | 5,554 |
| **KENTUCKY.** | | | |
| Ashland | 14,729 | 8,688 | 6,800 |
| Bellevue | 7,379 | 6,683 | 6,332 |
| Bowling Green | 9,638 | 9,173 | 8,226 |
| Covington | 57,121 | 53,270 | 42,938 |
| Danville | 5,099 | 5,420 | 4,285 |
| Dayton | 7,646 | 6,979 | 6,104 |
| Fort Thomas | 5,028 | ..... | ..... |
| Frankfort | 9,805 | 10,465 | 9,487 |
| Henderson | 12,169 | 11,452 | 10,272 |
| Hopkinsville | 9,696 | 9,419 | 7,280 |
| Lexington | 41,534 | 35,099 | 26,369 |
| Louisville | 234,891 | 223,928 | 204,731 |
| Mayfield | 6,583 | 5,916 | 4,081 |
| Maysville | 6,107 | 6,141 | 6,423 |
| Middlesboro | 8,041 | 7,305 | 4,162 |
| Newport | 29,317 | 30,309 | 28,301 |
| Owensboro | 17,424 | 16,170 | 13,189 |
| Paducah | 24,735 | 22,760 | 19,446 |
| Paris | 6,310 | 5,859 | 4,603 |
| Richmond | 5,622 | 5,340 | 4,653 |
| Winchester | 8,333 | 7,156 | 5,964 |
| **LOUISIANA.** | | | |
| Alexandria | 17,510 | 11,213 | 5,648 |
| Baton Rouge | 21,782 | 14,897 | 11,269 |
| Bogalusa | 8,245 | ..... | ..... |
| Crowley | 6,108 | 5,099 | 4,214 |
| Gretna | 7,197 | ..... | ..... |
| Houma | 5,160 | 5,024 | 3,212 |
| Lafayette | 7,855 | 6,392 | 3,314 |
| Lake Charles | 13,088 | 11,449 | 6,680 |
| Minden | 6,105 | 3,002 | 1,561 |
| Monroe | 12,675 | 10,209 | 5,428 |
| Morgan City | 5,429 | 5,477 | 2,332 |
| New Iberia | 6,278 | 7,499 | 6,815 |
| New Orleans | 387,219 | 339,075 | 287,104 |
| Shreveport | 43,874 | 28,015 | 16,013 |
| **MAINE.** | | | |
| Auburn | 16,985 | 15,064 | 12,951 |
| Augusta | 14,114 | 13,211 | 11,683 |
| Bangor | 25,978 | 24,803 | 21,850 |
| Bath | 14,731 | 9,396 | 10,477 |
| Belfast | 5,083 | 4,618 | 4,615 |
| Biddeford | 18,008 | 17,079 | 16,145 |
| Brewer | 6,064 | 5,667 | 4,835 |
| Brunswick | 5,784 | 5,341 | 5,210 |
| Calais | 6,084 | 6,116 | 7,655 |
| Caribou | 6,018 | 5,377 | 4,758 |
| Gardiner | 5,475 | 5,311 | 5,501 |
| Houlton | 6,191 | 5,845 | 4,686 |
| Lewiston | 31,791 | 26,247 | 23,761 |
| Old Town | 6,956 | 6,317 | 5,763 |

| MAINE—*Continued.* | | | |
|---|---|---|---|
| PLACE. | 1920. | 1910. | 1900. |
| Portland | 69,272 | 58,571 | 50,145 |
| Rockland | 8,109 | 8,174 | 8,150 |
| Rumford | 7,016 | 5,427 | 2,595 |
| Saco | 6,817 | 6,583 | 6,122 |
| Sanford | 10,691 | 9,049 | 6,078 |
| Skowhegan | 5,981 | 5,341 | 5,180 |
| South Portland | 9,254 | 7,471 | 6,287 |
| Waterville | 13,351 | 11,458 | 9,477 |
| Westbrook | 9,453 | 8,281 | 7,283 |
| **MARYLAND.** | | | |
| Annapolis | 11,214 | 8,609 | 8,525 |
| Baltimore | 733,826 | 558,485 | 508,957 |
| Cambridge | 7,467 | 6,407 | 5,747 |
| Cumberland | 29,837 | 21,839 | 17,128 |
| Frederick | 11,066 | 10,411 | 9,296 |
| Frostburg | 6,017 | 6,028 | 5,274 |
| Hagerstown | 28,064 | 16,507 | 13,591 |
| Salisbury | 7,553 | 6,690 | 4,277 |
| **MASSACHUSETTS.** | | | |
| Abington | 5,787 | 5,455 | 4,489 |
| Adams | 12,967 | 13,026 | 11,134 |
| Agawam | 5,023 | 3,501 | 2,536 |
| Amesbury | 10,036 | 9,894 | 9,473 |
| Amherst | 5,550 | 5,112 | 5,028 |
| Andover | 8,268 | 7,301 | 6,813 |
| Arlington | 18,708 | 11,187 | 8,603 |
| Athol | 9,792 | 8,536 | 7,061 |
| Attleboro | 19,731 | 16,215 | 11,335 |
| Belmont | 10,749 | 5,542 | 3,929 |
| Beverly | 22,561 | 18,650 | 13,884 |
| Boston | 748,060 | 670,585 | 560,892 |
| Braintree | 10,580 | 8,066 | 5,981 |
| Bridgewater | 8,438 | 7,688 | 5,806 |
| Brockton | 66,254 | 56,878 | 40,063 |
| Brookline | 37,748 | 27,792 | 19,935 |
| Cambridge | 109,694 | 104,839 | 91,886 |
| Canton | 5,945 | 4,797 | 4,584 |
| Chelmsford | 5,682 | 5,010 | 3,984 |
| Chelsea | 43,184 | 32,452 | 34,072 |
| Chicopee | 36,214 | 25,401 | 19,167 |
| Clinton | 12,779 | 13,075 | 13,667 |
| Concord | 6,461 | 6,421 | 5,652 |
| Danvers | 11,108 | 9,407 | 8,542 |
| Dedham | 10,792 | 9,284 | 7,457 |
| Dracut | 5,280 | 3,461 | 3,253 |
| Easthampton | 11,261 | 8,524 | 5,603 |
| Easton | 5,041 | 5,139 | 4,837 |
| Everett | 40,120 | 33,484 | 24,336 |
| Fairhaven | 7,291 | 5,122 | 3,567 |
| Fall River | 120,485 | 119,295 | 104,863 |
| Fitchburg | 41,029 | 37,826 | 31,531 |
| Framingham | 17,033 | 12,948 | 11,302 |
| Franklin | 6,497 | 5,641 | 5,017 |
| Gardner | 16,971 | 14,699 | 10,813 |
| Gloucester | 22,947 | 24,398 | 26,121 |
| Grafton | 6,887 | 5,705 | 4,859 |
| Great Barrington | 6,315 | 5,926 | 5,854 |
| Greenfield | 15,432 | 10,427 | 7,927 |
| Haverhill | 53,884 | 44,115 | 37,175 |
| Hingham | 5,695 | 4,965 | 5,059 |
| Holyoke | 60,203 | 57,730 | 45,712 |
| Hudson | 7,607 | 6,743 | 5,454 |
| Hyde Park | (Boston) | 15,507 | 13,244 |
| Ipswich | 6,201 | 5,777 | 4,658 |
| Lawrence | 94,270 | 85,892 | 62,559 |
| Leominster | 19,745 | 17,580 | 12,392 |
| Lexington | 6,350 | 4,918 | 3,831 |
| Lowell | 112,759 | 106,294 | 94,969 |
| Ludlow | 7,470 | 4,918 | 3,536 |
| Lynn | 99,148 | 89,336 | 68,513 |
| Malden | 49,103 | 44,404 | 33,664 |
| Mansfield | 6,255 | 5,183 | 4,006 |
| Marblehead | 7,324 | 7,338 | 7,582 |
| Marlboro | 15,028 | 14,579 | 13,609 |
| Maynard | 7,086 | 6,390 | 3,142 |
| Medford | 39,038 | 23,150 | 18,244 |
| Melrose | 18,204 | 15,715 | 12,962 |
| Methuen | 15,189 | 11,448 | 7,512 |
| Middleboro | 8,453 | 8,214 | 6,885 |
| Milford | 13,471 | 13,055 | 11,376 |
| Millbury | 5,652 | 4,740 | 4,460 |
| Milton | 9,382 | 7,924 | 6,578 |
| Montague | 7,675 | 6,866 | 6,150 |
| Natick | 10,907 | 9,866 | 9,488 |
| Needham | 7,012 | 5,026 | 4,016 |
| New Bedford | 121,217 | 96,652 | 62,442 |
| Newburyport | 15,618 | 14,949 | 14,478 |
| Newton | 46,054 | 39,806 | 33,587 |
| North Adams | 22,282 | 22,019 | 24,200 |
| North Andover | 6,265 | 5,529 | 4,243 |
| North Attleboro | 9,238 | 9,562 | 7,253 |
| Northampton | 21,951 | 19,431 | 18,643 |
| Northbridge | 10,174 | 8,807 | 7,036 |
| Norwood | 12,627 | 8,014 | 5,480 |
| Orange | 5,393 | 5,282 | 5,520 |
| Palmer | 9,896 | 8,610 | 7,801 |

| MASSACHUSETTS—*Continued.* | | | |
|---|---|---|---|
| PLACE. | 1920. | 1910. | 1900. |
| Peabody | 19,552 | 15,724 | 11,523 |
| Pittsfield | 41,763 | 32,121 | 21,766 |
| Plymouth | 13,045 | 12,141 | 9,592 |
| Quincy | 47,876 | 32,642 | 23,899 |
| Reading | 7,439 | 5,818 | 4,969 |
| Revere | 28,823 | 18,219 | 10,395 |
| Rockland | 7,544 | 6,928 | 5,327 |
| Salem | 42,529 | 43,697 | 35,956 |
| Saugus | 10,874 | 8,047 | 5,084 |
| Somerville | 93,091 | 77,236 | 61,643 |
| Southbridge | 14,245 | 12,592 | 10,025 |
| South Hadley | 5,527 | 4,894 | 4,256 |
| Spencer | 5,930 | 6,740 | 7,627 |
| Springfield | 129,614 | 88,926 | 62,059 |
| Stoneham | 7,873 | 7,090 | 6,197 |
| Stoughton | 6,865 | 6,316 | 5,442 |
| Swampscott | 8,101 | 6,204 | 4,548 |
| Taunton | 37,137 | 34,259 | 31,036 |
| Uxbridge | 5,384 | 4,671 | 3,599 |
| Wakefield | 13,025 | 11,404 | 9,290 |
| Walpole | 5,446 | 4,892 | 3,572 |
| Waltham | 30,915 | 27,834 | 23,481 |
| Ware | 8,525 | 8,774 | 8,263 |
| Watertown | 21,457 | 12,875 | 9,706 |
| Webster | 13,258 | 11,509 | 8,804 |
| Wellesley | 6,224 | 5,413 | 5,072 |
| West Springfield | 13,443 | 9,224 | 7,105 |
| Westboro | 5,789 | 5,446 | 5,400 |
| Westfield | 18,604 | 16,044 | 12,310 |
| Weymouth | 15,057 | 12,895 | 11,324 |
| Whitman | 7,147 | 7,292 | 6,155 |
| Winchendon | 5,904 | 5,678 | 5,001 |
| Winchester | 10,485 | 9,309 | 7,248 |
| Winthrop | 15,455 | 10,132 | 6,058 |
| Woburn | 16,574 | 15,308 | 14,254 |
| Worcester | 179,754 | 145,986 | 118,421 |

| MICHIGAN. | | | |
|---|---|---|---|
| Adrian | 11,878 | 10,763 | 9,654 |
| Albion | 8,354 | 5,833 | 4,519 |
| Alma | 7,542 | 2,757 | 2,047 |
| Alpena | 11,101 | 12,706 | 11,802 |
| Ann Arbor | 19,516 | 14,817 | 14,509 |
| Battle Creek | 36,164 | 25,267 | 18,563 |
| Bay City | 47,554 | 45,166 | 27,628 |
| Benton Harbor | 12,233 | 9,185 | 6,562 |
| Bessemer | 5,482 | 4,583 | 3,911 |
| Cadillac | 9,750 | 8,375 | 5,997 |
| Charlotte | 5,126 | 4,886 | 4,092 |
| Cheboygan | 5,642 | 6,859 | 6,489 |
| Coldwater | 6,114 | 5,945 | 6,216 |
| Detroit | 993,678 | 465,766 | 285,704 |
| Dowagiac | 5,440 | 5,088 | 4,151 |
| Escanaba | 13,103 | 13,194 | 9,549 |
| Flint | 91,599 | 38,550 | 13,103 |
| Grand Haven | 7,205 | 5,856 | 4,743 |
| Grand Rapids | 137,634 | 112,571 | 87,565 |
| Hamtramck | 48,615 | 3,559 | ..... |
| Hancock | 7,527 | 8,981 | 4,050 |
| Hastings | 5,132 | 4,383 | 3,172 |
| Highland Park | 46,499 | 4,120 | 427 |
| Hillsdale | 5,476 | 5,001 | 4,151 |
| Holland | 12,183 | 10,490 | 7,790 |
| Ionia | 6,935 | 5,030 | 5,209 |
| Iron Mountain | 8,251 | 9,216 | 9,242 |
| Ironwood | 15,739 | 12,821 | 9,705 |
| Ishpeming | 10,500 | 12,448 | 13,255 |
| Jackson | 48,374 | 31,433 | 25,180 |
| Kalamazoo | 48,487 | 39,437 | 24,404 |
| Lansing | 57,327 | 31,229 | 16,485 |
| Laurium | 6,696 | 8,537 | 5,643 |
| Ludington | 8,810 | 9,132 | 7,166 |
| Manistee | 9,694 | 12,381 | 14,260 |
| Manistique | 6,380 | 4,722 | 4,126 |
| Marquette | 12,718 | 11,503 | 10,058 |
| Menominee | 8,907 | 10,507 | 12,818 |
| Midland | 5,483 | 2,527 | 2,363 |
| Monroe | 11,573 | 6,893 | 5,043 |
| Munising | 5,037 | 2,952 | 2,014 |
| Mt. Clemens | 9,488 | 7,707 | 6,576 |
| Muskegon | 36,570 | 24,062 | 20,818 |
| Muskegon Heights | 9,514 | 1,690 | 1,011 |
| Negaunee | 7,419 | 8,460 | 6,935 |
| Niles | 7,311 | 5,156 | 4,287 |
| Owasso | 12,575 | 9,639 | 8,696 |
| Petoskey | 5,064 | 4,778 | 5,285 |
| Pontiac | 34,273 | 14,532 | 9,769 |
| Port Huron | 25,944 | 18,863 | 19,158 |
| River Rouge | 9,822 | 4,163 | 1,748 |
| Saginaw | 61,903 | 50,510 | 42,345 |
| St. Joseph | 7,251 | 5,936 | 5,155 |
| Sault Ste. Marie | 12,096 | 12,615 | 10,538 |
| Sturgis | 5,995 | 3,635 | 2,465 |
| Three Rivers | 5,209 | 5,072 | 3,550 |
| Traverse City | 10,925 | 12,115 | 9,407 |
| Wyandotte | 13,851 | 8,287 | 5,183 |
| Ypsilanti | 7,413 | 6,230 | 7,378 |

| MINNESOTA. | | | |
|---|---|---|---|
| PLACE. | 1920. | 1910. | 1900. |
| Albert Lea | 8,056 | 6,192 | 4,500 |
| Austin | 10,118 | 6,960 | 5,474 |
| Benidji | 7,086 | 5,099 | 2,183 |
| Brainerd | 9,591 | 8,526 | 7,524 |
| Chisholm | 9,039 | 7,684 | ..... |
| Cloquet | 5,127 | 7,031 | 3,072 |
| Crookston | 6,825 | 7,559 | 5,359 |
| Duluth | 98,917 | 78,466 | 52,969 |
| Eveleth | 7,205 | 7,036 | 2,752 |
| Faribault | 11,089 | 9,001 | 7,868 |
| Fergus Falls | 7,581 | 6,887 | 6,072 |
| Hibbing | 15,089 | 8,832 | 2,481 |
| Little Falls | 5,500 | 6,078 | 5,774 |
| Mankato | 12,469 | 10,365 | 10,599 |
| Minneapolis | 380,582 | 301,408 | 202,718 |
| Moorhead | 5,720 | 4,840 | 3,730 |
| New Ulm | 6,745 | 5,648 | 5,403 |
| Owatonna | 7,252 | 5,658 | 5,561 |
| Red Wing | 8,637 | 9,048 | 7,525 |
| Rochester | 13,722 | 7,844 | 6,843 |
| St. Cloud | 15,873 | 10,600 | 8,663 |
| St. Paul | 234,698 | 214,744 | 163,065 |
| South St. Paul | 6,860 | 4,510 | 2,322 |
| Stillwater | 7,735 | 10,198 | 12,318 |
| Virginia | 14,022 | 10,473 | 2,962 |
| Willmar | 5,892 | 4,135 | 3,409 |
| Winona | 19,143 | 18,583 | 19,714 |

| MISSISSIPPI. | | | |
|---|---|---|---|
| Biloxi | 10,937 | 8,049 | 5,467 |
| Clarksdale | 7,552 | 4,079 | 1,773 |
| Columbus | 10,501 | 8,988 | 6,484 |
| Corinth | 5,498 | 5,020 | 3,661 |
| Greenville | 11,560 | 9,610 | 7,642 |
| Greenwood | 7,793 | 5,836 | 3,026 |
| Gulfport | 8,157 | 6,386 | 1,060 |
| Hattiesburg | 13,270 | 11,733 | 4,175 |
| Jackson | 22,817 | 21,262 | 7,816 |
| Laurel | 13,037 | 8,465 | 3,193 |
| McComb | 7,775 | 6,237 | 4,477 |
| Meridian | 23,399 | 23,285 | 14,050 |
| Natchez | 12,608 | 11,791 | 12,210 |
| Pascagoula | 6,082 | 3,379 | 708 |
| Tupelo | 5,055 | 3,881 | 2,118 |
| Vicksburg | 18,072 | 20,814 | 14,834 |
| Yazoo | 5,244 | 6,796 | 4,944 |

| MISSOURI. | | | |
|---|---|---|---|
| Brookfield | 6,304 | 5,749 | 5,484 |
| Cape Girardeau | 10,252 | 8,475 | 4,815 |
| Carthage | 10,068 | 9,483 | 9,416 |
| Chillicothe | 6,772 | 6,265 | 6,905 |
| Clinton | 5,098 | 4,992 | 5,061 |
| Columbia | 10,392 | 9,662 | 5,651 |
| De Soto | 5,003 | 4,721 | 5,611 |
| Flat River | (Unincorp.) | 5,112 | ..... |
| Fulton | 5,595 | 5,228 | 4,883 |
| Hannibal | 19,306 | 18,341 | 12,780 |
| Independence | 11,686 | 9,859 | 6,974 |
| Jefferson City | 14,490 | 11,850 | 9,664 |
| Joplin | 29,902 | 32,073 | 26,023 |
| Kansas City | 324,410 | 248,381 | 163,752 |
| Kirksville | 7,213 | 6,347 | 5,966 |
| Maplewood | 7,431 | 4,976 | ..... |
| Marshall | 5,200 | 4,869 | 5,086 |
| Mexico | 6,013 | 5,939 | 5,099 |
| Moberly | 12,808 | 10,923 | 8,012 |
| Nevada | 7,139 | 7,176 | 7,461 |
| Poplar Bluff | 8,042 | 6,916 | 4,321 |
| St. Charles | 8,503 | 9,437 | 7,982 |
| St. Joseph | 77,939 | 77,403 | 102,979 |
| St. Louis | 772,897 | 687,029 | 575,238 |
| Sedalia | 21,144 | 17,822 | 15,231 |
| Springfield | 39,631 | 35,201 | 23,267 |
| Trenton | 6,951 | 5,656 | 5,396 |
| University | 6,792 | 2,417 | ..... |
| Webb City | 7,807 | 11,817 | 9,201 |
| Webster Groves | 9,474 | 7,080 | 1,895 |

| MONTANA. | | | |
|---|---|---|---|
| Anaconda | 11,668 | 10,134 | 9,453 |
| Billings | 15,100 | 10,031 | 3,229 |
| Bozeman | 6,183 | 5,107 | 3,419 |
| Butte | 41,611 | 39,165 | 30,470 |
| Great Falls | 24,121 | 13,948 | 14,930 |
| Havre | 5,429 | 3,624 | 1,033 |
| Helena | 12,037 | 12,515 | 10,770 |
| Kalispell | 5,147 | 5,549 | 2,526 |
| Lewiston | 6,120 | 7,992 | 1,096 |
| Livingston | 6,311 | 5,359 | 2,778 |
| Miles City | 7,937 | 4,697 | 1,938 |
| Missoula | 12,668 | 12,869 | 4,366 |

| NEBRASKA. | | | |
|---|---|---|---|
| Beatrice | 9,664 | 9,356 | 7,875 |
| Columbus | 5,410 | 5,014 | 3,522 |
| Fairbury | 5,454 | 5,294 | 3,140 |
| Fremont | 9,605 | 8,718 | 7,241 |
| Grand Island | 13,947 | 10,326 | 7,554 |

| NEBRASKA—*Continued.* PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Hastings | 11,647 | 9,338 | 7,188 |
| Kearney | 7,702 | 6,202 | 5,634 |
| Lincoln | 54,948 | 43,973 | 40,169 |
| Nebraska City | 6,279 | 5,488 | 7,380 |
| Norfolk | 8,634 | 6,025 | 3,883 |
| North Platte | 10,466 | 4,793 | 3,640 |
| Omaha | 191,601 | 124,096 | 102,555 |
| Scotts Bluff | 6,912 | 1,746 | ..... |
| South Omaha | (Omaha) | 26,259 | 26,001 |
| York | 5,388 | 6,235 | 5,132 |
| **NEVADA.** | | | |
| Reno | 12,016 | 10,867 | 4,500 |
| **NEW HAMPSHIRE.** | | | |
| Berlin | 16,104 | 11,780 | 8,886 |
| Claremont | 9,524 | 7,529 | 6,498 |
| Concord | 22,167 | 21,497 | 19,632 |
| Derry | 5,382 | 5,123 | 3,583 |
| Dover | 13,029 | 13,247 | 13,207 |
| Franklin | 6,318 | 6,132 | 5,846 |
| Keene | 11,210 | 10,068 | 9,165 |
| Laconia | 10,897 | 10,183 | 8,042 |
| Lebanon | 6,162 | 5,718 | 4,965 |
| Manchester | 78,384 | 70,063 | 56,987 |
| Nashua | 28,379 | 26,005 | 23,898 |
| Portsmouth | 13,569 | 11,269 | 10,637 |
| Rochester | 9,673 | 8,868 | 8,466 |
| Somersworth | 6,688 | 6,704 | 7,023 |
| **NEW JERSEY.** (For population of *all* incorporated places in the State, see the 1922 Almanac.) | | | |
| Asbury Park | 12,400 | 10,150 | 4,148 |
| Atlantic City | 50,707 | 46,150 | 27,838 |
| Bayonne | 76,754 | 55,545 | 32,722 |
| Belleville (town) | 15,660 | ..... | ..... |
| Bloomfield (town) | 22,019 | 15,070 | 9,668 |
| Boonton (town) | 5,372 | 4,930 | 3,901 |
| Bound Brook (bor) | 5,906 | 3,970 | 2,622 |
| Bridgeton | 14,323 | 14,209 | 13,913 |
| Burlington | 9,049 | 8,336 | 7,392 |
| Camden | 116,309 | 94,538 | 75,935 |
| Cliffside Park (bor) | 5,709 | 3,394 | 968 |
| Clifton | 26,470 | ..... | ..... |
| Collingswood (bor) | 8,714 | 4,795 | 1,633 |
| Dover (town) | 9,803 | 7,468 | 5,938 |
| East Orange | 50,710 | 34,371 | 21,506 |
| E. Rutherford (bor) | 5,463 | 4,275 | 2,640 |
| Elizabeth | 95,783 | 73,409 | 52,130 |
| Englewood | 11,627 | 9,924 | 6,253 |
| Fort Lee (bor) | 5,761 | 4,472 | ..... |
| Garfield | 19,381 | 10,213 | 3,504 |
| Gloucester | 12,162 | 9,462 | 6,840 |
| Guttenberg (town) | 6,726 | 5,647 | 3,825 |
| Hackensack (town) | 17,667 | 14,050 | 9,443 |
| Haddonfield (bor) | 5,646 | 4,142 | 2,776 |
| Hammonton (town) | 6,417 | 5,088 | 3,481 |
| Harrison (town) | 15,721 | 14,498 | 10,596 |
| Hawthorne (bor) | 5,135 | 3,400 | 2,096 |
| Hoboken | 68,166 | 70,324 | 59,364 |
| Irvington (town) | 25,480 | 11,877 | 5,255 |
| Jersey City | 298,103 | 267,779 | 206,433 |
| Kearny (town) | 26,124 | 18,659 | 10,899 |
| Lodi (bor) | 8,175 | 4,138 | 1,917 |
| Long Branch | 13,521 | 13,298 | 8,872 |
| Madison (bor) | 5,523 | 4,658 | 3,754 |
| Millville | 14,691 | 12,451 | 10,583 |
| Montclair (town) | 28,810 | 21,550 | 13,962 |
| Morristown (town) | 12,548 | 12,507 | 11,267 |
| New Brunswick | 32,779 | 23,388 | 20,006 |
| Newark | 414,524 | 347,469 | 246,070 |
| No. Plainfield (bor) | 6,916 | 6,117 | 5,009 |
| Nutley (town) | 9,421 | 6,009 | ..... |
| Orange | 33,268 | 29,630 | 24,141 |
| Passaic | 63,841 | 54,773 | 27,777 |
| Paterson | 135,875 | 125,600 | 105,171 |
| Pennsgrove (bor) | 6,030 | 2,118 | 1,825 |
| Perth Amboy | 41,707 | 32,121 | 17,699 |
| Phillipsburg (town) | 16,923 | 13,906 | 10,052 |
| Plainfield | 27,700 | 20,550 | 15,339 |
| Pleasantville | 5,887 | 4,390 | 2,182 |
| Princeton (bor) | 5,917 | 5,136 | 3,899 |
| Rahway | 11,042 | 9,337 | 7,935 |
| Red Bank (bor) | 9,251 | 7,398 | 5,428 |
| Ridgefield P'k (village) | 8,575 | ..... | ..... |
| Ridgewood (village) | 7,580 | 5,416 | 2,685 |
| Roosevelt (bor) | 11,047 | 5,786 | ..... |
| Roselle (bor) | 5,737 | 2,725 | 1,652 |
| Roselle P'k. (bor) | 5,438 | 3,138 | ..... |
| Rutherford (bor) | 9,497 | 7,045 | 4,411 |
| Salem | 7,435 | 6,614 | 5,811 |
| Secaucus (town) | 5,423 | 4,740 | 1,623 |
| Somerville (bor) | 6,718 | 5,060 | 4,843 |
| South Amboy | 7,897 | 7,007 | 6,349 |
| So. Orange (village) | 7,274 | 6,014 | 4,608 |
| So. River (bor) | 6,596 | 4,772 | 2,792 |
| Summit | 10,174 | 7,500 | 5,302 |
| Trenton | 119,289 | 96,815 | 73,307 |

| NEW JERSEY—*Continued.* PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Union (town) | 20,651 | 21,023 | 15,187 |
| Vineland (bor) | 6,799 | 5,282 | 4,370 |
| Wallington (bor) | 5,715 | 3,448 | 1,812 |
| W. Hoboken (town) | 40,074 | 35,403 | 23,094 |
| W. New York (town) | 29,926 | 13,560 | 5,267 |
| W. Orange (town) | 15,573 | 10,980 | 6,889 |
| Westfield (town) | 9,063 | 6,420 | ..... |
| Woodbury | 5,801 | 4,642 | 4,087 |
| **NEW MEXICO.** | | | |
| Albuquerque | 15,157 | 11,020 | 6,238 |
| Raton | 5,544 | 4,539 | 3,540 |
| Roswell | 7,033 | 6,172 | 2,049 |
| Sante Fe | 7,236 | 5,072 | 5,603 |
| **NEW YORK.** (Cities are in *Italics*. For population of *all* incorporated places in the Empire State, see the 1922 Almanac.) | | | |
| *Albany* | 113,344 | 100,253 | 94,151 |
| *Amsterdam* | 33,524 | 31,267 | 20,929 |
| *Auburn* | 36,192 | 34,668 | 30,345 |
| *Batavia* | 13,541 | 11,613 | 9,180 |
| *Beacon* | 10,996 | 10,629 | 9,480 |
| *Binghamton* | 66,800 | 48,443 | 39,647 |
| *Buffalo* | 506,775 | 423,715 | 352,387 |
| *Canandaigua* | 7,356 | 7,217 | 6,151 |
| *Cohoes* | 22,987 | 24,709 | 23,910 |
| *Corning* | 15,820 | 13,730 | 11,061 |
| *Cortland* | 13,294 | 11,504 | 9,014 |
| Depew | 5,850 | 3,921 | 3,379 |
| *Dunkirk* | 19,336 | 17,221 | 11,616 |
| *Elmira* | 45,393 | 37,176 | 35,672 |
| Endicott | 9,500 | 2,408 | ..... |
| Fredonia | 6,051 | 5,285 | 4,127 |
| Freeport | 8,599 | 4,836 | 2,612 |
| *Fulton* | 13,043 | 10,480 | 5,281 |
| *Geneva* | 14,648 | 12,446 | 10,433 |
| *Glen Cove* | 8,664 | ..... | ..... |
| *Glens Falls* | 16,638 | 15,243 | 12,613 |
| *Gloversville* | 22,075 | 20,642 | 18,349 |
| Hastings | 5,526 | 4,552 | 2,002 |
| Haverstraw | 5,228 | 5,669 | 5,935 |
| Hempstead | 6,382 | 4,964 | 3,582 |
| Herkimer | 10,453 | 7,520 | 7,555 |
| *Hornell* | 15,025 | 13,617 | 11,918 |
| *Hudson* | 11,745 | 11,417 | 9,528 |
| Hudson Falls | 5,761 | 5,189 | 4,473 |
| Ilion | 10,169 | 6,588 | 5,138 |
| *Ithaca* | 17,004 | 14,802 | 13,136 |
| *Jamestown* | 38,917 | 31,297 | 22,892 |
| Johnson City | 8,587 | 3,775 | 3,111 |
| *Johnstown* | 10,908 | 10,447 | 10,130 |
| *Kingston* | 26,688 | 25,908 | 24,535 |
| *Lackawanna* | 17,918 | 14,549 | ..... |
| Lancaster | 6,059 | 4,364 | 3,750 |
| *Little Falls* | 13,029 | 12,273 | 10,381 |
| *Lockport* | 21,308 | 17,970 | 16,581 |
| Malone | 7,556 | 6,467 | 5,935 |
| Mamaroneck | 6,571 | 5,699 | ..... |
| Massena | 5,993 | 2,951 | 2,032 |
| *Mechanicville* | 8,166 | 6,634 | 4,695 |
| Medina | 6,111 | 5,683 | 4,716 |
| *Middletown* | 18,420 | 15,313 | 14,522 |
| *Mt. Vernon* | 42,726 | 30,919 | 21,228 |
| *New Rochelle* | 36,213 | 28,867 | 14,720 |
| *New York City* | 5,620,048 | 4,766,883 | 3,437,202 |
| Bronx | 732,016 | 430,980 | 200,507 |
| Brooklyn | 2,018,356 | 1,634,351 | 1,166,582 |
| Manhattan | 2,284,103 | 2,331,542 | 1,850,093 |
| Queens | 469,042 | 284,041 | 152,999 |
| Richmond | 116,531 | 85,969 | 67,021 |
| Newark | 6,964 | 6,227 | 4,578 |
| *Newburgh* | 30,366 | 27,805 | 24,943 |
| *Niagara Falls* | 50,760 | 30,445 | 19,457 |
| North Tarrytown | 5,927 | 5,421 | 4,241 |
| *North Tonawanda* | 15,482 | 11,955 | 9,069 |
| *Norwich* | 8,268 | 7,422 | 5,766 |
| *Ogdensburg* | 14,609 | 15,933 | 12,633 |
| *Olean* | 20,506 | 14,743 | 9,462 |
| *Oneida* | 10,541 | 8,317 | 6,364 |
| *Oneonta* | 11,582 | 9,491 | 7,147 |
| Ossining | 10,739 | 11,480 | 7,939 |
| *Oswego* | 23,626 | 23,368 | 22,199 |
| Peekskill | 15,868 | 15,245 | 10,358 |
| *Plattsburg* | 10,909 | 11,138 | 8,434 |
| Port Chester | 16,573 | 12,809 | 7,440 |
| *Port Jervis* | 10,171 | 9,564 | 9,385 |
| *Poughkeepsie* | 35,000 | 27,936 | 24,029 |
| *Rensselaer* | 10,823 | 10,711 | 7,466 |
| *Rochester* | 295,750 | 218,149 | 162,608 |
| Rockville Centre | 6,262 | 3,667 | 1,884 |
| *Rome* | 26,341 | 20,497 | 15,343 |
| Rye | 5,308 | 3,964 | ..... |
| *Salamanca* | 9,276 | 6,322 | 4,734 |
| Saranac Lake | 5174 | 4,983 | 2,594 |
| *Saratoga Springs* | 13,181 | 12,693 | 12,409 |
| *Schenectady* | 88,723 | 72,826 | 31,682 |

| NEW YORK—*Continued.* PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Seneca Falls | 6,389 | 6,588 | 6,519 |
| Solvay | 7,352 | 5,139 | 3,493 |
| *Syracuse* | 171,717 | 137,249 | 108,374 |
| Tarrytown | 5,807 | 5,600 | 4,770 |
| *Tonawanda* | 10,068 | 8,290 | 7,431 |
| *Troy* | 72,013 | 76,813 | 60,651 |
| *Utica* | 94,156 | 74,419 | 56,383 |
| Walden | 5,493 | 4,004 | 3,147 |
| *Watertown* | 31,285 | 26,731 | 21,696 |
| *Watervliet* | 16,073 | 15,074 | 14,321 |
| Waverly | 5,270 | 4,855 | 4,465 |
| *White Plains* | 21,031 | 15,949 | 7,899 |
| Whitehall | 5,258 | 4,917 | 4,377 |
| *Yonkers* | 100,176 | 79,803 | 47,931 |
| **NORTH CAROLINA.** | | | |
| Asheville | 28,504 | 18,762 | 14,694 |
| Burlington | 5,952 | 4,808 | 3,692 |
| Charlotte | 46,338 | 34,014 | 18,091 |
| Concord | 9,903 | 8,715 | 7,910 |
| Durham | 21,719 | 18,241 | 6,679 |
| Elizabeth City | 8,925 | 8,412 | 6,348 |
| Fayetteville | 8,877 | 7.045 | 4,670 |
| Gastonia | 12,871 | 5,759 | 4,610 |
| Goldsboro | 11,296 | 6,107 | 5,877 |
| Greensboro | 19,861 | 15,895 | 10,035 |
| Greenville | 5,772 | 4,101 | 2,565 |
| Henderson | 5,222 | 4,503 | 3,746 |
| Hickory | 5,076 | 3,716 | 2,535 |
| High Point | 14,302 | 9,525 | 4,163 |
| Kinston | 9,771 | 6,995 | 4,106 |
| Lexington | 5,254 | 4,163 | 1,234 |
| Newbern | 12,198 | 9,961 | 9,090 |
| Raleigh | 24,418 | 19,218 | 13,643 |
| Reidsville | 5,333 | 4,828 | 3,262 |
| Rocky Mount | 12,742 | 8,051 | 2,937 |
| Salem | (W.-Salem) | 5,533 | 3,642 |
| Salisbury | 13,884 | 7,153 | 6,277 |
| Statesville | 7,895 | 4,599 | 3,141 |
| Thomasville | 5,676 | 3,877 | 751 |
| Washington | 6,314 | 6,211 | 4,842 |
| Wilmington | 33,372 | 25,748 | 20,976 |
| Wilson | 10,612 | 6,717 | 3,525 |
| Winston | 48,395 | 22,700 | 13,650 |
| **NORTH DAKOTA.** | | | |
| Bismarck | 7,122 | 5,443 | 3,319 |
| Devil's Lake | 5,141 | 5,157 | 1,729 |
| Fargo | 21,961 | 14,331 | 9,589 |
| Grand Forks | 14,010 | 12,478 | 7,652 |
| Jamestown | 6,627 | 4,358 | 2,853 |
| Minot | 10,476 | 6,188 | 1,277 |
| **OHIO.** | | | |
| Akron | 208,435 | 69,067 | 42,728 |
| Alliance | 21,603 | 15,083 | 8,974 |
| Ashland | 9,249 | 6,095 | 4,087 |
| Ashtabula | 22,032 | 18,266 | 12,949 |
| Athens | 6,418 | 5,463 | 3,066 |
| Barberton | 18,811 | 9,410 | 4,354 |
| Bellaire | 15,061 | 12,946 | 9,912 |
| Bellefontaine | 9,336 | 8,238 | 6,649 |
| Bellevue | 5,776 | 5,209 | 4,101 |
| Bowling Green | 5,788 | 5,222 | 5,067 |
| Bucyrus | 10,425 | 8,122 | 6,560 |
| Cambridge | 13,104 | 11,327 | 8,241 |
| Canal Dover | 8,101 | 6,621 | 5,422 |
| Canton | 87,091 | 50,217 | 30,667 |
| Chillicothe | 15,831 | 14,508 | 12,976 |
| Cincinnati | 401,247 | 363,591 | 325,902 |
| Circleville | 7,049 | 6,744 | 6,991 |
| Cleveland | 796,841 | 560,663 | 381,768 |
| Cleveland Heights | 15,236 | 2,955 | ..... |
| Columbus | 237,031 | 181,511 | 125,560 |
| Conneaut | 9,343 | 8,319 | 7,133 |
| Coshocton | 10,847 | 9,603 | 6,473 |
| Cuyahoga Falls | 10,200 | 4,020 | 3,186 |
| Dayton | 152,559 | 116,577 | 85,333 |
| Defiance | 8,876 | 7,327 | 7,579 |
| Delaware | 8,756 | 9,076 | 7,940 |
| Delphos | 5,745 | 5,038 | 4,517 |
| Dennison | 5,524 | 4,008 | 3,763 |
| East Cleveland | 27,292 | 9,179 | 2,757 |
| East Liverpool | 21,411 | 20,387 | 16,485 |
| East Palestine | 5,750 | 3,537 | 2,493 |
| East Youngstown | 11,237 | 4,972 | ..... |
| Elyria | 20,474 | 14,825 | 8,791 |
| Findlay | 17,021 | 14,858 | 17,613 |
| Fostoria | 9,987 | 9,597 | 7,730 |
| Fremont | 12,468 | 9,939 | 8,439 |
| Gallon | 7,374 | 7,214 | 7,282 |
| Gallipolis | 6,070 | 5,560 | 5,432 |
| Girard | 6,556 | 3,736 | 2,630 |
| Greenville | 7,104 | 6,237 | 5,501 |
| Hamilton | 39,675 | 35,279 | 23,914 |
| Ironton | 14,007 | 13,147 | 11,868 |
| Jackson | 5,842 | 5,468 | 4,672 |
| Kenmore | 12,683 | 1,561 | ..... |
| Kent | 7,070 | 4,488 | 4,541 |

| OHIO—*Continued.* PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Kenton | 7,690 | 7,185 | 6,852 |
| Lakewood | 41,732 | 15,181 | 3,355 |
| Lancaster | 14,706 | 13,093 | 8,991 |
| Lima | 41,326 | 30,508 | 21,723 |
| Logan | 5,493 | 4,850 | 3,480 |
| Lorain | 37,295 | 28,883 | 16,028 |
| Mansfield | 27,824 | 20,768 | 17,640 |
| Marietta | 15,140 | 12,923 | 13,348 |
| Marion | 27,891 | 18,232 | 11,862 |
| Martin's Ferry | 11,634 | 9,133 | 7,760 |
| Massillon | 17,428 | 13,879 | 11,944 |
| Middletown | 23,594 | 13,152 | 9,215 |
| Mt. Vernon | 9,237 | 9,087 | 6,633 |
| Nelsonville | 6,440 | 6,082 | 5,421 |
| New Philadelphia | 10,718 | 8,542 | 6,213 |
| Newark | 26,718 | 25,404 | 18,157 |
| Niles | 13,080 | 8,361 | 7,468 |
| Norwalk | 7,379 | 7,858 | 7,074 |
| Norwood | 24,966 | 16,185 | 6,480 |
| Painesville | 7,272 | 5,501 | 5,024 |
| Piqua | 15,044 | 13,388 | 12,172 |
| Portsmouth | 33,011 | 23,481 | 17 870 |
| Ravenna | 7,219 | 5,310 | 4,003 |
| St. Bernard | 6,312 | 5,002 | 3,384 |
| St. Mary's | 5,679 | 5,732 | 5,359 |
| Salem | 10,305 | 8,943 | 7 582 |
| Sandusky | 22,897 | 19,989 | 19,664 |
| Shelby | 5,578 | 4,903 | 4,685 |
| Sidney | 8,590 | 6,607 | 5,688 |
| Springfield | 60,840 | 46,921 | 38,253 |
| Steubenville | 28,508 | 22,391 | 14,349 |
| Struthers | 5,847 | 3,370 | ..... |
| Tiffin | 14,375 | 11,894 | 10,989 |
| Toledo | 243,164 | 168,497 | 131,822 |
| Troy | 7,260 | 6,122 | 5,881 |
| Urbana | 7,621 | 7,739 | 6,808 |
| Ulrichsville | 6,428 | 4,751 | 4,582 |
| Van Wert | 8,100 | 7,157 | 6,422 |
| Wapakoneta | 5,295 | 5,349 | 3,915 |
| Warren | 27,000 | 11,081 | 8,529 |
| Wash'g'n Court House | 7,962 | 7,277 | 5,751 |
| Wellston | 6,687 | 6,875 | 6,045 |
| Wellsville | 8,849 | 7,769 | 6,146 |
| West Park | 8,581 | 3,179 | 2,038 |
| Wilmington | 5,037 | 4,401 | 3,613 |
| Wooster | 8,204 | 6,136 | 6,063 |
| Xenia | 9,110 | 8,706 | 8,696 |
| Youngstown | 132,358 | 79,066 | 44,885 |
| Zanesville | 29,569 | 28,026 | 23,538 |
| **OKLAHOMA.** | | | |
| Ada | 8,012 | 4,349 | 3,257 |
| Ardmore | 14,181 | 8,618 | 8,759 |
| Bartlesville | 14,417 | 6,181 | 4,215 |
| Blackwell | 7,174 | 3,266 | 2,644 |
| Chickasha | 10,179 | 10,320 | 7,862 |
| Cushing | 6,326 | 1,072 | 826 |
| Drumright | 6,460 | ..... | ..... |
| Durant | 7,340 | 5,330 | 4,510 |
| El Reno | 7,737 | 7,872 | 5,370 |
| Enid | 16,576 | 13,799 | 10,087 |
| Guthrie | 11,757 | 11,654 | 11,652 |
| Henryetta | 5,889 | 1,671 | 1,051 |
| Hugo | 6,368 | 4,582 | 2,676 |
| Lawton | 8,930 | 7,788 | 5,562 |
| McAlester | 12,095 | 12,954 | 8,144 |
| Miami | 6,803 | 2,907 | 1,893 |
| Muskogee | 30,277 | 25,278 | 14,418 |
| Norman | 5,004 | 3,724 | 3,040 |
| Oklahoma City | 91,295 | 64,205 | 32,452 |
| Okmulgee | 17,430 | 4,176 | 2,322 |
| Pawhuska | 6,414 | 2,776 | 2,408 |
| Picher | 9,676 | ..... | ..... |
| Ponca City | 7,051 | 2,521 | 1,529 |
| Sapulpa | 11,634 | 8,283 | 4,259 |
| Shawnee | 15,348 | 12,474 | 10,955 |
| Tulsa | 72,075 | 18,182 | 7,298 |
| Vinita | 5,010 | 4,082 | 2,339 |
| **OREGON.** | | | |
| Astoria | 14,027 | 9,599 | 8,381 |
| Baker City | 7,729 | 6,742 | 6,663 |
| Bend | 5,415 | 536 | ..... |
| Corvallis | 5,752 | 4,552 | 1,819 |
| Eugene | 10,593 | 9,009 | 3,236 |
| La Grande | 6,913 | 4,843 | 2,991 |
| Medford | 5,756 | 8,840 | 1,791 |
| Oregon City | 5,686 | 4,287 | 3,494 |
| Pendleton | 7,387 | 4,460 | 4,406 |
| Portland | 258,288 | 207,214 | 90,426 |
| Salem | 17,679 | 14,094 | 4,258 |
| The Dalles | 5,807 | 4,880 | 3,542 |
| **PENNSYLVANIA.** | | | |
| Allentown | 73,502 | 51,913 | 35,416 |
| Altoona | 60,331 | 52,127 | 38,973 |
| Ambridge | 12,730 | 5,205 | ..... |
| Archbald | 8,603 | 7,194 | 5,396 |

**PENNSYLVANIA—*Continued.***

| PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Arnold | 6,120 | 1,818 | 1,426 |
| Ashland | 6,666 | 6,855 | 6,438 |
| Ashley | 6,520 | 5,601 | 4,046 |
| Avalon | 5,277 | 4,317 | 2,130 |
| Bangor | 5,402 | 5,369 | 4,106 |
| Beaver Falls | 12,802 | 12,191 | 10,054 |
| Bellevue | 8,198 | 6,323 | 3,416 |
| Berwick | 12,181 | 5,357 | 3,316 |
| Bethlehem | 50,358 | 12,837 | 7,293 |
| Blakely | 6,564 | 5,345 | 3,915 |
| Bloomsburg | 7,819 | 7,413 | 6,170 |
| Braddock | 20,879 | 19,357 | 15,654 |
| Bradford | 15,525 | 14,544 | 15,029 |
| Bristol | 10,273 | 9,256 | 7,104 |
| Butler | 23,778 | 20,728 | 10,853 |
| Canonsburg | 10,632 | 3,891 | 2,714 |
| Carbondale | 18,640 | 17,040 | 13,536 |
| Carlisle | 10,916 | 10,303 | 9,626 |
| Carnegie | 11,516 | 10,009 | 7,330 |
| Carrick | 10,504 | 6,117 | ..... |
| Chambersburg (boro) | 13,171 | 11,800 | 8,864 |
| Charleroi | 11,516 | 9,615 | 5,930 |
| Cheltenham | 11,015 | 8,434 | 6,154 |
| Chester | 58,030 | 38,537 | 33,988 |
| Clairton | 6,264 | 3,326 | ..... |
| Clearfield | 8,529 | 6,851 | 5,081 |
| Coaldale | 6,336 | 5,154 | ..... |
| Coatesville | 14,515 | 11,084 | 5,721 |
| Columbia | 10,836 | 11,454 | 12,316 |
| Connellsville | 13,804 | 12,845 | 7,160 |
| Conshohocken | 8,481 | 7,480 | 5,762 |
| Coraopolis | 6,162 | 5,252 | 2,555 |
| Corry | 7,228 | 5,991 | 5,369 |
| Crafton | 5,954 | 4,583 | 1,927 |
| Danville | 6,952 | 7,517 | 8,042 |
| Darby | 7,922 | 6,305 | 3,429 |
| Dickson City | 11,049 | 9,331 | 4,948 |
| Donora | 14,131 | 8,174 | ..... |
| Dormont | 6,455 | 1,115 | ..... |
| Dorranceton | 6,334 | 4,046 | 2,211 |
| Dubois | 13,681 | 12,623 | 9,375 |
| Dunmore | 20,250 | 17,615 | 12,583 |
| Duquesne | 19,011 | 15,727 | 9,036 |
| Duryea | 7,776 | 7,487 | ..... |
| East Conemaugh | 5,256 | 5,046 | 2,175 |
| East Pittsburgh | 6,527 | 5,615 | 2,883 |
| Easton | 33,813 | 28,523 | 25,238 |
| Edwardsville | 9,027 | 8,407 | 5,165 |
| Elwood City (boro) | 8,958 | 3,902 | 2,243 |
| Erie | 93,372 | 66,525 | 52,733 |
| Etna | 6,341 | 5,830 | 5,384 |
| Farrell | 15,586 | 10,190 | S. Sharon |
| Ford City | 5,605 | 4,850 | 2,870 |
| Forest City | 6,004 | 5,749 | 4,279 |
| Frackville | 5,590 | 3,118 | 2,594 |
| Franklin | 9,970 | 9,767 | 7,317 |
| Freeland | 6,666 | 6,197 | 5,254 |
| Glassport | 6,059 | 5,540 | ..... |
| Greater Punxsutawney | 10,311 | 9,058 | 6,746 |
| Greensburg | 15,033 | 13,012 | 6,508 |
| Greenville | 8,101 | 5,909 | 4,814 |
| Hanover | 8,664 | 7,057 | 5,302 |
| Harrisburg | 75,917 | 64,186 | 50,167 |
| Haverford Township | 6,631 | 3,989 | 2,414 |
| Hazelton | 32,277 | 25,452 | 14,230 |
| Homestead | 20,452 | 18,713 | 12,554 |
| Huntingdon | 7,051 | 6,861 | 6,053 |
| Indiana | 7,043 | 5,749 | 4,142 |
| Jeannette | 10,627 | 8,077 | 5,865 |
| Jersey Shore | 6,103 | 5,381 | 3,070 |
| Johnsonburg | 5,400 | 4,334 | 3,894 |
| Johnstown | 67,327 | 55,482 | 35,936 |
| Juniata | 7,660 | 5,285 | 1,709 |
| Kane | 7,283 | 6,626 | 5,296 |
| Kingston | 8,952 | 6,449 | 3,846 |
| Kittanning | 7,153 | 4,311 | 3,902 |
| Knoxville | 7,201 | 5,651 | 3,511 |
| Lancaster | 53,150 | 47,227 | 41,459 |
| Lansford | 9,625 | 8,321 | 4,888 |
| Larksville | 9,438 | 9,288 | ..... |
| Latrobe | 9,484 | 8,777 | 4,614 |
| Lebanon | 24,643 | 19,240 | 17,628 |
| Lehighton | 6,102 | 5,316 | 4,629 |
| Lewistown | 9,849 | 8,166 | 4,451 |
| Lock Haven | 8,557 | 7,772 | 7,210 |
| Luzerne | 5,998 | 5,426 | 3,817 |
| Marcus Hook | 5,324 | 1,573 | 1,209 |
| McKees Rocks | 16,713 | 14,702 | 6,352 |
| McKeesport | 46,781 | 42,694 | 34,227 |
| Mahanoy City | 15,599 | 15,936 | 13,504 |
| Meadville | 14,568 | 12,780 | 10,291 |
| Middletown (boro) | 5,920 | 5,374 | 5,608 |
| Midland | 5,452 | 1,244 | ..... |
| Millvale | 8,031 | 7,861 | 6,736 |
| Milton | 8,638 | 7,460 | 6,175 |
| Minersville | 7,845 | 7,240 | 4,815 |
| Monessen | 18,179 | 11,775 | 2,197 |
| Monongahela | 8,688 | 7,598 | 5,173 |

**PENNSYLVANIA—*Continued.***

| PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Mt. Carmel | 17,469 | 17,532 | 13,179 |
| Mt. Oliver | 5,575 | 4,241 | 2,295 |
| Mt. Pleasant | 5,832 | 5,812 | 4,745 |
| Munhall | 6,418 | 5,185 | ..... |
| Nanticoke | 22,614 | 18,877 | 12,116 |
| Nantyglo | 5,028 | ..... | ..... |
| New Brighton | 9,361 | 8,329 | 6,820 |
| New Castle | 44,938 | 36,280 | 28,339 |
| New Kensington | 11,987 | 7,707 | 4,665 |
| Norristown | 32,319 | 27,875 | 22,265 |
| North Braddock | 14,928 | 11,824 | 6,535 |
| Northampton | 9,349 | 8,729 | ..... |
| Oil City | 21,274 | 15,657 | 13,264 |
| Old Forge | 12,237 | 11,324 | 5,630 |
| Olyphant | 10,236 | 8,505 | 6,180 |
| Palmerton | 7,168 | ..... | ..... |
| Parsons | 5,628 | 4,338 | 2,529 |
| Philadelphia | 1,823,779 | 1,549,008 | 1,293,697 |
| Phoenixville | 10,484 | 10,743 | 9,196 |
| Pitcairn | 5,738 | 4,972 | 2,601 |
| Pittsburgh | 588,343 | 533,905 | 451,512 |
| Pittston | 18,497 | 16,267 | 12,556 |
| Plymouth | 16,500 | 16,996 | 13,649 |
| Pottstown | 17,431 | 15,599 | 13,696 |
| Pottsville | 21,785 | 20,236 | 15,710 |
| Punxsutawney | 10,311 | 9,058 | 4,375 |
| Rankin | 7,301 | 6,042 | 3,775 |
| Reading | 107,784 | 96,071 | 78,961 |
| Renovo | 5,877 | 4,621 | 4,082 |
| Ridgway | 6,037 | 5,408 | 3,515 |
| Rochester | 6,957 | 5,903 | 4,688 |
| St. Clair | 6,585 | 5,640 | ..... |
| St. Mary's | 6,967 | 6,346 | 4,295 |
| Sayre | 8,078 | 6,426 | 5,243 |
| Schuylkill Haven | 5,437 | 4,747 | 3,654 |
| Scottdale | 5,768 | 5,456 | 4,261 |
| Scranton | 137,783 | 129,867 | 102,026 |
| Shamokin | 21,204 | 19,588 | 18,202 |
| Sharon | 21,747 | 15,270 | 8,916 |
| Sharpsburg | 8,921 | 8,153 | 6,842 |
| Shenandoah | 24,726 | 25,774 | 20,321 |
| South Bethlehem | (Bethlehem) | 19,973 | 13,241 |
| South Sharon | (Sharon) | 10,190 | ..... |
| Steelton | 13,428 | 14,246 | 12,086 |
| Stroudsburg | 5,278 | 4,379 | 3,450 |
| Summithill | 5,499 | 4,209 | 2,986 |
| Sunbury | 15,721 | 13,770 | 9,810 |
| Swissvale | 10,908 | 7,381 | 1,716 |
| Swoyersville | 6,876 | 5,396 | 2,264 |
| Tamaqua | 12,363 | 9,462 | 7,267 |
| Tarentum | 8,925 | 7,414 | 5,472 |
| Taylor | 9,876 | 9,060 | 4,215 |
| Throop | 6,672 | 5,133 | 2,204 |
| Titusville | 8,432 | 8,533 | 8,244 |
| Turtle Creek | 8,138 | 4,953 | 3,262 |
| Tyrone | 9,084 | 7,176 | 5,847 |
| Uniontown | 15,692 | 13,344 | 7,344 |
| Vandergrift | 9,531 | 3,876 | 2,076 |
| Warren | 14,272 | 11,080 | 8,043 |
| Washington | 21,480 | 18,778 | 7,670 |
| Waynesboro | 9,720 | 7,199 | 5,396 |
| West Chester | 11,717 | 11,767 | 9,524 |
| West Hazelton | 5,854 | 4,715 | 2,516 |
| West Pittston | 6,978 | 6,848 | 5,846 |
| Wilkes Barre | 73,833 | 67,105 | 51,721 |
| Wilkinsburg | 24,403 | 18,924 | 11,886 |
| Williamsport | 36,198 | 31,860 | 28,757 |
| Wilmerding | 6,441 | 6,133 | 4,179 |
| Windber | 9,462 | 8,013 | ..... |
| Winton | 7,583 | 5,280 | 3,425 |
| Woodlawn | 12,495 | 1,396 | ..... |
| York | 47,512 | 44,750 | 33,708 |

**RHODE ISLAND.**

| | | | |
|---|---|---|---|
| Bristol | 11,375 | 8,565 | 6,901 |
| Burrillville | 8,606 | 7,878 | 6,317 |
| Central Falls | 24,174 | 22,754 | 18,167 |
| Coventry | 5,670 | 5,848 | 5,279 |
| Cranston | 29,407 | 21,107 | 13,343 |
| Cumberland | 10,077 | 10,107 | 8,925 |
| East Providence | 21,793 | 15,808 | 12,138 |
| Johnston | 6,855 | 5,935 | 4,305 |
| Lincoln | 9,543 | 9,825 | 8,937 |
| Newport | 30,255 | 27,149 | 22,441 |
| North Providence | 7,697 | 5,407 | 3,016 |
| Pawtucket | 64,248 | 51,622 | 39,231 |
| Providence | 237,595 | 224,326 | 175,597 |
| South Kingstown | 5,181 | 5,176 | 4,972 |
| Warren | 7,841 | 6,585 | 5,108 |
| Warwick | 13,481 | 26,629 | 21,316 |
| West Warwick | 15,461 | ..... | ..... |
| Westerly | 9,952 | 8,696 | 7,541 |
| Woonsocket | 43,496 | 38,125 | 28,204 |

**SOUTH CAROLINA.**

| | | | |
|---|---|---|---|
| Anderson | 10,570 | 9,654 | 5,498 |
| Charleston | 67,957 | 58,833 | 55,807 |
| Chester | 5,557 | 4,754 | 4,075 |

**SOUTH CAROLINA**—*Continued.*

| PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Columbia | 37,524 | 26,319 | 21,108 |
| Florence | 10,968 | 7,057 | 4,647 |
| Gaffney | 5,065 | 4,767 | 3,937 |
| Greenville | 23,127 | 15,741 | 11,860 |
| Greenwood | 8,703 | 6,614 | 4,824 |
| Newberry | 5,894 | 5,028 | 4,607 |
| Orangeburg | 7,290 | 5,906 | 4,455 |
| Rockhill | 8,809 | 7,216 | 5,485 |
| Spartanburg | 22,638 | 17,517 | 11,395 |
| Sumter | 9,508 | 8,109 | 5,673 |
| Union | 6,141 | 5,623 | 5,400 |

**SOUTH DAKOTA.**

| | | | |
|---|---|---|---|
| Aberdeen | 14,537 | 10,753 | 4,087 |
| Huron | 8,302 | 5,791 | 2,793 |
| Lead | 5,013 | 3,392 | 6,210 |
| Mitchell | 5,478 | 6,445 | 4,055 |
| Rapid City | 5,777 | 3,854 | 1,342 |
| Sioux Falls | 25,202 | 14,094 | 10,266 |
| Watertown | 9,400 | 7,010 | 3,352 |
| Yankton | 5,024 | 3,787 | 4,125 |

**TENNESSEE.**

| | | | |
|---|---|---|---|
| Bristol | 8,047 | 7,148 | 5,271 |
| Chattanooga | 57,895 | 44,604 | 30,154 |
| Clarksville | 8,110 | 8,548 | 9,431 |
| Cleveland | 6,522 | 5,549 | 3,858 |
| Columbia | 5,526 | 5,754 | 6,052 |
| Dyersburg | 6,444 | 4,149 | 3,647 |
| Jackson | 18,860 | 15,779 | 14,511 |
| Johnson City | 12,442 | 8,502 | 4,645 |
| Kingsport | 5,692 | | |
| Knoxville | 77,818 | 36,346 | 32,637 |
| Memphis | 162,351 | 131,105 | 102,320 |
| Morristown | 5,875 | 4,007 | 2,973 |
| Murfreesboro | 5,367 | 4,679 | 3,999 |
| Nashville | 118,342 | 110,364 | 80,865 |

**TEXAS.**

| | | | |
|---|---|---|---|
| Abilene | 10,274 | 9,204 | 3,411 |
| Amarillo | 15,494 | 9,957 | 1,442 |
| Austin | 34,876 | 29,860 | 22,258 |
| Beaumont | 40,422 | 20,640 | 9,427 |
| Belton | 5,098 | 4,164 | 3,700 |
| Bonham | 6,008 | 4,844 | 5,042 |
| Brenham | 5,066 | 4,718 | 5,938 |
| Brownsville | 11,791 | 10,517 | 6,305 |
| Brownwood | 8,223 | 6,967 | 3,965 |
| Bryan | 6,307 | 4,132 | 3,589 |
| Burkburnett | 5,300 | | |
| Cleburne | 12,820 | 10,364 | 7,493 |
| Childress | 5,003 | 3,818 | 692 |
| Cisco | 7,422 | 2,410 | 1,514 |
| Corpus Christi | 10,522 | 8,222 | 4,703 |
| Corsicana | 11,356 | 9,749 | 9,313 |
| Dallas | 158,976 | 92,104 | 42,638 |
| Del Rio | 10,589 | | |
| Denison | 17,065 | 13,632 | 11,807 |
| Denton | 7,626 | 4,732 | 4,187 |
| Eagle Pass | 5,765 | 3,558 | |
| Eastland | 9,368 | 3,555 | 596 |
| El Paso | 77,560 | 39,279 | 15,906 |
| Ennis | 7,224 | 5,669 | 4,919 |
| Fort Worth | 106,482 | 73,312 | 26,688 |
| Gainesville | 8,648 | 7,624 | 7,874 |
| Galveston | 44,255 | 36,981 | 37,789 |
| Greenville | 12,384 | 8,850 | 6,860 |
| Hillsboro | 6,952 | 6,115 | 5,346 |
| Houston | 138,276 | 78,800 | 44,634 |
| Houston Heights (Houston) | | 6,984 | 800 |
| Laredo | 22,710 | 14,855 | 13,429 |
| Longview | 5,713 | 5,155 | 3,591 |
| Marshall | 14,271 | 11,452 | 7,855 |
| McAllen | 5,331 | | |
| McKinney | 6,677 | 4,714 | 4,342 |
| Mineral Wells | 7,890 | 3,950 | 2,048 |
| Navasota | 5,060 | 3,284 | 3,857 |
| Orange | 9,212 | 5,527 | 3,335 |
| Palestine | 11,039 | 10,482 | 8,297 |
| Paris | 15,040 | 11,259 | 9,358 |
| Port Arthur | 22,251 | 7,663 | 900 |
| Ranger | 16,205 | | |
| San Angelo | 10,050 | 10,321 | |
| San Antonio | 161,379 | 96,614 | 53,321 |
| San Benito | 5,070 | | |
| Sherman | 15,031 | 12,412 | 10,243 |
| Sulphur Springs | 5,558 | 5,151 | 3,635 |
| Taylor | 5,965 | 5,314 | 4,211 |
| Temple | 11,033 | 10,993 | 7,065 |
| Terrell | 8,349 | 7,050 | 6,330 |
| Texarkana | 11,480 | 9,790 | 5,256 |
| Tyler | 12,085 | 10,400 | 8,069 |
| Vernon | 5,142 | 3,195 | 1,393 |
| Victoria | 5,957 | 3,673 | 4,010 |
| Waco | 38,500 | 26,425 | 20,686 |
| Waxahachie | 7,958 | 6,205 | 4,215 |
| Weatherford | 6,203 | 5,074 | 4,786 |
| Wichita Falls | 40,079 | 8,200 | 2,480 |
| Yoakum | 6,184 | 4,657 | 3,499 |

**UTAH.**

| PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Brigham | 5,282 | 3,685 | 2,859 |
| Logan | 9,439 | 7,522 | 5,451 |
| Ogden | 32,804 | 25,580 | 16,313 |
| Provo | 10,303 | 8,925 | 6,185 |
| Salt Lake City | 118,110 | 92,777 | 53,531 |

**VERMONT.**

| | | | |
|---|---|---|---|
| Barre | 10,008 | 10,734 | 8,448 |
| Bennington (town) | 9,982 | 8,698 | 8,034 |
| Bennington (village) | 7,230 | 6,211 | 5,656 |
| Brattleboro (town) | 8,332 | 7,541 | 6,640 |
| Brattleboro (village) | 7,324 | 6,517 | 5,297 |
| Burlington | 22,779 | 20,486 | 18,640 |
| Colchester | 6,527 | 6,450 | 5,352 |
| Montpelier | 7,125 | 7,856 | 6,266 |
| Rockingham | 6,231 | 6,207 | 5,809 |
| Rutland | 14,954 | 13,546 | 11,499 |
| St. Albans | 7,588 | 6,381 | 6,239 |
| St. Johnsbury (town) | 8,708 | 8,098 | 7,010 |
| St. Johnsbury (village) | 7,163 | 6,693 | 5,666 |
| Springfield | 5,283 | 3,256 | 2,040 |

**VIRGINIA.**

| | | | |
|---|---|---|---|
| Alexandria | 18,060 | 15,329 | 14,528 |
| Bristol | 6,729 | 6,247 | 4,579 |
| Charlottesville | 10,688 | 6,765 | 6,449 |
| Clifton Forge | 6,164 | 5,748 | 3,579 |
| Covington | 5,623 | 4,234 | 2,950 |
| Danville | 21,539 | 19,020 | 16,520 |
| Fredericksburg | 5,882 | 5,874 | 5,068 |
| Hampton | 6,138 | 5,505 | 2,764 |
| Harrisonburg | 5,875 | 4,879 | 3,521 |
| Lynchburg | 30,070 | 29,494 | 18,801 |
| Newport News | 35,596 | 20,205 | 19,635 |
| Norfolk | 115,777 | 67,452 | 46,624 |
| Petersburg | 31,012 | 24,127 | 21,810 |
| Portsmouth | 54,387 | 33,190 | 17,427 |
| Pulaski | 5,282 | 4,807 | 2,813 |
| Richmond | 171,667 | 127,628 | 85,050 |
| Roanoke | 50,842 | 34,874 | 21,495 |
| South Norfolk | 7,724 | | |
| Staunton | 10,623 | 10,604 | 7,289 |
| Suffolk | 9,123 | 7,008 | 3,827 |
| Winchester | 6,883 | 5,864 | 5,161 |

**WASHINGTON.**

| | | | |
|---|---|---|---|
| Aberdeen | 15,337 | 13,660 | 3,747 |
| Anacortes | 5,284 | 4,168 | 1,476 |
| Bellingham | 25,585 | 24,298 | 11,062 |
| Brenerton | 8,918 | 2,993 | |
| Centralia | 7,549 | 7,311 | 1,600 |
| Everett | 27,644 | 24,814 | 7,838 |
| Hoquiam | 10,058 | 8,171 | 2,608 |
| Olympia | 7,795 | 6,996 | 3,863 |
| Port Angeles | 5,351 | 2,286 | 2,321 |
| Puyallup | 6,323 | 4,544 | 1,884 |
| Seattle | 315,312 | 237,194 | 80,671 |
| Spokane | 104,437 | 104,402 | 36,848 |
| Tacoma | 96,965 | 83,743 | 37,714 |
| Vancouver | 12,637 | 9,300 | 3,126 |
| Walla Walla | 15,503 | 19,364 | 10,049 |
| Wenatchee | 6,324 | 4,050 | 451 |
| Yakima | 18,539 | 14,082 | 3,154 |

**WEST VIRGINIA.**

| | | | |
|---|---|---|---|
| Bluefield | 15,282 | 11,188 | 4,644 |
| Charleston | 39,608 | 22,996 | 11,099 |
| Clarksburg | 27,859 | 9,201 | 4,050 |
| Elkins | 6,788 | 5,260 | 2,016 |
| Fairmont | 17,851 | 9,711 | 5,655 |
| Grafton | 8,517 | 7,563 | 5,650 |
| Huntington | 50,177 | 31,161 | 11,923 |
| Keyser | 6,003 | 3,705 | 2,536 |
| Martinsburg | 12,515 | 10,698 | 7,564 |
| Morgantown | 12,127 | 9,150 | 1,895 |
| Moundsville | 10,669 | 8,918 | 5,362 |
| Parkersburg | 20,050 | 17,842 | 11,703 |
| Princeton | 6,224 | 3,027 | |
| Wheeling | 56,208 | 41,641 | 38,878 |
| Williamson | 6,819 | 3,561 | |

**WISCONSIN.**

| | | | |
|---|---|---|---|
| Antigo | 8,451 | 7,196 | 5,145 |
| Appleton | 19,561 | 15,773 | 15,085 |
| Ashland | 11,334 | 11,594 | 13,074 |
| Baraboo | 5,538 | 6,324 | 5,751 |
| Beaver Dam | 7,992 | 6,758 | 5,128 |
| Beloit | 21,284 | 15,125 | 10,436 |
| Chippewa Falls | 9,130 | 8,893 | 8,094 |
| Cudahy | 6,725 | 3,691 | 1,366 |
| De Pere | 5,165 | 4,477 | 4,038 |
| Eau Claire | 20,906 | 18,310 | 17,517 |
| Fond du Lac | 23,427 | 18,797 | 15,110 |
| Green Bay | 31,017 | 25,236 | 18,684 |
| Janesville | 18,293 | 13,894 | 13,185 |
| Kaukauna | 5,951 | 4,717 | 5,115 |
| Kenosha | 40,472 | 21,371 | 11,606 |
| La Crosse | 30,421 | 30,417 | 28,895 |
| Madison | 38,378 | 25,531 | 19,164 |

| WISCONSIN—*Continued.* PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Manitowoc | 17,563 | 13,027 | 11,786 |
| Marinette | 13,610 | 14,610 | 16,195 |
| Marshfield | 7,394 | 5,783 | 5,240 |
| Menasha | 7,214 | 6,081 | 5,589 |
| Menomonee | 5,104 | 5,036 | 5,655 |
| Merrill | 8,068 | 8 689 | 8 537 |
| Milwaukee | 457,147 | 373,857 | 285,315 |
| Neenah | 7,171 | 5,734 | 5,954 |
| Oconto | 4,920 | 5,629 | 5,646 |
| Oshkosh | 33,162 | 33,062 | 28,284 |
| Portage | 5,582 | 5,540 | 5,459 |
| Racine | 58,593 | 38,002 | 29,102 |
| Rhinelander | 6,654 | 5,637 | 4,998 |
| Sheboygan | 30,955 | 26,398 | 22,962 |
| South Milwaukee | 7,598 | 6,092 | 3,392 |
| Stevens Point | 11,370 | 8,692 | 9,524 |

| WISCONSIN—*Continued.* PLACE. | 1920. | 1910. | 1900. |
|---|---|---|---|
| Stoughton | 5,101 | 4,761 | 3,431 |
| Superior | 39,671 | 40,384 | 31,091 |
| Two Rivers | 7,305 | 4,850 | 3,784 |
| Watertown | 9,299 | 8,829 | 8,437 |
| Waukesha | 12,558 | 8,740 | 7,419 |
| Wausau | 18,661 | 16,560 | 12,354 |
| Wauwatosa | 5,818 | 3,346 | 2,842 |
| West Allis | 13,745 | 6,645 | ..... |
| Wisconsin Rapids | 7,243 | 6,521 | 4,493 |
| **WYOMING.** | | | |
| Casper | 11,447 | 2,639 | 883 |
| Cheyenne | 13,829 | 11,320 | 14,087 |
| Laramie | 6,301 | 8,237 | 8,207 |
| Rock Springs | 6,456 | 5,778 | 4,363 |
| Sheridan | 9,175 | 8,408 | 1,559 |

## PATIENTS WITH MENTAL DISEASES IN INSTITUTIONS IN U. S.

(From a Census taken by the National Committee for Mental Hygiene.)

| STATE. | JUNE 1, 1890. | | JAN. 1, 1894. | | JAN. 1, 1910. | | JAN. 1, 1920. | |
|---|---|---|---|---|---|---|---|---|
| | No. | Rate per 100,000. | No. | Rate per 100,000. | No. | Rate per 100,000. | No. | Rate per 100,000. |
| United States | 106,485 | 170.0 | 150,151 | 183.6 | 187,791 | 204.2 | 232,680 | 220.1 |
| Alabama | 1,469 | 97.1 | 1,603 | 82.6 | 2,039 | 95.4 | 2,238 | 95.3 |
| Arizona | 64 | 107.3 | 224 | 146.9 | 337 | 164.9 | 469 | 140.5 |
| Arkansas | 790 | 70.0 | 667 | 47.4 | 1,092 | 69.4 | 1,456 | 83.1 |
| California | 3,736 | 309.2 | 5,717 | 316.0 | 6,652 | 279.8 | 10,184 | 297.2 |
| Colorado | 326 | 79.1 | 754 | 119.0 | 1,199 | 150.1 | 1,680 | 178.8 |
| Connecticut | 2,056 | 275 5 | 2,831 | 287.9 | 3,579 | 321.1 | 4,387 | 317.8 |
| Delaware | 197 | 116.9 | 353 | 184.7 | 441 | 218.0 | 491 | 220.2 |
| Dist. of Columbia | 1,578 | 684.9 | 2,453 | 823.9 | 2,890 | 872.9 | 3,342 | 763.8 |
| Florida | 351 | 89.7 | 713 | 116.9 | 849 | 112.8 | 1,226 | 126.9 |
| Georgia | 1,815 | 98.8 | 2,839 | 120.4 | 3,132 | 120.0 | 3,754 | 129.6 |
| Idaho | 83 | 98.4 | 255 | 115.3 | 388 | 119.2 | 545 | 126.2 |
| Illinois | 6,641 | 173.6 | 9.607 | 187.7 | 12,839 | 227.7 | 14,884 | 229.5 |
| Indiana | 3,291 | 150.1 | 4,358 | 168.7 | 4,527 | 167.6 | 5,599 | 191.1 |
| Iowa | 3,197 | 167.2 | 4,336 | 196.7 | 5,377 | 247.7 | 5,964 | 248.1 |
| Kansas | 1,794 | 125.7 | 2,460 | 158.7 | 2,912 | 172.2 | 3,054 | 172.6 |
| Kentucky | 2,729 | 146.8 | 3,058 | 139.1 | 3,538 | 154.5 | 4,154 | 171.9 |
| Louisiana | 910 | 81.4 | 1,585 | 107.0 | 2,158 | 130.3 | 2,351 | 130.7 |
| Maine | 1,299 | 196.5 | 885 | 124.3 | 1,258 | 169.5 | 1,647 | 214.4 |
| Maryland | 1,646 | 157.9 | 2,505 | 204.2 | 3,220 | 248.6 | 3.973 | 274.1 |
| Massachusetts | 6,103 | 272.6 | 8,679 | 288.4 | 11,601 | 344.6 | 14,399 | 373.8 |
| Michigan | 3,725 | 177.9 | 5,430 | 211.9 | 6,699 | 238.4 | 7,733 | 210.8 |
| Minnesota | 2,205 | 169.4 | 4,070 | 217.8 | 4,744 | 228.5 | 5,964 | 249.8 |
| Mississippi | 1,104 | 85.6 | 1,493 | 91.0 | 1,978 | 110.1 | 1,809 | 101.0 |
| Missouri | 3,418 | 127.6 | 5,103 | 160.8 | 6,168 | 187.3 | 6,946 | 204.1 |
| Montana | 192 | 145.3 | 543 | 186.3 | 697 | 185.3 | 1,102 | 200.8 |
| Nebraska | 932 | 88.0 | 1,536 | 138.1 | 1,990 | 166.9 | 2,624 | 202.4 |
| Nevada | 183 | 399.9 | 200 | 352.8 | 230 | 280.9 | 220 | 284.2 |
| New Hampshire | 961 | 255.2 | 496 | 118.5 | 909 | 211.1 | 1,223 | 276.0 |
| New Jersey | 3,163 | 218.9 | 4,865 | 229.4 | 6,042 | 238.1 | 7,398 | 234.4 |
| New Mexico | 66 | 43.0 | 113 | 46.5 | 219 | 66.9 | 356 | 98.8 |
| New York | 17,846 | 297.5 | 26,176 | 329.7 | 31,280 | 343.2 | 38,903 | 374.6 |
| North Carolina | 1,725 | 106.6 | 1,883 | 93.8 | 2,522 | 114.3 | 3,180 | 124.3 |
| North Dakota | 221 | 121.0 | 446 | 108.1 | 628 | 108.8 | 1,243 | 192.5 |
| Ohio | 7,600 | 207.0 | 8,621 | 196.9 | 10,594 | 222.2 | 12,217 | 212.1 |
| Oklahoma | 7 | 11.3 | 413 | 37.4 | 1,110 | 67.0 | 1,990 | 98.1 |
| Oregon | 640 | 204.0 | 1,285 | 253.2 | 1,565 | 232.6 | 2,437 | 311.1 |
| Pennsylvania | 8,482 | 161.3 | 11,521 | 169.5 | 15,058 | 196.4 | 18,764 | 215.2 |
| Rhode Island | 795 | 230.1 | 1,077 | 229.2 | 1,243 | 229.1 | 1,528 | 252.8 |
| South Carolina | 912 | 79.2 | 1,156 | 82.3 | 1,541 | 101.7 | 1,894 | 112.5 |
| South Dakota | 310 | 94.3 | 595 | 127.2 | 864 | 148.3 | 1,182 | 185.7 |
| Tennessee | 1,845 | 104.4 | 1,713 | 82.3 | 2,204 | 100.9 | 2,605 | 111.4 |
| Texas | 1,670 | 74.7 | 3,345 | 99.7 | 4,053 | 104.0 | 5,586 | 119.8 |
| Utah | 166 | 79.8 | 344 | 110.3 | 342 | 91.6 | 534 | 118.8 |
| Vermont | 823 | 247.6 | 887 | 254.8 | 990 | 278.1 | 1,095 | 310.7 |
| Virginia | 2,407 | 145.4 | 3,137 | 162.6 | 3,635 | 176.3 | 4,250 | 184.0 |
| Washington | 380 | 108.8 | 1,178 | 158.2 | 1,987 | 174.0 | 3,423 | 252.3 |
| West Virginia | 1,079 | 141.5 | 1,475 | 139.9 | 1,722 | 141.0 | 1,808 | 123.5 |
| Wisconsin | 3,513 | 208.3 | 5,023 | 232.0 | 6,587 | 282.2 | 7,912 | 300.6 |
| Wyoming | 40 | 65.9 | 96 | 85.8 | 162 | 111.0 | 248 | 127.6 |

Social Condition of Mental Patients First Admitted to 72 State Hospitals, Year Ending June 30, 1920.

| PSYCHOSES. | TOTAL ASCERTAINED. | | SINGLE. | | MARRIED. | | WIDOWED. | | SEPARATED. | | DIVORCED. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Pct. | No. | Pct. | No. | Pct. | No. | Pct. | No. | Pct. | No. | Pct. |
| Senile | 2,477 | 100.0 | 364 | 14.7 | 838 | 33.8 | 1,209 | 48.8 | 25 | 1.0 | 41 | 1.7 |
| With cerebral arteriosclerosis | 1,362 | 100.0 | 189 | 13.9 | 684 | 50.2 | 448 | 32.9 | 24 | 1.8 | 17 | 1.2 |
| General paralysis | 2,188 | 100.0 | 485 | 22.2 | 1,354 | 61.9 | 221 | 10.1 | 55 | 2.5 | 73 | 3.3 |
| Alcoholic | 474 | 100.0 | 185 | 39.0 | 228 | 48.1 | 43 | 9.1 | 7 | 1.5 | 11 | 2.3 |
| Manic-depressive | 3,338 | 100.0 | 1,108 | 33.2 | 1,874 | 56.1 | 232 | 7.0 | 65 | 1.9 | 59 | 1.8 |
| Involution melancholia | 625 | 100.0 | 127 | 20.3 | 385 | 61.6 | 91 | 14.6 | 9 | 1.4 | 13 | 2.1 |
| Dementia præcox | 5,749 | 100.0 | 3,501 | 60.9 | 1,780 | 31.0 | 263 | 4.6 | 95 | 1.7 | 110 | 1.9 |
| Paranoia or paranoid conditions | 490 | 100.0 | 152 | 30.6 | 242 | 48.8 | 69 | 13.9 | 15 | 3.0 | 18 | 3.6 |
| Epileptic psychoses | 565 | 100.0 | 335 | 59.3 | 169 | 29.9 | 35 | 6.2 | 11 | 1.9 | 15 | 2.7 |
| Psychoneuroses and neuroses | 433 | 100.0 | 164 | 37.9 | 224 | 51.7 | 29 | 6.7 | 3 | 0.7 | 13 | 3.0 |
| With psychopathic personality | 486 | 100.0 | 289 | 59.5 | 152 | 31.3 | 19 | 3.9 | 16 | 3.3 | 10 | 2.1 |
| With mental deficiency | 677 | 100.0 | 517 | 76.4 | 118 | 17.4 | 24 | 3.5 | 13 | 1.9 | 5 | 0.7 |
| All other psychoses | 1,928 | 100.0 | 540 | 28.0 | 1,094 | 56.7 | 219 | 11.4 | 41 | 2.1 | 34 | 1.8 |
| Total | 20,798 | 100.0 | 7,956 | 38.3 | 9,142 | 44.0 | 2,902 | 14.0 | 379 | 1.8 | 419 | 2.0 |

## AMERICAN HOMICIDE AND SUICIDE STATISTICS.

(Compiled by F. L. Hoffman, Newark, N. J.)

### HOMICIDE RATE, PER 100,000 POPULATION, IN 28 CITIES.

| Cities. | Rate Per 100,000 Pop. | | | Cities. | Rate Per 100,000 Pop. | | |
|---|---|---|---|---|---|---|---|
| | 1911-1915. | 1916-1920. | 1921. | | 1911-1915. | 1916-1920. | 1921. |
| Baltimore, Md. | 5.8 | 7.9 | 11.3 | Newark, N. J. | 4.0 | 4.9 | 4.7 |
| Boston, Mass. | 4.6 | 4.6 | 3.7 | New Orleans, La. | 24.0 | 21.2 | 20.0 |
| Buffalo, N. Y. | 5.1 | 5.4 | 4.8 | New York, N. Y. | 5.9 | 5.0 | 6.2 |
| Chicago, Ill. | 9.0 | 10.7 | 11.8 | Philadelphia, Pa. | 4.4 | 6.6 | 6.1 |
| Cincinnati, Ohio | 12.2 | 11.6 | 15.2 | Pittsburgh, Pa. | 6.2 | 9.2 | 9.4 |
| Cleveland, Ohio. | 6.6 | 12.7 | 10.3 | Providence, R. I. | 5.1 | 4.4 | 5.0 |
| Dayton, Ohio. | 6.7 | 7.8 | 10.1 | Reading, Pa. | 2.4 | 1.9 | 4.6 |
| Hartford, Conn. | 3.9 | 4.2 | 1.4 | Rochester, N. Y. | 3.5 | 2.7 | 4.2 |
| Indianapolis, Ind. | 9.8 | 9.1 | 12.9 | San Francisco, Cal. | 13.0 | 11.4 | 9.8 |
| Los Angeles, Cal. | 10.9 | 10.0 | 13.6 | Seattle, Wash. | 9.6 | 7.7 | 7.0 |
| Louisville, Ky. | 16.9 | 14.7 | 16.5 | Spokane, Wash. | 9.9 | 4.6 | 8.6 |
| Memphis, Tenn. | 69.7 | 60.9 | 56.8 | St. Louis, Mo. | 14.3 | 16.8 | 17.2 |
| Milwaukee, Wis. | 3.7 | 3.6 | 3.6 | Washington, D. C. | 7.8 | 12.0 | 12.6 |
| Minneapolis, Minn. | 5.3 | 5.3 | 7.1 | | | | |
| Nashville, Tenn. | 35.9 | 21.0 | 35.1 | Total 28 cities. | 8.1 | 8.5 | 9.3 |

### CONSOLIDATED RETURN OF HOMICIDE DEATHS IN ABOVE 28 CITIES.

| Year. | Population. | Homicides. | Rate Per 100,000 Pop. | Year. | Population. | Homicides. | Rate Per 100,000 Pop. |
|---|---|---|---|---|---|---|---|
| 1900 | 11,981,034 | 609 | 5.1 | 1912 | 17,613,045 | 1,464 | 8.3 |
| 1901 | 12,331,665 | 603 | 4.9 | 1913 | 17,982,950 | 1,575 | 8.8 |
| 1902 | 12,611,765 | 621 | 4.9 | 1914 | 18,352,856 | 1,566 | 8.5 |
| 1903 | 12,970,877 | 690 | 5.3 | 1915 | 18,722,762 | 1,614 | 8.6 |
| 1904 | 12,956,583 | 729 | 5.6 | 1916 | 19,092,668 | 1,742 | 9.1 |
| 1905 | 14,024,422 | 931 | 6.6 | 1917 | 19,462,572 | 1,777 | 9.1 |
| 1906 | 14,851,650 | 1,148 | 7.7 | 1918 | 19,832,478 | 1,672 | 8.4 |
| 1907 | 15,648,584 | 1,338 | 8.6 | 1919 | 20,202,383 | 1,831 | 9.1 |
| 1908 | 16,056,800 | 1,272 | 7.9 | 1920 | 20,571,897 | 1,756 | 8.5 |
| 1909 | 16,465,016 | 1,196 | 7.3 | 1921 | 20,588,770 | 1,910 | 9.3 |
| 1910 | 16,873,233 | 1,365 | 8.1 | 1911-1915 | 89,914,751 | 7,648 | 8.5 |
| 1911 | 17,243,138 | 1,429 | 8.3 | 1916-1920 | 99,161,998 | 8,778 | 8.9 |

### HOMICIDES, 1916-1920, BY STATES.

(Rate per 100,000 population is in parentheses.)

Cal., 1,640 (10.1); Col., 408 (8.9); Conn., 266 (4.0); Del., 26 (5.8); Fla., 368 (19.0); Ill., 1,445 (7.6); Ind., 721 (5.0); Kan., 558 (6.3); Ky., 1,186 (10.0); La., 897 (16.7); Me., 49 (1.3); Md., 421 (5.9); Mass., 499 (2.6); Mich., 790 (4.5); Minn., 368 (3.1); Miss., 695 (19.4); Mo., 1,690 (10.0); Mont., 325 (12.5); N. H., 33 (1.5); N. J., 718 (4.7); N. Y., 2,222 (4.4); N. C., 1,038 (8.7); Ohio, 2,224 (7.9); Ore., 101 (4.4); Pa., 2,663 (6.2); R. I., 89 (3.0); S. C., 1,058 (12.8); Tenn., 1,197 (12.9); Utah, 108 (4.9); Vt., 37 (2.1); Va., 1,184 (10.4); Wash., 367 (5.5); Wis., 267 (2.1).

### SUICIDES IN 95 AMERICAN CITIES.

| Year. | Population. | Suicides. | Rate Per 100,000 Pop. | Year. | Population. | Suicides. | Rate Per 100,000 Pop. |
|---|---|---|---|---|---|---|---|
| 1900 | 16,561,949 | 2,585 | 15.6 | 1913 | 23,576,978 | 4,655 | 19.7 |
| 1901 | 17,109,426 | 2,686 | 15.7 | 1914 | 24,091,752 | 5,056 | 21.0 |
| 1902 | 17,656,899 | 2,969 | 16.8 | 1915 | 24,604,467 | 5,153 | 20.9 |
| 1903 | 18,204,372 | 3,317 | 18.2 | 1916 | 25,119,320 | 4,552 | 18.1 |
| 1904 | 18,750,843 | 3,547 | 18.9 | 1917 | 25,633,103 | 4,316 | 16.8 |
| 1905 | 19,299,318 | 3,509 | 18.2 | 1918 | 26,146,888 | 3,839 | 14.7 |
| 1906 | 19,846,591 | 3,360 | 16.9 | 1919 | 26,660,671 | 3,825 | 14.3 |
| 1907 | 20,394,263 | 3,854 | 18.9 | 1920 | 27,164,071 | 3,366 | 12.4 |
| 1908 | 20,941,736 | 4,522 | 21.6 | 1921 | 27,677,955 | 4,332 | 15.7 |
| 1909 | 21,489,209 | 4,391 | 20.4 | 1901-1905 | 91,020,858 | 16,028 | 17.6 |
| 1910 | 22,036,608 | 4,322 | 19.6 | 1906-1910 | 104,708,407 | 20,449 | 19.5 |
| 1911 | 22,550,310 | 4,623 | 20.5 | 1911-1915 | 117,921,964 | 24,001 | 20.4 |
| 1912 | 23,098,457 | 4,514 | 19.5 | 1916-1920 | 130,724,053 | 19,898 | 15.2 |

The rates of suicide per 100,000 population, in 1921, in the cities above, grouped geographically, were: New England, 12.0; Middle Atlantic, 13.7; Southern, 15.7; Central, 15.7; Rocky Mountain, 18.5, Pacific Coast, 28.7—General average for all the cities, 15.7.

### SUICIDES BY METHOD AND SEX IN U. S. REGISTRATION AREA, 1916-1920.

| Method. | Male Suicides. | Per Cent. | Rate Per 100,000 | Female Suicides. | Per Cent. | Rate Per 100,000 | Total Suicides. | Per Cent. | Rate Per 100,000 |
|---|---|---|---|---|---|---|---|---|---|
| Poison | 4,487 | 12.5 | 2.2 | 3,810 | 30.3 | 1.9 | 8,297 | 17.1 | 2.1 |
| Asphyxia | 3,999 | 11.1 | 2.0 | 2,605 | 20.7 | 1.3 | 6,604 | 13.6 | 1.6 |
| Hanging | 6,386 | 17.8 | 3.1 | 1,678 | 13.4 | 0.9 | 8,064 | 16.7 | 2.0 |
| Drowning | 1,826 | 5.1 | 0.9 | 1,288 | 10.3 | 0.7 | 3,114 | 6.4 | 0.8 |
| Firearms | 14,631 | 40.8 | 7.2 | 1,845 | 14.7 | 0.9 | 16,476 | 34 1 | 4.1 |
| Cutting and piercing instr. | 3,058 | 8.5 | 1.5 | 439 | 3.5 | 0.2 | 3,497 | 7.2 | 0.9 |
| Jumping from high places. | 817 | 2.3 | 0.4 | 552 | 4.4 | 0.3 | 1,369 | 2.8 | 0.3 |
| Crushing | 383 | 1.1 | 0.2 | 105 | 0.8 | 0.05 | 488 | 1.0 | 0.1 |
| Other | 292 | 0.8 | 0.1 | 239 | 1.9 | 0.1 | 531 | 1 2 | 0.1 |
| Total | 35,879 | 100.0 | 17.6 | 12,561 | 100.0 | 6.4 | 48,440 | 100.0 | 12.1 |

## LYNCHINGS IN THE UNITED STATES SINCE 1885.

(Compiled for the ALMANAC by Monroe N. Work, head of the Research and Record Department, the Tuskegee Normal and Industrial Institute and editor of the Negro Year Book.)

The two tables that follow include both white and colored victims.

LYNCHINGS BY ASCRIBED CAUSES.

| YEAR. | Homicide. | Felonious Assault. | Attacks on Women. | At'mpt'd At'ks on Women. | Theft. | "Insults" to Whites. | All Other Causes. | Totals. | YEAR. | Homicide. | Felonious Assault. | Attacks on Women. | At'mpt'd Atks. on Women. | Theft. | "Insults" to Whites. | All Other Causes. | Totals. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1889..... | 41 | .. | 34 | 4 | 19 | .. | 29 | 127 | 1906 . .. | 24 | 7 | 16 | 14 | 1 | 1 | 4 | 67 |
| 1890..... | 25 | 2 | 26 | 2 | 5 | .. | 16 | 76 | 1907 .... | 20 | 7 | 13 | 11 | 4 | 1 | 7 | 63 |
| 1891..... | 52 | 2 | 38 | 2 | 28 | .. | 45 | 122 | 1908 .... | 30 | 10 | 14 | 6 | 4 | 3 | 19 | 86 |
| 1892..... | 88 | 4 | 37 | 12 | 38 | 2 | 27 | 208 | 1909..... | 28 | 12 | 3 | 18 | 1 | 3 | 5 | 70 |
| 1893..... | 56 | 2 | 34 | 4 | 10 | 2 | 31 | 139 | 1910..... | 38 | 6 | 16 | 8 | 2 | 2 | 2 | 74 |
| 1894..... | 73 | 2 | 42 | 10 | 16 | 6 | 43 | 192 | 1911..... | 37 | 4 | 9 | 6 | 1 | 4 | 10 | 71 |
| 1895..... | 71 | 1 | 29 | 13 | 20 | 1 | 41 | 176 | 1912..... | 37 | 6 | 10 | 2 | 1 | 3 | 5 | 64 |
| 1896..... | 42 | 9 | 29 | 6 | 14 | .. | 22 | 122 | 1913..... | 29 | 11 | 5 | 5 | 2 | 1 | 8 | 52 |
| 1897..... | 68 | 5 | 25 | 23 | 2 | 2 | 30 | 155 | 1914..... | 30 | 8 | 6 | 1 | 1 | .. | 6 | 52 |
| 1898..... | 74 | 5 | 11 | 7 | 8 | 2 | 12 | 110 | 1915..... | 26 | 10 | 11 | .. | 9 | 3 | 10 | 69 |
| 1899..... | 56 | .. | 5 | 6 | 6 | .. | 27 | 100 | 1916..... | 20 | 7 | 3 | 9 | 8 | 2 | 5 | 54 |
| 1900..... | 43 | 10 | 18 | 13 | 7 | .. | 23 | 114 | 1917. .... | 6 | 2 | 7 | 5 | 2 | 2 | 14 | 38 |
| 1901..... | 48 | 9 | 21 | 8 | 21 | 1 | 27 | 135 | 1918..... | 28 | 2 | 10 | 6 | 2 | .. | 16 | 64 |
| 1902..... | 43 | 7 | 19 | 11 | 1 | .. | 15 | 95 | 1919..... | 21 | 14 | 9 | 10 | 1 | 6 | 22 | 83 |
| 1903..... | 53 | 8 | 16 | 7 | .. | 1 | 17 | 102 | 1920..... | 22 | 9 | 15 | 3 | .. | 3 | 9 | 61 |
| 1904..... | 36 | 4 | 14 | 6 | 1 | 2 | 24 | 87 | 1921 .... | 23 | 7 | 16 | 3 | .. | 3 | 12 | 64 |
| 1905..... | 34 | 4 | 15 | 4 | 2 | .. | 7 | 66 | | | | | | | | | |

NOTE.—In theft are included robberies of all kinds. Insults include "back talk," and quarrelsome language with white persons, resulting in lynching. In "all other causes" are included fighting with whites over matters not concerning women alleged to have been attacked.

LYNCHINGS BY STATES.

| YEAR. | Ala. | Ark. | Fla. | Ga. | Ky. | La. | Miss | Mo. | N. C. | Okla. | S. C. | Tenn. | Tex. | Va. | W.Va |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1882..... | 5 | 3 | 2 | 3 | 6 | 5 | 3 | 3 | 0 | 0 | 6 | 2 | 10 | 2 | 1 |
| 1883..... | 4 | 7 | 1 | 5 | 4 | 3 | 10 | 2 | 2 | 1 | 3 | 6 | 13 | 1 | 0 |
| 1884..... | 3 | 6 | 2 | 5 | 6 | 5 | 10 | 3 | 3 | 0 | 1 | 0 | 15 | 5 | 2 |
| 1885..... | 5 | 12 | 5 | 9 | 4 | 3 | 16 | 10 | 5 | 7 | 4 | 12 | 43 | 4 | 2 |
| 1886..... | 6 | 4 | 9 | 6 | 8 | 6 | 17 | 4 | 2 | 14 | 4 | 8 | 17 | 2 | 3 |
| 1887..... | 5 | 8 | 4 | 4 | 7 | 9 | 14 | 2 | 5 | 5 | 7 | 7 | 15 | 1 | 6 |
| 1888..... | 11 | 2 | 2 | 12 | 7 | 8 | 10 | 3 | 10 | 6 | 2 | 7 | 15 | 4 | 1 |
| 1889..... | 7 | 8 | 0 | 11 | 8 | 8 | 24 | 8 | 4 | 10 | 12 | 8 | 14 | 7 | 6 |
| 1890..... | 6 | 4 | 3 | 16 | 5 | 7 | 12 | 1 | 2 | 3 | 3 | 6 | 21 | 6 | 3 |
| 1891..... | 25 | 12 | 10 | 11 | 10 | 29 | 23 | 2 | 2 | 2 | 1 | 13 | 16 | 5 | 2 |
| 1892..... | 24 | 26 | 8 | 14 | 10 | 27 | 15 | 6 | 5 | 7 | 4 | 22 | 12 | 7 | 5 |
| 1893..... | 25 | 11 | 7 | 15 | 11 | 19 | 15 | 5 | 3 | 12 | 13 | 14 | 8 | 12 | 0 |
| 1894..... | 19 | 10 | 8 | 20 | 20 | 15 | 16 | 5 | 1 | 13 | 4 | 15 | 12 | 7 | 2 |
| 1895..... | 16 | 9 | 12 | 14 | 15 | 4 | 13 | 3 | 1 | 11 | 6 | 11 | 24 | 3 | 0 |
| 1896..... | 13 | 4 | 10 | 8 | 8 | 24 | 6 | 6 | 1 | 11 | 4 | 14 | 7 | 0 | 1 |
| 1897..... | 18 | 10 | 11 | 14 | 7 | 13 | 15 | 5 | 4 | 4 | 6 | 7 | 24 | 5 | 0 |
| 1898..... | 11 | 17 | 1 | 12 | 6 | 9 | 14 | 5 | 4 | 5 | 14 | 6 | 3 | 4 | 1 |
| 1899..... | 6 | 11 | 6 | 26 | 3 | 13 | 14 | 3 | 3 | 1 | 1 | 4 | 7 | 1 | 1 |
| 1900..... | 8 | 6 | 9 | 16 | 1 | 20 | 20 | 2 | 3 | 0 | 2 | 7 | 4 | 6 | 2 |
| 1901..... | 16 | 5 | 7 | 13 | 6 | 14 | 18 | 6 | 1 | 3 | 5 | 11 | 12 | 2 | 1 |
| 1902..... | 5 | 6 | 4 | 9 | 8 | 10 | 10 | 6 | 3 | 2 | 3 | 5 | 6 | 4 | 5 |
| 1903..... | 5 | 9 | 8 | 12 | 2 | 10 | 17 | 4 | 1 | 3 | 7 | 5 | 7 | 0 | 0 |
| 1904..... | 6 | 17 | 4 | 15 | 4 | 3 | 18 | 0 | 1 | 1 | 5 | 2 | 5 | 3 | 0 |
| 1905..... | 3 | 5 | 1 | 11 | 4 | 4 | 17 | 1 | 1 | 0 | 3 | 3 | 11 | 1 | 0 |
| 1906..... | 6 | 5 | 6 | 6 | 1 | 8 | 12 | 3 | 4 | 4 | 2 | 2 | 6 | 0 | 0 |
| 1907..... | 11 | 3 | 0 | 9 | 1 | 11 | 13 | 0 | 0 | 2 | 2 | 2 | 4 | 0 | 0 |
| 1908..... | 4 | 2 | 8 | 16 | 9 | 8 | 20 | 0 | 1 | 0 | 1 | 9 | 18 | 0 | 0 |
| 1909..... | 8 | 3 | 8 | 15 | 4 | 11 | 7 | 1 | 1 | 5 | 3 | 0 | 12 | 1 | 1 |
| 1910..... | 8 | 9 | 17 | 12 | 1 | 4 | 5 | 2 | 0 | 2 | 2 | 2 | 7 | 1 | 0 |
| 1911..... | 2 | 3 | 7 | 21 | 8 | 4 | 5 | 2 | 0 | 5 | 1 | 4 | 4 | 0 | 1 |
| 1912..... | 8 | 3 | 5 | 12 | 0 | 8 | 6 | 0 | 1 | 1 | 7 | 5 | 3 | 1 | 0 |
| 1913..... | 2 | 2 | 4 | 10 | 3 | 6 | 9 | 1 | 1 | 4 | 2 | 1 | 5 | 0 | 0 |
| 1914..... | 2 | 1 | 4 | 2 | 0 | 12 | 12 | 1 | 1 | 3 | 4 | 1 | 6 | 0 | 0 |
| 1915..... | 9 | 5 | 5 | 18 | 5 | 2 | 9 | 2 | 0 | 3 | 1 | 2 | 5 | 0 | 0 |
| 1916..... | 1 | 4 | 8 | 14 | 2 | 2 | 1 | 1 | 2 | 4 | 2 | 3 | 9 | 0 | 0 |
| 1917..... | 4 | 4 | 1 | 6 | 2 | 5 | 1 | 0 | 0 | 1 | 1 | 3 | 6 | 1 | 0 |
| 1918..... | 3 | 3 | 2 | 18 | 1 | 9 | 6 | 0 | 2 | 1 | 1 | 4 | 10 | 1 | 0 |
| 1919..... | 7 | 12 | 5 | 21 | 0 | 7 | 12 | 2 | 4 | 0 | 1 | 1 | 4 | 0 | 2 |
| 1920..... | 7 | 1 | 7 | 9 | 1 | 0 | 7 | 1 | 3 | 3 | 1 | 0 | 10 | 1 | 1 |
| 1921..... | 2 | 6 | 6 | 11 | 1 | 5 | 14 | 1 | 4 | 0 | 5 | 1 | 7 | 1 | 0 |
| Total... | 336 | 278 | 227 | 481 | 209 | 370 | 486 | 112 | 91 | 159 | 158 | 235 | 437 | 99 | 49 |

Totals for other States, 1882-1921: Arizona, 31, California, 48, Colorado, 48; Connecticut 1 (in 1886); Delaware, 1 (in 1903); Idaho, 25; Illinois, 30; Indiana, 48, Iowa, 18, Kansas, 46; Maine, 3 (in 1885); Maryland, 28; Massachusetts, 0; Michigan, 8; Minnesota, 9, Montana, 53; Nebraska, 46; Nevada, 12; New Hampshire 0; New Jersey, 1 (in 1886); New Mexico, 34; New York, 2 (1892 and 1896); North Dakota 11; Ohio, 19; Oregon, 19; Pennsylvania, 6; Rhode Island, 0; South Dakota, 29; Utah, 5; Vermont, 0; Washington, 27; Wisconsin, 6; Wyoming, 45.

### THE LYNCHING RECORD FOR 1921.

ACCORDING to the records compiled by Monroe N. Work, of the Department of Records and Research of the Tuskegee Institute, there were 72 instances in which officers of the law prevented lynchings. Of these 8 were in Northern States and 64 were in Southern States. In 1920 there were 56 such instances, 46 in Southern and 10 in Northern States. In 66 of the cases, the prisoners were removed, or the guards were augmented, or other precautions taken. In 6 instances armed force was used to repel the would-be lynchers. Concerning the cases of lynchings, there were 19 instances in which prisoners were taken from the jail and 16 instances in which, before reaching a jail, they were taken from officers of the law.

There were 64 persons lynched in 1921. Of these, 63 were in the South and 1 in the North. This is three more than the number, 61, for the year 1920. Of those lynched 59 were Negroes and 5 were whites.

THE 1921 LYNCHING RECORD—*Continued.*

Two of those put to death were Negro women. Nineteen, or less than one-third, of those put to death were charged with rape or attempted rape. Four of the victims were burned to death. Three were put to death and then their bodies were burned. The charges against those burned to death were: murder, 2; rape and murder, 2.

The offenses charged against the whites were: murder, 4; rape, 1. One of the women put to death was charged with assisting a man to escape who had killed an officer of the law. The other was charged with inciting racial troubles. The offenses charged against the Negro men were: murder, 11; attempted murder, 3; rape, 15; attempted rape, 3, killing men in altercation, 4; no special charge, 3; wounding men, 4; furnishing ammunition to man resisting arrest, 2; leaders in race clash, 2; charge not reported, 3; assisting man to escape who had killed officer of law, 1; making improper remarks to woman, 1; threatening to kill another, 1; entering young woman's room, 1; insulting woman, 1; writing note to woman, 1; attacking a man and woman, 1.

The States in which lynchings occurred and the number in each State are as follows: Alabama, 2; Arkansas, 6; Florida, 6; Georgia, 11; Kentucky, 1; Louisiana, 5; Mississippi, 14; Missouri, 1; North Carolina, 4; South Carolina, 5; Tennessee, 1; Texas, 7; Virginia, 1.

## NEGRO MIGRATIONS.

The total number of Negroes for whom the State of birth was reported comprised at the U. S. Census of 1920, as shown in the table above, 8,288,492, or 80.1 per cent., who were living in the States in which born, and 2,054,242, or 19.9 per cent., who were living in other States. In 1910 the percentage living in other States was 16.6, and in 1900 it was 15.6.

The total number of Negroes reported as born in the South (that part of the country lying south of the southern boundaries of New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Missouri, and Kansas) was 9,600,943. Of these, 7,751,361, or 80.7 per cent., were living in their native States in 1920; 1,068,788, or 11.1 per cent., were living in other Southern States; and 780,794, or 8.1 per cent., were living in the North or West. The total number of Negroes reported as born in the North or West was 741,791, of whom 537,131, or 72.4 per cent., were living in their native States in 1920; 157,437, or 21.2 per cent., were living in other Northern or Western States; and 47,223, or 6.4 per cent., were living in the South. Thus the proportion of Southern-born Negroes who migrated to the North or West, 8.1 per cent., was only about one-fourth larger than the proportion of the Negroes who were born in the North or West and migrated to the South, 6.4 per cent.

The number of Negroes born in the South and living in the North or West less the number born in the North or West and living in the South was 733,571. These may be termed the survivors of the net migration of Negroes from the South to the North and West. The number of Southern-born Negroes living in the North and West increased from 440,534 in 1910 to 780,794 in 1920, forming 40.9 per cent. of the total Negro population of the North and West in the earlier year and 50.3 per cent. in the later.

The migration of Southern Negroes to Northern and Western States undoubtedly took place to a materially greater extent between 1910 and 1920 than during the preceding decade. While it is impossible to calculate exactly the extent of this migration during the recent decade, the available data indicate that approximately 400,000, or somewhat more than one-half, of the 733,571 survivors of the net Negro migration from the South to the North and West prior to Jan. 1, 1920, left the South subsequently to April 15, 1910.

In general, the Negroes born in the North and West and in the northern part of the South have migrated to a much greater extent than those born in the far South. Considering as one group all the Negroes born in the Northern and Western States, the percentage living, in 1920, in other States than those in which born was 27.6; considering as another group those born in Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, Kentucky, Tennessee, Arkansas, and Oklahoma—i. e., the northern part of the South—the corresponding percentage was 24.8; but for the Negroes born in the far Southern States of South, Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas, the percentage living in States other than those in which born was only 16.2.

Although migration to the North and West has not taken place among the far Southern Negroes to the same extent, relatively to their total numbers, as among the Negroes in the northern part of the South, there was nevertheless a pronounced increase in such migration from the far South during the past decade. For example: The Negroes who were born in South Carolina and had migrated from that State to Pennsylvania increased from 2,113 in 1910 to 11,624 in 1920; those from Georgia to Pennsylvania increased from 1,578 to 16,196; those from Florida to Pennsylvania, from 393 to 5,370; those from Alabama to Ohio, from 781 to 17,588; those from Mississippi to Illinois, from 4,612 to 19,485; those from Louisiana to Illinois, from 1,609 to 8,078; and those from Texas to Missouri, from 1,907 to 4,344.

### NEGRO MIGRATION, BY STATES.

| STATE. | Total Born in Specified State, 1920. | Born and Living in Specified State, 1920. | STATE. | Total Born in Specified State, 1920. | Born and Living in Specified State, 1920. |
|---|---|---|---|---|---|
| United States | 10,342,734 | 8,288,492 | Virginia | 883,140 | 617,324 |
| NEW ENGLAND: | | | West Virginia | 45,117 | 33,347 |
| Maine | 1,497 | 717 | North Carolina | 876,128 | 714,449 |
| New Hampshire | 575 | 268 | South Carolina | 1,016,276 | 847,026 |
| Vermont | 1,329 | 331 | Georgia | 1,325,652 | 1,123,394 |
| Massachusetts | 23,386 | 17,931 | Florida | 253,655 | 217,229 |
| Rhode Island | 6,602 | 4,430 | EAST SOUTH CENTRAL: | | |
| Connecticut | 11,397 | 7,888 | Kentucky | 303,606 | 201,335 |
| MIDDLE ATLANTIC: | | | Tennessee | 512,872 | 365,769 |
| New York | 77,751 | 62,369 | Alabama | 1,032,321 | 841,668 |
| New Jersey | 54,015 | 42,707 | Mississippi | 1,071,919 | 861,340 |
| Pennsylvania | 126,537 | 100,500 | WEST SOUTH CENTRAL: | | |
| EAST NORTH CENTRAL: | | | Arkansas | 362,543 | 311,247 |
| Ohio | 88,394 | 66,836 | Louisiana | 749,704 | 634,353 |
| Indiana | 40,799 | 27,540 | Oklahoma | 78,026 | 64,079 |
| Illinois | 62,727 | 44,130 | Texas | 732,810 | 655,065 |
| Michigan | 14,677 | 10,382 | MOUNTAIN: | | |
| Wisconsin | 2,483 | 1,204 | Montana | 859 | 345 |
| WEST NORTH CENTRAL: | | | Idaho | 335 | 123 |
| Minnesota | 3,326 | 1,838 | Wyoming | 429 | 134 |
| Iowa | 11,584 | 6,132 | Colorado | 4,676 | 2,335 |
| Missouri | 146,635 | 101,702 | New Mexico | 1,273 | 467 |
| North Dakota | 536 | 101 | Arizona | 1,227 | 524 |
| South Dakota | 833 | 244 | Utah | 691 | 189 |
| Nebraska | 4,155 | 2,155 | Nevada | 181 | 53 |
| Kansas | 38,784 | 23,687 | PACIFIC: | | |
| SOUTH ATLANTIC: | | | Washington | 2,731 | 1,106 |
| Delaware | 30,919 | 20,438 | Oregon | 596 | 307 |
| Maryland | 263,899 | 196,729 | California | 10,771 | 8,366 |
| District of Columbia | 62,356 | 46,569 | | | |

## UNITED STATES ALIEN IMMIGRATION STATISTICS.

(By W. W. Husband, U. S. Commissioner General of Immigration. Figures denoting immigration for the years 1832, 1843, 1850 and 1857 represent respectively 15-month, 9-month, 15-month, and 6-month periods.)

TOTAL ADMITTED FROM ALL COUNTRIES, BY FISCAL YEARS.

| Year. | Number. | Year. | Number. | Year. | Number. | Year. | Number. | Year. | Number. |
|---|---|---|---|---|---|---|---|---|---|
| 1820..... | 8,385 | 1841..... | 80,289 | 1862..... | 72,183 | 1883..... | 603,322 | 1904..... | 812,870 |
| 1821..... | 9,127 | 1842..... | 104,565 | 1863..... | 132,925 | 1884..... | 518,592 | 1905..... | 1,026,499 |
| 1822..... | 6,911 | 1843..... | 52,496 | 1864..... | 191,114 | 1885..... | 395,346 | 1906..... | 1,100,735 |
| 1823..... | 6,354 | 1844..... | 78,615 | 1865..... | 180,339 | 1886..... | 334,203 | 1907..... | 1,285,349 |
| 1824..... | 7,912 | 1845..... | 114,371 | 1866..... | 332,577 | 1887..... | 490,109 | 1908..... | 782,870 |
| 1825..... | 10,199 | 1846..... | 154,416 | 1867..... | 303,104 | 1888..... | 546,889 | 1909..... | 751,786 |
| 1826..... | 10,837 | 1847..... | 234,968 | 1868..... | 282,189 | 1889..... | 444,427 | 1910..... | 1,041,570 |
| 1827..... | 18,875 | 1848..... | 226,527 | 1869..... | 352,768 | 1890..... | 455,302 | 1911..... | 878,587 |
| 1828..... | 27,382 | 1849..... | 297,024 | 1870..... | 387,203 | 1891..... | 560,319 | 1912..... | 838,172 |
| 1829..... | 22,520 | 1850..... | 369,980 | 1871..... | 321,350 | 1892..... | 579,663 | 1913..... | 1,197,892 |
| 1830..... | 23,322 | 1851..... | 379,466 | 1872..... | 404,806 | 1893..... | 439,730 | 1914..... | 1,218,480 |
| 1831..... | 22,633 | 1852..... | 371,603 | 1873..... | 459,803 | 1894..... | 285,631 | 1915..... | 326,700 |
| 1832..... | 60,482 | 1853..... | 368,645 | 1874..... | 313,339 | 1895..... | 258,536 | 1916..... | 298,826 |
| 1833..... | 58,640 | 1854..... | 427,833 | 1875..... | 227,498 | 1896..... | 343,267 | 1917..... | 295,403 |
| 1834..... | 65,365 | 1855..... | 200,877 | 1876..... | 169,986 | 1897..... | 230,832 | 1918..... | 110,618 |
| 1835..... | 45,374 | 1856..... | 195,857 | 1877..... | 141,857 | 1898..... | 229,299 | 1919..... | 141,132 |
| 1836..... | 76,242 | 1857..... | 112,123 | 1878..... | 138,469 | 1899..... | 311,715 | 1920..... | 430,001 |
| 1837..... | 79,340 | 1858..... | 191,942 | 1879..... | 177,826 | 1900..... | 448,572 | 1921..... | 805,228 |
| 1838..... | 38,914 | 1859..... | 129,571 | 1880..... | 457,257 | 1901..... | 487,918 | 1922..... | 309,556 |
| 1839..... | 68,069 | 1860..... | 133,143 | 1881..... | 669,431 | 1902..... | 648,743 | | |
| 1840..... | 84,066 | 1861..... | 142,877 | 1882..... | 788,992 | 1903..... | 857,046 | Total.. | 34,744,888 |

The above table covers only immigrant aliens and does not include non-immigrant aliens.

In the year ending June 30, 1922, alien immigrants to the number of 13,731 were debarred, and 4,353 others were deported. Of those debarred 5,529 were paupers; 1,249 unable to read; 672 diseased; 176 criminals.

Of the immigrants deported, 434 were criminals.

ALIEN IMMIGRATION, BY CHIEF PORTS, SINCE 1907.

| Year (Fiscal). | New York. | | | Philadelphia. | | | Boston. | | |
|---|---|---|---|---|---|---|---|---|---|
| | U. S. Citizens Returning | Non-Immigr'nt Aliens. | Immigrants. | U. S. Citizens Return'g | Non-Immig. Aliens. | Immigrants. | U. S. Citizens Returning | Non-Immigr'nt Aliens. | Immigrants. |
| 1907..... | 146,747 | 111,539 | 1,004,756 | 3,258 | 1,008 | 30,501 | 12,420 | 12,558 | 70,164 |
| 1908..... | 158,619 | 99,008 | 585,970 | 3,158 | 433 | 16,458 | 11,745 | 11,002 | 41,363 |
| 1909..... | 169,820 | 144,140 | 580,617 | 3,252 | 789 | 14,294 | 11,284 | 11,577 | 36,318 |
| 1910..... | 170,210 | 109,921 | 786,094 | 2,905 | 2,030 | 37,641 | 9,244 | 8,458 | 53,617 |
| 1911..... | 182,724 | 100,059 | 637,003 | 3,527 | 1,271 | 45,023 | 11,019 | 8,423 | 45,865 |
| 1912..... | 179,358 | 112,268 | 605,151 | 3,983 | 3,606 | 43,749 | 10,517 | 10,008 | 38,782 |
| 1913..... | 166,686 | 139,937 | 892,653 | 3,999 | 4,271 | 59,466 | 11,894 | 11,649 | 54,740 |
| 1914..... | 168,912 | 114,521 | 878,052 | 3,114 | 2,672 | 56,857 | 14,816 | 11,085 | 69,365 |
| 1915..... | 132,983 | 62,738 | 178,416 | 1,868 | 1,108 | 7,114 | 10,634 | 5,385 | 15,983 |
| 1916..... | 49,733 | 32,721 | 141,390 | 93 | 34 | 229 | 1,243 | 1,129 | 12,428 |
| 1917..... | 39,958 | 29,100 | 129,446 | 125 | 42 | 274 | 790 | 528 | 11,828 |
| 1918..... | 21,739 | 26,387 | 28,867 | 30 | 26 | 386 | 419 | 215 | 3,392 |
| 1919..... | 31,546 | 35,026 | 26,731 | 196 | 69 | 333 | 528 | 294 | 374 |
| 1920..... | 85 173 | 105,343 | 225,206 | 1,694 | 640 | 4,205 | 2,089 | 1,187 | 15,820 |
| 1921..... | 141,482 | 87,682 | 560,971 | 2,227 | 1,187 | 24,432 | 5,116 | 1,827 | 51,565 |
| 1922..... | 162,389 | 65,962 | 209,778 | 588 | 275 | 3,257 | 2,675 | 838 | 4,924 |

| | Baltimore. | | | San Francisco. | | | Total United States. | | |
|---|---|---|---|---|---|---|---|---|---|
| 1907..... | 1,514 | 1,074 | 66,910 | 4,567 | 2,283 | 3,539 | 191,797 | 153,120 | 1,285,349 |
| 1908..... | 1,484 | 653 | 31,489 | 5,303 | 2,976 | 3,608 | 200,447 | 141,825 | 782,870 |
| 1909..... | 1,121 | 1,546 | 18,966 | 6,351 | 4,273 | 3,103 | 217,173 | 192,449 | 751,786 |
| 1910..... | 1,030 | 682 | 30,563 | 5,818 | 4,387 | 4,233 | 243,191 | 156,467 | 1,041,570 |
| 1911..... | 1,290 | 593 | 22,866 | 4,249 | 4,417 | 3,419 | 269,128 | 151,713 | 878,587 |
| 1912..... | 1,136 | 814 | 21,667 | 5,567 | 4,168 | 3,958 | 280,801 | 178,983 | 838,172 |
| 1913..... | 1,104 | 763 | 32,833 | 5,909 | 3,381 | 5,554 | 286,604 | 229,335 | 1,197,892 |
| 1914..... | 1,071 | 956 | 39,048 | 5,404 | 3,084 | 6,716 | 286,586 | 184,601 | 1,218,480 |
| 1915..... | 204 | 166 | 3,017 | 6,168 | 4,013 | 8,055 | 239,579 | 107,544 | 326,700 |
| 1916..... | 52 | 52 | 124 | 6,254 | 3,674 | 7,955 | 121,930 | 67,922 | 298,826 |
| 1917..... | 47 | 25 | 231 | 5,032 | 3,245 | 7,269 | 127,420 | 67,474 | 295,403 |
| 1918..... | 49 | 22 | 268 | 4,547 | 8,116 | 9,812 | 72,867 | 101,235 | 110,618 |
| 1919..... | 30 | 25 | 260 | 5,299 | 9,275 | 9,121 | 96,420 | 95,889 | 141,132 |
| 1920..... | 133 | 54 | 301 | 6,273 | 13,868 | 8,830 | 157,173 | 191,575 | 430,001 |
| 1921..... | 81 | 29 | 265 | 7,402 | 14,102 | 8,361 | 222,712 | 172,935 | 805,228 |
| 1922..... | 117 | 60 | 163 | 7,339 | 6,986 | 6,724 | 243,563 | 122,949 | 309,556 |

NET INCREASE OF U. S. POPULATION BY ARRIVAL AND DEPARTURE OF ALIENS, FISCAL YEARS ENDED JUNE 30.

| Year. | Admitted. | | | Departed. | | | Increase. |
|---|---|---|---|---|---|---|---|
| | Immigrant. | Non-Immigrant. | Total. | Emigrant. | Non-Emigrant. | Total. | |
| 1909..... | 751,786 | 192,449 | 944,235 | 225,802 | 174,590 | 400,392 | 543,843 |
| 1910..... | 1,041,570 | 156,467 | 1,198,037 | 202,436 | 177,982 | 380,418 | 817,619 |
| 1911..... | 878,587 | 151,713 | 1,030,300 | 295,666 | 222,549 | 518,215 | 512,085 |
| 1912..... | 838,172 | 178,983 | 1,017,155 | 333,262 | 282,030 | 615,292 | 401,863 |
| 1913..... | 1,197,892 | 229,335 | 1,427,227 | 308,190 | 303,734 | 611,924 | 815,303 |
| 1914..... | 1,218,480 | 184,601 | 1,403,081 | 303,338 | 330,467 | 633,805 | 769,276 |
| 1915..... | 326,700 | 107,544 | 434,244 | 204,074 | 180,100 | 384,174 | 50,070 |
| 1916..... | 298,826 | 67,922 | 366,748 | 129,765 | 111,042 | 240,807 | 125,941 |
| 1917..... | 295,403 | 67,474 | 362,877 | 66,277 | 80,102 | 146,379 | 216,498 |
| 1918..... | 110,618 | 101,235 | 211,853 | 94,585 | 98,683 | 193,268 | 18,585 |
| 1919..... | 141,132 | 95,889 | 237,021 | 123,522 | 92,709 | 216,231 | 20,790 |
| 1920..... | 430,001 | 191,575 | 621,576 | 288,315 | 139,747 | 428,062 | 193,514 |
| 1921..... | 805,228 | 172,935 | 978,163 | 247,718 | 178,313 | 426,031 | 552,132 |
| 1922..... | 309,556 | 122,949 | 432,505 | 198,712 | 146,672 | 345,384 | 87,121 |

YEARLY AND MONTHLY QUOTAS UNDER RESTRICTION ACT (EXTENDED TO JUNE 30, 1924).

| Country or Region of Birth. | Annually. | Monthly. | Country or Region of Birth. | Annually. | Monthly. |
|---|---|---|---|---|---|
| Albania | 288 | 58 | Spain (incl. Canary Isl.) | 912 | 182 |
| Armenia (Russ.) | 230 | 46 | Sweden | 20,042 | 4,008 |
| Austria | 7,451 | 1,490 | Switzerland | 3,752 | 750 |
| Belgium | 1,563 | 313 | United Kingdom | 77,342 | 15,468 |
| Bulgaria | 302 | 61 | Jugoslavia | 6,426 | 1,285 |
| Czechoslovakia | 14,357 | 2,871 | Other Europe (incl. Andorra, Gibraltar, Liechtenstein, Malta, Monaco and San Marino) | 86 | 17 |
| Danzig, Free City of | 301 | 60 | | | |
| Denmark | 5,619 | 1,124 | Palestine | 57 | 12 |
| Finland | 3,921 | 784 | Syria | 928 | 186 |
| Fiume, Free State of | 71 | 14 | Turkey (European and Asiatic; incl. Smyrna region and Turkish-Armenian region) | 2,388 | 478 |
| France | 5,729 | 1,146 | | | |
| Germany | 67,607 | 13,521 | | | |
| Greece | 3,294 | 659 | | | |
| Hungary | 5,638 | 1,128 | Other Asia (incl. Cyprus, Hejaz, Iraq (Mesopotamia), Persia, Rhodes, and any other Asiatic territory not included in the Barred Zone. Persons born in Asiatic Russia are included in the Russia quota) | 81 | 16 |
| Iceland | 75 | 15 | | | |
| Italy | 42,057 | 8,411 | | | |
| Luxemburg | 92 | 19 | | | |
| Memel Region | 150 | 30 | | | |
| Netherlands | 3,607 | 721 | | | |
| Norway | 12,202 | 2,440 | | | |
| Poland | 21,076 | 4,215 | | 122 | 25 |
| Eastern Galicia | 5,786 | 1,157 | Africa | | |
| Pinsk region | 4,284 | 857 | Atlantic Islands (other than Azores, Canary Islands, Madeira and islands adjacent to the American continent) | | |
| Portugal (incl. Azores and Madeira) | 2,465 | 493 | | | |
| Roumania | 7,419 | 1,484 | | 121 | 24 |
| Bessarabian region | 2,792 | 558 | Australia | 279 | 56 |
| Russia (European and Asiatic) | 21,613 | 4,323 | New Zealand and Pacific Islands | 80 | 16 |
| Esthonian region | 1,348 | 270 | | | |
| Latvian region | 1,540 | 308 | Total | 357,803 | 71,561 |
| Lithuanian region | 2,310 | 462 | | | |

IMMIGRATION BY RACES (FISCAL YEARS).

| Races. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. | 1921. | 1922. |
|---|---|---|---|---|---|---|---|---|---|
| African (black) | 8,447 | 5,660 | 4,576 | 7,971 | 5,706 | 5,823 | 8,174 | 9,873 | 5,248 |
| Armenian | 7,785 | 932 | 964 | 1,221 | 221 | 282 | 2,762 | 10,212 | 2,249 |
| Bohemian and Moravian | 9,928 | 1,651 | 642 | 327 | 74 | 105 | 415 | 1,743 | 3,086 |
| Bulgarian, Serb'n, Montenegrin | 15,084 | 3,506 | 3,146 | 1,134 | 150 | 205 | 1,064 | 7,700 | 1,370 |
| Chinese | 2,354 | 2,469 | 2,239 | 1,843 | 1,576 | 1,697 | 2,148 | 4,017 | 4,465 |
| Croatian and Slovenian | 37,284 | 1,942 | 791 | 305 | 33 | 23 | 493 | 11,035 | 3,783 |
| Cuban | 3,539 | 3,402 | 3,442 | 3,428 | 1,179 | 1,169 | 1,510 | 1,523 | 698 |
| Dalmat'n, Bosn'n, Herzegov'n | 5,149 | 305 | 114 | 94 | 15 | 4 | 63 | 930 | 307 |
| Dutch and Flemish | 12,566 | 6,675 | 6,443 | 5,393 | 2,200 | 2,735 | 12,730 | 12,813 | 3,749 |
| East Indian | 172 | 82 | 80 | 69 | 61 | 68 | 160 | 353 | 223 |
| English | 51,746 | 38,662 | 36,168 | 32,246 | 12,980 | 26,889 | 58,366 | 54,627 | 30,429 |
| Finnish | 12,805 | 3,472 | 5,649 | 5,900 | 1,867 | 968 | 1,510 | 4,233 | 2,506 |
| French | 18,166 | 12,636 | 19,518 | 24,405 | 6,840 | 12,598 | 27,390 | 24,122 | 13,617 |
| German | 79,871 | 20,729 | 11,555 | 9,682 | 1,992 | 1,837 | 7,338 | 24,168 | 31,218 |
| Greek | 45,881 | 15,187 | 26,792 | 25,919 | 2,602 | 813 | 13,998 | 31,828 | 3,821 |
| Hebrew | 138,051 | 26,497 | 15,108 | 17,342 | 3,672 | 3,055 | 14,292 | 119,036 | 53,524 |
| Irish | 33,898 | 23,503 | 20,636 | 17,462 | 4,657 | 7,910 | 20,784 | 39,056 | 17,191 |
| Italian (north) | 44,900 | 10,660 | 4,905 | 3,796 | 1,074 | 1,236 | 12,918 | 27,459 | 6,098 |
| Italian (south) | 251,612 | 46,557 | 33,909 | 35,154 | 5,234 | 2,137 | 84,882 | 195,037 | 35,056 |
| Japanese | 8,941 | 8,609 | 8,711 | 8,925 | 10,168 | 10,056 | 9,279 | 7,531 | 6,361 |
| Korean | 152 | 146 | 154 | 194 | 149 | 77 | 72 | 61 | 88 |
| Lithuanian | 21,584 | 2,638 | 599 | 479 | 135 | 160 | 422 | 829 | 1,602 |
| Magyar | 44,538 | 3,604 | 981 | 434 | 32 | 52 | 252 | 9,377 | 6,037 |
| Mexican | 13,089 | 10,993 | 17,198 | 16,438 | 17,602 | 28,844 | 51,042 | 29,603 | 18,246 |
| Pacific Islander | 1 | 6 | 5 | 10 | 17 | 6 | 17 | 13 | 7 |
| Polish | 122,657 | 9,065 | 4,502 | 3,109 | 668 | 732 | 2,519 | 21,146 | 6,357 |
| Portuguese | 9,647 | 4,376 | 12,208 | 10,194 | 2,319 | 1,574 | 15,174 | 18,856 | 1,867 |
| Roumanian | 24,070 | 1,200 | 953 | 522 | 155 | 89 | 898 | 5,925 | 1,520 |
| Russian | 44,957 | 4,459 | 4,858 | 3,711 | 1,513 | 1,532 | 2,378 | 2,887 | 2,486 |
| Ruthenian (Russniak) | 36,727 | 2,933 | 1,365 | 1,211 | 49 | 103 | 258 | 958 | 698 |
| Scandinavian | 36,053 | 24,263 | 19,172 | 19,596 | 8,741 | 8,261 | 16,621 | 25,812 | 16,678 |
| Scotch | 18,997 | 14,310 | 13,515 | 13,350 | 5,204 | 10,364 | 21,180 | 24,649 | 15,596 |
| Slovak | 25,189 | 2,069 | 577 | 244 | 35 | 85 | 3,824 | 35,047 | 6,001 |
| Spanish | 11,064 | 5,705 | 9,259 | 15,019 | 7,909 | 4,224 | 3,594 | 27,448 | 1,879 |
| Spanish-American | 1,544 | 1,667 | 1,881 | 2,587 | 2,231 | 3,092 | 3,934 | 3,325 | 1,446 |
| Syrian | 9,023 | 1,767 | 676 | 976 | 210 | 231 | 3,047 | 5,105 | 1,334 |
| Turkish | 2,693 | 273 | 216 | 454 | 24 | 18 | 140 | 353 | 40 |
| Welsh | 2,558 | 1,390 | 983 | 793 | 278 | 608 | 1,462 | 1,748 | 956 |
| West Indian (except Cuban) | 1,396 | 823 | 948 | 1,369 | 732 | 1,223 | 1,546 | 1,553 | 976 |
| Other peoples | 3,830 | 1,877 | 3,388 | 2,097 | 314 | 247 | 1,345 | 3,237 | 743 |
| Total | 1,218,480 | 326,700 | 298,826 | 295,403 | 110,618 | 141,132 | 430,001 | 805,228 | 309,556 |

EMIGRATION FROM THE U. S. BY CHIEF RACES, YEAR ENDED JUNE 30, 1922.

| Race or People. | No. | Race or People. | No. | Race or People. | No. |
|---|---|---|---|---|---|
| African (black) | 2,183 | Greek | 7,649 | Scandinavian (Norwegians, Danes, and Swedes) | 4,417 |
| Czech | 4,246 | Hebrew | 830 | Scotch | 1,659 |
| Bulgarian, Serbian, and Montenegrin | 5,877 | Irish | 2,485 | Slovak | 3,451 |
| Chinese | 6,146 | Italian (north) | 7,448 | Spanish | 7,838 |
| Crotian and Slovenian | 3,997 | Italian (south) | 46,562 | Spanish American | 1,791 |
| Dalmatian, Bosnian, and Herzegovinian | 549 | Japanese | 4,353 | Syrian | 1,396 |
| Dutch and Flemish | 2,157 | Lithuanian | 4,606 | Turkish | 272 |
| English | 9,668 | Magyar | 4,758 | West Indian (other than Cuban) | 820 |
| Finnish | 1,254 | Mexican | 5,770 | | |
| French | 3,464 | Polish | 31,004 | Other and total | 198,712 |
| German | 5,715 | Portuguese | 6,052 | | |
| | | Roumanian | 4,219 | | |
| | | Russian | 2,891 | | |

IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED DURING THE FISCAL YEAR ENDED JUNE 30, 1922, BY OCCUPATIONS.

| Occupation. | Immigrant. | Emigrant. |
|---|---|---|
| PROFESSIONAL. | | |
| Actors | 704 | 158 |
| Architects | 127 | 63 |
| Clergy | 1,204 | 526 |
| Editors | 66 | 23 |
| Electricians | 713 | 131 |
| Engineers (professional) | 1,103 | 379 |
| Lawyers | 131 | 57 |
| Literary and scientific persons | 392 | 154 |
| Musicians | 714 | 229 |
| Officials (Government) | 744 | 258 |
| Physicians | 458 | 157 |
| Sculptors | 164 | 111 |
| Teachers | 1,118 | 456 |
| Other professional | 2,317 | 611 |
| Total | 10,955 | 3,313 |
| SKILLED. | | |
| Bakers | 1,629 | 547 |
| Barbers and hairdressers | 1,168 | 375 |
| Blacksmiths | 880 | 302 |
| Bookbinders | 97 | 18 |
| Brewers | 35 | 21 |
| Butchers | 1,059 | 373 |
| Cabinetmakers | 160 | 146 |
| Carpenters and joiners | 3,930 | 1,184 |
| Cigarette makers | 39 | 5 |
| Cigar makers | 147 | 215 |
| Cigar packers | 7 | 7 |
| Clerks and accountants | 9,444 | 2,027 |
| Dressmakers | 3,726 | 387 |
| Engineers (locomotive, marine, and stationary) | 931 | 215 |
| Furriers and fur workers | 131 | 38 |
| Gardeners | 431 | 221 |
| Hat and cap makers | 165 | 20 |
| Iron and steel workers | 751 | 195 |
| Jewelers | 146 | 86 |
| Locksmiths | 540 | 40 |
| Machinists | 1,291 | 948 |
| Mariners | 2,845 | 1,224 |
| Masons | 1,411 | 359 |
| Mechanics (not specified) | 1,583 | 709 |
| Metal workers (other than iron, steel and tin) | 187 | 58 |
| Millers | 177 | 79 |
| Milliners | 600 | 52 |
| Miners | 2,227 | 3,257 |
| Painters and glaziers | 881 | 346 |
| Patternmakers | 54 | 12 |
| Photographers | 198 | 54 |
| Plasterers | 170 | 39 |
| Plumbers | 219 | 65 |
| Printers | 409 | 77 |
| Saddlers and harnessmakers | 96 | 21 |
| Seamstresses | 1,972 | 134 |
| Shoemakers | 2,287 | 826 |
| Stokers | 348 | 195 |
| Stonecutters | 162 | 93 |
| Tailors | 4,331 | 981 |
| Tanners and curriers | 99 | 28 |
| Textile workers (not specified) | 131 | 67 |
| Tinners | 176 | 40 |
| Tobacco workers | 20 | 1 |
| Upholsterers | 78 | 19 |
| Watch and clock makers | 290 | 34 |
| Weavers and spinners | 1,262 | 532 |
| Wheelwrights | 7 | 8 |
| Woodworkers (not specified) | 89 | 28 |
| Other skilled | 2,472 | 1,250 |
| Total | 51,588 | 17,958 |
| MISCELLANEOUS. | | |
| Agents | 611 | 207 |
| Bankers | 125 | 136 |
| Draymen, hackmen, and teamsters | 308 | 84 |
| Farm laborers | 10,529 | 2,690 |
| Farmers | 7,676 | 5,036 |
| Fishermen | 640 | 154 |
| Hotel keepers | 165 | 97 |
| Laborers | 32,726 | 100,058 |
| Manufacturers | 202 | 152 |
| Merchants and dealers | 7,278 | 4,328 |
| Servants | 44,531 | 5,212 |
| Other miscellaneous | 11,172 | 4,343 |
| Total | 115,963 | 122,497 |
| No occupation (including women and children) | 131,050 | 54,944 |
| Grand total | 309,556 | 198,712 |

## UNITED STATES NATURALIZATION STATISTICS.

| Year. (Fiscal). | Declarations Filed. | Petitions Filed. | Certificates Issued. | Year (Fiscal). | Declarations Filed. | Petitions Filed. | Certificates Issued. |
|---|---|---|---|---|---|---|---|
| 1908 | 137,229 | 44,029 | 25,963 | 1915 | 245,815 | 106,317 | 96,390 |
| 1909 | 145,794 | 43,161 | 38,372 | 1916 | 207,935 | 108,009 | 93,911 |
| 1910 | 167,226 | 55,038 | 39,206 | 1917 | 438,748 | 132,320 | 94,897 |
| 1911 | 186,157 | 73,644 | 56,257 | 1918 | 335,069 | 110,416 | *151,449 |
| 1912 | 169,142 | 95,627 | 69,965 | 1919 | 346,827 | 107,559 | *217,358 |
| 1913 | 181,632 | 95,186 | 82,017 | 1920 | 300,106 | 166,925 | 125,711 |
| 1914 | 214,016 | 123,855 | 105,439 | 1921 | 304,481 | 180,894 | 163,656 |

NO. OF PERSONS GRANTED OR DENIED CITIZENSHIP DURING FISCAL YEARS.

| | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. | 1921. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Granted | 39,206 | 56,257 | 69,965 | 82,017 | 105,439 | 96,390 | 93,911 | 94,897 | *151,449 | *217,358 | 125,711 | 163,656 |
| Denied | 7,781 | 9,017 | 9,635 | 10,891 | 13,133 | 13,691 | 11,927 | 9,544 | 12,182 | 13,119 | 15,586 | 18,981 |
| Total | 46,987 | 65,274 | 79,600 | 92,908 | 118,572 | 110,081 | 105,838 | 104,441 | 163,631 | 230,477 | 141,297 | 182 637 |

* Includes military naturalizations which in 1921, not included in table, totalled 261,936.

## DEATH RATE IN UNITED STATES REGISTRATION AREA, 1900-1920.

(By the United States Census Bureau. Exclusive of still-births.)

| Year. | Population. | Deaths. | Per 1,000 Pop. | Year. | Population. | Deaths. | Per 1,000 Pop. | Year. | Population. | Deaths. | Per 1,000 Pop. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900 | 30,765,618 | 539,939 | 17.6 | 1907 | 43,016,990 | 687,034 | 16.0 | 1914 | 65,812,424 | 898,059 | 13.6 |
| 1901 | 31,370,952 | 518,207 | 16.5 | 1908 | 46,789,913 | 691,574 | 14.8 | 1915 | 67,093,621 | 909,155 | 13.6 |
| 1902 | 32,029,815 | 508,640 | 15.9 | 1909 | 50,870,518 | 732,538 | 14.4 | 1916 | 71,339,485 | 1,001,921 | 14.0 |
| 1903 | 32,701,083 | 524,415 | 16.0 | 1910 | 53,843,896 | 805,412 | 15.0 | 1917 | 74,972,798 | 1,068,932 | 14.3 |
| 1904 | 33,345,163 | 551,354 | 16.5 | 1911 | 59,182,100 | 839,284 | 14.2 | 1918 | 81,371,863 | 1,474,841 | 18.1 |
| 1905 | 34,052,201 | 545,533 | 16.0 | 1912 | 60,358,203 | 838,251 | 13.9 | 1919 | 85,147,822 | 1,096,436 | 12.9 |
| 1906 | 41,983,419 | 658,105 | 15.7 | 1913 | 63,197,158 | 890,848 | 14.1 | 1920 | 87,486,713 | 1,142,558 | 13.1 |

### DEATHS BY AGES IN 1920.

Under 1 year, 174,710; 1 yr., 36,986; 2 yrs., 16,892; 3 yrs., 11,369; 4 yrs., 8,475, under 5 yrs., 248,432; 5 to 9 yrs., 27,051; 10 to 14 yrs., 19,450; 15 to 19 yrs., 31,259, 20 to 24 yrs., 43,892; 25 to 29 yrs., 49,753; 30 to 34 yrs., 50,050, 35 to 39 yrs., 52,093; 40 to 44 yrs., 47,609, 45 to 49 yrs., 51,959; 50 to 54 yrs., 58,072; 55 to 59 yrs., 61,678; 60 to 64 yrs., 72,780; 65 to 69 yrs., 76,564; 70 to 74 yrs., 79,584; 75 to 79 yrs., 73,995; 80 to 84 yrs., 53,474, 85 to 89 yrs., 29,403; 90 to 94 yrs., 10,376, 95 to 99 yrs., 2,459; 100 yrs. and over, 961; deaths at age unknown, 1,664.

## DEATHS IN U. S. REGISTRATION AREA IN 1920.

| Registration Area. | All Deaths. | Total White Deaths. | Total Native White Deaths. | Foreign-Born White Deaths. | Nativity Unknown Deaths. | Negro Deaths. | Japanese Deaths. | Other Colored Deaths. |
|---|---|---|---|---|---|---|---|---|
| REGISTRATION STATES. | | | | | | | | |
| California | 47,196 | 44,223 | 30,593 | 12,752 | 878 | 779 | 1,006 | 1,188 |
| Colorado | 13,717 | 13,315 | 10,394 | 2,485 | 436 | 303 | 46 | 53 |
| Connecticut | 18,916 | 18,414 | 12,739 | 5,523 | 152 | 491 | 2 | 9 |
| Delaware | 3,265 | 2,593 | 2,240 | 334 | 19 | 668 | 1 | 3 |
| Florida | 12,720 | 7,581 | 6,556 | 713 | 312 | 5,134 | ..... | 5 |
| Illinois | 82,296 | 78,299 | 55,080 | 22,248 | 971 | 3,925 | 4 | 68 |
| Indiana | 39,430 | 37,623 | 33,776 | 3,546 | 301 | 1,802 | 1 | 4 |
| Kansas | 20,267 | 19,038 | 16,141 | 2,515 | 382 | 1,189 | 1 | 39 |
| Kentucky | 28,564 | 24,004 | 22,656 | 1,015 | 333 | 4,560 | ..... | ..... |
| Louisiana | 21,553 | 10,805 | 9,436 | 1,074 | 295 | 10,722 | 4 | 22 |
| Maine | 11,872 | 11,833 | 9,915 | 1,797 | 121 | 31 | 1 | 7 |
| Maryland | 21,362 | 16,152 | 13,892 | 2,107 | 153 | 5,198 | 3 | 9 |
| Massachusetts | 53,498 | 52,438 | 35,447 | 16,755 | 236 | 993 | 1 | 66 |
| Michigan | 51,549 | 49,834 | 35,696 | 13,320 | 818 | 1,529 | 1 | 185 |
| Minnesota | 25,722 | 25,309 | 15,467 | 9,652 | 190 | 188 | 1 | 224 |
| Mississippi | 22,040 | 7,923 | 7,515 | 139 | 269 | 14,092 | ..... | 25 |
| Missouri | 42,638 | 38,862 | 33,372 | 4,497 | 993 | 3,761 | 2 | 13 |
| Montana | 5,289 | 4,968 | 3,517 | 1,320 | 131 | 41 | 9 | 271 |
| Nebraska | 12,976 | 12,579 | 9,402 | 2,975 | 202 | 228 | 12 | 157 |
| New Hampshire | 6,764 | 6,753 | 5,168 | 1,374 | 201 | 11 | ..... | ..... |
| New Jersey | 41,326 | 38,851 | 27,254 | 11,329 | 268 | 2,460 | 2 | 13 |
| New York | 144,558 | 140,374 | 94,466 | 45,100 | 808 | 3,938 | 32 | 214 |
| North Carolina | 32,654 | 20,189 | 19,624 | 134 | 431 | 12,315 | ..... | 150 |
| Ohio | 74,341 | 70,313 | 56,938 | 12,423 | 952 | 4,010 | 1 | 17 |
| Oregon | 9,246 | 8,923 | 6,894 | 1,821 | 208 | 33 | 58 | 232 |
| Pennsylvania | 120,902 | 114,800 | 90,378 | 23,480 | 942 | 6,065 | 3 | 34 |
| Rhode Island | 8,696 | 8,422 | 5,517 | 2,846 | 59 | 270 | ..... | 4 |
| South Carolina | 23,767 | 9,425 | 9,149 | 169 | 107 | 14,338 | ..... | 4 |
| Tennessee | 28,396 | 20,226 | 19,299 | 394 | 533 | 8,169 | ..... | 1 |
| Utah | 5,198 | 5,065 | 3,614 | 1,368 | 83 | 29 | 42 | 62 |
| Vermont | 5,536 | 5,530 | 4,586 | 889 | 55 | 6 | ..... | ..... |
| Virginia | 30,514 | 18,353 | 17,647 | 513 | 193 | 12,130 | 8 | 23 |
| Washington | 15,164 | 14,330 | 10,110 | 3,736 | 484 | 143 | 266 | 425 |
| Wisconsin | 29,675 | 29,349 | 18,917 | 10 161 | 271 | 116 | ..... | 210 |
| Tot l deaths in registration area | 1,142,558 | 1,007,117 | 769,822 | 223,913 | 13,382 | 130,147 | 1,511 | 3,783 |

### DEATHS BY MONTHS IN 1920.

Jan., 111,919; Feb., 167,164; March, 116,379; April, 93,474; May, 91,189; June, 79,924; July, 77,442; Aug., 77,809; Sept., 76,821; Oct., 80,452; Nov., 82,223; Dec., 87,762.

### DEATHS FROM CHIEF CAUSES IN 1920.

Organic heart diseases, 124,143; pneumonia (all forms), 120,108; tuberculosis of the lungs, 88,195; acute nephritis and Bright's disease, 78,192; cancer and other malignant tumors, 72,931; cerebral hemorrhage and brain softening, 71,618; violent deaths (excluding suicide), 68,697; influenza, 62,097; congenital debility and malformations, 61,080; diarrhoea and enteritis (under 2 yrs.), 38,514; unknown or ill defined diseases, 15,505; diabetes, 14,062; diphtheria and croup, 13,395; appendicitis and typhlitis, 11,702; bronchitis, 11,609; puerperal (other than septicemia), 10,976; whooping cough, 10,968; respiratory deseases (other than pneumonia), 10,120 hernia, intestinal obstruction, 9,314; suicide, 8,959; measles, 7,712; tuberculosis (other than pulm. and meningeal), 6,826; typhoid fever, 6,805; cirrhosis of the liver, 6,241; puerperal septicemia, 5,800; meningitis, 5,281; tuberculous meningitis, 4,895; rheumatism, 4,287; scarlet fever, 4,004; malaria, 3,136; erysipelas, 2,721; small pox, 508

### DEATHS IN CHIEF U. S. CITIES, 1921.

| City. | Population. | Total Deaths. | Death Rate. | Deaths Under 1 Year. | Provisional Infant Mortality Rate, 1921. | Infant Mortality Rate, 1920. | Mortality Data for Calendar Year 1920. | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Total Deaths. | Death Rate. | Deaths Under 1 Year. |
| Total | 27,433,479 | 327,550 | 12.0 | 48,067 | ..... | ..... | 372,629 | 13.8 | 56,818 |
| Baltimore, Md. | 750,864 | 10,361 | 13.8 | 1,598 | 87 | 106 | 11,356 | 15.4 | 1,961 |
| Boston, Mass. | 757,634 | 10,095 | 13.4 | 1,483 | 76 | 101 | 11,604 | 15.4 | 1,966 |
| Buffalo, N. Y. | 519,608 | 6,199 | 12.0 | 1,212 | 92 | 103 | 7,475 | 14.6 | 1,371 |
| Chicago Ill. | 2,780,655 | 30,763 | 11.1 | 5,061 | ..... | ..... | 34,848 | 12.8 | 5,675 |
| Cincinnati, Ohio | 403,418 | 5,691 | 14.1 | 602 | 77 | 82 | 6,073 | 15.1 | 644 |
| Cleveland, Ohio | 831,138 | 8,681 | 10.5 | 1,463 | 73 | 87 | 9,985 | 12.4 | 1,692 |
| Columbus, Ohio | 245,358 | 3,158 | 12.9 | 360 | 73 | 96 | 3,546 | 14.8 | 453 |
| Denver, Col. | 263,152 | 3,696 | 14.1 | 392 | ..... | ..... | 4,454 | 17.3 | 463 |
| Detroit, Mich. | 1,070,450 | 10,356 | 9.7 | 2,303 | 85 | 104 | 13,700 | 13.4 | 2,885 |
| Indianapolis, Ind. | 325,632 | 4,085 | 12.6 | 523 | 77 | 91 | 4,636 | 14.6 | 623 |
| Jersey City, N. J. | 302,788 | 3,727 | 12.3 | 673 | 82 | ..... | 4,221 | 14.1 | 758 |
| Kansas City, Mo. | 336,157 | 4,620 | 13.8 | 626 | ..... | ..... | 5,279 | 16.1 | 765 |
| Milwaukee Wis. | 468,386 | 4,535 | 9.7 | 870 | 82 | 94 | 5,415 | 11.7 | 990 |
| Minneapolis, Minn. | 392,815 | 4,288 | 10.9 | 524 | 55 | 65 | 4,713 | 12.3 | 600 |
| New Orleans, La. | 394,657 | 6,444 | 16.4 | 811 | ..... | ..... | 6,869 | 17.6 | 785 |
| New York, N. Y. | 5,751,867 | 64,067 | 11.2 | 9,528 | 71 | 85 | 73,393 | 13.0 | 11,319 |
| Newark, N. J. | 424,885 | 4 746 | 11.2 | 836 | 71 | ..... | 5,372 | 12.9 | 993 |
| Philadelphia, Pa. | 1,866,212 | 23,623 | 12.7 | 3,346 | 76 | 91 | 26,511 | 14.4 | 3,956 |
| Pittsburgh, Pa. | 602,452 | 8,335 | 13.9 | 1,443 | 89 | 111 | 9,678 | 16.4 | 1,641 |
| Portland, Ore. | 264 859 | 2,858 | 10.8 | 250 | 47 | 60 | 3,164 | 12.1 | 310 |
| Rochester, N. Y. | 305,329 | 3,456 | 11.4 | 530 | 78 | 84 | 3,765 | 12.6 | 567 |
| St. Louis, Mo. | 786 164 | 9,414 | 12.0 | 886 | ..... | ..... | 10,931 | 14.1 | 1,153 |
| St. Paul, Minn. | 237,781 | 2,496 | 10.5 | 260 | 47 | 73 | 2,958 | 12.5 | 378 |
| San Francisco, Cal. | 520 546 | 7,019 | 13.5 | 429 | 48 | 62 | 7,259 | 14.2 | 558 |
| Seattle, Wash. | 327,227 | 2,843 | 8.7 | 291 | 47 | 57 | 3,401 | 10.7 | 349 |
| Toledo, Ohio | 253,696 | 3,041 | 12.0 | 406 | 76 | 89 | 3,413 | 13.8 | 473 |
| Washington, D. C. | 454,026 | 6,052 | 13.4 | 757 | 83 | 91 | 6,463 | 14.6 | 803 |

## BIRTH RATE IN U. S. BIRTH REGISTRATION AREA, 1915-1920.

(By the United States Census Bureau.)

| YEAR. | Population. | Births. | Per 1,000 Pop. | YEAR. | Population. | Births. | Per 1,000 Pop. | YEAR. | Population. | Births. | Per 1,000 Pop. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915... | 30,936,179 | 776,304 | 25.1 | 1917... | 54,771,416 | 1,353,792 | 24.7 | 1919... | 61,483,423 | 1,373,438 | 22.3 |
| 1916... | 32,788,670 | 818,983 | 25.0 | 1918... | 55,515,241 | 1,363,649 | 24.6 | 1920... | 63,659.441 | 1,508,874 | 23.7 |

Births are exclusive of still births. The birth registration area was established in 1915.

The birth rate in 1920 among the general population in the birth registration area was, as shown in the above table, 23.7 per 1,000 population. The white birth rate was 23.5; colored, 27.0. The Negro birth rate in 1920 was 26.3 per 1,000 Negro population; the death rate, 18.4 per 1,000 negro population.

The Japanese birth rate in 1920 in the birth registration area of the United States was 65.0 per 1,000 Japanese population; the death rate was 13.9 per 1,000 Japanese population.

"It is not to be expected," says the Census Bureau, "that this rate of natural increase will be maintained year after year by the Japanese in this country. At present he age constitution of the Japanese in this country is undoubtedly most favorable for a very rapid natural increase of population, but as the years go by and our Japanese grow older this rate will undoubtedly decrease, together with the birth rate, till the latter approximates the birth rate of Japan itself, where in 1917 the official rate is given as 32.4."

## ESTIMATED POPULATION, NUMBER OF BIRTHS AND DEATHS (EXCLUSIVE OF STILL-BIRTHS) BIRTH AND DEATH RATES PER 1,000 POPULATION, DEATHS UNDER 1 YEAR OF AGE, AND INFANT MORTALITY RATES IN THE BIRTH REGISTRATION AREA, 1920.

| AREA. | Population Estimated as of July 1, 1920. | Births (Exclusive of Still-births.) | Deaths (Exclusive of Still-births.) | Rate Per 1,000 Population. | | Births Per 100 Deaths. | Deaths of Infants Under 1 Year of Age. | |
|---|---|---|---|---|---|---|---|---|
| | | | | Births. | Deaths. | | Total. | Per 1,000 Births. |
| SUMMARY. | | | | | | | | |
| The registration area (total).... | 63,659,441 | 1,508,874 | 836,134 | 23.7 | 13.1 | 180 | 129,531 | 86 |
| White..... | 59,468,918 | 1,395,523 | 759,014 | 23.5 | 12.8 | 184 | 114,603 | 82 |
| Colored..... | 4,190,523 | 113,351 | 77,120 | 27.0 | 18.4 | 147 | 14,928 | 132 |
| Cities in registration area (total) | 32,006,328 | 763,209 | 448,657 | 23.8 | 14.0 | 170 | 69,474 | 91 |
| White..... | 30,422,053 | 725,136 | 413,686 | 23.8 | 13.5 | 175 | 63,440 | 87 |
| Colored..... | 1,584,275 | 38,073 | 34,971 | 24.0 | 22.1 | 109 | 6,034 | 158 |
| Rural part registr't'n area (tot'l) | 31,653,113 | 745,665 | 387,477 | 23.6 | 12.2 | 192 | 60,057 | 81 |
| White..... | 29,046,865 | 670,387 | 345,328 | 23.1 | 11.9 | 194 | 51,163 | 76 |
| Colored..... | 2,606 248 | 75,278 | 42,149 | 28.9 | 16.2 | 179 | 8,894 | 118 |

## BIRTH AND DEATH RATES, 1920, BY STATES.

(Rates are per 1,000 population.)

| AREA. | Birth Rate. | Death Rate. | AREA. | Birth Rate. | Death Rate. | AREA. | Birth Rate. | Death Rate. |
|---|---|---|---|---|---|---|---|---|
| The birth registration area (total)..... | 23.7 | 13.1 | Maryland (total)..... | 24.8 | 14.7 | Oregon (total)..... | 18.9 | 11.7 |
| White..... | 23.5 | 12.8 | White..... | 24.3 | 13.3 | White..... | 18.8 | 11.5 |
| Colored..... | 27.0 | 18.4 | Colored..... | 27.5 | 21.2 | Colored..... | 27.1 | 23.0 |
| REGISTRATION STATES. | | | Massachusetts (to al)... | 23.6 | 13.8 | Pennsylvania (total)... | 25.1 | 13.8 |
| California (total)..... | 19.3 | 13.6 | White..... | 23.6 | 13.7 | White..... | 25.2 | 13.5 |
| White..... | 18.3 | 13.3 | Colored..... | 26.3 | 21.5 | Colored..... | 22.3 | 20.9 |
| Colored..... | 39.3 | 18.1 | Michigan (total)..... | 25.0 | 13.9 | Rhode Island (total)... | .... | 14.3 |
| Connecticut (total).... | 24.5 | 13.6 | White..... | 25.1 | 13.7 | White..... | .... | 14.1 |
| White..... | 24.4 | 13.4 | Colored..... | 20.9 | 24.9 | Colored..... | .... | 26.3 |
| Colored..... | 25.4 | 22.6 | Minnesota (total)..... | 23.3 | 10.7 | South Carolina (total).. | 28.2 | 14.0 |
| Dist. of Col. (total).... | 19.9 | 14.6 | White..... | 23.3 | 10.6 | White..... | 28.8 | 11.4 |
| White..... | 19.1 | 12.6 | Colored..... | 24.3 | 22.6 | Colored..... | 27.7 | 16.5 |
| Colored..... | 22.5 | 20.6 | Nebraska (total)..... | 23.7 | 10.0 | Utah (total)..... | 31.2 | 11.5 |
| Indiana (total)..... | 22.0 | 13.4 | White..... | 23.8 | 9.8 | White..... | 31.1 | 11.4 |
| White..... | 22.1 | 13.2 | Colored..... | 21.0 | 22.8 | Colored..... | 37.2 | 17.7 |
| Colored..... | 18.3 | 21.9 | New Hampshire (total). | 22.4 | 15.2 | Vermont (total)..... | 21.0 | 15.7 |
| Kansas (total)..... | 22.3 | 11.4 | White..... | 22.4 | 15.2 | White..... | 21.1 | 15.7 |
| White..... | 22.5 | 11.1 | Colored..... | 10.6 | 14.5 | Colored..... | 3.6 | 10.8 |
| Colored..... | 17.1 | 20.3 | New York (total)..... | 22.5 | 13.8 | Virginia (total)..... | 28.3 | 13.1 |
| Kentucky (total)..... | 26.0 | 11.8 | White..... | 22.5 | 13.7 | White..... | 27.8 | 11.3 |
| White..... | 26.8 | 11.0 | Colored..... | 23.1 | 19.3 | Colored..... | 29.7 | 17.6 |
| Colored..... | 17.6 | 19.4 | North Carolina (total).. | 31.6 | 12.7 | Washington (tota)..... | 19.8 | 11.1 |
| Maine (total)..... | 22.5 | 15.4 | White..... | 31.7 | 11.2 | White..... | 19.2 | 10.8 |
| White..... | 22.6 | 15.4 | Colored..... | 31.3 | 16.0 | Colored..... | 39.5 | 22.5 |
| Colored..... | 6.9 | 16.8 | Ohio (total)..... | 21.3 | 12.8 | Wisconsin (total)..... | 22.2 | 11.2 |
| | | | White..... | 21.3 | 12.5 | White..... | 22.2 | 11.1 |
| | | | Colored..... | 20.4 | 21.0 | Colored..... | 25.1 | 21.4 |

Rhode Island was dropped from the death registration area in 1919.

In 1920, in the registration area, 82 white babies and 132 colored babies out of 1,000 of each color born died n their first year of life. In New York City the number dying in the first year of life was 83 white and 157 colored. The greatest white infant mortality was in Richmond Borough; the greatest colored, in the Bronx.

## ILLEGITIMATE BIRTHS.

The percentage of illegitimate births in 1920 in the United States was 2.27 per 100 births; percentage of white illegitimates, 1.42; percentage of native white illegitimates, 1.67; percentage of illegitimate births by foreign mothers, .052; percentage of Negro illegitimate births, 12.56.

The average number of children ever born to mothers of 1920 was 3.3; the average number of these children living was 2.9. Italian, Austrian and Hungarian mothers of 1920 had an average of 4.0 to 4.5 children each, of which 3.4 to 3.9 were still living.

The largest number of children are born to miners, metal mill workers, guards, watchmen, janitors and sextons; the smallest number to soldiers, sailors, marines, bookkeepers, policemen, designers, technical engineers, chemists, actors, architects, artists, lawyers, doctors, druggists, teachers, authors, reporters, editors, bankers and brokers, chauffeurs and electricians.

One birth in every 100 is of twins or triplets, etc.

## BIRTH RATES AMONG ALIEN WHITE MOTHERS IN U. S.

(Per 1,000 enumerated female population, by country of birth in the registration area and each registration State, 1920).

(Rates are shown in *italics* when the number of births is less than 5.)

| AREA. | COUNTRY OF BIRTH. | | | | | | |
|---|---|---|---|---|---|---|---|
| | United States. | Canada | Denmark, Norway, Sweden. | England, Sco and, Wales | Ireland. | Italy. | Other Foreign Countries. |
| The registration area..... | 42.8 | 47.3 | 39.4 | 38.2 | 41.5 | 160.0 | 85.2 |
| California..... | 34.7 | 25.8 | 33.0 | 33.8 | 34.5 | 92.1 | 73.7 |
| Connecticut..... | 31.2 | 55.8 | 44.9 | 36.7 | 39.0 | 177.2 | 117.2 |
| District of Columbia..... | 33.9 | 23.4 | 43.0 | 32.9 | 31.2 | 137.9 | 68.2 |
| Indiana..... | 43.8 | 28.3 | 34.9 | 41.6 | 29.2 | 137.8 | 83.0 |
| Kansas..... | 46.4 | 15.5 | 20.6 | 18.8 | 14.1 | 96.1 | 58.8 |
| Kentucky..... | 55.1 | 12.8 | 44.6 | 21.3 | 13.1 | 124.3 | 29.6 |
| Maine..... | 41.3 | 72.1 | 41.9 | 42.7 | 48.9 | 231.2 | 103.9 |
| Maryland..... | 47.1 | 44.8 | 52.8 | 43.3 | 28.2 | 160.0 | 72.9 |
| Massachusetts..... | 33.2 | 54.7 | 42.7 | 42.0 | 50.1 | 175.7 | 116.9 |
| Michigan..... | 47.7 | 41.2 | 37.5 | 52.3 | 35.5 | 203.2 | 98.8 |
| Minnesota..... | 48.5 | 29.4 | 41.9 | 43.9 | 26.1 | 166.3 | 63.5 |
| Nebraska..... | 49.8 | 12.0 | 33.3 | 25.2 | 21.0 | 180.4 | 52.8 |
| New Hampshire..... | 37.0 | 71.4 | 34.9 | 34.6 | 34.5 | 176.4 | 130.6 |
| New York..... | 33.5 | 39.0 | 41.5 | 36.0 | 42.6 | 150.8 | 72.9 |
| North Carolina..... | 64.2 | 47.5 | 78.4 | 48.2 | 33.1 | 52.3 | 92.0 |
| Ohio..... | 39.9 | 32.7 | 41.3 | 35.8 | 31.4 | 178.0 | 82.5 |
| Oregon..... | 39.5 | 33.3 | 37.6 | 41.5 | 27.0 | 112.5 | 51.6 |
| Pennsylvania..... | 42.0 | 40.5 | 40.5 | 36.0 | 39.2 | 188.8 | 118.1 |
| South Carolina..... | 59.1 | 51.7 | *30.8* | 70.4 | *19.1* | 97.2 | 72.5 |
| Utah..... | 64.5 | 57.3 | 46.4 | 44.5 | 42.4 | 151.5 | 110.9 |
| Vermont..... | 39.1 | 61.1 | 35.0 | 43.7 | 24.8 | 107.8 | 144.4 |
| Virginia..... | 56.7 | 46.3 | 54.7 | 47.6 | 34.9 | 124.2 | 90.6 |
| Washington..... | 41.0 | 36.6 | 43.4 | 40.3 | 40.8 | 109.0 | 57.3 |
| Wisconsin..... | 45.4 | 25.7 | 32.8 | 28.7 | 19.4 | 191.2 | 51.1 |

*Birth rates of colored per 1,000 enumerated female population, in the registration area, 1920*—Negro, 52.8; Indian, 48.3; Japanese, 188.5; Chinese, 116.4; other colored, 126.8.

## NATIONAL GEOGRAPHIC SOCIETY, WASHINGTON, D. C.

(By the President, Gilbert Grosvenor.)

FOUNDED in 1899, "for the increase and diffusion of geographic knowledge," the National Geographic Society has filled such an important role in the encouragement of science and its application to the needs of mankind that its membership now exceeds 750,000. In the promotion of its work of increasing geographic knowledge the society pioneered in the study of Alaska and the encouragement of the opening up of that territory; supported Peary in his Polar work; investigated the problems of vulcanism and seismology at Mont Pelee, Messina and in Alaska; explored the ruins of the Inca country of the high Andes, unearthing its holy city, Machu Picchu, and the staircase farms of the Incas, which far eclipse the Hanging Gardens of Babylon; studied the history of the Ice Age, as exemplified in the glaciers of Alaska; discovered the Valley of Ten Thousand Smokes. It is now engaged in a series of excavations in Chaco Canyon, with a view to reconstructing, as far as possible, the primitive history of the pre-Columbian people of that region.

In its recognition of the services to mankind of those who labor to push back the horizons of geography, the society has awarded the Hubbard Gold Medal to Peary for his furthest North in 1906; to Amundsen for achieving the Northwest Passage and locating the North Magnetic Pole; to Gilbert for his physiographic researches; to Shackleton for his Antarctic explorations; and to Stefansson for his discovery of a hundred thousand square miles of territory in the Canadian Arctic. It also awarded special gold medals to Peary and Amundsen for their attainment of the North and South Poles respectively; and to Gen. George W. Goethals in recognition of his service to the world in the building of the Panama Canal. In its work of diffusing geographic knowledge the society relies principally on its leading publication, the National Geographic Magazine. The magazine contains some 1,400 pages of text and illustrations in the twelve numbers of each year. Some of these numbers are monographic, and have become the recognized handbook on the subjects with which they deal—like Nelson's "Larger and Smaller Mammals of North America," McCandless and Grosvenor's "Flag Number," Fuertes's "Dog Number," and Wyllie's "Romance of Military Insignia."

Through the columns of more than 500 leading American daily newspapers and the large plate matter syndicates the society's geographic news bulletins are reaching nto more than half the homes of the United States. These bulletins are furnished gratis to the press, and through them the society is able to interpret the geographic and historical backgrounds that give significance to the news despatches from every corner of the globe. The United States Bureau of Education, in its promotion of the intelligent study of current events in the schools of the country, has co-operated with the society in placing illustrated editions of these bulletins in the hands of the teachers of the United States. Many State Superintendents have requested that they be furnished to every teacher in their jurisdiction.

A further educational activity undertaken by the society in recent months is its Pictorial Geography. By means of a continuing series of loose-leaf geographic text and pictures, prepared in recognition of the fact that the average map and the technical phraseology of geographies mean little to children, the society is aiming to bring them mental pictures of busy places, living peoples and beautiful landscapes and to portray to them nature's moods and processes in terms they understand and forms they enjoy. Another activity of the society in the diffusion of geographic knowledge is the publication of books, maps and monographs on subjects of first interest. Its map of the war zone in France was readily used by American officers at home and abroad; and the War Department has adopted its map of Mexico as the base for the army's military maps of that turbulent country. It has recently published new maps of Europe, Africa, South America, and of the world. In 1917 the society appropriated $20,000 and in 1920 $13,500 out of its reserve fund, the money necessary to save from destruction the privately owned "Big Trees" in Sequoia National Park, California, and had the ground they occupy deeded in perpetuity to the United States for the benefit of posterity. More recently the society and a group of its members added a fund of nearly $100,000 for the preservation of another large group of these big trees.

For a review of the society's scientific work in the past year reference is made to the article on "Scientific Progress in 1921," elsewhere in this ALMANAC. The officers and editorial staff are: President and Editor, Gilbert Grosvenor; Vice-President, Henry White; Vice-Director and Associate Editor, John Oliver La Gorce; Secretary, O. P. Austin; Associate Secretary, George W. Hutchison; Treasurer, John Joy Edson; Assistant Editors, William J. Showalter and Ralph A. Graves; Chief of Illustrations Division, Franklin L. Fisher; Chief of School Service, J. R. Hildebrand.

## CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING.

DURING the fifteen years of its existence the Carnegie Foundation has distributed (these data are from the annual report for the year ending June 30, 1922) $9,929,066 in retiring allowances and pensions to 1,000 persons. Of this sum $625,000 has been paid to former teachers of Harvard, $548,000 to former teachers of Yale, and $464,000 to former teachers of Columbia University. Sixteen other universities have each received between one and two hundred thousand dollars. The remainder has gone to eighty different institutions. There are now operative 511 retiring allowances and 98 widows' pensions, entailing an annual expenditure of $1,008,000. The average retiring allowance paid is $1,649.

The total resources of the Carnegie Foundation amount to $26,223,000, of which $15,192,000 belong to the permanent general endowment; $8,535,000 to a reserve fund to be spent in the retirement, during the next sixty years, of teachers now in associated institutions; $1,250,000 to the endowment of the Division of Educational Enquiry, and $612,000 to a reserve fund to be expended in aiding universities and colleges to adopt the new plan of contractual annuities.

The Teachers' Insurance and Annuity Association of America, which was established by the foundation through a gift of $1,000,000 to provide insurance and annuity protection for college teachers without overhead charges, has written 1,095 insurance policies covering $5,578,000 of insurance and 947 annuity contracts providing $1,165,000 annual income at retirement.

## RUSSELL SAGE FOUNDATION.

(Official statement for The Almanac, as of August 1, 1922.)

The Russell Sage Foundation, 130 East 22d Street, New York City, was organized in 1907 for the improvement of social and living conditions in the United States. The endowment, about $15,000,000, was given by Mrs. Russell Sage in memory of her husband. The Foundation is primarily an educational institution. It does not attempt to relieve individual or family need or to duplicate the work of existing social agencies. It studies and interprets facts with regard to social conditions and methods of social work, makes this information available by publications, conferences and other means of public education.

The work of the Foundation is carried on through a central office, through nine departments and through a limited number of subsidies to other organizations. The departments of the Foundation have been developed to meet the particu.ar social needs and opportunities or to give permanent form to investigations or undertakings begun experimentally.

The Department of Recreation has worked in cooperation with the National Community Center Association, the Recreation Committee of New York City, the Boy Scouts, Girl Scouts, Camp Fire Girls, National University Extension Association and the New York Drama League to carry out its purpose, which is that of aiding in constructive social organization of leisure time. Assistance in promoting better motion pictures, both for commercial purposes and for school, club and army and navy service has been continued.

Advisory work has been given in many States, in Canada, China, India, Japan, Cuba, Russia, Sweden, Turkey, Serbia, Uruguay and Argentina.

A free public library containing about 20,000 books and 56,000 pamphlets on social problems, is maintained by the Foundation.

The trustees of the Foundation are: Robert W. de Forest, President; Mrs. William B. Rice, Vice President; Charles D. Norton, Treasurer; John H. Finley, Louisa Lee Schuyler, Mrs. Finley J. Shepard, John M. Glenn, who is also General Director of the Foundation, Frederick A. Delano, and Dwight Morrow.

## NATIONAL SHORTHAND CONTEST.

(New London, Conn., Aug. 24, 1922.)

HELD under the auspices of the National Shorthand Reporters' Association, John R. Gregg, President.

To qualify for the World's Championship, the writers must qualify with at least 95% accuracy in the three individual speeds—200 words a minute, solid matter; 240 a minute, judge's charge to the jury, and 280 a minute, court testimony. In the contest held in 1922 only six writers qualified for the championship, which trophy was won by Nathan Behrin. Charles Lee Swem, former official reporter and personal stenographer to President Wilson, and Albert Schneider won second and third places respectively.

| NAMES OF CONTESTANTS. | Errors at 200. | Errors at 240. | Errors at 280. | Total Errors. | Average Accuracy. |
|---|---|---|---|---|---|
| Nathan Behrin | 4 | 8 | 7 | 19 | 99.84 |
| Charles Lee Swem | 16 | 19 | 12 | 47 | 98.65 |
| Albert Schneider | 12 | 20 | 30 | 62 | 98.36 |
| John J. Daly | 3 | 25 | 38 | 66 | 98.17 |
| Solomon Powsner | 19 | 30 | 26 | 75 | 97.92 |
| Neale Ransom | 50 | 42 | 19 | 111 | 96.92 |

Speed certificates were awarded to all writers who qualified on any of the speeds with less than 5% of errors; forty-nine certificates were awarded as follows: To writers of the Gregg system, 24; to writers of the Pitmanic systems, 25.

## JOHN FRITZ MEDAL WINNERS.

THE John Fritz Medal Board of Award—Societies represented: Amer. Soc. of Civ. Engineers, Amer. Inst. of Mining and Metallurgical Engineers, Amer. Soc. of Mech. Engineers, Amer. Inst. of Electrical Engineers. Office, 29 West 39th St., New York.

The first award of the medal was made to John Fritz at a dinner given to him on his eightieth birthday, Aug. 21, 1902. The other awards have been as follows: 1905, to Lord Kelvin, for work in cable telegraphy; 1906, to George Westinghouse for invention and development of airbrake; 1907, to Alexander Graham Bell, for invention and introduction of telephone; 1908, to Thomas Alva Edison, for invention duplex and quadruplex telegraph, phonograph, development of a commercially practical incandescent lamp, the development of a complete system of electric lighting, including dynamos, regulating devices, underground system protective devices and meters; 1909, to Charles T. Porter, for advancing knowledge of steam engineering and improvements in engine construction; 1910, to Alfred Noble, for notable achievements as a civil engineer; 1911, to Sir William H. White, for notable achievements in naval architecture; 1912, to Robert W. Hunt, for contributions to early development of Bessemer steel process; 1913, no award; 1914, to Prof. John E. Sweet, for achievements in machine design, and pioneer work in construction and development of high-speed steam engine; 1915, to Dr. James Douglas, for achievements in mining metallurgy, education, and industrial welfare; 1916, to Dr. Elihu Thomson, for achievement in electrical invention, in electrical engineering and industrial development, and in scientific research; 1917, to Dr. Henry M. Howe, for his investigations in metallurgy; 1918, to J. Waldo Smith, for providing New York with water; 1918, to Gen. George W. Goethals, as builder of the Panama Canal; 1920, to Orville Wright, for development of the airplane; 1921, to Sir Robert Hadfield, for invention of manganese steel; 1922, to Eugene Schneider, for development of ordnance (75-m. gun); 1923, to Guglielmo Marconi, for the invention of wireless telegraphy.

## EDISON GOLD MEDAL WINNERS.

1909, to Elihu Thomson; 1910, to Frank J. Sprague; 1911, to George Westinghouse; 1912, to William Stanley; 1913, to Charles F. Brush; 1914, to Alexander Graham Bell; 1916, to Nikola Tesla; 1917, to John J. Carty; 1918 to Benjamin G. Lamme; 1919, to W. L. R. Emmet; 1920 to Michael I. Pupin; 1921, to Cummings C. Chesney.

## METROPOLITAN MUSEUM OF ART.

THE Metropolitan Museum of Art, in Central Park, opposite East 80th-85th Streets, New York City, was incorporated April 13, 1870, "for the purpose of establishing and maintaining . . . a museum and a library of art, of encouraging and developing the study of the fine arts, and the application of arts to manufacture and practical life, of advancing the general knowledge of kindred subjects, and, to that end, of furnishing popular instruction." After one-half century of growth, it has to-day, through bequests, gifts, and purchases, collections of incalculable value, embracing both fine and decorative arts. They comprise objects in almost every material—marble, stone, wood, pottery, porcelain, glass, metals, lace textiles, &c.—and embody man's attempts throughout the ages to achieve his ideals of beauty. In date they range from 3000 B. C. to the twentieth century and represent the ancient world—Assyria, Babylonia, Cyprus, Egypt, Greece, and Rome; the Orient, including China, Japan, Corea, India, Persia, and Asia Minor; Europe from the Early Christian and Byzantine Art through the Romanesque, Gothic, Renaissance, and later periods; and our own country.

### TOMBS AND ANTIQUITIES.

These collections are housed in a building erected by the city, in Central Park, affording 280,000 square feet of exhibition floor space. Among the more noteworthy individual objects or collections are the mastaba tomb erected about 4,500 years ago in the Egyptian cemetery at Sakkara for a Theban dignitary named Perneb and re-erected here in its original form, with its painted scenes in low relief still preserved; six large alabaster reliefs from the palace in Nimrod of Ashur-nasir-pal, who reigned over Assyria from 885 to 860 B. C.; an Etruscan bronze chariot of the sixth century B. C., the only complete ancient bronze chariot known; the Cesnola antiquities from Cyprus; a group of Roman fresco paintings from Boscoreale, especially those on the walls of a reconstructed cubiculum (bedchamber), and a gathering of ancient glass, "one of the richest and most important in the world." In the accumulations of Near Eastern Art of special interest are the domed room from a Jain temple in India, recently installed, the gift of Robert W. and Lockwood de Forest, which represents the wood carving of India and is supplemented by an extensive collection of Indian and Thibetan jewelry; the Indian miniatures in the Alexander Smith Cochran Collection, and some remarkable examples of early Indian stone carving; the Persian manuscripts and miniatures in the Cochran Collection; twenty-four manuscripts and a number of single sheets represent such masters of decoration as Behzad and Mirak, and some of the greatest names in Persian caligraphy from the fifteenth to the eighteenth century. The Far Eastern objects include the well-known Benjamin Altman gathering of Chinese porcelains and the Heber R. Bishop assemblage of jades.

The paintings, over twelve hundred in number, represent the Italian, Spanish, German, Dutch, Flemish, French, English and American schools. There is an unusual showing of the works by Rembrandt, twenty in all, thirteen received in the bequest of the late Benjamin Altman. Through the gift of J. Pierpont Morgan the Museum possesses a Raphael, the so-called Colonna Altarpiece, a Virgin and Child Enthroned with Saints. Groups of paintings kept together by the conditions under which they were received are: the George A. Hearn Collection, principally American in character; the Benjamin Altman Collection, strongest in its Dutch paintings, but including four Memlings, a Durer, a Giorgione, a Fra Angelico, two Velasquezes, and other works of rare excellence; the Michael Dreicer Collection of Italian and northern primitives, in which such artists as Memling, Roger van der Weyden, Schongauer, and Piero di Cosimo are represented; and the Catherine Lorillard Wolfe Collection, consisting largely of works by French artists of the early and middle years of the nineteenth century.

Others of special note are the William H. Riggs Collection of Arms and Armor, which in its scope and quality ranks with European national collections, and, with the Ellis and Dino Collections, gives an opportunity to study the development of armor from the fifteenth to the eighteenth century; the Crosby Brown gathering of 3,600 specimens, including representative instruments of all nations, among them the earlier of the two existing pianos by Bartolommeo di Francesco Cristofori, the inventor of the pianoforte; the James F. Ballard Collection of rugs, Turkish, Persian, Indian, and Spanish, of the sixteenth and seventeenth centuries; and the William H. Huntington assemblage of portraits of Washington, Franklin, and Lafayette in all materials.

### THE MORGAN COLLECTION.

The Pierpont Morgan Collection, the gift of J. Pierpont Morgan, fills an entire wing and is a priceless gathering of the decorative arts of Europe from Gallo-Roman and Merovingian periods to the end of the eighteenth century. The rarest and most precious section of the collection represents the supreme work of the goldsmiths, Byzantine and mediaeval enamellers, and ivory carvers. The most comprehensive gathering included in the Pierpont Morgan wing is that brought together by Georges Hoentschel of Paris, the collector, and consisting of two parts; sculpture, furniture, textiles, ivories, woodwork, and architectural fragments of the Gothic period, chiefly of French, Flemish, Dutch, German Spanish, and Italian origin, and French decorative arts of the seventeenth and eighteenth centuries—furniture and woodwork, many samples from historic buildings, decorative paintings, and ormolu fittings. Among the treasures of the Pierpont Morgan Collection are also five Gothic tapestries, known as the Sacrament Set because they picture in weaving the sacraments of the church; two sculptured groups, an Entombment and a Pieta, from the famous Chateau de Biron in southwestern France; superb examples of the goldsmith's craft from the fifteenth to the eighteenth century; a unique collection of snuff boxes, vanity boxes, scent bottles, and dance programmes, signed by famous jewellers of the eighteenth century; and a large collection of watches representative of the work of the best craftsmen in Europe from the sixteenth to the nineteenth century. The Dreicer Collection also contains valuable examples of Gothic and Renaissance sculpture and decorative arts.

### SERVICEABLE TO THE PUBLIC.

To make the museum collections serviceable to the public, to manufacturers and designers, to artists and art students, and to the pupils in the public and private schools of New York City and vicinity is the constant effort of the members of the museum staff, working on behalf of the trustees.

A reference library and a collection of photographs are open to the public and a large collection of lantern slides, photographs, post cards, etc., is available on easy terms for lectures given anywhere east of the Mississippi. Opportunity to copy the objects in the collections themselves is granted with reasonable restrictions. A study room of textiles has been fitted up with every facility for the use of the large collection of laces and textiles, and other study rooms in different parts of the building are intended for the convenience of those who wish to study the various collections at length.

## THE FRANKLIN INSTITUTE OF THE STATE OF PENNSYLVANIA.

(15 South Seventh Street, Philadelphia, Pa.)

THE Franklin Institute of the State of Pennsylvania for the Promotion of the Mechanic Arts was organized in the year 1824, to meet a demand in America for an institution similar to that founded by Count Rumford in London in 1799. The founders intended it not only as an appropriate memorial to the name of Franklin, but as a means of continuing for all time a work which throughout his long life he perhaps regarded as his best, namely, the discovery of physical and natural laws and their application to increase the well-being and comfort of mankind. Membership, 1,500.

Weekly lectures on scientific and technical subjects are given throughout the winter season; the Journal of the Franklin Institute has been published monthly since 1826; monthly meetings are held at which rediscoveries in physical science and important engineering achievements are discussed, and major inventions described. The Committee on Science and the Arts examines and makes reports upon all new and useful machines, inventions and discoveries submitted to it. The membership is divided into the following sections, each group devoting its attention to the branch of technology for which it is organized: Chemistry, Electricity, Mining, Metallurgy, Astronomy, Photography, Physics, and Engineering.

Library.—75,912 volumes, 18,254 pamphlets, 2,292 maps and charts, and 1,349 photographs. Complete sets of over 780 of the leading scientific and technical publications of the world.

## AMERICAN MUSEUM OF NATURAL HISTORY.

THE American Museum of Natural History, located at 77th Street and Central Park West, N. Y. City, was founded and chartered in 1869 for the purpose of encouraging and developing the study of natural science, of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction. It is open free every day in the year; on weekdays and holidays from 9 A. M. to 5. P M., on Sundays from 1 to 5 P. M.

The constitution provides for a self-perpetuating board of trustees, not to exceed twenty-five in number, who hold office for terms of five years, with the Mayor, the Comptroller and the President of the Park Board serving as trustees ex-officio.

The building, which is the property of the city, is one of the largest municipal structures in the city, and has cost over $5,000,000. At present only eight sections of the building have been erected, which when completed will cover the entire area of Manhattan Square. The city makes an annual maintenance appropriation for heating, lighting, repairing and supervising the building, caring for its collections, the construction of cases, and other maintenance work. All the collections, however, are the property of the corporation and are acquired by gift of the trustees and members and other friends and supporters. The funds from which the trustees purchase and prepare specimens, carry on explorations in all parts of the world, publish the results of its research work and enlarge its present library of natural history of over 70,000 volumes are raised by the museum and its friends, and derived from the income of an endowment amounting to $9,603,-952.57.

### NOTEWORTHY EXHIBITS.

The American Museum is famous as possessing the largest collection in the world of gems and gem material, the finest and most complete exhibits illustrating the evolution of the horse, the finest series of bird habitat groups, an extensive collection of meteorites, and the largest and best collections of fossil vertebrates and material showing all phases of the life of primitive man.

*First Floor*—Collections illustrating the life of the Indians of the North Pacific Coast, the Eskimo, Indians of the woodlands, plains and Southwest. Two new and large groups (Hopi and Apache) in the Southwest Hall. Forestry Hall—Sections of trees, including one from a big tree of California which measures 16 feet in diameter and is 1,341 years old. Natural woods, with specimens of their leaves and flowers, and sections of the finished woods. Exhibits in food needs and economics (temporarily placed in this hall). Darwin Hall—Specimens, models and groups showing invertebrate life, the Nahant Tide-Pool and the Wharf-Pile Groups being particularly interesting. New exhibit representing a two-inch section of sea-bottom, with its characteristic microscopic plant and animal life, magnified more than 15,000 times.

*Second Floor*—Collections from Africa. Material illustrating the life of prehistoric man of North America. Ancient monuments of Mexico and Central America. Birds of the world. Recent fishes. Mammals of North America. Akeley group of African elephants. Extensive reptile and amphibian material, including a number of beautiful groups (Lower California Lizard, Bullfrog, Great Salamander and New England Spring Groups). The most recent, finest and largest of the groups is the Florida Group. This reproduces a portion of a cypress swamp, with a stretch of sandy lowlands, teeming with characteristic animal life.

*Third Floor*—Shells. Collections from the living tribes of Asia, including Chinese bamboos, porcelain, basketry, inlaid work, embroidery, cloisonne enamel, agricultural implements, carvings in wood, ivory and stone and an especially valuable collection of ancient bronzes and pottery; material illustrating the mode of living, costumes and war implements of Siberia. Large and fine collections from the Indians of South America. Hall of Primates—Monkeys, apes and primitive man. Mammals of the world, including whales. Insect life. Birds of North America (the famous habitat groups). Public health exhibits dealing with problems of water supply, disposal of wastes, bacteria, insects and diseases, military hygiene.

### GEMS AND FOSSILS.

*Fourth Floor*—Collections from the Philippine Islands and the South Seas. Mineral and Gem collections. Hall of Gems, the gift of J. Pierpont Morgan—Collections including practically every variety of known gem, cut and uncut, some of remarkable size and purity of color; largest perfect crystal in the world, mounted on bronze base supported by three Chinese figures; exceptionally fine cameos, carved jade, etc. Hall of Fossil Invertebrates and Historical Geology—Large collections and models of caves and of Copper Queen Mine, showing cross sections and surrounding country. Halls of Fossil Vertebrates devoted to the great collections of the remains of creatures which lived from 30,000 to 20,000,000 years ago. These collections, by right of extent, variety, quality and methods of preparation and exhibition, are the finest in the world. The collections illustrating the evolution of the horse approach in importance and value the combined collections of this sort to be found in all other institutions. Hall of the Age of Man—Casts of prehistoric men and skeletons of the animals of their time (mammoths, mastodons and giant ground sloths). In the adjoining hall are fossil camels, giant pigs, a pigmy hippopotamus and primitive rhinoceros-like animals; fossil lemurs and monkeys which have an important bearing on the ancestry of man. Dinosaur Hall—Remains of fossil reptiles and fishes which lived from three million to ten million years ago. "Mummy" of dinosaur (trachodon) in which the texture of the skin has been preserved. Fossil aquarium reproducing a number of the earliest known fishes, with typical marine surroundings—all prepared on the basis of recovered specimens illustrating the animal and plant life of the time.

*Fifth Floor*—Public reference library. Osborn library of Vertebrate Paleontology. Offices. Laboratories. Studios.

### EDUCATIONAL ACTIVITIES.

In addition to its work in securing and exhibiting natural history specimens, the institution maintains a Department of Public Education, which works in conjunction with the city's public schools and institutions for the blind, giving lectures, and circulating loan collections, slides and motion picture films. In 1921, 869 natural history collections were served to 477 schools and 209,451 slides were circulated. For teaching the blind, special apparatus, including relief globes and maps, are used. On December 23, 1921, the City Administration appropriated $1,500,000 for the construction of the Southeast Wing on Central Park West, and the Southeast Court Building, and on April 21, 1922, it appropriated $570,000 for the construction of the School Service Building.

While the institution is forced, through lack of building space, to keep the great majority of its collections in storage rooms, this material is available for study by persons interested.

## BUFFALO FINE ARTS ACADEMY.

The Buffalo Fine Arts Academy was organized November 11, 1862, and incorporated December 4 same year. The building occupied by the organization was a gift from Mr. John Joseph Albright. It is a white marble structure two hundred and fifty feet long (north and south) and one hundred and fifty feet deep (east and west). Its central feature is based on the east porch of the Erectheum, on the Acropolis at Athens—perhaps the purest type of Ionic architecture The City of Buffalo has been contributing toward the support of the institute since 1909. The permanent collection of the academy consists of 315 paintings, 803 engravings and etchings, and 57 sculptures, including casts. The total membership is 610. During each year several special exhibitions are given; a semi-annual art journal is published. Lectures are given. Special efforts are made to interest the public and the school children. Several foreign exhibits brought over by the director, Cornelia B. Sage Quinton, and passed on to other museums after being first shown at the Albright Art Gallery, have made Buffalo noted in art circles. They included: Exhibition of paintings and sculpture by the Societe Nouvelle of France, of which Rodin was President; exhibition of French textiles; exhibition of the work (sculpture) by Constantin Meunier; collections of the French artists G. La Touche and M. B. de Monvel; the exhibition of American sculpture, held at Albright Art Gallery in 1916.

## SMITHSONIAN INSTITUTION.

THE Smithsonian Institution is legally an establishment having as its members the President of the United States, the Vice President, the Chief Justice, and the President's Cabinet. It is governed by a Board of Regents consisting of the Vice President, the Chief Justice, three members of the United States Senate, three members of the House of Representatives, and six citizens of the United States appointed by joint resolution of Congress. The Secretary of the Smithsonian Institution is its executive officer and the director of its activities.

The institution at Washington, D. C., was established by statute in 1846, under the terms of the will of James Smithson, who bequeathed his fortune in 1826 to the United States to found an institution for the "increase and diffusion of knowledge among men." From the income of the fund a building, known as the Smithsonian Building, was erected on land given by the United States. The institution maintains a library, numbering about 300,000 volumes, which is deposited in the Library of Congress and which consists mainly of the transactions of learned societies, and scientific periodicals. While the body of the library is deposited in the Library of Congress and accessible to all its readers, a working library is maintained at the institution. The Regents are empowered to accept gifts without action of Congress in furtherance of the purposes of the institution, and to administer trusts in accord therewith.

The institution has charge of the National Museum, the National Gallery of Art, the International Exchange Service, the Bureau of American Ethnology, the National Zoological Park, the Astrophysical Observatory, and the United States Regional Bureau for the International Catalogue of Scientific Literature.

The United States National Museum is the depository of the national collections. It is rich in the natural history, geology, paleontology, archaeology and ethnology of America, and has collections of American history (including large war collections illustrative of the part taken by the United States in the recent conflict), as well as many series relating to the arts and the industrial arts. It is an educational and a research museum, and issues scientific publications. The National Gallery of Art consists of the collections of etchings and engravings of George P. Marsh, the collections of Charles L. Freer, containing paintings and etchings by Whistler, and examples of Oriental art; the Harriet Lane Johnson collection, including works of a number of the greatest English portrait painters, and the collection of William T. Evans, of one hundred and fifty-one paintings, representing one hundred and six American artists. The National Museum occupies two special structures, built in 1881 and 1911, containing 650,000 square feet of floor space. There are 6,274 articles in the Freer collection. The amount of the annual appropriations made by Congress for the support of the museum for the fiscal year 1920 was $307,500. In addition there was appropriated for publications, binding of books, etc., $37,500. The buildings are opened to the public 9 A. M. to 4.30 P. M., week days, and in addition the new building at the foot of Tenth Street is opened Sundays, 1.30 P. M. to 4.30 P. M.

Bureau of American Ethnology, for the study of the American Indian; the International Exchanges, for the exchange of governmental and scientific publications between the United States and foreign countries; the Astrophysical Observatory for the investigation of radiation phenomena; the National Zoological Park, at Washington, containing about 1,400 animals and the Regional Bureau of the International Catalogue of Scientific Literature, for the preparation of a classified index to the current scientific literature of the United States, are also branches of the institution.

## NATIONAL ACADEMY OF SCIENCES, WASHINGTON, D. C.

THERE are 186 living members, comprising investigators in many departments of science. The geographical distribution of members covers the United States, but is not considered in their election. The National Academy has often been called into the service of the Government. Committees appointed in accordance with acts of Congress at the request of joint commissions and committees of Congress, of the President of the United States, and of the various departments of the National Government, have reported on a great variety of subjects. From time to time trust funds have been established, the incomes of which are devoted to the award of medals or to grants for research. The will of Alexander Dallas Bache, first President of the Academy, directed that the residue of his estate, after the death of his wife, should be paid over to the National Academy of Sciences for the "prosecution of researches in physical and natural science by assisting experimentalists and observers." Other trusts have been left to the Academy. Several hundred thousand dollars have been disbursed by the academy from the income of trust funds in direct aid of scientific research. A recent gift was that of the Carnegie Corporation, $5,000,000, for a suitable building for the academy and the National Research Council, and for the endowment of the council.

## MOUNT VERNON MUSEUM, AND TOMB OF WASHINGTON.

"MOUNT VERNON," on the west shore of the Potomac River, 15 miles below Washington, belongs to the Mount Vernon Ladies' Association. It was built in 1743 by Lawrence, half brother of George Washington. On the death of Lawrence and of his only daughter, George Washington inherited the estate and went there to live soon after his marriage in 1759. He died and was buried there in 1799. In 1855 John Augustine Washington offered it for sale. A patriotic daughter of South Carolina, Ann Pamela Cunningham, devoted herself to raising $200,000 required for the purpose. In 1858 the Mount Vernon Ladies' Association of the Union was organized, with Miss Cunningham as regent, and vice regents representing 12 States. Contributions were solicited and popular support was enlisted. The full sum was in hand before the end of 1859, and in 1860 Mount Vernon became the property of the association. A further fund was provided for permanent care and maintenance. Portions of the original estate that had been sold have been acquired again; buildings which had fallen into ruin have been restored; the deer park under the hill has been restocked; the mansion has been repaired; many articles of furniture and adornment have been restored to the several rooms; numbers of valuable relics and mementoes of George and Martha Washington and of their time have been deposited here.

## CORCORAN GALLERY OF ART, WASHINGTON, D. C.

THE Corcoran Gallery of Art, at Washington, D. C., founded and endowed by the late William Wilson Corcoran in 1869, solely for encouraging American genius in the fine arts, is a private corporation controlled by a self-perpetuating board of nine trustees. The original home of the institution was at Pennsylvania Avenue and 17th Street; but in 1897 its collections were transferred to the present building, designed by Ernest Flagg of New York, and located at New York Avenue and 17th Street, N. W. The value of the building and grounds connected therewith is $1,000,000, and the present value of the collections is estimated at $1,500,000. The endowment fund amounts to $1,000,000.

The collection of paintings is particularly representative of American artists. In addition the gallery has examples of the French, Dutch, English, and other schools. The sculptures include casts from the antique and the Renaissance, and modern works, as well as original works in marble and bronze. There are over 100 original bronzes by Antoine-Louis Barye, French sculptor of animals. It is open to the public: Mondays, 12 M. to 4.30 P. M.; other week days, 9 A. M. to 4.30 P. M.; Sundays, 1.30 to 4.30 P. M.

## THE HASKELL ORIENTAL MUSEUM OF THE UNIVERSITY OF CHICAGO.

THE Haskell Oriental Museum was erected through the generosity of Mrs. Caroline E. Haskell. Its collections, now exceeding 16,000 original objects, are intended to exhibit as systematically as possible the early civilizations of the Near East. Egypt is most largely represented. Both the Egyptian and the Assyro-Babylonian sections have been augmented in part by expeditions of the university's Oriental Exploration Fund in 1903-7 and by its Oriental Institute in 1919-20. The latter organization is a recent expression of the interest of Mr. John D. Rockefeller, Jr. It supplements the museum not only by adding to its collections but by cataloguing and co-ordinating in research the materials there assembled, both originals and reproductions, with the library facilities of the university. The museum houses also some materials for the study of Palestine and of the religions of the Far East.

## INDEPENDENCE HALL NATIONAL MUSEUM, PHILADELPHIA.

(Data Supplied by Wilfred Jordan, the Curator.)

INDEPENDENCE HALL was at first called "The State House of Pennsylvania." It now comprises the main or central building (Independence Hall), two arcades connecting it with two two-story buildings called the Wings or Province Halls, and two separate corner buildings, one Congress Hall, the other Old City Hall, one on the corner of Fifth Street and the other on the corner of Sixth Street, facing on Chestnut Street, Philadelphia. The State House group of buildings was designed and built by Andrew Hamilton, a Philadelphia lawyer, who bought the land, for which he created a trust. Congress and City Halls were in Hamilton's original scheme of the State House group, but were not built until after the close of the Revolution. The group of buildings covers a frontage of 396 feet on Chestnut Street.

The original building (Independence Hall) in the group was begun in 1732 and was opened and first put to use in September, 1736, when William Allen, Mayor and prominent merchant of Philadelphia, gave a dinner to the citizens. In October, 1736, the Legislature, of which Benjamin Franklin was clerk, moved into the completed part of the structure, then known as the "East Room." In June, 1753, Pass & Stow placed in position in the State House steeple the Liberty Bell, weighing 2,080 pounds. In 1752 a clock was ordered, and in 1759 it was placed and paid for. The State House was practically completed in the latter year. Here are some of the historical events that have taken place in Independence Hall:

June 15, 1775, Washington accepted his appointment as General of the Continental Army.

July 4, 1776, Colonies issued the Declaration of Independence.

July 15, 1776, convention to form a new Constitution for Pennsylvania met here.

September 11 and October 4, 1777, American officers captured at the Battles of Brandywine and Germantown were held prisoners in the building by the British.

Congress, which had left Philadelphia in September, 1777, and which convened in Independence Hall March 4, 1777, left again on September 18, 1777; returned July 2, 1778, and continued to sit there until the close of the Revolution.

July 9, 1778, the Articles of Federation and Union between the States were signed in Declaration Chamber by eight States. The five remaining States signed later, the last, Maryland, on March 1, 1781.

May 14, 1787, the Federal Convention to frame a Constitution for the United States assembled, sitting until September.

December 13, 1787, the Pennsylvania Convention met to ratify the Philadelphia Constitution.

In 1824 Lafayette was given a reception there.

December 6, 1790, the Congress of the United States occupied the County Building, now known as Congress Hall, one of the Independence Hall group, and remained there until the seat of Government was removed to Washington in 1800.

March 4, 1793, George Washington was inaugurated in Congress Hall, at the beginning of his second term as President; and John Adams was inaugurated there March 4, 1797. The House of Representatives occupied the lower floor and the Senate the second floor.

February 7, 1791, the Supreme Court of the United States held its first session on the second floor of the City Building, now known as Old City Hall, one of the Independence Hall group, and stayed there until August 15, 1800. The Supreme Court of Pennsylvania sat on the second floor of the building also. The City Building was used as the municipal headquarters until March 27, 1895.

In 1816 the City of Philadelphia bought the entire property.

There are many historic oil portraits in the National Portrait Gallery, including Washington and other early American public men.

Independence Hall was formally thrown open as a public historical museum July 4, 1876, although parts of this building were used as a museum as early as 1790. Cost of its annual upkeep is $25,000. Its art collection, made up in the main of original pictures of celebrities of Colonial and Revolutionary times, is worth over $500,000. The museum collection consists of furniture, manuscripts, musical instruments, water colors, missiles, maps, coins, currency, weapons, metals, prints, wearing apparel, utensils, and books.

There are no pay days. The National Museum is open to the public daily throughout the year, from 9 A. M. to 4 P M., Sundays, 1 to 4 P. M., except Christmas and Thanksgiving. The National Museum, Independece Hall group, is located on the south side of Chestnut Street, between Fifth and Sixth Streets, and can be reached from the central hotel district and the railroad stations by trolleys or subway trains. A series of free bulletins are issued, which will be mailed upon request.

## THE CLEVELAND MUSEUM OF ART.

THE Cleveland Museum of Art, incorporated in 1913, was opened to the public on June 6, 1916. It is situated in Wade Park on land given by J. H. Wade. The building cost about $1,250,000, was made possible through the wills of John Huntington and Horace Kelley, and the main income is derived from The John Huntington Art & Polytechnic Trust and The Horace Kelley Art Foundation. The Museum is open free on Sundays, Wednesdays, Saturdays and holidays, an admission fee of twenty-five cents being charged on other days. The hours on Sunday are 1 to 10 P. M., on Wedne day, 9 A. M. to 10 P. M., and on other week days and holidays, 9 A. M. to 5 P. M. The membership is approximately 5,000.

Exhibition space comprises a central rotunda, opening on one side into the Court of Tapestries and Armor, and on the other into the Garden Court, and around these as a central axis are arranged fourteen exhibition galleries. The collection of American Colonial art was installed in a gallery directly opposite the main entrance so that the first emphasis for the entering visitor might be on the artistic production of our own country. This has been of aid in developing in the foreign-born visitor the realization of America's traditional and cultural background. The Court of Tapestries and Armor houses an important and striking collection of arms and armor, and a series of eight tapestries depicting the story of Dido and Aeneas. The museum is especially rich in its oriental collections, and has developed other important groups illustrating the art of various countries from ancient to modern times.

The educational work of The Cleveland Museum of Art is being developed along various lines. The conference room is available at all times for clubs or groups desirous of studying art subjects or the museum's collections. Lectures and museum talks are given on request by members of the staff.

The Children's Museum is becoming an important factor of the museum's activities. An appeal is made to the child mind by exhibits of suitable works of art, including series of ethnological models and natural history groups. Drawing materials are placed at the disposal of the children and sympathetic assistance is given them by the attendants, every effort being made to create an interest in and an appreciation of beauty and art. Classes of sixth, seventh and eighth grade public school children work in the museum each day under a supervisor employed by the Board of Education. Classes from the public and private schools and from the colleges come for general tours of the galleries and for correlative study.

A department of musical arts was established in 1920. The museum's reference library contains 5,000 books on art, etc., magazines, and over 7,000 lantern slides.

## THE CITY ART MUSEUM OF ST. LOUIS.

THE City Art Museum of St. Louis was established in 1879, and became a municipal institution in 1909. The building is in Forest Park, 160x350 feet, with 44 galleries on three floors. The collections include paintings, prints, sculpture, textiles, ceramics, metal work, furniture and other objects. The modern paintings are comprehensive, by artists of America, France, Holland, Spain, England, Russia, Sweden, Belgium and other countries. There is a small group of Old Masters. In the print department are etchings, engravings and woodcuts by old and modern masters. The sculptures are chiefly examples by American artists, supplemented by collections of casts from the antique and from masterpieces of the Renaissance. Among the Chinese ceramics are specimens from the Han Dynasty downward, and examples of the Sung, Ming, and K'ang-Hsi periods. There are groups of Chinese paintings, bronzes, jades and other carved stones, lacquer, glass, textiles, &c., as well as objects illustrative of the decorative arts of ancient Greece and Egypt, of Japan, Korea and Persia. The museum is open daily, except Christmas and New Year's Days, 10 A. M. to 5 P. M. Admission free.

## FIELD MUSEUM OF NATURAL HISTORY, CHICAGO.

FIELD Museum of Natural History, established 1893, at the close of the World's Columbian Exposition of 1893, removed June 1, 1920, to its new building in Grant Park. The founding of a scientific institution of this character in Chicago was made possible by a gift of $1,000,000 by Marshall Field, whose name the institution bears, and who on his death, January 6, 1906, bequeathed a further $8,000,000, of which $4,000,000 was for the erection of a permanent building, and $4,000,000 for endowment. The sum of $1,200,000 has been contributed by others, and there is an annual income from other sources than endowment of approximately $120,000.

### FIVE MAIN DEPARTMENTS.

The nucleus of the exhibition material was gathered by gift and purchase at the World's Columbian Exposition. Several departments created at the organization have been abandoned, until, after a lapse of twenty-seven years and expenditure of over $7,000,000, the museum is now divided into five departments: Anthropology, botany, geology, zoology, and the N. W. Harris Public School Extension. Many expeditions for the purpose of obtaining study, exhibition, and exchange material and data have been dispatched to all parts of the world. The results have been published by the museum from time to time. It has a working library of 78,000 titles, an extensive exchange system, fully equipped departmental laboratories, an herbarium of 560,000 sheets, study collections of mammals, birds, fishes, reptiles and insects reaching many thousand specimens, a large taxidermy section, a printing shop, illustration studio, assaying and lapidary rooms, etc. In North America, Philippine, Chinese and Tibetan ethnology, in meteorites, in the world's mineralogy, in economic botany, the museum is particularly prominent, while its series of mounted mammals and birds and plant reproduction furnish examples of advanced museum practice. The institution is open to the public on all days except Christmas and Thanksgiving. A small admission fee is charged except on Thursday, Saturday, and Sunday, when it is free to all. Students, scholars and teachers are admitted free at all times.

### COVERS ELEVEN ACRES.

The museum is incorporated under Illinois State law, and the administrative control rests in a board of twenty-one trustees. The building is 750 feet by 350 feet, but with the exterior outer lines, including entrances and terrace, the structure covers about eleven acres of ground. President, Stanley Field; Secretary and Director, D. C. Davies.

## THE ART INSTITUTE OF CHICAGO.

THE institute is on the lake front at the foot of Adams Street, facing Michigan Avenue. Building constructed of Bedford limestone in Italian Renaissance style, 320 feet long with 120,000 square feet of floor space. The institute has about 150 galleries, school rooms, offices and studios; also Fullerton (lecture) Hall, with seating capacity of 500; the Burnham Library of 3,000 volumes on architectural subjects, and the Ryerson Library, 14,500 volumes on art, one of the few libraries in the world devoted exclusively to art. During the fall, winter and spring months 80 to 100 lectures on art and related subjects are given in Fullerton Hall, also an orchestra concert each Sunday afternoon and evening, and occasionally a pageant or dramatic presentation.

### 1,800 PAINTINGS, 1,100 SCULPTURES.

The museum contains more than 1,800 paintings, 1,000 casts of sculpture, 100 original marble statues and fragments of all periods, 3,500 prints, etchings, engravings and lithographs, 1,500 textiles of ancient and modern times, Peruvian and Egyptian to the Eighteenth Century, and extensive collections of potteries, porcelains, china, etc., a great part of the last named being assembled in Gunsaulus Hall, among them the Blanxius collection of English potteries and porcelains, one of the finest extant. The institute was incorporated in 1879 and achieved international importance with the purchase of fifteen old Dutch Masters of the Demidoff collection, in 1890. These paintings, with other important canvases of their school, hang in the Charles Lawrence Hutchinson Gallery of Old Masters, named in honor of Mr. Hutchinson, who has been President of the institute for over forty years. Rembrandt, Rubens, Van Dyck, Hans Holbein, Hobbema, Von Ostade, ter Borch, Jan Steen, Teniers, Ruysdael, Van de Velde, are represented in this gallery. The Henry Field, A. A. Munger and Nickerson memorial collections include painters of the Barbizon school, the earlier American painters of landscape and figures, the Potter Palmer collections, paintings of modern European impressionists.

### MODERN AMERICAN ART.

Modern American art is chiefly represented in the collection now numbering over one hundred canvases and other works presented by The Friends of American Art. One of the features of the institute is the series of temporary exhibitions of paintings, sculpture, architecture and applied arts which are held during the year. Annual and special exhibitions and collections of various kinds from America and abroad to the number of six to ten at a given time keep the constituency of the Art Institute aware of current achievement in art. Attendance (1921), 1,224,894. Free days for public—Wednesdays, Saturdays, Sundays and public holidays. The institute's sources of income are bequests, gifts, membership dues (total paid membership, Jan. 1, 1922), 18,196, income from its endowment of about $3,000,000 both restricted and free, and a small tax from the South Park Board of the City of Chicago. The building has a value between a million and a half and two million dollars. The collections have a commercial worth far beyond five million dollars. The art school of the institute has an annual attendance of about 4,600 students; often referred to as the largest art school in the world. It has a faculty of about two score teachers and instructors.

## THE CINCINNATI MUSEUM OF ART.

(By the Director, J. H. Gest.)

THE Cincinnati Museum Association, organized in 1880, and incorporated in 1881, gives exhibitions during the year, and has collections of modern American art which include the pictures, sculpture and etchings of Frank Duveneck; paintings, studies, drawings and etchings by Robert Blum; as well as a representation of the other leading American painters and sculptors; and a considerable number of modern French paintings. Casts of Greek sculpture and of carved ivory from the Roman to the Renaissance period are installed in the Schmidlapp Building, and there is a large group of American archaeology. The decorative arts are represented, the department of metal work including, besides the Elkington reproductions, a group of original armor and the Conner collection of original silver. The museum holds also the Doane collection of musical instruments, the Longworth historical exhibition of India shawls, and the exhibition of Rookwood pottery, the Cincinnati art industry with which the museum and its school, the Art Academy of Cincinnati, are closely connected. There is a reference library.

## BROOKS MEMORIAL ART GALLERY, MEMPHIS, TENN.

THE Brooks Memorial Art Gallery, a gift to Memphis by Mrs. Samuel Hamilton Brooks, in memory of her husband, was dedicated May 25, 1916. It is of pure Grecian architecture, of Georgian marble, costing $115,000. Situated in Overton Park, it is under the supervision of the Park Commission, one of which body is chairman of the Art Gallery.

The extension work in the schools is one of the important activities of the Gallery, and is supported by the Memphis Art Association. There is an annual exhibit of local artists' work and students from the schools and studios, every spring. Prizes are given by the Art Association, including one for the best essay by any one from the English classes. The Junior Art Association is the centre of school interest. Several of the schools have already begun to buy good pictures. There are also garden clubs, etc. Each school has a branch of the Junior Art Association with its own officers and plan of work. There are three joint meetings a year, the chairman of which makes a report to the Senior Art Association, thereby forming a circle of work around the Art Gallery. At stated times lecturers are brought to the city.

## TELFAIR ACADEMY OF ARTS AND SCIENCES, SAVANNAH, GA.

FOUNDED 1875, under will of Mary Telfair (daughter of Edward Telfair, revolutionary patriot, signer of the Articles of Confederation, and early Governor of Georgia), and last of her name. She devised to a Trustee the Telfair residence and contents, and an endowment of $100,000. By additions and alterations, the residence was converted into an art gallery, containing: (1) Specimens of Colonial furniture and furnishings of the Telfair family, displayed in the dining room, which is unchanged; (2) Old books and manuscripts found in the residence; (3), a collection of casts of classical statues; (4), about seventy modern paintings by artists of America, England, France, Germany, Holland, Belgium and Italy. Open seven days a week; no pay days. Gives miscellaneous art exhibitions, chiefly from American Federation of Arts, exhibitions of individual painters and etchers, and lectures.

## ISAAC DELGADO MUSEUM OF ART, NEW ORLEANS.

THE Isaac Delgado Museum of Art was dedicated on December 16, 1911. The building was the gift of Isaac Delgado to the City of New Orleans, and is maintained by the city. The Museum is free to the public; except Fridays, 25 cts. The Curator, C. W. Boyle. It is open on Sundays, but closed every Monday. Mr. Delgado was born in 1839, at Kingston, Jamaica, and came to New Orleans when a young man, and became associated with his uncle, Samuel Delgado, in the sugar and molasses business. He died January 4, 1912. Permanent collection includes the Chapman H. Hyams collection of paintings and statuary; the Morgan Whitney collection of jade and other hard stones; the Alvin Howard collection of Etruscan glassware and Greek pottery; the B. M. Harrod collection of paintings and old silverware; the John G. Agar collection of paintings, bronzes and ceramics, and the Eugene Lacosst collection of bronzes and ceramics.

## UNIVERSITY OF PENNSYLVANIA MUSEUM.

(At the University, Philadelphia.)

Director, George Byron Gordon. The collections include Egyptian, Babylonian, Graeco-Roman, Chinese, Mohammedan, Aboriginal America, Africa, the South Seas, Primitive Asia, Ancient Art, Industrial Art the Decorative Arts. There is a library of 10,000 volumes relating to subjects illustrated in the exhibits.

The most important accessions during the year have been an ancient royal feather cloak and cape from Hawaii; a collection of South Sea Island carvings; a collection of ancient Benin carved elephant tusks and bronzes; a Chinese gilt bronze statuette of the period of the Six Dynasties. The number of visitors during the year was 94,056. The expenses of administration amounted to $83,742.03 and the sum of $151,092.95 was spent for expeditions and collections The interest on the Eckley B. Coxe, Jr. Endowment of $500,000 is available for Egyptian explorations. The city appropriated $30,000. The entire income of the museum, including sales of photographs, publications, etc., was $324,854.47.

The museum maintains expeditions in Alaska, Central America, South America, Egypt and Palestine. Open daily throughout the year from 10 A. M. until 5 P. M. Sundays 2 until 6. Organized 1889. First section of the museum opened in 1889, second section opened in 1916. Annual meeting in December. Board meets third Friday of each month, except July and August. Expert guidance is free to all visitors. The Museum Journal is published quarterly, giving accounts of expeditions in the field and of exhibits in the museum. Four series of publications are issued containing studies and investigations in archaeology and ethnology: Anthropological Series, Babylonian Series, Egyptian Series, Mediterranean Series. The public schools are especially looked after in the way of lectures at the institution.

## MUSEUM OF HISTORIC ART AT PRINCETON UNIVERSITY.

THE Museum of Historic Art was founded in the year 1889. It contains the notable T umbull-Prime collection of pottery and porcelain, a few Assyrian, Greek and Roman sculptures, Cypriote and later Greek pottery, and a quantity of Syrian glass from the Princeton expeditions. In the mediæval and Renaissance field there are sculptures and paintings, few but of good quality. The cast collection comprises the history of sculpture in epitome from early Egyptian times through the Italian Renaissance. A new hall of architectural casts is in preparation under the care of the School of Architecture.

A distinctive and probably unique exhibition is the series of full size architectural casts taken from Syrian buildings of late classical and early Christian periods by Prof. Howard Crosby Butler.

The museum, which for a year will be in process of rearrangement, is regularly open to the public from 2 to 5 P. M. Sunday afternoons, and generally on week days during the term on application to the custodian.

## BOSTON MUSEUM OF FINE ARTS.

THE Museum of Fine Arts, Boston, was incorporated February 4, 1870. The first section of the Museum building in Copley Square was dedicated July 3, 1876, and the next day it was opened to the public. The original building was twice enlarged. The first section of the present building on Huntington Avenue was opened November 15, 1909. The total cost of land, building, and installation was $2,900,000. The second section of the proposed completed building, the Robert Dawson Evans Galleries for Paintings, the gift of Mrs. Evans, was opened February 3, 1915. It cost $1,000,000. The annual running expenses are about $200,000. The Museum receives no city or State aid, its funds for running expenses and for purchases being derived entirely from private gifts and bequests. Admission is free whenever the Museum is open: 10 A. M. to 5 P. M. week days (Nov. 1 to March 1, 4 P. M.), 1 P. M. to 5 P. M. Sundays.

The Museum possesses collections illustrating the art of Ancient Egypt, Greece, and Rome, the art of mediaeval, Renaissance and modern Europe, American art, and the art of Asia. Its collection of Egyptian and Greek sculpture and Greek vases and terra cottas is the finest in this country; its collection of the art of China and Japan is unrivalled; its collection of the art of India is the only one in this country; and its collection of paintings and drawings from India is superior even to the one in the British Museum; the textiles, numbering over 7,000 pieces, are recognized as the best comprehensive representative collection in this country; the paintings, of which over 700 are exhibited, include, besides examples of the old masters, a large collection of French paintings of the nineteenth century and also of early American paintings.

## WORCESTER ART MUSEUM.

(By the Director, Raymond Wyer.)

THE Worcester, Mass., Art Museum was founded and incorporated in 1896. It was a gift from the late Mr. Stephen Salisbury who left his entire estate for its maintenance and the formation of a permanent collection. One of the significant collections of early Italian paintings and sculpture in the country has been assembled as well as important examples of painting and sculpture of other schools and periods. Collections of textiles, furniture, ceramics, woodwork, silver and bronzes are being made. Also of special note are the Bancroft Collection of Japanese Prints and the Goodspeed Collection of Engravings by American Artists. Another important feature is the Educational Department, which gives courses of instruction in color and design to school children and lectures on the same subject to adults. It has an important art library. A series of free concerts is given each year to the public as well as a number of transient exhibitions. There is a Worcester Art Museum Arts and Crafts School in a separate building.

## THE MUSEUMS AT HARVARD UNIVERSITY.

THE William Hayes Fogg Art Museum was founded by Mrs. Elizabeth Fogg of New York in memory of her husband, whose name it bears. Mrs. Fogg bequeathed for this purpose $220,000, of which $150,000 was expended on the fireproof building, completed in 1895, in the College Yard. The building is two stories high with a lecture room. Admission to the Museum is free. The hours of opening are: week-days, 9 A. M. to 5 P. M.; Sundays during the college year 12 M. to 5 P. M. The Museum is closed on legal holidays and on Saturday afternoons during the summer vacation of the University.

The collections include original works of ancient sculpture, among them a marble statue of Meleager (possibly a fourth century copy of the original by Scopas; moulds and fragments of Arretine pottery; Greek vases, coins and figurines; a series of Gandhara sculptures; a notable collection of Romanesque sculpture, principally composed of 16 capitals representing the finest type of twelfth century French work; Oriental works of art, including Chinese, Japanese and Thibetan paintings, Persian miniatures and calligraphy, pottery, jade and bronze; textiles; a few American paintings, among them works by Sargent, Winslow Homer and Dodge Macknight; about one hundred Byzantine, Italian, Spanish, Flemish and German paintings of the fourteenth, fifteenth and sixteenth centuries; original drawings and water color drawings by masters of the French, Italian, Northern and English schools; and a large collection of prints, chiefly the work of the German and Italian wood and metal engravers and etchers. The Museum also has a library and a collection of photographs and slides.

### SEMITIC AND GERMANIC MUSEUMS AT HARVARD UNIVERSITY.

The Semitic Museum at Harvard University was founded by Jacob H. Schiff, Esq., in 1899. The objects aimed at have been to aid the regular instruction given in the departments; to furnish the means of research; to illustrate the manners, customs and history of the Semitic peoples and thus to show, as far as may be, what the Semites have contributed to civilization. The Museum building on Divinity Avenue, Cambridge, completed in 1902, is likewise the gift of Mr. Schiff.

The object of the Germanic Museum is to illustrate by means of plaster casts and other kinds of reproduction the outward aspect of the development of Germanic Culture. The new Museum building, erected in 1916 at the corner of Kirkland Street and Divinity Avenue, Cambridge, is called, in honor of its donor, Adolphus Busch Hall.

### PEABODY MUSEUM AT HARVARD UNIVERSITY.

The Peabody Museum of American Archaeology and Ethnology of Harvard University was founded by George Peabody in 1866. Its purpose was the forming and preserving of collections of antiquities and objects relating (1) to the native people of the American continent, and (2) to the various primitive peoples of the world in general. The collections are housed in the Peabody Museum building of five stories which forms the southern wing of the University Museum structure. The five stories have more than 53,000 square feet of floor space for exhibition purposes, and about 18,000 square feet for offices, laboratories and storage.

The collections relating to prehistoric American tribes have been brought together largely by explorations under the auspices of the Museum, those relating to Middle America being unusually complete. In the halls devoted to the Mayan region are grouped the reproductions of the great stone stelae and altars which adorn the plazas and stand before the ruined temples of the great Maya cities. Collections relating to historic American tribes contain rare objects obtained by well-known early explorers.

The material relating to prehistoric Europe contains collections by Gabriel de Mortillet, Lartet and Christy, and Clement, the pioneer archaeologists of the century just past. The primitive people of Oceania are represented, also both the historic and prehistoric tribes of Africa. The osteological collections contain examples of skeletal remains from nearly all sections of the world.

The laboratories of the Museum are open (under proper restrictions) to all specialists and students in anthropology. The collections are also made use of by many of the institutions of higher education in Central New England, in connection with the study of the origin and development of design, architecture, and the various minor arts, as well as of mankind in general. The publications of the Museum consist of papers, memoirs, annual reports and special publications.

## PEABODY MUSEUM OF NATIONAL HISTORY, YALE UNIVERSITY.

THE Peabody Museum of Natural History at Yale University was founded by George Peabody in 1866. Ten years later the first wing of the museum was built, but the complete plan was never carried out, and the building was removed in 1917 to make way for the Harkness Memorial Quadrangle. Since then the greater part of the collections have been in storage pending the erection of a new building, which, it is hoped, will be begun before the end of 1922.

The museum has the following collections: Mineralogy, built up around the Gibbs collection purchased by the University as far back as 1825 and containing, besides an abundance of minerals, one of the largest assemblages of meteorites in the country; Zoology, brought together largely by Yale's distinguished naturalists, the late Professor J. D. Dana and Professors A. E. Verrill and S. I. Smith, and including a vast amount of marine invertebrates accumulated through co-operation with the U. S. Fish Commission; Anthropology, much of which was presented by the late Prof. O. C. Marsh; Invertebrate Paleontology, with material from all parts of this country and representing all geologic ages; Osteology, the gift of Prof. Marsh; and finally the Marsh collection of Vertebrate Paleontology, surpassed by perhaps but one other in the world, and particularly rich in type material from the western part of the United States.

### SCHOOL OF FINE ARTS.

*The School of the Fine Arts* at Yale University contains the Jarves collection of Italian art, numbering 120 paintings from the thirteenth to the seventeenth centuries; the Trumbull Gallery of Historical American Paintings; the Alden collection of Belgian wood-carvings of the seventeenth century, comprising 120 feet of wainscoting, including three confessionals, from a chapel in Ghent; the Frederick Wells Williams loan collections of Chinese porcelains and bronzes, and a number of other valuable objects of art; sketches by old masters, examples of contemporaneous work, casts and marbles representative of various periods of ancient and Renaissance art; bronzes; and Braun autotypes and Arundel prints to the number of about four hundred. These are from time to time supplemented by special collections and exhibitions.

*The William A. Speck Collection of Goethe Literature*, 26 Linsly Hall, includes many first and other important editions of Goethe's works, numerous books dealing with the Faust legend before Goethe's time, and most of the Faust dramas by other authors; also a very full representation of the translations into other languages of Goethe's *Faust*, a large body of commentaries, many portraits of Goethe and his friends, manuscript letters by and about Goethe, views of Weimar during Goethe's time, and an assemblage of medals struck in his honor.

### BABYLONIAN COLLECTION.

*The Babylonian Collection* at Yale University consists of about 10,000 original tablets belonging to the various periods in Babylonian history, from about 4000 to 150 B. C., and includes literary texts (epics and liturgies), syllabaries or dictionaries, mathematical treatises and different kinds of exercises from temple schools, divination texts, legal and business transactions, administrative documents from the archives of Babylonian temples, personal and official letters and records of various kinds, seal cylinders, inscribed bricks, votive objects, reliefs, royal building inscriptions, incantation bowls, etc. The original inscriptions are augmented by the *William Hayes Ward Collection* of seal-cylinder impressions, and by a large number of casts from museums in Europe and America which illustrate the life and customs of the ancient Babylonians and Assyrians. In addition to the Babylonian and Assyrian material, the beginning has been made of a collection of other Semitic monuments, including both casts and originals. *The Whiting Collection* of Palestinian pottery and terra-cotta, numbering 940 pieces, acquired through the generosity of the late Mrs. Francis Wayland, is also available for study.

## THE LIBRARY OF CONGRESS.

THE Library of Congress was established in 1800, destroyed in 1814, by the burning of the Capitol, afterward replenished by the purchase by Congress of the library of ex-President Jefferson, 6,760 volumes (cost, $23,950); in 1851, 35,000 volumes destroyed by fire; in 1852, partially replenished by an appropriation of $75,000; increased (1) by regular appropriations by Congress; (2) by deposits under the Copyright Law; (3) by gifts and exchanges; (4) by the exchanges of the Smithsonian Institution, the library of which (40,000 volumes) was, in 1866, deposited in the Library of Congress with the stipulation that future accessions should follow it. One hundred sets of Government publications are at the disposal of the Librarian of Congress for exchange, through the Smithsonian, with foreign Governments, and from this source are received about 12,000 volumes annually. Other special accessions have been: The Peter Force collection (22,529 volumes, 37,000 pamphlets), purchased 1867, cost $100,000; the Count de Rochambeau collection (manuscript), purchased 1883, cost $20,000; the Toner collection (24,484 volumes, numerous pamphlets), the gift in 1882 of Dr. Joseph M. Toner; the Hubbard collection (engravings).

The collection is now the largest in the Western Hemisphere, and third in the world. It comprises over 2,918,256 printed books and pamphlets (including the law library, which, while a division of the Library of Congress, still remains at the Capitol), maps and charts, pieces of music, and photographs, prints, engravings and lithographs numbering about two million.

The collection is rich in history, political science, in official documents, National, State, and foreign, and in Americana, including important files of American newspapers and original manuscripts (Colonial, Revolutionary, and formative periods). Many of the rare books and manuscripts belonging to the library are exhibited on the second floor.

Among the special book collections are the Yudin, of Russian literature (80,000 volumes); the Schiff, of Judaica (about 20,000); the Weber, of Indica; the Huitfeld-Kaas (Scandinavian); the John Boyd Thacher of Incunabula (930 titles). The Orientalia include some 5,000 volumes (fascicules) of Japanese books and about 40,000 volumes (fascicules) of Chinese. The Division of Prints includes certain collections given or lent, besides a large mass of material received by copyright and some by purchase. The manuscript collections are especially noteworthy for material on American history, some of the most distinguished of which has been received by transfer from the executive departments, the library being now regarded as the main custodian of the historical archive material in the possession of the Government. It has the papers of seventeen Presidents and of various American statesmen, Franklin, Morris, Hamilton, &c.

The library is copying largely documents in foreign archive offices and other institutions of concern to American history. It has already a large body of transcripts from such sources. This policy of transcribing and copying, where necessary by facsimile, is applied also to maps and to music. Through it, the collection of music, in bulk one of the largest in the world, is especially strengthened in full scores of orchestral and operatic music.

In 1897 the main collection was removed from the Capitol to the building erected for it under the Acts of Congress approved April 15, 1886, October 2, 1888, and March 2, 1889, at a cost of $6,347,000 (limit by law, $6,500,000), exclusive of the land, which cost $585,000. The architects who furnished the original designs were John L. Smithmeyer and Paul J. Pelz. By the act of October 2, 1888, before the foundations were laid, Thomas L. Casey, Chief of Engineers of the Army, was placed in charge of the construction of the building, and the architectural details were worked out by Paul J. Pelz and Edward P. Casey. Upon the death of Gen. Casey, in March, 1896, the entire charge of the construction devolved upon Bernard R. Green, Gen. Casey's assistant, and under his superintendence the building was completed in February, 1897, and opened to the public November, 1897. The building occupies three and three-quarter acres upon a site ten acres in extent at a distance of 1,270 feet east of the Capitol, and is the largest and most magnificent library building in the world. In the decorations some forty painters and sculptors are represented—all American citizens. The floor space is 326,195 square feet, or nearly eight acres. The book stacks, including the new stack built over the southeast interior court, contain about 100 miles of shelving, affording space for 3,540,000 of travel volumes and 84,000 volumes of newspapers.

The library is maintained by annual appropriations by Congress for various purposes, including the purchase of books. Total appropriation (1922) $711,120. For service and contingent expenses, $484,155; purchase of books, $98,000; building and grounds, $128,265.

*Library Service*—Library proper, 276 employees; copyright, 91; other, 149; distribution of cards, 53; legislative reference, 30. Total, 450. By virtue of the act of 1897, employees in the library proper are appointed by the Librarian of Congress, "solely with reference to their fitness for their particular duties." Custody and care of the building is under the Superintendent of the Library Building and Grounds, who is also the disbursing officer and appoints the 147 employees of his office.

Entitled by statute to draw books for home use are various officials at Washington. In addition, special permits are freely issued by the Librarian to persons engaged in research.

*Inter-Library Loans*—While not a lending library but primarily a reference library, the Library of Congress maintains an inter-library loan system by which special service is rendered to scholarship by the loan to other libraries for the use of investigators engaged in serious research of books which it is not within the power or duty of the library in question to supply and which at the time are not needed in Washington.

*Copyright Office*—The Copyright Office is a distinct division of the Library of Congress and is located on the ground floor, south side; open 9 to 4.30. It is under the immediate charge of the Register of Copyrights, who, by the acts of February 19, 1897, and March 4, 1909, is authorized "under the direction and supervision of the Librarian of Congress" to perform all the duties relating to copyrights. Copyright registration was transferred to the Librarian of Congress by the act of July 8, 1870. Of most articles copyrighted two copies, and of some one copy, must be deposited in the Library of Congress to perfect copyright.

*Hours*—The library building is open to the public all days in the year excepting 4th of July and Christmas. The hours are from 9 A. M. to 10 P. M. weekdays, from 2 P. M. to 10 P. M. Sundays and Holidays and 9 A. M. to 1 P. M. on Saturdays from June 15 to September 15.

*Librarians Since the Inception of the Library*—1800-1815, the Clerk of the House of Representatives (for the time being); 1815-1829, George Watterston; 1829-1861, John S. Meehan; 1861-1864, John G. Stephenson; 1864-1897 (June 30), Ainsworth R. Spofford; 1897-January 17, 1899, John Russell Young; 1899 (April 5), Herbert Putnam. *Chief Assistant*, Appleton P. C. Griffin; *Chief Clerk*, Allen R. Boyd; *Secretary*, Jessica L. Farnum.

## PAN-AMERICAN UNION.

THE Pan-American Union is the international organization and office maintained in Washington, D. C., by the twenty-one American republics, as follows: Argentina, Bolivia, Brazil, Chili, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Hayti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Salvador, United States, Uruguay, and Venezuela. It is devoted to the development and advancement of commerce, friendly intercourse, and good understanding among these countries. It is supported by quotas contributed by each country, based upon the population. Its affairs are administered by a Director-General and Assistant Director, elected by and responsible to a Governing Board, which is composed of the Secretary of State of the United States and the diplomatic representatives in Washington of the other American Governments. These two executive officers are assisted by a staff of experts, statisticians, commercial specialists, editors, translators, compilers, librarians, clerks and stenographers. The Union publishes a monthly bulletin in English, Spanish, and Portuguese, which is a record of Pan-American progress. It also publishes numerous special reports and pamphlets on various subjects of practical information. Its *library*, the Columbus Memorial *Library*, contains 50,000 volumes, 25,000 photographs, 180,000 index cards, and a collection of 1,600 maps. The Union is housed in a building erected through the gifts of Andrew Carnegie and the contributions of the American republics.

*Director-General*—Dr. L. S. Rowe; *Assistant Director*—Francisco J. Yanes; *Counselor*—Franklin Adams; *Trade Adviser*—W. A. Reid; *Chief Statistician*—William C. Wells; *Chief Clerk*—Wm. V. Griffin.

## MUSEUM OF ANTHROPOLOGY, UNIVERSITY OF CALIFORNIA.

The Museum of Anthropology of the University of California was founded by Mrs. Phoebe Apperson Hearst in 1901. The collections gathered through her generosity cost more than $1,000,000. The Museum is temporarily located at Parnassus and Second Avenues, San Francisco. It is open daily (except Monday) to the public without charge. The hours are 10 A. M. to 4 P. M. on week days, 10 to 5 on Sundays.

Although the Museum was founded in 1901 it was not opened for public exhibition until 1911. The collections which have been placed on view represent the ancient cultures of the following regions: California, Southwestern United States, the Great Plains, the North Pacific Coast, Peru, Oceania, Asia, Greece, Italy and Egypt.

## NATIONAL ACADEMY OF DESIGN.

(Founded 1825. Headquarters, 109th Street and Amsterdam Avenue, New York.)

The National Academy of Design, and the Society of American Artists (founded 1877) were united, April 7, 1906. All members of the latter organization then became members of the former.

**Council**—Edwin H. Blashfield, President; Harry W. Watrous, Vice President; Charles C. Curran, Corresponding Secretary; Douglas Volk, Recording Secretary; Francis C. Jones, Treasurer. W. Granville-Smith, Robert I. Aitken, Herbert Adams, Emil Carlsen, Charles A. Platt, Hobart Nichols.

ACADEMICIANS.

(The year named is that of election.)

**Painters**—George R. Barse, Jr., 1900; Gifford Beal, 1914; Cecilia Beaux, 1902; George Bellows, 1913; Frank W. Benson, 1905; Louis Betts, 1915; Edwin H. Blashfield, 1888; Max Bohm, 1920; Frederic A. Bridgman, 1881; George DeForest Brush, 1908; Howard Russell Butler, 1899.

Emil Carlsen, 1906; Carlton T. Chapman, 1914; F. S. Church, 1885; B. West Clinedinst, 1898; William A. Coffin, 1912; Colin Campbell Cooper, 1912; E. Irving Couse, 1911; Bruce Crane, 1901; Charles C. Curran, 1904.

Elliott Daingerfield, 1906; W. P. W. Dana, 1863; Charles H. Davis, 1906; Lockwood DeForest, 1898; Franklin DeHaven, 1920; Louis Paul Dessar, 1906; Charles Melville Dewey, 1907; Thomas W. Dewing, 1888; Frederick Dielman, 1883; Paul Dougherty, 1907; Frank Vincent DuMond, 1906.

Lydia Field Emmet, 1912; Ben Foster, 1904; August Franzen, 1920; Frederick Karl Frieseke, 1914.

Daniel Garber, 1913; Edward Gay, 1907; W. Granville-Smith, 1915; Walter Griffin, 1922; Albert L. Groll, 1910.

Hamilton Hamilton, 1889; Alexander Harrison, 1901; Birge Harrison, 1910; Childe Hassam, 1906; Charles Hawthorne, 1911; Robert Henri, 1906; William H. Howe, 1897.

George Inness, Jr., 1899; John C. Johansen, 1915; Francis C. Jones, 1894; H. Bolton Jones, 1883.

William Sargeant Kendall, 1905; F. W. Kost, 1906; W. L. Lathrop, 1907; Ernest Lawson, 1917; DeWitt Lockman, 1921; Will H. Low, 1890.

George W. Maynard, 1885; Gari Melchers, 1906; Richard E. Miller, 1915; Louis Moeller, 1894; F. Luis Mora, 1906; Thomas Moran, 1884; H. Siddons Mowbray, 1891.

Hobart Nichols, 1920; Leonard Ochtman, 1904; Ivan G. Olinsky, 1919.

Walter Palmer, 1897; Maxfield Parrish, 1906; DeWitt Parshall, 1917; Edward H. Potthast, 1906; Henry Prellwitz, 1912.

Robert Reid, 1906; William Ritschel, 1914; William S. Robinson, 1914; Charles Rosen, 1917; Carl Rungius, 1920; Chauncey F. Ryder, 1920.

John S. Sargent, 1897; W. Elmer Schofield, 1907; Aaron D. Shattuck, 1861; Henry B. Snell, 1906; Robert Spencer, 1920; Gardner Symons, 1911.

Edmund C. Tarbell, 1906; William Thorne, 1913; Louis C. Tiffany, 1880; D. W. Tryon, 1891; Helen M. Turner, 1921.

Robt. W. Van Boskerck, 1907; Elihu Vedder, 1865; Douglas Volk, 1899; Robert W. Vonnoh, 1906.

Henry O. Walker, 1902; Horatio Walker, 1891; Harry W. Watrous, 1895; Frederick J. Waugh, 1911; John F. Weir, 1896; C. D. Weldon, 1897; Carleton Wiggins, 1906; Irving R. Wiles, 1897; Frederick Ballard Williams, 1909; Charles H. Woodbury, 1907.

Cullen Yates, 1919; George H. Yewell, 1880.

**Sculptors**—Herbert Adams, 1899; Robert I. Aitken, 1914; Paul Wayland Bartlett, 1917; A. Stirling Calder, 1913; James Earle Fraser, 1917; Daniel Chester French, 1901; Charles Grafly, 1905; Anna Vaughn Hyatt, 1922; Isidor Konti, 1909; Evelyn Beatrice (Batchelder) Longman, 1919.

Frederick W. MacMonnies, 1906; Hermon A. MacNeil, 1906; Paul H. Manship, 1916; Charles H. Niehaus, 1906; Edward C. Potter, 1906; A. Phimister Proctor, 1904; Frederick G. R. Roth, 1906; Lorado Taft, 1911; Bessie Potter Vonnoh, 1921; Adolph A. Weinman, 1911.

**Architects**—Henry Bacon, 1917; Arnold Brunner, 1916; Cass Gilbert, 1908; Thomas Hastings, 1909; William Rutherford Mead, 1910; Charles A. Platt, 1911.

**Engravers and Etchers**—Timothy Cole, 1908; Joseph Pennell, 1909.

ASSOCIATES.

**Painters**—Wayman Adams, Ernest Albert, Thomas Allen, Karl Anderson.

William J. Baer, Hugo Ballin, Reynolds Beal, E. A. Bell, Frank A. Bicknell, Charles Bittinger. Ernest L. Blumenschein, Mary Green Blumenschein, George H. Bogert, Adolphe Borie, Joseph H. Boston. Hugh H. Breckenridge, R. Sloan Bredin, Miss Fidelia Bridges, Roy Brown, George Elmer Browne, K. A. Buehr (elect), Bryson Burroughs.

Dines Carlsen (elect), John F. Carlson, Charles S. Chapman, Adelaide Cole Chase, Eliot Clark, Ralph Clarkson, C. C. Coleman, Charlotte B. Coman, Paul Cornoyer, William Cotton, Louise Cox, Thomas B. Craig, Arthur Crisp.

Francis Day, W. R. Derrick (elect), Sidney E. Dickinson, W. H. Drake, Edward Dufner.

William B. Faxon, Anna Fisher, Gertrude Fiske, John E. Follinsbee, Will Howe Foote, Kenneth Frazier, Henry Brown Fuller, Lucia Fairchild Fuller.

I. M. Gaugengigl, Robert David Gauley, Lillian M. Genth (Miss), Howard Giles, William J. Glackens, Edmund Greacen, Frank Russell Green, Oliver Dennett Grover, Jules Guerin.

Ben Ali Haggin, Phillip L. Hale, William J. Hays, Albert Herter, Eugene Higgins, Victor Higgins, Howard Hildebrandt, Laura D. Hills, James R. Hopkins, Felicie Waldo Howell (Miss), Henry S. Hubbell, Frederick W. Hutchinson (elect), William H. Hyde.

Ernest L. Ipsen, M. Jean MacLane Johansen, Alphonse Jongers.

Dora Wheeler Keith, Paul King, William Fair Kline, Leon Kroll.

Jonas Lie, Chester Loomis, Mary Fairchild Low, Albert P. Lucas.

Fred Dana Marsh, Paul Moschcowitz, Jerome Myers.

Walter Nettleton, G. Glenn Newell, Spencer Nichols, John H. Niemeyer, Robert H. Nisbet, Violet Oakley (Miss).

Lawton Parker, Henry W. Parton, William M. Paxton, Joseph T. Pearson, Jr., Ernest Peixotto, Henry R. Poore, W. Merritt Post, Arthur J. E. Powell, Edith Mitchell Prellwitz.

William M. J. Rice, Henry R. Rittenberg, Edward F. Rook.

William Sartain, Amanda Brewster Sewell, Robert V. V. Sewell, Leopold Seyffert, Rosina Emmet Sherwood, William H. Singer, Jr., Howard E. Smith, Arthur P. Spear, Eugene Speicher, T. C. Steele, Albert Sterner, George H. Story.

Henry O. Tanner, Leslie P. Thompson, Walter Ufer, Harry A. Vincent, Edward C. Volkert.

H. M. Walcott, Harry F. Waltman, Everett L. Warner, J. Louis Webb, William Wendt, William J. Whittemore, Guy Wiggins, Charles Morris Young.

**Sculptors**—Chester Beach, Cyrus E. Dallin, Abastenia St. L. Eberle, Rudulph Evans, John Flanagan, Sherry E. Fry, Charles Louis Hinton, Charles Keck (elect), H. Augustus Lukeman.

J. Philip Martiny, Edward McCartan (elect), Andrew O'Connor (elect), Willard D. Paddock (elect), Attilio Piccirilli, Furio Piccirilli, Edmond T. Quinn, Janet Scudder, Mahonri Young.

**Architects**—Grosvenor Atterbury, William A. Boring, Wells Bosworth, J. H. Freedlander, Bertram G. Goodhue, John Galen Howard.

C. Grant LaFarge, Frederick Law Olmsted, John Russell Pope, S. B. P. Trowbridge, C. Howard Walker.

**Engravers and Etchers**—Frank French (elect), Charles Dana Gibson, Ernest Roth, William G. Watt (elect).

## AMERICAN ACADEMY OF ARTS AND LETTERS.

The first seven members of the American Academy of Arts and Letters were selected by the National Institute of Arts and Letters from its own body in 1904 by ballot. The seven were William Dean Howells, Augustus Saint-Gaudens, Edmund Clarence Stedman, John La Farge, Samuel L. Clemens, John Hay and Edward MacDowell. In order to become eligible to the American Academy one must first be a member of the National Institute of Arts and Letters. This society was organized at a meeting of the American Social Science Association in 1898. The qualification for membership is stated in the constitution, "It shall be notable achievement in art, music or literature." The number in the Institute is limited to 250, and the election is by ballot.

The American Academy of Arts and Letters numbers fifty members and the officers are: William Milligan Sloane, President; Brander Matthews, Chancellor; Thomas Hastings, Treasurer; Robert Underwood Johnson, 15 West 81st St., New York City, Secretary.

The following are the living members of the academy, as of November 7, 1922.

John Singer Sargent
Daniel Chester French
James Ford Rhodes
William Milligan Sloane
Robert Underwood Johnson
George Washington Cable
Henry van Dyke
William Crary Brownell
Basil Lanneau Gildersleeve
Woodrow Wilson
Arthur Twining Hadley
Henry Cabot Lodge
Edwin Howland Blashfield
Thomas Hastings
Brander Matthews
Elihu Vedder
George Edward Woodberry
George Whitefield Chadwick
George deForest Brush
William Rutherford Mead
Bliss Perry
Abbott Lawrence Lowell
Nicholas Murray Butler
Paul Wayland Bartlett
Owen Wister
Herbert Adams
Augustus Thomas
Timothy Cole
Cass Gilbert
William Roscoe Thayer
Robert Grant
Frederick MacMonnies
William Gillette
Paul Elmer More
Gari Melchers
Elihu Root
Brand Whitlock
Hamlin Garland
Paul Shorey
Charles Adams Platt
Maurice Francis Egan
Archer M. Huntington
Childe Hassam
David Jayne Hill
Lorado Taft
Booth Tarkington
Henry Bacon
Charles Dana Gibson
Joseph Pennell

The directors of the academy are: N. M. Butler, Hamlin Garland, Cass Gilbert, Thomas Hastings, A. M. Huntington, R. U Johnson, Brander Matthews, W. M. Sloane, and Augustus Thomas.

In 1923 the academy will move into its new building at 155th Street, between Broadway and Riverside Drive, the cornerstone of which was laid by Marshal Foch in 1922.

## NATIONAL COMMISSION OF FINE ARTS.

(1729 New York Ave., Washington.)

*Chairman*—Charles Moore; *Vice Chairman*—John Russell Pope; James L. Greenleaf, James E. Fraser, Henry Bacon, Louis Ayres, H. Siddons Mowbray; *Sec. and Exec. Officer*—H. P. Caemmerer.

## PROMINENT SOCIAL CLUBS IN BIG CITIES IN UNITED STATES.

**Atlanta**—*Athletic*, 37 Auburn Ave.; *Capital City*, Harris and Peachtree Sts.

**Baltimore**—*Arundel*, 1000 N. Charles St.; *Baltimore*, Charles and Madison Sts.; *Country*, Roland Park; *Johns Hopkins*, 227 W. Monument St.; *Maryland*, 1 E. Eager St.; *Merchants'*, 206 E. German St.; *University*, 801 N. Charles St.

**Boston**—*Algonquin*, 217 Commonwealth Ave.; *Automobile*, 100 Stuart St.; *Boston Art*, Newbury and Dartmouth Sts.; *Boston Athletic*, Exeter and Blagden Sts.; *Chilton*, 152 Commonwealth Ave.; *Exchange*, Milk and Battery March Sts.; *Harvard*, 374 Commonwealth Ave.; *Mayflower*, 6 Park St.; *New Riding*, 52 Hemenway St.; *St. Botolph*, 4 Newbury St.; *Somerset*, 42 Beacon St.; *Tavern*, 4 Boylston Pl.; *Tennis & Racquet*, 939 Boylston St.; *Union*, 8 Park St.; *University*, 270 Beacon St.

**Buffalo, N. Y.**—*Buffalo*, 388 Delaware Ave.; *Canoe*, 1051 Ellicott Sq.; *Country*, Williamsville Rd.; *Ellicott*, Ellicott Sq.; *Garret*, 205 Bryant St.; *Park*, 1401 Elmwood Ave.; *Saturn*, 88 Edward St.; *Twentieth Century*, 595 Delaware Ave.; *University*, 546 Delaware Ave.

**Charleston**—*Carolina Yacht*, East Bay; *Charleston*; *Country*.

**Chicago**—*Casino*, 167 E. Delaware Pl.; *Caxton*, 410 So. Michigan Ave.; *Chicago*, Michigan Ave. and Van Buren St.; *Chicago Athletic*, 125 Michigan Ave.; *Literary*, 410 So. Michigan Ave.; *Fortnightly*, 203 Michigan Ave.; *South Shore Country*, 70th St. and the Lake; *Union League*, 108 Jackson Boulevard; *University*, 76 E. Monroe St.; *Woman's Country*, 410 So. Michigan Ave.; *Woman's Athletic*, 606 So. Michigan Ave.

**Cincinnati**—*Commercial*; *Country*, Grandin Rd.; *Queen City*, Seventh and Elm Sts.; *University*, Broadway and Fourth St.

**Cleveland**—*Ohio Country*, Lake Shore Boulevard; *Mayfield Country*, Mayfield, Rd.; *Roadside*, St Clair Ave.; *Tavern*, E. 36th St. and Prospect Ave.; *Union*, 1,211 Euclid Ave.; *University*, 3,813 Euclid Ave.

**Detroit**—*College*, 50 Peterboro St.; *Country*, Grosse Pte. Farms; *Detroit*, Fort and Cass Sts.; *Fellowcraft*, 70 Washington Boulevard; *Ingleside*, Woodward and Atkinson Sts.; *Twentieth Century*, Columbia and Witherell; *University*, Jefferson and Russell; *Yondotega*.

**Los Angeles**—*California*, Fifth and Hill Sts.; *Jonathan*, Pacific Elec. Bldg.; *University*, Sixth and Hill Sts.

**Minneapolis**—*Minikahda; Minneapolis*, So. Second Ave.; *University*, 41 Seventh St.

**New Orleans**—*Boston*, 824 Canal St.; *Carnival German*, Cotton Exchange Bldg.; *Louisiana*, Canal and Carondelet Sts.; *Country*, Napoleon Ave.; *Pickwick*, Canal, near Rampart St.; *Round Table*, 6330 St. Charles Ave.; *Stratford*, 313 St Charles St.

**Philadelphia**—*Acorn*, 1618 Walnut St.; *Art*, 220 So. Broad St.; *Franklin Inn*, Camac and St. James Sts.; *Markham*, 212 So. 15th St.; *Penn*, 720 Locust St.; *Philadelphia*, 1301 Walnut St.; *Princeton*, 1223 Locust St.; *Racquet*, 16th St., near Walnut St.; *Rittenhouse*, 1811 Walnut St.; *St. Anthony*, 32 So. 22d St.; *Union League*, Broad and Walnut Sts.; *University*, 1510 Walnut St.

**Pittsburgh**—*Duquesne*, 325 Sixth Ave.; *Pittsburgh*, 425 Penn Ave.; *Pittsburgh Athletic*, Grant Boulevard and Fifth St.; *Union*, Frick Bldg.; *University*, Grant Boulevard, near Fifth St.

**Richmond**—*Commonwealth*, Monroe and Franklin Sts.; *Country*; *Westmoreland*, 601 E. Grace St.

**St. Louis**—*Commercial*; *Log Cabin*; *Mercantile*, Seventh and Locust Sts.; *Noonday*, Security Bldg.; *Racquet*, 476 N. Kingshighway; *Round Table*; *St. Louis*, 3663 Lindell St.; *University*, 607 N. Grand Ave.; *Wednesday*, Taylor and Westminster Sts.; *Woman's*, 3621 Washington Ave.

**St. Paul**—*Minnesota; Town & Country*, Marshall Ave.; *University*, Summit and Ramsey Sts.

**San Francisco**—*Athenian-Nile*, 14th and Franklin Sts.; *Bohemian*, Post and Taylor Sts.; *Family*, 545 Powell St.; *Francisca*, 560 Sutter St.; *Holluschickie*, 700 Mason St.; *Olympic*, Post St., near Mason St.; *Pacific Union*, 1000 California St.; *Town & Country*, 218 Stockton St.; *University*, Powell and California Sts.

**Savannah**—*Chatham Hunt*.

**Washington**—*Alibi*, 1806 I St.; *Army & Navy*, Farragut Sq.; *Cosmos*, 1520 H St.; *Metropolitan*, 1700 H St.; *Riding & Hunt*, 22d and P Sts.; *University*, 930 16th St.; *Washington*, 1701 K St.

## THE ALFRED B. NOBEL PRIZES.

THE Swedish scientist Alfred B. Nobel, the inventor of dynamite, died in 1896, bequeathing his fortune, estimated at $9,000,000, to the founding of a fund the interest of which should yearly be distributed to those who had mostly contributed to the benefit of mankind improvement during the year immediately preceding that of the award.

The Board of Directors of the Nobel Foundation, exclusively consisting of Swedes, must reside in Stockholm. The board has in its care the funds of the institution, and hands yearly over to the awarders of the prizes the amount to be given away. The value of each prize is on an average $40,000.

| YEAR. | Physics. | Chemistry. | Medicine. | Literature. | Peace. |
|---|---|---|---|---|---|
| 1901... | W. C. Röntgen (G) | J. H. van't Hoff (D.) | E. A. von Behring (G.) | R. F. A. Sully-Prudhomme (F.) | H. Dunant (Swi.) Fr. Passy (F.) |
| 1902... | H. A. Lorentz (D.) P. Zeeman (D.) | E. Fischer (G.) | Sir Ronald Ross (E.) | Th. Mommsen (G.) | E. Ducommun (Swi.) A. Gobat (Swi.) |
| 1903... | H. A. Becquerel (F.) P. and Marie Curie (F.) | S. A. Arrhenius (Swe.) | N. R. Finsen (Dane.) | B. Bjornson (N.) | Sir W. R. Cremer (E.) |
| 1904.. | Lord Rayleigh (E.) | Sir Wm. Ramsay (E.) | I. P. Pawlow (R.) | F. Mistral (F.) J. Echegaray (Sp.) | Institute of International Law. |
| 1905... | Ph. Lenard (G.) | A. von Baeyer (G.) | R. Koch (G.) | H. Sienkiewicz (P.) | Baroness von Suttner (Aus.) |
| 1906... | J. J. Thomson (E.) | H. Moissan (F.) | C. Golgi (I.) S. Ramon y Cajal (Sp.) | G. Carducci (I.) | Th. Roosevelt (A.) |
| 1907... | A. A. Michelson (A.) | E. Buchner (G.) | C. L. A. Laveran (F.) | R. Kipling (E.) | E. T. Moneta (I.) L. Renault (F.) |
| 1908... | G. Lippmann (F.) | E. Rutherford (E.) | P. Ehrlich (G.) E. Metchnikoff (R.) | R. Eucken (G.) | K. P. Arnoldson (Swe.) F. Bajer (Dane). |
| 1909... | G. Marconi (I.) F. Braun (G.) | W. Ostwald (G.) | Th. Kocher (Swi) | Selma Lagerlof (Swe.) | A. M. F. Beernaert (B.) Baron de Constant (F.) |
| 1910... | J. D. van der Waals (D.) | O. Wallach (G.) | A. Kossel (G.) | P. Heyse (G.) | Int'l Peace Bureau (Swi.) |
| 1911... | W. Wien (G.) | Marie Curie (F.) | A. Gullstrand (Swe.) | M. Maeterlinck (B.) | T. M. C. Asser (D.) A. H. Fried (Aus.) |
| 1912... | Gustaf Dalen (Swe.) | V. Grignard (F.) P. Sabatier (F.) | A. Carrel (A.) | G. Hauptmann (G.) | Elihu Root (A.) |
| 1913... | H. K. Onnes (D.) | A. Werner (Swi.) | C. Richet (F.) | R. Tagore (Beng.) | H. LaFontaine (B.) |
| 1914... | M. von Laue (G.) | T. W. Richards (A.) | R. Barany (Aus.) | Not awarded. | Not awarded. |
| 1915... | W. H. Bragg (E.) W. L. Bragg (E.) | R. Willstatter (G.) | Not awarded. | Romain Rolland (F.) | Not awarded. |
| 1916... | Not awarded. | Not awarded. | Not awarded. | Verner Heidenstam (Swe.) | Not awarded. |
| 1917... | Prof. Chas. G. Barkla (E.) | Not awarded. | Not awarded. | K.Gjellerup (Dane.) H. Pontoppidan (Dane.) | International Red Cross of Geneva. W'drow Wilson (A.) |
| 1918... | M. Planck (G.) | Prof. F. Haber (G.) | Not awarded. | Carl Spitteler (Swi.) | |
| 1919... | J. Stark (G.) | Not awarded. | Dr. Jules Bordet (B) | Knut Hamsun (N.) | L. Bourgeois (F) |
| 1920... | C. E. Guillaume (Swi.) | Walther Nernst (G.) | Prof. A. Krogh (Dane.) | Anatole France (F.) | K.H.Branting (Swe) Chr. L. Lange (N.) |
| 1921... | Albert Einstein (G.) | Fred'k Soddy (E.) | ..... | J. Benavente (Sp.) | ..... |
| 1922... | Neils Bohr (Dh.) | F. W. Aston (E.) | ..... | | |

A., American; Aus., Austrian; B., Belgian; Beng., Bengalese; D., Dutch; Dh., Danish; E., English; F., French; G., German; I., Italian; N., Norwegian; P., Polish; R., Russian; Sp., Spanish; Swe., Swedish; Swi., Swiss.

## THE FRENCH ACADEMY.

The French Academy, founded in 1630 and incorporated in 1637, was abolished by the Revoluton, but was revived in 1795 as one of the sections of the Institute of France.

The Academy, when full, consists of 40 regular members. There are, in addition, ten members at large (from whom the regular members are selected by the Academy to fill vacancies), eight foreign members, and seventy corresponding members.

| YEAR ELECTED | Names of Members. | Born. |
|---|---|---|
| 1888.... | Othenin de Cleron, Comte d' Haussonville..... | Gurcy, 1843. |
| 1890.... | Charles Louis de Saulses de Freycinet..... | Foix, 1828. |
| 1891.... | Louis Marie Julien Viaud (Pierre Loti) | Rochefort, 1850. |
| 1894.... | Paul Bourget..... | Amiens, 1852. |
| 1896.... | H. G. Anatole Francois Thibault (Anatole France)..... | Paris, 1844. |
| 1897.... | Gabriel Hanotaux... | Beaurevoir, 1853. |
| 1898.... | Henri Emile Lavedan | Orleans, 1859. |
| 1903.... | Frederic Masson.... | Paris, 1847. |
| 1903.... | Rene Bazin..... | Angers, 1853. |
| 1906.... | Alexander Ribot.... | St. Omer, 1842. |
| 1906.... | Maurice Barres..... | Charmes, 1862. |
| 1907.... | Maurice Donnay.... | Paris, 1859. |
| 1908.... | Jean Richepin..... | Medea, Algeria, 1849. |
| 1909.... | Raymond Poincare.. | Bar-le-Duc, 1860. |
| 1909.... | Eugene Brieux..... | Paris, 1858. |
| 1909.... | Rene Doumic..... | Paris, 1860. |

| YEAR ELECTED | Names of Members. | Born. |
|---|---|---|
| 1909.... | Marcel Prevost..... | Paris, 1862. |
| 1911.... | Henri de Regnier... | Honfleur, 1864. |
| 1912.... | Marshal Lyautey... | Nancy, 1854. |
| 1914.... | Pierre de la Gorce.. | Vannes, 1846. |
| 1914.... | Henri Bergson..... | Paris, 1859. |
| 1918.... | Marshal Joffre..... | Rivesaltes, 1852. |
| 1918.... | Louis Barthou..... | Oloron-Ste. Marie, 1862. |
| 1918.... | Reni M.A.Tardiveau (Rene Boylesve).. | La Haye-Descartes, 1867. |
| 1918.... | Francois de Curel... | Metz, 1854. |
| 1918.... | Alfred Baudrillart... | Paris, 1859. |
| 1918.... | Marshal Foch..... | Tarbes, 1851. |
| 1918.... | Georges Clemenceau | Feole, 1841. |
| 1918.... | Jules Cambon..... | Paris, 1845. |
| 1919.... | Henry Bordeaux.... | Thonon, 1870. |
| 1920.... | Robert de Flers..... | Pont l'Eveque, 1872. |
| 1920.... | Joseph Bedier..... | Paris, 1864. |
| 1920.... | Louis Chevrillon.... | Ruelle (Charente), 1864. |
| 1922.... | Pierre de Nolhac.... | Puy de Dome, Dept. of, 1859. |
| 1922.... | Georges Goyau..... | Orleans, 1869. |

## SCHOOL ATTENDANCE IN THE UNITED STATES.

(U. S. Census Returns, Jan. 1, 1920.)

| DIVISION AND STATE. | Children 7 to 13 Years of Age. | | 14 to 15 Years of Age. | | 16 to 17 Years of Age. | | 18 to 20 Years of Age. | |
|---|---|---|---|---|---|---|---|---|
| | Total Number. | Attending School. | Total Number. | Attending School. | Total Number. | Attending School. | Total Number. | Attending School. |
| United States | 15,306,793 | 13,869,010 | 3,907,710 | 3,124,129 | 3,828,131 | 1,644,061 | 5,522,082 | 814,651 |
| GEOGRAPHICAL DIVISIONS: | | | | | | | | |
| New England | 942,848 | 898,605 | 239,061 | 179,963 | 238,015 | 92,749 | 348,366 | 52,306 |
| Middle Atlantic | 2,976,461 | 2,805,986 | 734,334 | 582,517 | 743,081 | 240,079 | 1,073,881 | 117,978 |
| East North Central | 2,832,926 | 2,693,634 | 725,231 | 598,227 | 726,207 | 293,581 | 1,066,273 | 143,264 |
| West North Central | 1,788,544 | 1,679,682 | 470,770 | 401,680 | 465,924 | 224,014 | 667,905 | 115,553 |
| South Atlantic | 2,334,219 | 1,997,008 | 600,051 | 452,330 | 570,333 | 249,134 | 819,017 | 119,934 |
| East South Central | 1,535,376 | 1,283,921 | 397,209 | 307,840 | 375,463 | 181,363 | 510,547 | 85,535 |
| West South Central | 1,755,432 | 1,447,653 | 457,575 | 351,732 | 432,811 | 208,180 | 613,182 | 90,031 |
| Mountain | 493,303 | 452,896 | 121,124 | 104,983 | 114,369 | 65,231 | 167,610 | 33,528 |
| Pacific | 647,684 | 609,625 | 162,355 | 144,857 | 161,928 | 89,730 | 255,301 | 56,522 |
| NEW ENGLAND: | | | | | | | | |
| Maine | 99,350 | 93,615 | 26,259 | 21,967 | 25,964 | 12,082 | 37,249 | 6,635 |
| New Hampshire | 55,158 | 51,544 | 14,210 | 12,312 | 14,322 | 5,979 | 20,891 | 3,228 |
| Vermont | 46,175 | 43,336 | 12,276 | 10,577 | 12,197 | 5,611 | 16,654 | 3,020 |
| Massachusetts | 483,762 | 464,752 | 122,214 | 90,290 | 121,257 | 49,260 | 179,979 | 28,822 |
| Rhode Island | 78,318 | 74,872 | 20,044 | 11,827 | 21,019 | 5,527 | 30,393 | 3,273 |
| Connecticut | 180,085 | 170,486 | 44,058 | 32,990 | 43,256 | 14,290 | 63,200 | 7,328 |
| MIDDLE ATLANTIC: | | | | | | | | |
| New York | 1,307,158 | 1,226,918 | 325,678 | 265,353 | 330,102 | 107,688 | 498,368 | 56,946 |
| New Jersey | 426,665 | 404,928 | 104,198 | 74,841 | 103,836 | 31,016 | 151,341 | 15,194 |
| Pennsylvania | 1,242,638 | 1,174,140 | 304,458 | 242,323 | 309,143 | 101,375 | 424,172 | 45,838 |
| EAST NORTH CENTRAL: | | | | | | | | |
| Ohio | 732,550 | 703,560 | 185,015 | 162,380 | 186,142 | 82,659 | 283,092 | 40,818 |
| Indiana | 389,445 | 369,713 | 103,421 | 82,964 | 103,812 | 41,405 | 148,603 | 21,155 |
| Illinois | 860,832 | 815,080 | 217,579 | 171,810 | 220,232 | 81,699 | 321,204 | 39,627 |
| Michigan | 477,976 | 453,652 | 119,811 | 103,747 | 119,423 | 47,055 | 176,534 | 21,711 |
| Wisconsin | 372,123 | 351,629 | 99,405 | 77,326 | 96,598 | 40,763 | 136,840 | 19,953 |
| WEST NORTH CENTRAL: | | | | | | | | |
| Minnesota | 335,458 | 314,905 | 89,059 | 76,759 | 89,606 | 38,055 | 129,164 | 21,377 |
| Iowa | 325,918 | 309,744 | 87,074 | 74,732 | 87,718 | 45,078 | 126,538 | 24,524 |
| Missouri | 471,725 | 440,394 | 126,694 | 103,959 | 125,220 | 54,963 | 178,055 | 25,079 |
| North Dakota | 111,711 | 102,876 | 26,900 | 23,489 | 25,143 | 13,417 | 34,266 | 6,507 |
| South Dakota | 97,665 | 91,322 | 24,684 | 21,411 | 24,240 | 12,757 | 34,682 | 6,453 |
| Nebraska | 190,593 | 178,914 | 49,228 | 42,315 | 47,936 | 23,830 | 70,385 | 11,906 |
| Kansas | 255,474 | 241,531 | 67,131 | 59,015 | 66,061 | 35,914 | 94,814 | 19,707 |
| SOUTH ATLANTIC: | | | | | | | | |
| Delaware | 28,707 | 27,336 | 7,432 | 5,997 | 7,582 | 2,968 | 11,018 | 1,458 |
| Maryland | 196,735 | 182,147 | 52,355 | 38,525 | 53,048 | 16,812 | 78,968 | 8,572 |
| District of Columbia | 41,665 | 38,962 | 11,456 | 9,530 | 12,455 | 5,566 | 24,375 | 3,947 |
| Virginia | 382,533 | 324,292 | 97,568 | 73,671 | 94,348 | 47,769 | 135,531 | 20,305 |
| West Virginia | 239,199 | 213,053 | 58,752 | 48,331 | 58,161 | 24,599 | 81,591 | 11,061 |
| North Carolina | 460,696 | 400,846 | 118,416 | 91,619 | 109,719 | 54,942 | 150,743 | 28,832 |
| South Carolina | 315,069 | 274,429 | 82,374 | 64,264 | 73,885 | 36,318 | 105,236 | 18,066 |
| Georgia | 517,974 | 409,754 | 133,941 | 90,718 | 123,760 | 49,133 | 177,629 | 30,781 |
| Florida | 151,641 | 126,189 | 37,757 | 29,675 | 37,395 | 17,027 | 53,926 | 6,912 |
| EAST SOUTH CENTRAL: | | | | | | | | |
| Kentucky | 387,388 | 342,974 | 100,749 | 78,178 | 96,412 | 40,983 | 133,118 | 18,391 |
| Tennessee | 390,677 | 333,118 | 101,744 | 80,780 | 98,001 | 49,669 | 134,266 | 24,976 |
| Alabama | 428,939 | 344,699 | 107,620 | 83,417 | 101,488 | 49,559 | 136,001 | 22,213 |
| Mississippi | 328,372 | 263,130 | 87,096 | 65,465 | 79,562 | 41,152 | 107,162 | 19,955 |
| WEST SOUTH CENTRAL: | | | | | | | | |
| Arkansas | 312,478 | 256,263 | 81,372 | 62,632 | 75,578 | 38,423 | 100,442 | 17,797 |
| Louisiana | 308,507 | 234,249 | 81,865 | 53,736 | 76,271 | 28,053 | 107,559 | 11,508 |
| Oklahoma | 356,225 | 304,646 | 89,884 | 73,720 | 85,053 | 46,088 | 117,777 | 19,774 |
| Texas | 779,222 | 652,476 | 204,454 | 161,644 | 195,909 | 95,616 | 287,404 | 40,952 |
| MOUNTAIN: | | | | | | | | |
| Montana | 77,026 | 71,513 | 18,024 | 16,058 | 17,225 | 10,036 | 23,611 | 5,014 |
| Idaho | 68,198 | 65,102 | 16,746 | 15,342 | 15,640 | 9,741 | 21,694 | 4,842 |
| Wyoming | 26,465 | 24,554 | 6,142 | 5,294 | 5,796 | 3,047 | 9,071 | 1,492 |
| Colorado | 129,178 | 121,353 | 32,582 | 28,076 | 31,957 | 16,997 | 46,209 | 9,319 |
| New Mexico | 60,430 | 52,829 | 14,931 | 12,002 | 13,602 | 6,885 | 20,775 | 3,403 |
| Arizona | 48,479 | 38,179 | 11,731 | 8,663 | 10,769 | 4,874 | 18,485 | 2,671 |
| Utah | 74,957 | 71,611 | 18,909 | 17,719 | 17,435 | 12,456 | 24,738 | 6,122 |
| Nevada | 8,570 | 7,755 | 2,059 | 1,829 | 1,945 | 1,195 | 3,027 | 665 |
| PACIFIC: | | | | | | | | |
| Washington | 171,819 | 102,750 | 43,386 | 38,442 | 42,391 | 23,105 | 63,814 | 13,715 |
| Oregon | 99,562 | 94,312 | 25,623 | 23,224 | 25,017 | 14,931 | 37,502 | 9,146 |
| California | 376,303 | 352,563 | 93,346 | 83,191 | 94,520 | 51,694 | 153,985 | 33,661 |

### ATTENDANCE IN HIGH SCHOOLS.

One-fourth of the high schools in the United States enroll from 2 to 27 students; another fourth, from 27 to 50 students; another fourth, from 50 to 100 students, and the last fourth, over 100 students.

Similarly, one-half of the 14,000 high schools in the country have an enrolment between 27 and 100 students. Out of every 1,000 students entering high schools, 725 stay into the second year; 525 into the third year; 449 into the fourth year; and 418 graduate.

The public high schools have greater influence in keeping the girls in school than they do in holding the boys. Of the 665,000 secondary students enrolled in the first year, only 45.3 per cent. are boys, indicating that more girls than boys enter high school. In the second year the percentage of boys is still smaller, viz., 42.7. In the third year the corresponding percentage of boys reduces to 41 and in the fourth year to 38.8.

This condition does not exist in the private high schools, where the boys constitute 45.8 per cent. of the first-year enrolment, 45.6 per cent. of the second-year enrolment, 46 per cent. of the third-year enrolment, and 44.6 per cent. of the fourth-year enrolment.

Of the students enrolled in a four-year high school, nearly one-half (47.3 per cent.) are in schools maintained longer than 180 days annually. Almost all of the other one-half of this group of students (48.8 per cent.) are found to be enrolled in schools running from 161 to 180 days each year, only 3.9 per cent. being enrolled in the four-year high schools having a term of 160 days or fewer.

In the three-year high schools over one-third (39.2 per cent.) of the students have a term as short as 160 days. Over one-half (56.6 per cent.) of the students enrolled in these three-year high schools have a term of 161 to 180 days. Only a few (4.2 per cent.) of these students are enrolled in high schools which are in session longer than 180 days.

## SUMMARY OF PUBLIC SCHOOL WORK IN UNITED STATES.

(Source: Bureau of Education, Department of the Interior. Reprinted from the Statistical Abstract of the U. S. Private schools not included, nor are public schools in American colonies.)

| School Year. | Population 5 to 18 Years. | Pupils. Number Enrolled. | Pupils. Aver. Daily Attendance. | Teachers. Male. | Teachers. Female. | Teachers. Total. | Sal'ies Supt's and Teachers. | Total Expenditure. |
|---|---|---|---|---|---|---|---|---|
| 1871.... | 12,305,600 | 7,561,582 | 4,545,317 | 90,293 | 129,932 | 220,225 | $42,580,853 | $69,107,612 |
| 1880.... | 15,065,767 | 9,867,505 | 6,144,143 | 122,795 | 163,798 | 286,593 | 55,942,972 | 78,094,687 |
| 1890.... | 18,543,201 | 12,722,581 | 8,153,635 | 125,525 | 238,397 | 363,922 | 91,836,484 | 140,506,715 |
| 1900.... | 21,404,322 | 15,503,110 | 10,632,772 | 126,588 | 296,474 | 423,062 | 137,687,746 | 214,964,618 |
| 1901.... | 21,982,797 | 15 688,602 | 10,714,613 | 126,491 | 305,292 | 431,783 | 143,286,204 | 227,465,664 |
| 1902.... | 22,278,693 | 15,917,385 | 11,064,164 | 120,883 | 320,936 | 441,819 | 151,443,681 | 238,262,299 |
| 1903.... | 22,655,001 | 15,999,717 | 11,053,158 | 116 720 | 333,144 | 449,864 | 157,635,732 | 252,804,081 |
| 1904.... | 23,028,748 | 16,256,038 | 11,318,256 | 113,744 | 341,498 | 455,242 | 167,824,753 | 273,216,227 |
| 1905.... | 23,410,800 | 16,468,300 | 11,481,531 | 110,532 | 349,737 | 460,269 | 177,462,981 | 291,616,660 |
| 1906.... | 23,792,723 | 16,641,970 | 11,712,300 | 109,179 | 356,884 | 466,063 | 186,483,464 | 307,765,659 |
| 1907.... | 24,262,936 | 16,890,818 | 11,925,672 | 104,414 | 376,902 | 481,316 | 202,047,814 | 336,898,333 |
| 1908.... | 24,613,763 | 17,061,962 | 12,154,172 | 104,495 | 390,968 | 495,463 | 219,780,123 | 371,344,410 |
| 1909.... | 24,239,820 | 17,506,175 | 12,684,837 | 108,300 | 398,153 | 506,453 | 237,013,913 | 401,397,747 |
| 1910.... | 24,360,888 | 17,813,852 | 12,827,307 | 110,481 | 412,729 | 523,210 | 253,915,470 | 426,250,434 |
| 1911.... | 24 745,562 | 18,035,118 | 12,871,980 | 110,328 | 423,278 | 533,606 | 266,678,471 | 446,726,929 |
| 1912.... | 25,167,445 | 18,182,937 | 13,302,303 | 114,559 | 432,730 | 547,289 | 284,945,162 | 482,886,793 |
| 1913.... | 25,587,331 | 18,609,040 | 13,613,656 | 113,213 | 452,270 | 565,483 | 304,431,681 | 521,546,375 |
| 1914.... | 26,002 153 | 19,153,786 | 14,216,459 | 114,662 | 465,396 | 580,058 | 323,610,915 | 555,077,146 |
| 1915.... | 26,425,100 | 19,693,007 | 14,964,886 | 118,435 | 485,566 | 604,001 | 344,668,690 | 605,460,785 |
| 1916.... | 26,846 976 | 20,351,687 | 15,358,927 | 123,038 | 499,333 | 622,371 | 364,789,265 | 640,717,053 |
| 1918.... | 27,686,476 | 20,853,516 | 15,548,914 | 105,194 | 545,515 | 650,709 | 436,477,090 | 763,678,089 |
| 1920.... | 27,728,788 | 21,732,840 | 16,248,997 | 96,987 | 582,287 | 679,274 | 596,174,676 | 1,045,053,545 |

Salary figures, 1910 and since, include teachers and principals only; 1918 figures for teachers do not include 9,180 superintendents, 5,119 supervisors, or 12,591 principals, whose salaries, though, are included in the next column. The 1920 figures for teachers do not include 6,583 supervisors and 13,638 prin.ipals, whose salaries, though, are included in the next column.

### THE 1920 CENSUS OF SCHOOL ATTENDANCE.

According to the U. S. Census returns for 1920, the e were in the United States, as of Jan. 1, 15,306,-793 children 7 to 13 years, inclusive, of whom 13.869,010, or 90.6 per cent., were attending school; children 14 and 15 years, numbered 3,907,710, of whom 3,124,129, or 79.9 per cent., were attending school; children 16 and 17 years totalled 3,828,131, of whom 1,644,061 or 42.9 per cent., were attending school; children 18 to 21 years numbered 5,522,082, of whom 814,651, or 14.8 per cent., were attending school.

### SCHOOL ATTENDANCE IN THE U. S., 7 TO 13 YEARS OF AGE, INCLUSIVE.

| State. | Total No. Children of School Age. | No. Attending School. | Per Ct. Attending. | State. | Total No. Children of School Age. | No. Attending School. | Per Ct. Attending. | State. | Total No. Children of School Age. | No. Attending School. | Per Ct. Attending. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ala.... | 428,939 | 344,699 | 80.4 | Me.... | 99,350 | 93,615 | 94.2 | Okla... | 355,225 | 304,665 | 85.8 |
| Ariz... | 48,479 | 38,179 | 78.8 | Md.... | 196,735 | 182,147 | 92.6 | Ore... | 99,562 | 94,312 | 94.7 |
| Ark... | 312,478 | 256,263 | 82.0 | Mass.. | 483,762 | 464,752 | 96.1 | Pa.... | 1,242,638 | 1,174,140 | 94.5 |
| Cal.... | 376,302 | 352,563 | 93.7 | Mich.. | 477,976 | 453,652 | 94.9 | R. I... | 78,318 | 74,872 | 95.6 |
| Col.... | 129,178 | 121,353 | 93.9 | Minn.. | 335,458 | 314,905 | 93.9 | S. C... | 315,069 | 274,429 | 87.1 |
| Conn.. | 180,085 | 170,486 | 94.7 | Miss... | 328,372 | 263,130 | 80.1 | S. D... | 97,665 | 91,322 | 93.5 |
| Del.... | 28,756 | 27,356 | 95.2 | Mo.... | 471,725 | 440,394 | 93.4 | Tenn.. | 390,677 | 333,118 | 85.3 |
| D. of C. | 41,665 | 38,962 | 93.5 | Mont.. | 77,026 | 71,513 | 92.8 | Tex.... | 779,222 | 652,476 | 83.7 |
| Fla.... | 151,641 | 126,189 | 83.2 | Neb... | 190,593 | 178,910 | 93.9 | Utah.. | 74,957 | 71,611 | 95.5 |
| Ga.... | 517,974 | 409,754 | 79.1 | Nev... | 8,570 | 7,755 | 90.5 | Vt.... | 46,175 | 43,336 | 93.9 |
| Idaho.. | 68,198 | 65,102 | 95.5 | N. H.. | 55,158 | 51,544 | 93.4 | Va.... | 382,533 | 324,292 | 84.8 |
| Ill.... | 860,832 | 815,080 | 94.7 | N. J... | 426,665 | 404,928 | 94.9 | Wash.. | 171,819 | 162,750 | 94.7 |
| Ind.... | 389,445 | 369,713 | 94.9 | N. M.. | 60,430 | 52,829 | 87.4 | W. Va. | 239,199 | 213,053 | 89.1 |
| Iowa.. | 325,918 | 309,744 | 95.0 | N. Y.. | 1,307,158 | 1,226,918 | 93.9 | Wis... | 372,123 | 351,629 | 94.5 |
| Kan... | 255,474 | 241,531 | 94.5 | N. C.. | 460,696 | 400,846 | 87.0 | Wyo... | 26,465 | 24,554 | 92.8 |
| Ky.... | 387,388 | 342,974 | 88.5 | N. D.. | 111,711 | 102,876 | 92.1 | | | | |
| La.... | 308,507 | 234,249 | 75.9 | Ohio... | 732,550 | 703,560 | 96.0 | Total | 15,306,793 | 13,869,010 | 90.6 |

### FINANCIAL LOSS DUE TO IRREGULAR SCHOOL ATTENDANCE, 1917-18.

| States. | Dollars. | States. | Dollars. | States. | Dollars. | States. | Dollars. |
|---|---|---|---|---|---|---|---|
| Alabama.... | 2,462,879 | Iowa..... | 7,436,575 | Nebraska.... | 4,098,829 | Rhode Isl'd.. | 862,388 |
| Arizona..... | 1,581,572 | Kansas..... | 4,976,869 | Nevada..... | 225,516 | So. Carolina.. | 1,747,693 |
| Arkansas.... | 1,748,166 | Kentucky... | 3,434,312 | New Hamp.. | 637,084 | So. Dakota... | 2,450,338 |
| California... | 9,723,029 | Louisiana.... | 1,703,222 | New Jersey.. | 7,440,130 | Tennessee... | 2,418,432 |
| Colorado.... | 3,036 765 | Maine..... | 850,773 | New Mexico. | 1,320,321 | Texas..... | 6,949,827 |
| Connecticut.. | 2,293,971 | Maryland... | 1,854,989 | New York... | 17,994,956 | Utah..... | 1,178,442 |
| Delaware.... | 295,170 | Mass..... | 6,093,206 | No. Carolina | 2,283,968 | Vermont.... | 502,282 |
| Dist. of Col.. | 710,003 | Michigan.... | 6,488,492 | No. Dakota.. | 2,879,190 | Virginia..... | 2,665,747 |
| Florida. .... | 1,406,907 | Minnesota... | 5,874,296 | Ohio..... | 5,403,288 | Washington.. | 3,922,843 |
| Georgia..... | 2,435,859 | Mississippi... | 1,535,023 | Oklahoma... | 5,623,985 | W. Virginia.. | 2,069,346 |
| Idaho..... | 1,491,507 | Missouri.... | 5,424,596 | Oregon..... | 775,617 | Wisconsin... | 3,672,571 |
| Illinois..... | 5,974,701 | Montana.... | 2,401,480 | Pennsyiv'nia. | 13,208,847 | Wyoming.... | 398,879 |
| Indiana..... | 1,958,017 | | | | | | |

Financial loss due to irregular attendance is estimated on the basis of each State's total expenditure for public schools, compared with time lost, measured by vacant seats.

Enrolment (1890) 12,722,581; (1900) 15,503,110; (1910) 17,813,852.

Expenditures on public school libraries in the year ended June 30, 1919, tota'led $1 292,725, of which States contributed $1,130,054. In New York State the expenditures were $155,745 by the State, and $38,754 from other sources. The next largest contributor was California, $94,179, and $5,286 from other sources

## SCHOOLS IN THE UNITED STATES.

(Data by the U. S. Bureau of Education.)

| States. | Public School Buildings Used. | | | Universities, Colleges, Professional Schools. | Junior Colleges. | Normal Schools and Teachers' Colleges. | Private Secondary Schools | Private Commercial Schools | Nurse-Training Schools | Total. |
|---|---|---|---|---|---|---|---|---|---|---|
| | For Element'y Schools | For Secondary Schools Only. | Total. | | | | | | | |
| Continental U. S. | ..... | ..... | 271,319 | 618 | 92 | 449 | 2,093 | 1,283 | 1,755 | 277,609 |
| Alabama | 6,297 | 89 | 6,386 | 10 | 1 | 14 | 53 | 17 | 26 | 6,507 |
| Arizona | 569 | 30 | 599 | 1 | ..... | 2 | 5 | 4 | 2 | 613 |
| Arkansas | 6,617 | 25 | 6,642 | 9 | 1 | 6 | 17 | 10 | 16 | 6,701 |
| California | 6,054 | 318 | 6,372 | 21 | 11 | 10 | 87 | 66 | 68 | 6,635 |
| Colorado | ..... | ..... | 3 413 | 4 | ..... | 3 | 13 | 18 | 20 | 3,471 |
| Connecticut | 1 446 | 45 | 1,491 | 6 | ..... | 9 | 54 | 36 | 25 | 1,621 |
| Delaware | 446 | 2 | 448 | 1 | ..... | ..... | 6 | 2 | 3 | 460 |
| District of Columbia | 144 | 9 | 153 | 10 | ..... | 3 | 24 | 14 | 14 | 218 |
| Florida | 2,512 | 20 | 2,532 | 4 | ..... | 1 | 19 | 11 | 12 | 2,579 |
| Georgia | 7,925 | 36 | 7,961 | 23 | 2 | 6 | 49 | 22 | 32 | 8,095 |
| Idaho | 1,737 | 34 | 1,771 | 3 | 1 | 3 | 10 | 6 | 7 | 1,801 |
| Illinois | ..... | ..... | 13,872 | 37 | 5 | 13 | 105 | 77 | 114 | 14,223 |
| Indiana | 7,835 | 146 | 7,981 | 21 | 1 | 8 | 34 | 43 | 32 | 8,120 |
| Iowa | ..... | ..... | 12,716 | 22 | 2 | 3 | 99 | 35 | 59 | 12,936 |
| Kansas | 9,362 | 147 | 9,509 | 17 | ..... | 3 | 26 | 34 | 42 | 9,631 |
| Kentucky | ..... | ..... | 8,820 | 11 | 7 | 8 | 69 | 17 | 23 | 8,955 |
| Louisiana | 3,394 | 8 | 3,402 | 5 | 1 | 6 | 41 | 17 | 14 | 3,486 |
| Maine | 3,218 | 69 | 3,287 | 4 | ..... | 6 | 51 | 15 | 28 | 3,391 |
| Maryland | ..... | ..... | 2,552 | 18 | 1 | 7 | 39 | 13 | 26 | 2,656 |
| Massachusetts | 2,746 | 210 | 2,956 | 26 | ..... | 20 | 105 | 65 | 96 | 3,268 |
| Michigan | ..... | ..... | 8,941 | 11 | 3 | 40 | 57 | 38 | 44 | 9,134 |
| Minnesota | 8,837 | 240 | 9,077 | 14 | 3 | 9 | 58 | 34 | 57 | 9,252 |
| Mississippi | ..... | ..... | 7,000 | 6 | 1 | 3 | 24 | 7 | 22 | 7,063 |
| Missouri | 8,990 | 631 | 9,621 | 20 | 14 | 9 | 52 | 46 | 48 | 9,810 |
| Montana | 3,575 | 35 | 3 610 | 3 | ..... | 1 | 9 | 8 | 14 | 3,645 |
| Nebraska | ..... | ..... | 7,655 | 11 | ..... | 5 | 21 | 18 | 33 | 7,743 |
| Nevada | 302 | 17 | 342 | 1 | ..... | 2 | ..... | 1 | 1 | 347 |
| New Hampshire | 1,193 | 24 | 1,217 | 3 | ..... | 3 | 23 | 11 | 23 | 1,280 |
| New Jersey | 2,036 | 70 | 2,106 | 8 | ..... | 7 | 61 | 43 | 46 | 2,271 |
| New Mexico | 1,392 | 38 | 1,430 | 3 | ..... | 3 | 9 | 3 | 2 | 1,450 |
| New York | ..... | ..... | 11,824 | 50 | ..... | 28 | 239 | 131 | 161 | 12,433 |
| North Carolina | ..... | ..... | 7,994 | 17 | 5 | 19 | 73 | 12 | 53 | 8,173 |
| North Dakota | 5,129 | 10 | 5,139 | 4 | ..... | 6 | 15 | 8 | 15 | 5,187 |
| Ohio | 9,753 | 574 | 10,327 | 40 | ..... | 46 | 69 | 79 | 81 | 10,642 |
| Oklahoma | 6,830 | 174 | 7,004 | 6 | ..... | 7 | 24 | 20 | 25 | 7,086 |
| Oregon | 2,460 | 213 | 2,673 | 9 | 1 | 3 | 18 | 7 | 13 | 2,724 |
| Pennsylvania | 14,508 | 795 | 15,303 | 48 | ..... | 22 | 134 | 112 | 183 | 15,802 |
| Rhode Island | ..... | ..... | 507 | 3 | ..... | 1 | 15 | 10 | 11 | 547 |
| South Carolina | 4,804 | 30 | 4,834 | 16 | ..... | 6 | 24 | 9 | 23 | 4,912 |
| South Dakota | 5,470 | 14 | 5,484 | 6 | 1 | 6 | 11 | 7 | 18 | 5,533 |
| Tennessee | ..... | ..... | 6,726 | 14 | 2 | 11 | 49 | 18 | 22 | 6,842 |
| Texas | ..... | ..... | 11,122 | 20 | 18 | 11 | 39 | 46 | 40 | 11,296 |
| Utah | 643 | 40 | 683 | 3 | ..... | 1 | 13 | 5 | 7 | 712 |
| Vermont | 1,680 | 20 | 1,700 | 4 | ..... | 2 | 16 | 3 | 14 | 1,739 |
| Virginia | ..... | ..... | 6,552 | 18 | 10 | 14 | 60 | 12 | 37 | 6,683 |
| Washington | 3,102 | 99 | 3,201 | 6 | 1 | 6 | 28 | 24 | 26 | 3,292 |
| West Virginia | 6,643 | 51 | 6,694 | 5 | ..... | 8 | 16 | 10 | 33 | 6,766 |
| Wisconsin | 8,141 | 92 | 8,233 | 15 | ..... | 39 | 29 | 35 | 39 | 8,390 |
| Wyoming | 1,435 | 42 | 1,477 | 1 | ..... | ..... | 1 | 4 | 5 | 1,488 |
| Possessions: | | | | | | | | | | |
| Alaska | 75 | ..... | 75 | ..... | ..... | ..... | ..... | ..... | ..... | 75 |
| Canal Zone | 16 | ..... | 16 | ..... | ..... | ..... | ..... | ..... | ..... | 16 |
| Hawaii | ..... | ..... | 167 | 1 | ..... | 2 | 3 | ..... | ..... | 173 |
| Philippine Islands | 3,746 | 41 | 3,787 | ..... | ..... | ..... | ..... | ..... | ..... | 3,787 |
| Porto Rico | 1,895 | 8 | 1,903 | 9 | ..... | ..... | 1 | ..... | ..... | 1,913 |

In the cases of public schools, both elementary and secondary, there is no definite information as to the actual number of "schools." but only as to the number of school buildings.

## EDUCATION PROLONGS THE LIVES OF WOMEN.

(From School Life, Published by U. S. Bureau of Education.)

College women live longer than other women, according to a study by Myra M. Hulst, of the American Red Cross, published in the Quarterly Publication of the American Statistical Association. Among 15,561 graduates of three woman's colleges, the death rate between the ages of 20 and 64 years is only 3.24 per 1,000. For college women between 25 and 34 years, the death rate was 2.77 per 1,000, while for women in the general population, it was more than twice as high, namely, 6.10 per 1,000.

Such favorable figures for college graduates are not surprising when it is considered that as a rule only the physically fit continue through the four years to graduation. Physical and medical examinations given to all students bring to light remediable defects and lead to improvement. Favorable living conditions such as college women are likely to encounter, prescribed physical exercise, and general physical education add to the high level of health.

College women as a rule come from high-class homes, where the environment gives them a good start in life. Judging by the names of the women considered in this study, the majority of them are from American stock. Such women, of good financial condition, well fed and clothed, and with opportunity for leisure are likely to have better health than the average woman, whose living conditions are less favorable.

Professional occupations, such as college women usually engage in, have fewer risks than the industrial and other occupations of non-college women. It was found that 58 per cent. of the college graduates had been engaged in teaching.

In this connection, a study was made of the death rate of women teachers in New York City as reported by the City Pension Commission. For ages between 25 and 34, the death rate was 2.98, almost as low as that of the college women for the same ages. The death rates for teachers were found to be the lowest existing in the New York City service.

Clearly education and professional life have a good effect on women's health.

## ILLITERACY IN BIG UNITED STATES CITIES.

(U. S. Census, 1920 returns. Illiterates are those 10 years old and over who cannot read or write.)

NOTE.—All the figures in the table relate to persons 10 years old or over.

| | WHOLE POPULATION. | | NATIVE WHITE POP. | | FOR.-BORN WHITES | | NEGROES. | |
|---|---|---|---|---|---|---|---|---|
| CITY. | Total. | Illiterates. | Total. | Illiterates. | Total. | Illiter'tes | Total. | Illiter'tes |
| Akron, Ohio | 171 936 | 5,958 | 129,603 | 232 | 37,213 | 5,425 | 4,985 | 272 |
| Albany, N. Y. | 90,322 | 2,918 | 77,708 | 274 | 17,471 | 2,582 | 1,080 | 41 |
| Atlanta, Ga. | 166,000 | 11,031 | 108,208 | 1,339 | 4,676 | 223 | 53,086 | 9,465 |
| Baltimore, Md. | 599,978 | 26,248 | 424,643 | 2,731 | 83,083 | 11,622 | 91,891 | 11,822 |
| Birmingham, Ala. | 144,738 | 12,200 | 80,757 | 585 | 5,997 | 936 | 57,960 | 10,674 |
| Boston, Mass. | 611,539 | 24,524 | 359,954 | 517 | 236,320 | 23,407 | 14,162 | 317 |
| Bridgeport, Conn. | 112,367 | 7,743 | 64,557 | 117 | 45,795 | 7,411 | 1,911 | 172 |
| Buffalo, N. Y. | 407,079 | 17,095 | 283,219 | 787 | 119,685 | 16,180 | 3,978 | 111 |
| Cambridge, Mass. | 89,329 | 2,736 | 53,290 | 72 | 31,624 | 2,547 | 4,314 | 108 |
| Camden, N. J. | 91,650 | 4,544 | 64,697 | 368 | 19,955 | 3,510 | 6,945 | 654 |
| Chicago, Ill. | 2,171,021 | 99,133 | 1,273,573 | 2,419 | 797,618 | 92,473 | 96,961 | 3,764 |
| Cincinnati, Ohio | 338,941 | 6,741 | 270,323 | 1,055 | 42,564 | 2,843 | 25,989 | 2,841 |
| Cleveland, Ohio | 629,456 | 33,164 | 362,873 | 624 | 236,244 | 30,946 | 29,994 | 1,563 |
| Columbus, Ohio | 199,564 | 5,664 | 164,593 | 2,270 | 15,891 | 1,788 | 18,959 | 1,584 |
| Dallas, Tex. | 133,491 | 4,252 | 104,175 | 529 | 8,394 | 1,375 | 20,862 | 2,348 |
| Dayton, Ohio | 125,828 | 2,360 | 105,171 | 439 | 12,960 | 1,202 | 7,660 | 717 |
| Denver, Col. | 220,549 | 4,150 | 177,218 | 531 | 37,203 | 3,328 | 5,442 | 222 |
| Des Moines, Iowa | 104,924 | 1,395 | 89,119 | 309 | 11,110 | 800 | 4,627 | 282 |
| Detroit, Mich. | 793,316 | 29,954 | 474,161 | 1,074 | 282,257 | 27,389 | 36,169 | 1,417 |
| Fall River, Mass. | 93,556 | 11,178 | 51,520 | 509 | 41,736 | 10,632 | 245 | 27 |
| Fort Worth, Tex. | 89,418 | 3,509 | 68,683 | 393 | 6,860 | 2,062 | 13,763 | 1,034 |
| Grand Rapids, Mich. | 111,152 | 3,683 | 82,102 | 174 | 28,065 | 3,491 | 918 | 17 |
| Hartford, Conn. | 111,756 | 5,662 | 67,945 | 92 | 40,176 | 5,286 | 3,482 | 266 |
| Houston, Tex. | 115,388 | 6,217 | 74,604 | 469 | 11,459 | 2,592 | 29,284 | 3,152 |
| Indianapolis, Ind. | 264,049 | 5,463 | 217,576 | 1,595 | 16,818 | 1,390 | 29,551 | 2,458 |
| Jersey City, N. J. | 234,339 | 10,089 | 152,347 | 367 | 75,232 | 9,431 | 6,669 | 260 |
| Kansas City, Kan. | 81,254 | 3,008 | 57,862 | 481 | 11,253 | 1,561 | 12,074 | 964 |
| Kansas City, Mo. | 277,054 | 5,573 | 222,445 | 766 | 26,810 | 3,077 | 27,640 | 1,696 |
| Los Angeles, Cal. | 498,894 | 10,203 | 365,618 | 807 | 108,684 | 7,887 | 13,524 | 575 |
| Louisville, Ky. | 197,886 | 7,946 | 151,095 | 1,828 | 11,569 | 869 | 35,187 | 5,245 |
| Lowell, Mass. | 90,509 | 6,231 | 52,739 | 245 | 37,549 | 5,960 | 144 | 6 |
| Memphis, Tenn. | 137,619 | 9,280 | 78,567 | 423 | 5,704 | 534 | 53,294 | 8,310 |
| Milwaukee, Wis. | 368,002 | 10,950 | 257,042 | 454 | 108,934 | 10,429 | 1,949 | 60 |
| Minneapolis, Minn. | 314,012 | 3,844 | 223,176 | 317 | 87,083 | 3,379 | 3,499 | 122 |
| Nashville, Tenn. | 98,420 | 7,054 | 65,665 | 1,291 | 2,365 | 175 | 30,385 | 5,588 |
| New Bedford, Mass. | 96,341 | 11,631 | 44,849 | 317 | 47,636 | 10,330 | 3,781 | 954 |
| New Haven, Conn. | 128,063 | 8,046 | 79,058 | 142 | 45,101 | 7,738 | 3,768 | 149 |
| New Orleans, La. | 319,902 | 19,010 | 209,629 | 2,139 | 25,632 | 3,572 | 84,314 | 13,234 |
| New York, N. Y. | 4,522,689 | 281,121 | 2,414,134 | 6,552 | 1,968,535 | 270,788 | 132,487 | 2,756 |
| Newark, N. J. | 327,434 | 19,721 | 197,445 | 539 | 115,609 | 18,403 | 14,067 | 626 |
| Norfolk, Va. | 96,693 | 6,111 | 53,157 | 597 | 6,511 | 392 | 36,874 | 5,111 |
| Oakland, Cal. | 182,851 | 4,638 | 127,754 | 307 | 44,575 | 3,489 | 4,847 | 121 |
| Omaha, Neb. | 158,554 | 4,011 | 114,347 | 236 | 35,017 | 3,334 | 8,981 | 408 |
| Paterson, N. J. | 110,243 | 6,903 | 64,284 | 283 | 44,564 | 6,544 | 1,325 | 49 |
| Philadelphia, Pa. | 1,477,666 | 58,631 | 967,608 | 2,764 | 393,747 | 50,379 | 115,057 | 5,316 |
| Pittsburgh, Pa. | 468,573 | 20,297 | 316,882 | 885 | 119,182 | 17,712 | 32,172 | 1,661 |
| Portland, Ore. | 217,561 | 3,654 | 166,639 | 314 | 46,338 | 2,701 | 1,381 | 69 |
| Providence, R. I. | 191,960 | 11,417 | 118,853 | 421 | 68,278 | 10,434 | 4,664 | 530 |
| Reading, Pa. | 87,768 | 3,043 | 77,554 | 594 | 9,449 | 2,417 | 756 | 30 |
| Richmond, Va. | 140,804 | 7,931 | 91,425 | 898 | 4,576 | 359 | 44,754 | 6,665 |
| Rochester, N. Y. | 239,616 | 10,871 | 168,082 | 302 | 70,085 | 10,531 | 1,374 | 26 |
| St. Louis, Mo. | 653,164 | 17,634 | 489,042 | 2,233 | 102,490 | 10,327 | 61,235 | 4,996 |
| St. Paul, Minn. | 192,279 | 3,046 | 138,074 | 251 | 51,086 | 2,717 | 2,990 | 67 |
| Salt Lake City, Utah | 93,096 | 970 | 72,746 | 148 | 19,182 | 773 | 645 | 20 |
| San Antonio, Tex. | 131,362 | 14,955 | 84,925 | 2,822 | 33,977 | 11,233 | 12,256 | 875 |
| San Francisco, Cal. | 440,564 | 8,520 | 287,855 | 563 | 138,475 | 6,585 | 2,176 | 68 |
| Scranton, Pa. | 106,912 | 6,941 | 78,110 | 314 | 28,321 | 6,614 | 475 | 11 |
| Seattle, Wash. | 267,361 | 4,061 | 184,801 | 253 | 71,988 | 2,608 | 2,622 | 49 |
| Spokane, Wash. | 86,917 | 687 | 69,523 | 73 | 16,488 | 550 | 626 | 20 |
| Springfield, Mass. | 105,680 | 3,939 | 72,388 | 276 | 30,857 | 3,536 | 2,279 | 118 |
| Syracuse, N. Y. | 141,279 | 5,607 | 108,156 | 398 | 31,936 | 5,158 | 1,124 | 40 |
| Toledo, Ohio | 199,796 | 4,897 | 157,014 | 612 | 37,667 | 4,002 | 5,030 | 254 |
| Trenton, N. J. | 94,114 | 6,500 | 60,807 | 226 | 29,676 | 5,995 | 3,559 | 245 |
| Washington, D. C. | 377,295 | 10,509 | 254,522 | 640 | 28,292 | 1,728 | 93,782 | 8,053 |
| Wilmington, Del. | 88,863 | 4,907 | 63,397 | 345 | 16,075 | 3,083 | 9,354 | 1,473 |
| Worcester, Mass. | 143,725 | 6,779 | 89,769 | 237 | 52,821 | 6,507 | 1,044 | 27 |
| Yonkers, N. Y. | 78,739 | 4,309 | 51,635 | 81 | 25,439 | 4,162 | 1,612 | 56 |
| Youngstown, Ohio | 102,225 | 5,815 | 63,017 | 157 | 33,343 | 5,332 | 5,769 | 316 |

The pronounced differences between the percentages of illiteracy for the total population and for native whites which appear for many cities are due to the large proportions of illiterates among the foreign-born whites and the Negroes, the former having a considerable effect upon the average percentages in the Northern cities, and the latter in the Southern cities. For example, in Fall River, Mass., where the illiteracy in the population 10 years of age and over was 11.9 per cent. for all classes combined, it was only 1 per cent. for the native, but was 25.5 per cent. for the foreign-born whites. Again, in Birmingham, Ala., the percentage of illiteracy was 8.4 for the total population, 0.7 for the native whites, and 18.4 for the Negroes.

## ILLITERACY IN THE UNITED STATES IN 1920.

(U. S. Census Figures, as of Jan. 1, 1920.)

THE percentage of illiteracy in the native white population decreased between 1910 and 1920 in all States except six, in which it was very low in 1910 and remained unchanged—Idaho, Wyoming, and Washington, each with three-tenths of 1 per cent., and South Dakota, Nevada, and Oregon, each with four-tenths of 1 per cent.

For the foreign-born white population the percentage illiterate increased between 1910 and 1920 in 17 States, decreased in 29 States and the District of Columbia, and remained unchanged in two States.

In the case of the Negro population the percentage illiterate decreased in the District of Columbia and in every State except four—Vermont, Rhode Island, Wyoming, and Oregon. The largest proportional increase, from 3.4 in 1910 to 4.7 in 1920, appears for Oregon. The largest proportional decrease is that for New Mexico; in which State the percentage illiterate declined from 14.2 in 1910 to 4.3 in 1920, or by more than two-thirds. The explanation of this pronounced decrease is found in the fact that a large increase took place in the total Negro population of New Mexico, due in part to the presence of Negro troops in that State in 1920, and that there were few illiterates among the newcomers.

| STATE. | POPULATION, 10 YEARS OF AGE AND OVER. | | NATIVE WHITE POPULATION, 10 YEARS OF AGE AND OVER. | | FOREIGN-BORN WHITES, 10 YEARS OF AGE AND OVER. | | NEGROES, 10 YEARS OF AGE AND OVER. | |
|---|---|---|---|---|---|---|---|---|
| | Total. | Illiterates. | Total. | Illiterates. | Total. | Illiterates. | Total. | Illiterates. |
| Alabama | 1,730,421 | 278,082 | 1,038,602 | 65,394 | 17,393 | 1,893 | 674,004 | 210,690 |
| Arizona | 255,461 | 39,131 | 152,875 | 3,233 | 70,053 | 19,219 | 7,319 | 338 |
| Arkansas | 1,302,905 | 121,837 | 925,474 | 41,411 | 13,834 | 1,145 | 363,403 | 79,245 |
| California | 2,870,855 | 95,592 | 2,075,167 | 8,747 | 664,983 | 69,768 | 33,391 | 1,579 |
| Colorado | 747,485 | 24,208 | 620,163 | 8,624 | 114,285 | 14,224 | 9,909 | 619 |
| Connecticut | 1,087,797 | 67,265 | 697,892 | 2,927 | 371,666 | 63,131 | 17,441 | 1,078 |
| Delaware | 178,930 | 10,508 | 134,741 | 2,427 | 19,541 | 3,373 | 24,598 | 4,700 |
| District Columbia | 377,295 | 10,509 | 254,522 | 640 | 28,292 | 1,728 | 93,782 | 8,052 |
| Florida | 751,787 | 71,811 | 450,630 | 13,166 | 42,057 | 2,657 | 258,449 | 55,639 |
| Georgia | 2,150,230 | 328,338 | 1,237,776 | 66,796 | 16,028 | 861 | 896,127 | 261,115 |
| Idaho | 326,051 | 4,928 | 282,667 | 914 | 38,379 | 2,501 | 814 | 44 |
| Illinois | 5,184,993 | 173,987 | 3,829,325 | 30,907 | 1,194,979 | 131,996 | 157,205 | 10,476 |
| Indiana | 2,356,214 | 52,034 | 2,138,143 | 27,929 | 149,239 | 17,555 | 68,361 | 6,476 |
| Iowa | 1,913,155 | 20,680 | 1,672,815 | 8,275 | 223,752 | 11,004 | 15,902 | 1,283 |
| Kansas | 1,396,725 | 22,821 | 1,238,566 | 7,179 | 108,006 | 11,291 | 48,166 | 4,228 |
| Kentucky | 1,837,434 | 155,014 | 1,614,064 | 112,206 | 30,603 | 2,244 | 192,657 | 40,548 |
| Louisiana | 1,366,066 | 299,092 | 784,198 | 81,957 | 44,244 | 9,707 | 536,360 | 206,730 |
| Maine | 621,233 | 20,240 | 514,762 | 8,396 | 104,585 | 11,604 | 1,091 | 64 |
| Maryland | 1,158,953 | 64,434 | 862,553 | 15,368 | 101,155 | 13,575 | 194,825 | 35,404 |
| Massachusetts | 3,161,769 | 146,607 | 2,002,534 | 7,780 | 1,063,572 | 135,720 | 37,613 | 2,565 |
| Michigan | 2,895,606 | 88,046 | 2,124,975 | 14,172 | 713,228 | 70,535 | 52,139 | 2,203 |
| Minnesota | 1,877,132 | 34,487 | 1,380,415 | 5,955 | 482,231 | 26,242 | 7,776 | 241 |
| Mississippi | 1,338,612 | 229,734 | 625,923 | 22,242 | 7,918 | 1,057 | 703,627 | 205,813 |
| Missouri | 2,037,771 | 83,403 | 2,399,809 | 47,066 | 184,394 | 17,669 | 152,861 | 18,528 |
| Montana | 421,443 | 9,544 | 318,532 | 1,067 | 91,729 | 5,178 | 1,450 | 87 |
| Nebraska | 1,012,552 | 13,784 | 849,914 | 3,360 | 148,209 | 9,468 | 11,489 | 556 |
| Nevada | 63,905 | 3,802 | 43,837 | 157 | 14,586 | 1,241 | 313 | 16 |
| New Hampshire | 361,930 | 15,788 | 271,844 | 1,973 | 89,472 | 13,746 | 490 | 33 |
| New Jersey | 2,494,246 | 127,661 | 1,666,154 | 9,696 | 729,799 | 111,595 | 96,701 | 5,910 |
| New Mexico | 267,595 | 41,637 | 220,893 | 25,519 | 26,786 | 7,250 | 5,362 | 228 |
| New York | 8,402,786 | 425,022 | 5,466,635 | 28,406 | 2,752,055 | 389,603 | 171,303 | 5,032 |
| North Carolina | 1,844,673 | 241,603 | 1,284,208 | 104,844 | 6,981 | 474 | 545,542 | 133,674 |
| North Dakota | 470,210 | 9,937 | 335,124 | 1,307 | 129,951 | 7,238 | 405 | 16 |
| Ohio | 4,624,456 | 181,006 | 3,795,373 | 33,726 | 669,924 | 84,387 | 157,912 | 12,715 |
| Oklahoma | 1,513,951 | 56,844 | 1,320,407 | 30,418 | 39,020 | 5,456 | 114,536 | 14,205 |
| Oregon | 638,987 | 9,317 | 526,579 | 1,990 | 100,672 | 5,172 | 1,893 | 89 |
| Pennsylvania | 6,769,322 | 312,699 | 5,155,382 | 38,870 | 1,371,402 | 258,812 | 240,027 | 14,645 |
| Rhode Island | 483,788 | 31,312 | 304,225 | 2,255 | 171,032 | 28,169 | 8,192 | 839 |
| South Carolina | 1,219,316 | 220,667 | 593,709 | 38,742 | 6,327 | 391 | 618,928 | 181,422 |
| South Dakota | 482,195 | 8,109 | 387,602 | 1,490 | 81,781 | 3,848 | 678 | 35 |
| Tennessee | 1,777,762 | 182,629 | 1,400,917 | 101,809 | 15,297 | 1,263 | 354,426 | 79,532 |
| Texas | 3,556,614 | 295,844 | 2,648,333 | 80,643 | 332,955 | 114,417 | 572,719 | 102,053 |
| Utah | 331,530 | 6,264 | 269,741 | 925 | 55,724 | 3,504 | 1,273 | 59 |
| Vermont | 284,472 | 8,488 | 241,286 | 3,613 | 42,701 | 4,837 | 454 | 28 |
| Virginia | 1,748,868 | 195,159 | 1,196,920 | 70,475 | 30,325 | 2,150 | 520,657 | 122,322 |
| Washington | 1,101,929 | 18,526 | 827,734 | 2,379 | 244,881 | 11,630 | 6,064 | 245 |
| West Virginia | 1,083,395 | 69,413 | 953,822 | 44,324 | 60,679 | 14,548 | 68,826 | 10,513 |
| Wisconsin | 2,069,567 | 50,397 | 1,601,443 | 10,449 | 456,420 | 38,359 | 4,456 | 182 |
| Wyoming | 150,993 | 3,149 | 122,638 | 421 | 24,762 | 2,233 | 1,251 | 66 |
| Total, U. S. | 82,739,315 | 4,931,905 | 60,861,863 | 1,242,572 | 13,497,886 | 1,763,740 | 8,053,225 | 1,842,161 |

## COST OF PUBLIC SCHOOLS IN BIG U. S. CITIES, 1919-1920.

| CITY. | Average Daily Attend. | Total Current Expense. | CITY. | Average Daily Attend. | Total Current Expense. | CITY. | Average Daily Attend. | Total Current Expense. |
|---|---|---|---|---|---|---|---|---|
| Birmingh'm. | 24,639 | $914,558 | Worcester | 23,855 | $1,917,006 | Columbus | 28,474 | $2,407,360 |
| Los Angeles. | 75,562 | 7,272,004 | Detroit | 100,040 | 8,663,484 | Portland, Or. | 33,585 | 3,006,299 |
| Oakland | 29,081 | 2,679,988 | G'd Rapids. | 16,784 | 1,446,086 | Phil'delphia. | 201,108 | 15,311,147 |
| San Fran'co. | 48,446 | 3,588,283 | Minneap'lis. | 50,227 | 5,046,659 | Pittsburgh | 70,757 | 5,508,668 |
| Denver | 37,373 | 2,944,068 | St. Paul | 26,190 | 2,405,834 | Scranton | 20,243 | 1,177,493 |
| Bridgeport. | 20,615 | 1,288,909 | Kansas City | 41,555 | 3,451,995 | Providence | 31,447 | 1,997,226 |
| New Haven. | 25,203 | 1,311,730 | St Louis | 82,815 | 6,301,679 | Nashville | 15,652 | 578,044 |
| Washington. | 52,739 | 3,932,905 | Omaha | 28,432 | 2,439,206 | Richmond | 21,622 | 1,234,875 |
| Atlanta | 26,703 | 1,377,341 | Jersey City. | 34,915 | 2,480,617 | Seattle | 39,508 | 4,190,763 |
| Chicago | 304,518 | 24,213,129 | Newark | 58,896 | 4,950,745 | Spokane | 15,719 | 1,319,884 |
| Indianap'lis. | 35,005 | 3,078,202 | Paterson | 18,754 | 1,232,658 | Milwaukee | 50,445 | 3,820,638 |
| Louisville | 24,548 | 1,345,869 | Buffalo | 52,622 | 5,459,266 | | | |
| New Orleans | 36,832 | 1,868,610 | New York | 735,062 | 50,205,090 | Total | 2,940,540 | 222,157,892 |
| Baltimore | 75,421 | 3,697,774 | Rochester | 33,087 | 2,608,580 | | | |
| Boston | 103,839 | 7,758,717 | Syracuse | 20,784 | 1,307,897 | Av. annual cost per pupil | | 75.55 |
| Fall River | 14,428 | 1,088,331 | Cincinnati | 41,439 | 3,864,131 | | | |
| Lowell | 10,737 | 750,797 | Cleveland | 100,834 | 9,013,347 | | | |

Figures in current expenses column do not include outlays for capital acquisition.

## AMERICAN COLLEGES AND UNIVERSITIES.

This list is based on the 1921-1922 Education Directory of the United States Bureau of Education, Dept. of the Interior.

Where the name of the institution is in italics, the figures are from the 1922 ALMANAC. In other cases the data are from questionnaires returned by the institution in the year 1922.

| NAME. | Location. | Year Organ. | Governing Official. | No. of Stud'ts. | No. of Teach's |
|---|---|---|---|---|---|
| *Abilene Christian* | Abilene, Tex. | 1906 | | 498 | 34 |
| Adelphi College | Brooklyn, N. Y. | 1896 | F. D. Blodgett, LL. D. | 460 | 26 |
| Adrian | Adrian, Mich. | 1858 | H. L. Feeman | 165 | 16 |
| Akron Municipal Univ. | Akron, Ohio | 1870 | P. R. Kolbe | 785 | 75 |
| Alabama, Univ. of | Tuscaloosa, Ala. | 1831 | G. H. Denny, LL. D. | 1,633 | 95 |
| Alabama, Woman's Col. of | Montgomery, Ala. | 1909 | M. W. Swartz | 382 | 29 |
| Albany | Albany, Ore. | 1866 | A. M. Williams | 213 | 15 |
| Albion | Albion, Mich. | 1861 | J. W. Laird | 590 | 35 |
| Albright College | Myerstown, Pa. | 1895 | L. C. Hunt, A.M., D.D. | 192 | 17 |
| Alfred Univ. | Alfred, N. Y. | 1836 | B. C. Davis, LL. D. | 360 | 45 |
| Allegheny College | Meadville, Pa. | 1815 | F. W. Hixson, LL. D. | 565 | 35 |
| Alma | Alma, Mich. | 1886 | H. M. Crooks, LL. D. | 276 | 21 |
| American Univ. | Washington, D. C. | 1891 | J. W. Hamilton | 150 | 16 |
| Amherst | Amherst, Mass. | 1821 | A. Meiklejohn | 528 | 50 |
| *Anderson Col. for Women* | Anderson, S. C. | 1910 | | 325 | 27 |
| Antioch College | Yellow Springs, Ohio | 1853 | A. E. Morgan | 208 | 47 |
| Arizona, Univ. of | Tucson, Ariz. | 1885 | F. C. Lockwood | 1,190 | 100 |
| Arkansas | Batesville, Ark. | 1872 | W. S. Lacy | 150 | 14 |
| Arkansas, Univ. of | Fayetteville, Ark. | 1871 | J. C. Futrall | 1,054 | 110 |
| Armour Inst. of Tech. | Chicago, Ill. | 1893 | H. M. Raymond | 730 | 70 |
| Asbury College | Wilmore, Ky. | 1889 | Dr. H. C. Morrison | 580 | 42 |
| Ashland College | Ashland, Ohio | 1878 | E. E. Jacobs, Ph. D. | 191 | 15 |
| Atlanta Univ. | Atlanta, Ga. | 1867 | E. T. Ware | 549 | 39 |
| Atlantic Christian Col. | Wilson, N. C. | 1902 | H. S. Hilley | 160 | 17 |
| Augsburg Sem. | Minneapolis, Minn. | 1869 | G. Sverdrup | 130 | 19 |
| Aurora | Aurora, Ill. | 1893 | O. R. Jenks | 85 | 11 |
| Austin | Sherman, Tex. | 1849 | T. S. Clyce, D.D., LL. D. | 283 | 14 |
| Baker Univ. | Baldwin City, Kan. | 1858 | O. B. Marlham | 469 | 31 |
| Baldwin-Wallace | Berea, Ohio | 1846 | B. Storms | 991 | 47 |
| Barnard College | New York, N. Y. | 1889 | N. M. Butler | 750 | 104 |
| Bates | Lewiston, Me. | 1864 | C. D. Gray | 556 | 40 |
| Baylor College (Fem.) | Belton, Tex. | 1845 | J. C. Hardy | 1,200 | 60 |
| Baylor Univ. | Waco and Dallas, Tex. | 1845 | S. P. Brooks, A.M., LL. D. | 1,694 | 186 |
| Beaver College | Beaver, Pa. | 1853 | J. M. Thoburn, Jr. | 273 | 22 |
| Beloit College | Beloit, Wis. | 1846 | M.A.Brannon, Ph.D.,LL.D. | 540 | 51 |
| Benedict College | Columbia, S. C. | 1870 | Rev. C. B. Antisdel | 813 | 36 |
| Berea | Berea, Ky. | 1858 | Board of Trustees | 2,550 | 141 |
| Bethany College | Lindsborg, Kan. | 1881 | E. F. Pihelas | 919 | 35 |
| Bethany College | Bethany, W. Va. | 1840 | C. Goodnight | 290 | 24 |
| Bethel | Newton, Kan. | 1887 | J. H. Langenwalter | 234 | 19 |
| Birmingham-Southern | Birmingham, Ala. | | G. E. Snavely, Ph. D. | 496 | 34 |
| Blue Mountain | Blue Mountain, Miss. | 1873 | W. T. Lowrey, LL. D. | 300 | 27 |
| Blue Ridge | New Windsor, Md. | 1899 | | 201 | 21 |
| Bluffton College | Bluffton, Ohio | 1900 | S. K. Mosiman, Ph. D. | 320 | 23 |
| Boston | Chestnut Hill, Mass. | 1863 | Rev. W. Devlin, S. J. | 796 | 38 |
| Boston Univ. | Boston, Mass. | 1869 | L. H. Murlin, D.D., LL.D. | 8,104 | 362 |
| Bowdoin | Brunswick, Me. | 1794 | K. C. M. Sills | 450 | 35 |
| Bradley Poly. Inst. | Peoria, Ill. | 1897 | T. C. Burgess | 1,459 | 46 |
| Brenau | Gainesville, Ga. | 1878 | H. J. Pearce | 450 | 40 |
| Bridgewater College | Bridgewater, Va. | 1880 | P. A. Bowman | 230 | 22 |
| Brown Univ. | Providence, R. I. | 1764 | W.H.P.Faunce, D.D.,LL.D. | 1,648 | 90 |
| Bryn Mawr | Bryn Mawr, Pa. | 1885 | Miss M. E. Parks | 457 | 69 |
| Bucknell Univ. | Lewisburg, Pa. | 1846 | E. W. Hunt, LL. D. | 998 | 49 |
| Buena Vista | Storm Lake, Iowa | 1891 | A. M. Boyd | 148 | 14 |
| Buffalo Univ. | Buffalo, N. Y. | 1846 | | 1,468 | 238 |
| Butler | Indianapolis, Ind. | 1848 | Dr. R. J. Aley | 875 | 37 |
| California Inst. of Tech. | Pasadena, Cal. | 1891 | Dr. R. A. Millikan | 480 | 70 |
| California, Univ. of | Berkeley, Cal. | 1868 | D. P. Barrows | 14,367 | 1,024 |
| Campion | Prairie du Chien, Wis. | 1871 | A. H. Rohde | 136 | 20 |
| Canisius | Buffalo, N. Y. | 1870 | Rev. M. J. Ahern | 320 | 29 |
| Capital Univ. | Columbus, Ohio | 1850 | Dr. Otto Mees | 500 | 25 |
| Carleton | Northfield, Minn. | 1866 | D. J. Cowling | 842 | 65 |
| Carnegie Inst. Tech. | Pittsburgh, Pa. | 1900 | A. A. Hamerschlag, LL.D. | 3,771 | 285 |
| Carroll College | Waukesha, Wis. | 1846 | W. A. Ganfield | 323 | 18 |
| Carson and Newman | Jefferson City, Tenn. | 1849 | Dr. O. E. Sams | 376 | 31 |
| Carthage | Carthage, Ill. | 1870 | R. D. Hoover | 294 | 26 |
| Case School Ap. Science | Cleveland, Ohio | 1881 | C. S. Howe | 700 | 68 |
| Catholic Univ. of America | Washington, D. C. | 1887 | Rt. Rev. T. J. Shahan | 1,835 | 90 |
| Catholic Univ. of Okla. | Shawnee, Okla. | 1915 | Rev. D. Blaise | 115 | 11 |
| Cedar Crest College | Allentown, Pa. | 1868 | W. F. Curtis | 170 | 20 |
| Cedarville College | Cedarville, Ohio | 1887 | W. R. McChesney, Ph. D. | 122 | 17 |
| Centenary | Shreveport, La. | 1839 | Geo. S. Sexton | 255 | 20 |
| Central | Fayette, Mo. | 1854 | P. H. Linn | 314 | 14 |
| Central Baptist | Conway, Ark. | 1892 | D. S. Campbell | 170 | 21 |
| Central Wesleyan | Warrentown, Mo. | 1864 | O. E. Kriege | 372 | 26 |
| Centre | Danville, Ky. | 1819 | | 287 | 12 |
| Central Holiness Univ. | University Park, Iowa. | 1906 | Dr. J. L. Brasher | 230 | 27 |
| Charleston, College of | Charleston, S. C. | 1785 | H. Randolph, M. A., LL. D. | 123 | 11 |
| Chicago, Univ. of | Chicago, Ill. | 1890 | H. P. Judson | 11,385 | 355 |
| Chicora College | Columbia, S. C. | 1890 | S. C. Byrd, D. D. | 335 | 39 |
| Cincinnati Univ. | Cincinnati, Ohio | 1870 | F. C. Hicks | 4,245 | 384 |
| Citadel, The | Charleston, S. C. | 1842 | Col. O. J. Bond | 298 | 22 |
| City of N. Y., College of | New York, N. Y. | 1847 | S. E. Mezes | 13,744 | 464 |
| Clark | Worcester, Mass. | 1889 | W. W. Atwood | 250 | 30 |
| Clark Univ. | Atlanta, Ga. | 1870 | H. A. King | 490 | 20 |
| Clarkson College of Tech. | Potsdam, N. Y. | 1896 | J. P. Brooks | 221 | 19 |
| Coe College | Cedar Rapids, Iowa | 1881 | H. M. Gage | 904 | 1,207 |
| Coker | Hartsville, S. C. | 1908 | E. W. Sikes | 225 | 23 |
| Colby | Waterville, Me. | 1813 | A. J. Roberts, LL. D. | 486 | 28 |
| Colgate Univ. | Hamilton, N. Y. | 1819 | G. P. Cutten, LL. D. | 678 | 48 |
| Colorado | Colorado Springs, Col. | 1874 | Clyde Duniway, LL. D. | 700 | 65 |
| Colorado School of Mines | Golden, Col. | 1872 | V. C. Alderson, A. B. | 478 | 30 |
| Colorado, Univ. of | Boulder, Col. | 1876 | George Nortin, Ph. D. | 2,715 | 200 |

| NAME. | Location. | Year Organ. | Governing Official. | No. of Stud'ts. | No. of Teach's |
|---|---|---|---|---|---|
| Colorado Woman's | Denver, Col | 1889 | J. W. Bailey | 120 | 15 |
| Columbia | Dubuque, Iowa | 1873 | Rev. E. D. Howard | 594 | 32 |
| Columbia Univ | New York, N. Y | 1754 | N. M. Butler | 8,193 | 1,203 |
| Concordia | Moorhead, Minn | 1891 | J. A. Aasgaard | 319 | 29 |
| Connecticut (Fem.) | New London, Conn | 1911 | B. T. Marshall | 289 | 42 |
| Converse College | Spartanburg, S. C | 1890 | R. P. Pell | 379 | 36 |
| Cornell | Mt. Vernon, Iowa | 1853 | C. W. Flint, A. M., LL. D. | 742 | 47 |
| Cornell Univ | Ithaca, N. Y | 1865 | L. Farrand, LL. D | 5,477 | 900 |
| Cotner | Bethany, Neb | 1889 | E. F. Snavely | 250 | 30 |
| Cox Col. and Conserv | College Park, Ga | 1842 | W. S. Cox | 171 | 20 |
| Creighton Univ | Omaha, Neb | 1878 | J F.McCormick,A.M.,LL.D | 1,408 | 153 |
| Culver-Stockton | Canton, Mo | 1853 | John H. Wood | 150 | 17 |
| Cumberland Univ | Lebanon, Tenn | 1842 | W. P. Bone | 500 | 24 |
| Dakota Wesleyan Univ | Mitchell, S. D | 1885 | E. D. Kohlstedt | 419 | 34 |
| Dallas, Univ. of | Dallas, Tex | 1910 | V.Rev. M. F. Winne, Ph.D. | 170 | 23 |
| Dana College | Blair, Neb | 1886 | C. Hansen | 170 | 11 |
| Daniel Baker College | Brownwood, Texas | 1888 | S. E. Chandler | 209 | 18 |
| Dartmouth College | Hanover, N. H | 1769 | E. M. Hopkins | 2,011 | 160 |
| Davidson College | Davidson, N. C | 1836 | W. J. Martin, LL. D | 512 | 25 |
| Davis and Elkins | Elkins, W. Va | 1904 | J. E. Allen | 300 | 12 |
| Dayton, Univ. of | Dayton, Ohio | 1850 | J. A. Fetzlaff | 900 | 70 |
| Defiance College | Defiance, Ohio | 1902 | A. G. Caris | 267 | 24 |
| Denison Univ | Granville, Ohio | 1831 | C. W. Chamberlain, Ph. D. | 896 | 58 |
| Denver Univ | Denver, Col | 1864 | W. D. Engle | 2,046 | 200 |
| De Paul Univ | Chicago, Ill | 1898 | T. F. Levan | 2,028 | 130 |
| De Pauw Univ | Greencastle, Ind | 1837 | G. R. Grose | 1,217 | 47 |
| Des Moines Univ | Des Moines, Iowa | 1852 | J. W. Miller | 931 | 43 |
| Detroit Univ | Detroit, Mich | 1911 | Rev. J. P. McNichols, S. J. | 1,755 | 155 |
| Dickinson | Carlisle, Pa | 1783 | J. H. Morgan | 460 | 22 |
| Doane College | Crete, Neb | 1872 | J. N. Bennett | 248 | 22 |
| Drake Univ | Des Moines, Iowa | 1881 | A. Holmes, A. M., Ph. D. | 2,291 | 80 |
| Drexel Institute | Philadelphia, Pa | 1891 | K.G.Matheson,A.M.,LL.D. | 2,818 | 90 |
| Dropsie | Philadelphia, Pa | 1907 | C. Adler | 70 | 7 |
| Drury | Springfield, Mo | 1873 | T. W. Nadal | 400 | 25 |
| Dubuque, Univ. of | Dubuque, Iowa | 1852 | C. M. Steffins | 303 | 27 |
| Duquesne Univ | Pittsburgh, Pa | 1878 | V. Rev. M. A. Hehir, LL. D. | 2,500 | 87 |
| D'Youville College | Buffalo, N. Y | 1908 | Sister Verecunda | 109 | 20 |
| Earlham College | Earlham, Ind | 1859 | D. M. Edwards | 485 | 32 |
| Eastern College | Manassas, Va | 1900 | R. H. Holliday | 125 | 15 |
| *Elizabeth College* | Salem, Va | 1897 | | 108 | 15 |
| Ellsworth College | Iowa Falls, Iowa | 1890 | F. Meyer | 350 | 18 |
| Elmira College | Elmira, N. Y | 1855 | F. Lent | 485 | 38 |
| Elon College | Elon College, N. C | 1889 | Board of Trustees | 329 | 29 |
| Emory Univ | Atlanta, Ga | 1914 | H. Hill | 854 | 135 |
| Emory and Henry College | Emory, Va | 1838 | J. N. Hillman | 215 | 14 |
| Emmanuel College | Boston, Mass | 1921 | Sister Mary | 145 | 24 |
| Emmanuel Missionary | Berrien Springs, Mich | 1910 | F. Griggs | 440 | 32 |
| Emporia, College of | Emporia, Kan | 1882 | Frederick W. Lewis | 343 | 28 |
| Erskine College | Due West, S. C | 1839 | R. C. Grier | 111 | 8 |
| Eureka College | Eureka, Ill | 1855 | L. O. Lehman | 208 | 22 |
| Evansville College | Evansville, Ind | 1919 | A. F. Hughes | 297 | 42 |
| *Ewing College* | Ewing, Ill | 1867 | | 110 | 10 |
| Fairmount College | Wichita, Kan | 1895 | F. A. Neff | 389 | 29 |
| Fargo College | Fargo, N. D | 1887 | G. R. Vowles | 490 | 21 |
| Findlay College | Findlay, Ohio | 1882 | W. H. Guyer, D. D | 386 | 20 |
| Fisk Univ | Nashville, Tenn | 1866 | F. A. McKenzie | 496 | 42 |
| Flora MacDonald College | Red Springs, N. C | 1896 | C. G. Vardell | 300 | 25 |
| Florida (Female) | Tallahassee, Fla | 1905 | E. Conradi | 784 | 50 |
| Florida, Univ. of | Gainesville, Fla | 1905 | A. A. Murphy | 1,060 | 60 |
| Fordham Univ | Bronx, N. Y | 1841 | Rev. E. P. Tivnan | 3,500 | 100 |
| Franklin College | Franklin, Ind | 1834 | C. E. Goodell, A. M | 350 | 20 |
| Franklin & Marshall | Lancaster, Pa | 1787 | H. H. Apple | 496 | 28 |
| Friends' Univ | Wichita, Kan | 1898 | O. Hendershott | 226 | 18 |
| Furman Univ | Greenville, S. C | 1851 | W. J. McGlothlin | 375 | 24 |
| Gallaudet College | Washington, D. C | 1857 | P. Hall, Litt. D | 114 | 19 |
| Galloway College | Searcy, Ark | 1890 | J. M. Williams | 250 | 26 |
| Geneva College | Beaver Falls, Pa | 1848 | A. A. Johnston | 631 | 16 |
| George Washington Univ | Washington, D. C | 1821 | H. L. Hodgkins, Ph. D | 4,652 | 300 |
| Georgetown College | Georgetown, Ky | 1829 | M. B. Adams | 352 | 25 |
| Georgetown Univ | Washington, D. C | 1789 | J. B. Creeden | 515 | 22 |
| Georgia School of Tech | Atlanta, Ga | 1886 | K. G. Matheson | 2,262 | 115 |
| *Georgia, Univ. of* | Athens, Ga | 1785 | | 1,200 | 90 |
| Gettysburg College | Gettysburg, Pa | 1832 | W.A.Granville,Ph.D.,LL.D. | 504 | 31 |
| Gonzaga Univ | Spokane, Wash | 1887 | W. J. Fitzgerald | 721 | 70 |
| Gooding College | Gooding, Idaho | 1917 | C. W. Tenney | 173 | 12 |
| Goshen College | Goshen, Ind | 1895 | I. R. De Tweiler | 250 | 20 |
| Goucher College | Baltimore, Md | 1885 | W. W. Guth, Ph. D., LL. D. | 886 | 71 |
| Grand Island College | Grand Island, Neb | 1892 | J. M. Wells | 150 | 13 |
| Grand View College | Des Moines, Iowa | 1895 | C. P. Hojberg | 100 | 15 |
| Greensboro College | Greensboro, N. C | 1838 | Rev. S. B. Turrentine, D.D. | 350 | 27 |
| Greenville College | Greenville, Ill | 1892 | E. G. Burritt, A. M | 409 | 29 |
| Greenville, Woman's | Greenville, S. C | 1854 | Rev. D. M. Ramsay | 603 | 40 |
| Grenada College | Grenada, Miss | 1852 | J. R. Countiss | 225 | 18 |
| Grinnell College | Grinnell, Iowa | 1846 | J. H. T. Main, LL. D | 815 | 64 |
| Grove City College | Grove City, Pa | 1884 | W. C. Ketler, LL. D | 431 | 26 |
| Guilford College | Guilford College, N. C | 1837 | R. Binford | 240 | 20 |
| Gustavus Adolphus College | St. Peter, Minn | 1862 | O. J. Johnson | 377 | 22 |
| Hamilton College | Clinton, N. Y | 1812 | F. C. Ferry | 324 | 31 |
| Hamline Univ | St. Paul, Minn | 1854 | S. F. Kerfoot | 556 | 38 |
| Hampden-Sidney College | Hampden-Sidney, Va | 1776 | Dr. J. D. Eggleston | 180 | 10 |
| Hanover College | Hanover, Ind | 1827 | W. A. Willis | 371 | 15 |
| Harvard Univ | Cambridge, Mass | 1636 | A. L. Lowell | 6,073 | 957 |
| Hastings | Hastings, Neb | 1882 | C. H. French, LL.D., D.D. | 422 | 27 |
| Haverford College | Haverford, Pa | 1833 | W. W. Comfort | 225 | 22 |
| Hawaii, Univ. of | Honolulu, T. H | 1919 | A. L. Dean | 404 | 41 |
| Hedding College | Abingdon, Ill | 1855 | C. W. Grune | 148 | 18 |
| Heidelberg Univ | Tiffin, Ohio | 1850 | C. E. Miller | 404 | 30 |
| Henderson-Brown | Arkadelphia, Ark | 1890 | J. M. Workman | 337 | 25 |
| *Hendrix College* | Conway, Ark | 1884 | | 380 | 18 |
| Highland College | Highland, Kan | 1857 | J. L. Howe | 20 | 4 |

| NAME. | Location | Year Organ. | Governing Official. | No. of Stud'ts | No. of Teach's |
|---|---|---|---|---|---|
| Hillsdale College | Hillsdale, Mich | 1855 | J. W. Mauck | 468 | 24 |
| Hiram College | Hiram, Ohio | 1850 | M. L. Bates | 325 | 24 |
| Hobart College | Geneva, N. Y | 1822 | M. Bartlett | 281 | 26 |
| Hollins College | Hollins, Va | 1842 | M. L. Cocke | 312 | 32 |
| Holy Cross, College of the | Worcester, Mass | 1843 | The Trustees | 750 | 55 |
| Hood College | Frederick, Md | 1893 | J. H. Apple, LL. D | 443 | 33 |
| Hope College | Holland, Mich | 1866 | E. D. Dimnent | 532 | 26 |
| Howard College | Birmingham, Ala | 1842 | John C. Dawson | 294 | 22 |
| Howard Univ | Washington, D. C | 1867 | J. S. Durkee | 1,954 | 157 |
| Hunter College | New York, N. Y | 1870 | G. S. Davis | 1,491 | 117 |
| Huron College | Huron, S. D | 1883 | G. S. McCunie, D. D | 334 | 24 |
| Idaho, College of | Caldwell, Idaho | 1891 | W. J. Boone | 202 | 13 |
| Idaho, Univ. of | Moscow, Idaho | 1889 | A. H. Upham | 1,420 | 100 |
| Illinois, Univ. of | Urbana Ill | 1867 | David Kinley | 9,009 | 1,065 |
| Illinois Wesleyan Univ | Bloomington, Ill | 1850 | Theodore Kemp | 591 | 38 |
| Illinois Woman's College | Jacksonville, Ill | 1846 | Jos. R. Harker, Ph. D | 473 | 35 |
| Indiana Central Univ | Indianapolis, Ind | 1905 | I. J. Good | 195 | 14 |
| Indiana Univ | Bloomington, Ind | 1820 | W. L. Bryan | 3,914 | 211 |
| *Industrial Arts, College of* | Denton, Tex | 1903 | | 1,319 | 110 |
| International Y. M. C. A | Springfield, Mass | 1885 | L. L. Doggett | 412 | 25 |
| Iowa State Univ | Iowa City, Iowa | 1847 | W. A. Jessup | 5,000 | 500 |
| Iowa Wesleyan Univ | Mt. Pleasant, Iowa | 1842 | W. S. Smith | 295 | 26 |
| Irving College (Female) | Mechanicsburg, Pa | 1856 | E. E. Campbell | 130 | 20 |
| Jamestown College | Jamestown, N. D | 1909 | B. H. Kroeze, LL. D | 281 | 28 |
| Jefferson College | Convent, La | 1831 | Very Rev. P. F. Quinn, S.M. | 50 | 8 |
| Jewell, Wm., College | Liberty, Mo | 1849 | J. P. Greene | 307 | 17 |
| John B. Stetson Univ | De Land, Fla | 1887 | L. Hulley | 543 | 48 |
| Johns Hopkins Univ | Baltimore, Md | 1876 | F. J. Goodnow | 3,200 | 400 |
| Johnson College, Smith W | Charlotte, N. C | 1867 | H. L. McCrorey | 246 | 20 |
| Judson College | Marion, Ala | 1838 | P. V. Bomar, D. D | 291 | 21 |
| Juniata College | Huntington, Pa | 1876 | I. H. Brumbaugh | 392 | 25 |
| Kalamazoo College | Kalamazoo, Mich | 1833 | H. L. Stetson | 366 | 27 |
| Kansas City Univ | Kansas City, Kan | 1896 | J. C. Williams | 326 | 19 |
| Kansas, Univ. of | Lawrence, Kan | 1864 | Dr. E. H. Lindley | 3,700 | 315 |
| Kansas Wesleyan Univ | Salina, Kan | 1886 | L. B. Bowers | 939 | 38 |
| Kentucky, Univ. of | Lexington, Ky | 1866 | F. L. McVey | 1,881 | 150 |
| Kentucky Wesleyan College | Winchester, Ky | 1866 | W. B. Campbell | 135 | 15 |
| Kenyon College | Gambier, Ohio | 1824 | W. F. Peirce | 225 | 19 |
| King College | Bristol, Tenn | 1867 | T. Scherer | 64 | 9 |
| Kingfisher College | Kingfisher, Okla | 1894 | H. W. Tuttle | 134 | 13 |
| Knox College | Galesburg, Ill | 1837 | J. L. McConaughy | 550 | 43 |
| Knoxville College | Knoxville, Tenn | 1875 | J. K. Giffen | 376 | 30 |
| Lafayette College | Easton, Pa | 1826 | J. H. MacCracken, LL. D | 850 | 70 |
| La Grange College | La Grange, Ga | 1831 | W. E. Thompson | 160 | 18 |
| Lake Erie College | Painesville, Ohio | 1859 | Miss V. B. Small | 164 | 25 |
| Lake Forest College | Lake Forest, Ill | 1876 | H. M. Moore | 225 | 22 |
| Lander College | Greenwood, S. C | 1872 | J. O. Wilson | 301 | 30 |
| La Salle | Philadelphia, Pa | 1863 | B. Richard | 400 | 22 |
| Lawrence College | Appleton, Wis | 1847 | S. Plantz | 1,242 | 62 |
| Lebanon Valley | Annville, Pa | 1866 | G. D. Gossard | 303 | 21 |
| Lehigh Univ | So. Bethlehem, Pa | 1866 | C. R. Richards | 1,132 | 102 |
| Lenoir College | Hickory, N. C | 1891 | J. C. Peery | 320 | 20 |
| Lewis Institute | Chicago, Ill | 1895 | G. N. Carman | 1,200 | 50 |
| Lincoln College | Lincoln, Ill | 1865 | A. E. Turner, LL. D | 187 | 17 |
| Lincoln Memorial Univ | Harrogate, Tenn | 1897 | G. A. Hubbell | 769 | 20 |
| Lincoln Univ | Lincoln Univ, Pa | 1854 | Rev. J. B. Rendall, D. D | 241 | 12 |
| Lindenwood College | St. Charles, Mo | 1827 | J. Roemer | 360 | 40 |
| Linfield College | McMinnville, Ore | 1857 | L. W. Riley | 248 | 16 |
| Little Rock College | Little Rock, Ark | 1908 | H. A. Heagney, LL. D | 275 | 24 |
| Livingston College | Salisbury, N. C | 1882 | D. C. Suggs | 349 | 26 |
| Lombard College | Galesburg, Ill | 1852 | J. M. Tilden, A.M., LL.D | 250 | 21 |
| Loretto College | Webster Groves, Mo | 1916 | Mother Edith Laughran | 177 | 31 |
| Louisiana College | Pineville, La | 1906 | C. Cottingham | 245 | 24 |
| Louisville, Univ. of | Louisville, Ky | 1837 | J. L. Patterson, A. M | 900 | 200 |
| Lowell Textile School | Lowell, Mass | 1895 | C. H. Eames | 278 | 33 |
| Loyola Univ | Chicago, Ill | 1870 | W. H. Agnew | 2,000 | 180 |
| Loyola College | Baltimore, Md | 1852 | Rev. J. A. McEneany | 70 | 10 |
| Loyola Univ | New Orleans, La | 1912 | E. A. Cummings | 800 | 52 |
| Luther College | Decorah, Iowa | 1861 | O. L. Olson, Ph. D | 272 | 22 |
| Macalester College | St. Paul, Minn | 1885 | E. A. Bess | 400 | 28 |
| Maine, Univ. of | Orono, Me | 1865 | C. C. Little | 1,307 | 119 |
| Manhattan College | New York, N. Y | 1853 | Brother Thomas | 480 | 40 |
| Manchester College | No. Manchester, Ind | 1895 | C. J. Wruger, LL. D | 600 | 30 |
| Marietta College | Marietta, Ohio | 1835 | E. S. Parsons | 324 | 24 |
| Marion Institute | Marion, Ala | 1842 | Col. W. J. Murfee | 210 | 18 |
| Marquette Univ | Milwaukee, Wis | 1855 | Rev. H. C. Noonan | 3,395 | 210 |
| *Maryland, for Women* | Lutherville, Md | 1853 | | 125 | 20 |
| Maryland, Univ. of | College Park, Md | 1807 | A. F. Wood, A. M | 2,200 | 185 |
| Maryville College | Maryville, Tenn | 1819 | S. T. Wilson | 815 | 62 |
| Marywood College | Scranton, Pa | 1917 | Mother M. Casimir | 136 | 25 |
| Mass. Inst. of Tech | Cambridge, Mass | 1861 | E. Thomson, Sc. D | 3,505 | 381 |
| McKendree College | Lebanon, Ill | 1828 | G. E. McCammon, D. D | 125 | 18 |
| McPherson College | McPherson, Kan | 1888 | D. W. Kurtz | 450 | 27 |
| *Mercer Univ* | Macon, Ga | 1837 | | 485 | 39 |
| Meredith College (Fem.) | Raleigh, N. C | 1891 | C. E. Brewer | 404 | 39 |
| Miami Univ | Oxford, Ohio | 1809 | R. M. Hughes | 1,245 | 83 |
| Michigan College of Mines | Houghton, Mich | 1885 | F. W. McNair, B. S | 331 | 25 |
| Michigan, Univ. of | Ann Arbor, Mich | 1837 | M. L. Burton | 9,803 | 714 |
| Middlebury College | Middlebury, Vt | 1800 | P. D. Moody | 494 | 45 |
| Midland College | Fremont, Neb | 1887 | E. E. Stauffer | 471 | 32 |
| *Milligan College* | Milligan College, Tenn | 1867 | | 142 | 14 |
| *Milliken, James, Univ* | Decatur, Ill | 1901 | | 1,400 | 65 |
| Mills College | Oakland, Cal | 1885 | A. H. Reinhardt | 500 | 65 |
| Millsaps College | Jackson, Miss | 1892 | A. F. Watkins | 389 | 15 |
| Milton College | Milton, Wis | 1867 | A. E. Whitford | 182 | 16 |
| Milwaukee-Downer | Milwaukee, Wis | 1895 | L. R. Briggs | 382 | 40 |
| Minnesota, Univ. of | Minneapolis, Minn | 1868 | L. D. Coffman | 8,943 | 1,250 |
| Mississippi College | Clinton Miss | 1826 | J. W. Provine | 375 | 18 |
| Miss. State Col. for Women | Columbus, Miss | 1884 | J. C. Fant | 893 | 67 |
| Mississippi, Univ. of | Oxford. Miss | 1844 | J. N. Powers | 678 | 37 |

| Name. | Location. | Year Organ. | Governing Official. | No. of Stud'ts. | No. of Teach's |
|---|---|---|---|---|---|
| Missouri, Univ. of | Columbia, Mo | 1839 | J. C. Jones | 5,300 | 283 |
| Missouri Valley College | Marshall, Mo | 1889 | W. H. Black | 295 | 15 |
| Missouri Wesleyan | Cameron, Mo | 1887 | C. Harmon | 474 | 26 |
| Monmouth College | Monmouth, Il | 1856 | United Presby. Church | 467 | 27 |
| Montana State Univ | Missoula, Mont | 1895 | C. H. Clapp | 1,205 | 75 |
| Montana State Sch. of Mines | Butte, Mont | 1900 | G. W. Craven | 162 | 12 |
| Moravian C. & S. (Female) | Bethlehem, Pa | 1742 | Rev. R. Riemer | 150 | 26 |
| Morgan College (Colored) | Baltimore, Md | 1867 | J. O. Spencer | 273 | 18 |
| *Morningside College* | Sioux City, Iowa | 1894 | | 1,006 | 40 |
| Morris Brown Univ. (Col.) | Atlanta, Ga | 1885 | J. H. Lewis | 850 | 30 |
| Mount Holyoke | S. Hadley, Mass | 1837 | Mary E. Woolley | 795 | 128 |
| Mount St. Charles | Helena, Mont | 1911 | N. C. Huff | 150 | 16 |
| Mount St. Joseph | Dubuque, Iowa | 1901 | Sister M. Gervane, B.V.M. | 131 | 20 |
| Mount St. Joseph's | Baltimore, Md | 1876 | Bro. James | 290 | 12 |
| Mount St. Mary's | Emmittsburg, Md | 1808 | Rt. Rev. Mgr. B. J. Bradley, A. M., LL. D | 562 | 37 |
| Mount St. Mary's | No. Plainfield, N. J | 1908 | M. O. Scully | 75 | 10 |
| Mt. St. Vincent, College of | New York, N. Y | 1911 | Sister J. Rosaire | 200 | 26 |
| Mount Union | Alliance, Ohio | 1846 | W. H. McMaster, A.M., D.D. | 447 | 26 |
| Muhlenberg College | Allentown, Pa | 1867 | Rev. J. A. W. Haas | 272 | 21 |
| Municipal Univ. of Akron | Akron, Ohio | 1870 | P. R. Kolbe, Ph. D | 785 | 75 |
| Muskingum College | New Concord, Ohio | 1837 | J. K. Montgomery, D. D | 620 | 29 |
| Nebraska, Univ. of | Lincoln, Neb | 1871 | Board of Regents | 6,500 | 658 |
| Nebraska Wesleyan Univ | University Pl., Neb | 1886 | J. B. Schreckengast | 785 | 45 |
| Nevada, Univ. of | Reno, Nev | 1873 | W. E. Clark | 726 | 62 |
| *Newberry College* | Newberry, S. C | 1856 | | 170 | 12 |
| Newcomb, H. S., Memorial | New Orleans, La | 1886 | Pierce Butler | 604 | 69 |
| New Hampshire State | Durham, N. H | 1866 | R. H. Hetzel, LL.D | 973 | 106 |
| New Jersey Col. for Women | New Brunswick, N. J | 1918 | Miss M. S. Douglass | 400 | 45 |
| N. M. State Sch. of Mines | Socorro, N. M | 1889 | E. H. Wells | 92 | 9 |
| New Mexico, State Univ. of | Albuquerque, N. M | 1889 | D. Hill, Ph. D., LL. D | 266 | 33 |
| New Rochelle | New Rochelle, N. Y | 1904 | M. Irene | 450 | 43 |
| N. Y. State Col of Forestry | Syracuse, N. Y | 1911 | B. F. Moon | 358 | 33 |
| N. Y. State Library School | Albany, N. Y | 1887 | J. T. Myer | 37 | 12 |
| New York Univ | New York, N. Y | 1831 | E. E. Brown, Ph. D., LL. D | 12,254 | 635 |
| Niagara Univ | Niagara County, N. Y | 1857 | W. E. Katzenberger | 350 | 25 |
| No. Carolina Woman's | Greensboro, N. C | 1892 | J. I. Foust | 987 | 110 |
| No. Carolina, Univ. of | Chapel Hill, N. C | 1789 | H. W. Chase | 1,600 | 125 |
| No. Dakota Univ | Grand Forks, N. D | 1883 | T. F. Kane | 1,315 | 95 |
| Northeastern College | Boston, Mass | 1898 | F. P. Speare, M. H., LL. B. | 4,877 | 155 |
| Northland College | Ashland, Wis | 1907 | J. D. Brownell, D. D | 212 | 19 |
| Northwestern College | Watertown, Wis | 1865 | Rev. E. E. Kowalke | 258 | 16 |
| Northwestern Univ | Chicago & Evanston, Ill | 1851 | W. D. Scott | 7,711 | 568 |
| Norwich Univ | Northfield, Vt | 1819 | C. A. Plumley | 293 | 22 |
| Notre Dame | Baltimore, Md | 1896 | Sister Mary Philemon | 78 | 15 |
| Notre Dame Univ | Notre Dame, Ind | 1842 | W. J. Walsh | 1,576 | 115 |
| Oakland City | Oakland City, Ind | 1885 | W. P. Mearing | 682 | 26 |
| Oberlin College | Oberlin, Ohio | 1833 | H. C. King | 1,679 | 176 |
| Occidental | Los Angeles, Cal | 1887 | Remsen D. Bird | 450 | 28 |
| *Ogden College* | Bowling Green, Ky | 1877 | | 125 | 5 |
| Ohio Northern Univ | Ada, Ohio | 1871 | A. E. Smith, D. D., Ph. D | 1,137 | 45 |
| Ohio State Univ | Columbus, Ohio | 1870 | W. O. Thompson, D. D | 8,060 | 625 |
| Ohio, Univ. of | Athens, Ohio | 1804 | E. B. Bryan | 1,483 | 100 |
| Ohio Wesleyan Univ | Delaware, Ohio | 1842 | J. W. Hoffman, D.D., LL.D. | 1,623 | 103 |
| Oklahoma Baptist Univ | Shawnee, Okla | 1910 | J. W. Lawrence | 430 | 27 |
| Oklahoma City College | Oklahoma City, Okla | 1919 | E. G. Green | 286 | 14 |
| Oklahoma Col. for Women | Chickasha, Okla | 1908 | G. W. Austin | 520 | 42 |
| Oklahoma, Univ. of | Norman, Okla | 1892 | Board of Regents | 3,900 | 163 |
| Olivet College | Olivet, Mich | 1844 | P. F. Voelker | 230 | 22 |
| Omaha Univ | Omaha, Neb | 1908 | D. E. Jenkins | 592 | 18 |
| Oregon, Univ. of | Eugene, Ore | 1872 | P. L. Campbell, A.B., LL.D. | 2,241 | 123 |
| Ottawa Univ | Ottawa, Kan | 1865 | S. E. Price | 431 | 26 |
| Otterbein College | Westerville, Ohio | 1847 | W. G. Chippinger | 503 | 34 |
| Ouachita College | Arkadelphia, Ark | 1886 | Thos. E. Dicken, LL. D | 263 | 21 |
| Oxford (Female) | Oxford, N. C | 1830 | Eleanor N. Adams | 205 | 23 |
| Ozarks, College of the | Clarksville, Ark | 1893 | W. J. Hurie, D. D | 170 | 16 |
| Pacific College | San Jose, Cal | 1851 | Tully C. Knoles | 481 | 35 |
| Pacific College | Newberg, Ore | 1891 | L. T. Pennington | 154 | 14 |
| Pacific Union | St. Helena, Cal | 1906 | W. E. Nelson | 390 | 30 |
| Pacific Univ | Forest Grove, Ore | 1849 | R. F. Clark | 250 | 20 |
| Paine College (Colored) | Augusta, Ga | 1882 | R. S. Tomlin | 217 | 16 |
| Park College | Parkville, Mo | 1875 | F. W. Hawley | 445 | 20 |
| Parsons College | Fairfield, Iowa | 1875 | R. A. Montgomery, D. D | 400 | 21 |
| Payne, Howard, College | Brownwood, Tex | 1889 | W. R. Hornburg, D. D | 553 | 28 |
| Penn College | Oscaloosa, Iowa | 1873 | H. E. McGrew | 514 | 33 |
| Pennsylvania College | Gettysburg, Pa | (Changed name to Gettysburg) | | | |
| Penn. College for Women | Pittsburgh, Pa | 1870 | J. C. Acheson, LL. D | 198 | 25 |
| Pennsylvania Milltary Col | Chester, Pa | 1821 | Col. C. E. Hyatt | 181 | 25 |
| Penn. State | State College, Pa | 1855 | J. M. Thomas | 3,272 | 315 |
| Pennsylvania, Univ. of | Philadelphia, Pa | 1740 | Col. L. Wood | 10,193 | 1,006 |
| Philippines, Univ. of | Manila, P. I | 1908 | G. P. Benton | 4,693 | 319 |
| Phillips Univ | E. Enid, Okla | 1907 | I. N. McCash | 721 | 52 |
| Piedmont College | Demorest, Ga | 1897 | F. E. Jenkins | 272 | 31 |
| Pittsburgh, Univ. of | Pittsburgh, Pa | 1787 | J. G. Bowman | 5,314 | 467 |
| Polytechnic Inst | Brooklyn, N. Y | 1854 | F. W. Atkinson | 450 | 41 |
| Pomona College | Claremont, Cal | 1887 | J. A. Blaisdell | 800 | 66 |
| Porto Rico, Univ. of | Rio Piedras, Porto Rico | 1903 | J. B. Huyke | 1,461 | 95 |
| Presbyterian Col. of S. C | Clinton, S. C | 1880 | D. M. Douglas | 163 | 13 |
| Princeton Univ | Princeton, N. J | 1746 | J. G. Hibben | 2,253 | 232 |
| Providence College | Providence, R. I | 1919 | W. D. Noon | 276 | 14 |
| Puget Sound | Tacoma, Wash | 1903 | E. H. Todd | 465 | 23 |
| Purdue Univ | Lafayette, Ind | 1869 | H. W. Marshall | 3,110 | 275 |
| Queens | Charlotte, N. C | 1857 | W. H. Frazee | 256 | 22 |
| Radcliffe | Cambridge, Mass | 1879 | Le B. R. Briggs | 662 | 140 |
| Randolph-Macon | Ashland, Va | 1830 | R. E. Blackwell | 206 | 23 |
| Randolph-Macon (Female) | Lynchburg, Va | 1893 | D. R. Anderson | 632 | 50 |
| Redlands Univ | Redlands, Cal | 1909 | V. L. Duke | 381 | 24 |
| Reed College | Portland, Ore | 1910 | R. F. Scholz | 300 | 30 |
| Regis College | Denver, Col | 1888 | Rev. R. M. Kelly, S. J | 304 | 20 |
| Rensselaer Poly. Inst | Troy, N. Y | 1824 | P. C. Ricketts | 1,133 | 83 |

| Name. | Location. | Year Organ. | Governing Official. | No. of Stud'ts. | No. of Teach'rs |
|---|---|---|---|---|---|
| Rhode Island State | Kingston, R. I. | 1892 | H. Edwards, LL. D. | 401 | 40 |
| Rice Inst. | Houston, Tex. | 1912 | E. O. Lovett | 878 | 63 |
| Richmond, Univ. of | Richmond, Va. | 1832 | F.W.Boatwright,M.A.,LL.D | 750 | 35 |
| *Rio Grande College* | Rio Grande, Ohio | 1876 | | 455 | 13 |
| Ripon College | Ripon, Wis. | 1851 | Silas Evans | 423 | 33 |
| Roanoke College | Salem, Va. | 1853 | Dr. C. J. Smith | 200 | 22 |
| Robert College | Constantinople, Turkey | 1863 | C. F. Gates, D.D., LL.D. | 605 | 74 |
| Rochester Univ | Rochester, N. Y. | 1850 | R. Rhees, A.M.,D.D.,LL.D. | 819 | 68 |
| Rockford College | Rockford, Ill. | 1847 | W. O. Maddox, Ph. D. | 333 | 45 |
| Rock Hill | Ellicott City, Md. | 1853 | Bro. Felician | 120 | 15 |
| Rollins College | Winter Park, Fla. | 1885 | R. J. Sprague, Ph. D. | 370 | 31 |
| Rose Poly. Inst | Terre Haute, Ind. | 1874 | Dr. P. B. Woodworth | 238 | 20 |
| Russell Sage College | Troy, N. Y. | 1916 | Miss E. Kellas | 325 | 50 |
| Rutgers College | New Brunswick, N. J. | 1766 | W. H. S. Demarest, D. D., LL. D. | 796 | 98 |
| Sacred Heart, College of | New York, N. Y. | 1917 | Mme. Ruth Burrell | 135 | 15 |
| Sacred Heart, Col. & Acad. | Cincinnati, Ohio | 1915 | M. Norton | 30 | 10 |
| St. Ambrose College | Davenport, Iowa | 1882 | W. L. Harmon | 322 | 25 |
| St. Anselm's College | Manchester, N. H. | 1889 | Rt. Rev. A. Ernest | 300 | 30 |
| St. Bernard College | St. Bernard, Ala. | 1892 | Bernard Menges | 195 | 32 |
| St. Bonaventura's | Allegany, N. Y. | 1856 | T. Plasomann | 450 | 25 |
| St. Catherine | St. Paul, Minn. | 1908 | Sister Antonia | 400 | 30 |
| St. Elizabeth, College of | Convent, N. J. | 1899 | Sister Marie Jose | 183 | 35 |
| St. Francis College | Brooklyn, N. Y. | 1868 | Brother Jarlath | 530 | 40 |
| St. Francis Xavier | Chicago, Ill. | 1912 | Mother Mary Irma | 125 | 12 |
| St. Genevieve's Col. & Acad. | Asheville, N. C. | 1909 | M. L. Lorin | 50 | 18 |
| St. Ignatius College | Cleveland, Ohio | 1886 | Rev. T. J. Smith | 510 | 29 |
| St. Ignatius College | San Francisco, Cal. | 1885 | Rev. Pius L. Moore, S. J. | 280 | 15 |
| St. John's College | Annapolis, Md. | 1696 | T. Fell, Ph. D., LL. D. | 237 | 17 |
| St. John's College | Brooklyn, N. Y. | 1870 | J. W. Moore | 130 | 14 |
| St. John's Univ | Toledo, Ohio | 1898 | F. X. Busch, S. J. | 300 | 26 |
| St. John's Univ | Collegeville, Minn. | 1857 | A. Deutsch, Ph. D. | 450 | 40 |
| St. Joseph's College | Philadelphia, Pa. | 1851 | Rev. A. G. Brown | 604 | 31 |
| St. Lawrence Univ | Canton, N. Y. | 1856 | R. E. Sykes | 1,172 | 76 |
| St. Louis College | San Antonio, Tex. | 1894 | | 300 | 23 |
| St. Louis Univ | St. Louis, Mo. | 1818 | W. F. Robinson | 2,637 | †235 |
| St. Mary's College | Notre Dame, Ind. | 1855 | Mother Pauline | 348 | 48 |
| St. Mary's College | St. Mary's Ky. | 1821 | Rev. Michael Jaglowicz | 130 | 9 |
| St. Mary's College | Oakland, Cal. | 1863 | Bro. U. Gregory, F. S. C. | 460 | 28 |
| St. Mary's College | St. Mary's, Kan. | 1869 | B. J. Rodman, S. J. | 500 | 40 |
| St. Mary's College | Prairie du Chien, Wis. | 1872 | Mother Mary Seraphia | 130 | 16 |
| St. Mary of the Woods | St. Mary of Woods, Ind. | 1840 | Mother Mary Cleophus | 170 | 35 |
| St. Michael's College | Winooski, Vt. | 1904 | Rev. W. J. Marie | 160 | 18 |
| St. Olaf | Northfield, Minn. | 1874 | Rev. L. W. Boe, D. D. | 880 | 57 |
| St. Peter's College | Jersey City, N. J. | 1878 | T. F. Graham | 580 | 20 |
| St. Stephen's College | Annandale, N. Y. | 1860 | B. I. Bell, D. D. | 120 | 16 |
| St. Teresa, College of | Winona, Minn. | 1911 | Mother M. Leo (Tracy) | 350 | 40 |
| St. Thomas, College of | St. Paul, Minn. | 1885 | V. Rev. T. E. Cullen | 890 | 55 |
| St. Viator College | Bourbonnais, Ill. | 1868 | Rev. T. J. Rice | 450 | 28 |
| St. Vincent College | Beatty, Pa. | 1846 | Rt. Rev. A. Stehle | 577 | 45 |
| St. Xavier College | Cincinnati, Ohio | 1840 | J. McCabe | 592 | 31 |
| Salem College | Salem, W. Va. | 1888 | S. O. Bond | 486 | 21 |
| Salem Acad. & College | Winston-Salem, N. C. | 1772 | H. E. Rondthaler, D. D. | 679 | 54 |
| Santa Clara, Univ. of | Santa Clara, Cal. | 1851 | Z. J. Maher | 350 | 38 |
| Scott, Agnes, College | Decatur, Ga. | 1889 | F. H. Gaines, D. D. | 430 | 50 |
| Seton Hall College | So. Orange, N. J. | 1856 | J. F. Mooney | 407 | 26 |
| Seton Hill Col. for Women | Greensburg, Pa. | 1895 | Mother Mary Raymond | 134 | 34 |
| Shaw Univ. (Colored) | Raleigh, N. C. | 1865 | J. L. Peacock, D. D. | 400 | 30 |
| Shorter College | Rome, Ga. | 1873 | W. D. Furry | 270 | 24 |
| Silliman Collegiate Inst. | Clinton, La. | 1852 | Rev. W. B. Currie, D. D. | 100 | 12 |
| Simmons College | Abilene, Tex. | 1891 | J. D. Sandefer, LL. D. | 650 | 31 |
| Simmons College | Boston, Mass. | 1899 | H. Lefavour, Ph.D., LL.D. | 1,305 | 121 |
| Simpson College | Indianola, Iowa | 1867 | John L. Hillman | 528 | 34 |
| Sioux Falls Univ. | Sioux Falls, S. D. | 1883 | V. C. Coulter | 280 | 20 |
| Skidmore School of Arts | Saratoga Springs, N. Y. | 1911 | C. H. Keyes, Ph. D. | 320 | 42 |
| Smith College | Northampton, Mass. | 1871 | W. A.Neilson,Ph.D.,LL.D. | 1,999 | 197 |
| South, Univ. of the | Sewanee, Tenn. | 1857 | B. F. Finney | 215 | 27 |
| So. Carolina, Univ. of | Columbia, S. C. | 1801 | W. D. Melton | 621 | 42 |
| So. Dakota, Univ. of | Vermilion, S. D. | 1882 | R. L. Slagle | 837 | 73 |
| So. California, Univ. of | Los Angeles, Cal. | 1880 | R. B. Von KleinSmid | 4,031 | 249 |
| Southern Meth. Univ. | Dallas, Tex. | 1915 | H. M. Whaling, Jr. | 1,441 | 84 |
| Southwestern College | Winfield, Kan. | 1885 | A. E. Kirk | 588 | 39 |
| Southwestern Presby. Univ. | Clarksville, Tenn. | 1875 | C. E. Diehl | 120 | 13 |
| Southwestern Univ | Georgetown, Tex. | 1873 | C. McT. Bishop, LL. D. | 510 | 26 |
| *Spring Hill College* | Spring Hill, Ala. | 1829 | | 334 | 30 |
| Stanford, Jr., Leland, Univ. | Stanford Univ., Cal. | 1885 | R. L. Wilbur | 3,103 | 102 |
| Sterling College | Sterling, Kan. | 1887 | R. T. Campbell | 227 | 15 |
| Stetson, John B., Univ. | De Land, Fla. | 1883 | Lincoln Hulley, Ph. D. | 543 | 40 |
| Stevens Inst. of Tech. | Hoboken, N. J. | 1871 | A. C. Humphreys, M. E. E. D., Sc. D., LL. D. | 802 | 61 |
| Susquehanna Univ. | Selinsgrove, Pa. | 1858 | C. T. Aikens | 310 | 28 |
| Swarthmore College | Swarthmore, Pa. | 1864 | F. Aydelotte | 510 | 45 |
| Sweet Briar College | Sweet Briar, Va. | 1906 | E. W. McVea | 300 | 32 |
| Syracuse Univ. | Syracuse, N. Y. | 1870 | C. W. Flint | 5,100 | 460 |
| *Syrian Protestant* | Beirut, Syria | 1863 | | 950 | 86 |
| Tabor College | Tabor, Iowa | 1866 | Dr. S. E. Lynd | 75 | 10 |
| Talladega College (Colored) | Talladega, Ala. | 1867 | F. A. Sumner | 519 | 45 |
| Tarkio College | Tarkio, Mo. | 1883 | J.A Thompson,D.D.,LL.D. | 219 | 19 |
| Taylor Univ. | Upland, Ind. | 1846 | J. Paul, D. D. | 405 | 20 |
| Teachers' College | New York, N. Y. | 1888 | J. E. Russell | 3,929 | 251 |
| Temple Univ. | Philadelphia, Pa. | 1884 | R. H. Conwell, D.D.,LL.D. | 7,648 | 403 |
| Tennessee College | Murfreesboro, Tenn. | 1907 | W. J. Burnett | 124 | 19 |
| Tennessee, Univ. of | Knoxville, Tenn. | 1794 | H. A. Morgan | 1,443 | 226 |
| Texas Christian Univ. | Fort Worth, Tex. | 1873 | E. McS. Wait | 600 | 50 |
| Texas Presbyterian College | Milford, Tex. | 1902 | F. W. Thompson | 200 | 27 |
| Texas, Univ. of | Austin, Tex. | 1883 | R. E Vinson | 4,680 | 252 |
| Thiel College | Greenville, Pa. | 1870 | Rev. E. F. Riter | 300 | 17 |
| Toledo, Univ. of | Toledo, Ohio | 1884 | A. M. Stowe, Ph. D. | 1,409 | 53 |
| Transylvania College | Lexington, Ky. | 1783 | A. D. Harmon, LL. D. | 275 | 30 |
| Trinity College | Hartford, Conn. | 1823 | Rev. R. B. Ogilby | 250 | 24 |

| NAME. | Location. | Year Organ. | Governing Official. | No. of Stud'ts. | No. of Teach's |
|---|---|---|---|---|---|
| *Trinity College* | Durham, N. C. | .... | .... | 625 | 60 |
| Trinity College | Washington, D. C. | 1900 | Sister Raphael | 372 | 35 |
| Trinity Univ | Waxahachie, Tex. | 1869 | Board of Trustees | 345 | 22 |
| Tufts College | Medford, Mass. | 1852 | J. A. Converse | 2,091 | 381 |
| Tulane Univ | New Orleans, La. | 1834 | A. B. Dimoiddie, LL. D. | 2,580 | 387 |
| Tulsa Univ. (formerly Henry Kendall) | Tulsa, Okla. | 1894 | J. M. Gordon, A.M., LL.D. | 425 | 24 |
| Tusculum College | Greenville, Tenn. | 1794 | Prof. C. O. Gray, LL. D. | 200 | 23 |
| Union College | College View, Neb. | 1891 | O. M. John | 416 | 30 |
| Union College | Schenectady, N. Y. | 1795 | C. A. Richmond | 678 | 54 |
| Union Christian College | Merom, Ind. | 1859 | W. S. Alexander | 80 | 8 |
| Union Univ | Jackson, Tenn. | 1842 | H. E. Walters | 550 | 32 |
| Upsala College | Kenilworth, N. J. | 1893 | C. G. Erickson, Ph. D. | 105 | 10 |
| Ursinus College | Collegeville, Pa. | 1869 | G. L. Omwake | 238 | 21 |
| U. S. Military Acad | West Point, N. Y. | 1802 | Brig. Gen. D. MacArthur | 1,154 | 167 |
| U. S. Naval Acad | Annapolis, Md. | 1845 | Rear Adm. H. B. Wilson | 2,248 | 250 |
| Upper Iowa Univ | Fayette, Iowa | 1857 | .... | 444 | 21 |
| Utah, Univ. of | Salt Lake City, Utah | 1850 | G. Thomas | 2,757 | 154 |
| Valparaiso Univ | Valparaiso, Ind. | 1873 | M. J. Bowman, Jr. | 1,500 | 150 |
| Vanderbilt Univ | Nashville, Tenn. | 1873 | J. H. Kirkland | 1,245 | 198 |
| Vassar College | Poughkeepsie, N. Y. | 1861 | H. W. MacCracken | 1,143 | 150 |
| Vermont, Univ. of | Burlington, Vt. | 1791 | G. W. Bailey, LL. D. | 1,056 | 145 |
| Villanova College | Villanova, Pa. | 1843 | F. A. Driscoll | 521 | 36 |
| Virginia Military Inst | Lexington, Va. | 1839 | E. W. Nichols | 46 | 6 |
| Virginia Union Univ. (Col.) | Richmond, Va. | 1865 | W. J. Clark | 381 | 10 |
| Virginia, Univ. of | Charlottesville, Va. | 1819 | E. A. Alderman | 1,756 | 100 |
| Wabash College | Crawfordsville, Ind. | 1832 | A. D. Thomas | 496 | 23 |
| Wake Forest College | Wake Forest, N. C. | 1834 | W. L. Poteat | 540 | 40 |
| Wartburg College | Clinton, Iowa | 1868 | Rev. O. L. Proehl | 90 | 9 |
| Washburn College | Topeka, Kan. | 1865 | P. P. Womer | 969 | 50 |
| Washington College | Washington College, Pa. | 1795 | J. T. Cooter | 122 | 7 |
| Washington College | Chestertown, Md. | 1723 | C. P. Gould, Ph. D. | 121 | 12 |
| Washington Missionary | Takoma Park, D. C. | 1904 | H. A. Morrison | 265 | 24 |
| Washington State College | Pullman, Wash. | 1890 | E. O. Holland | 2,212 | 164 |
| Washington, Univ. of | Seattle, Wash. | 1861 | H. Suzzallo | 5,410 | 262 |
| Washington Univ | St. Louis, Mo. | 1853 | R. S. Brookings | 3,604 | 336 |
| Washington & Jefferson | Washington, Pa. | 1802 | S. S. Baker | 454 | 27 |
| Washington & Lee Univ | Lexington, Va. | 1749 | Dr. H. L. Smith | 777 | 42 |
| Waynesburg College | Waynesburg, Pa. | 1850 | P. R. Stewart | 110 | 9 |
| Wellesley College | Wellesley, Mass. | 1875 | Ellen F. Pendleton | 1,548 | 150 |
| Wells College | Aurora, N. Y. | 1868 | K. D. MacMillan | 230 | 36 |
| Wesleyan College | Macon, Ga. | 1836 | Rev. W. F. Quillian | 547 | 43 |
| Wesleyan Univ | Middletown, Conn. | 1831 | W. A. Shanklin | 532 | 52 |
| Western College (Female) | Oxford, Ohio | 1853 | W. W. Boyd | 320 | 40 |
| Western Maryland College | Westminster, Md. | 1867 | A. N. Ward | 402 | 32 |
| Western Reserve Univ | Cleveland, Ohio | 1826 | Dr. J. D. Williamson | 2,534 | 434 |
| Western Union College | Le Mars, Iowa | 1900 | C. A. Mock | 200 | 16 |
| Westminster College | New Wilmington, Pa. | 1852 | W. C. Wallace, D. D. | 341 | 20 |
| Westminster College | Fulton, Mo. | 1849 | E. E. Reed, D. D. | 174 | 14 |
| West Virginia Univ | Morgantown, W. Va. | 1867 | F. B. Trotter | 1,853 | 188 |
| West Virginia Wesleyan | Buckhannon, W. Va. | 1890 | W. B. Fleming | 556 | 30 |
| Wheaton College | Wheaton, Ill. | 1860 | C. A. Blanchard | 237 | 16 |
| Wheaton College | Norton, Mass. | 1834 | Rev. S. V. Cole, A.M., LL.D. | 309 | 30 |
| Whitman College | Walla Walla, Wash. | 1882 | S. B. L. Penrose, LL. D. | 449 | 38 |
| Whitworth College | Spokane, Wash. | 1890 | W. H. Robinson | 155 | 16 |
| Wilberforce Univ. (Colored) | Wilberforce, Ohio | 1856 | J. A. Gregg | 920 | 62 |
| Willamette Univ | Salem, Ore. | 1842 | C. G. Doney, Ph. D. | 567 | 37 |
| William & Mary, College of | Williamsburg, Va. | 1693 | J. H. C. Chandler | 684 | 36 |
| Williams College | Williamstown, Mass. | 1793 | H. A. Garfield | 583 | 51 |
| Wilmington College | Wilmington, Ohio | 1875 | J. E. Jay | 335 | 18 |
| Wilson College | Chambersburg, Pa. | 1868 | Dr. E. D. Warfield | 385 | 35 |
| Winthrop College | Rock Hill, S. C. | 1886 | D. B. Johnson | 1,243 | 89 |
| Wisconsin, Univ. of | Madison, Wis. | 1849 | E. A. Birge | 7,756 | 885 |
| Wittenberg College | Springfield, Ohio | 1845 | E. E. Tulloss | 603 | 35 |
| Wofford College | Spartanburg, S. C. | 1854 | H. N. Snyder | 345 | 14 |
| Woman's Alabama College | Montgomery, Ala. | 1909 | M. W. Swartz | 382 | 29 |
| Woman's Oklahoma College | Chickasha, Okla. | 1908 | G. W. Austin | 520 | 43 |
| Woman's Tennessee | Murfreesboro, Tenn. | 1907 | G. J. Burnett | 124 | 19 |
| Wooster, College of | Wooster, Ohio | 1866 | C. F. Wishart | 735 | 40 |
| Worcester Poly Inst | Worcester, Mass. | 1865 | I. N. Hollis | 502 | 59 |
| Wyoming, Univ. of | Laramie, Wyo. | 1886 | A. Nelson | 548 | 60 |
| Yale Univ | New Haven, Conn. | 1701 | J. R. Angell | 3,930 | 581 |
| Yankton College | Yankton, S. D. | 1881 | Rev. H. K. Warren, LL. D. | 331 | 24 |
| York College | York, Neb. | 1890 | W. O. Jones | 158 | 20 |

## SCHOOLS OF JOURNALISM IN THE UNITED STATES.

(A List Prepared by the U. S. Bureau of Education, Washington, D. C.)

Journalism is taught in special schools or in special classes at the following institutions:

*At State Universities*—Arkansas, California, Colorado, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Missouri, Maine, Montana, Nebraska, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin.

*At State Colleges and Schools*—Colorado Agricultural College, Delaware College, Fort Hays (Kansas) Normal School, Georgia Technical School of Commerce, Indiana State Normal School, Iowa State College, Kansas State Agricultural College, Kansas State Norma School, Massachusetts Agricultural College, Missouri State Normal College, Nebraska State Normal School, No th Dakota Agricultural College, Oklahoma Agricultural and Mechanical College, Pennsylvania State College, Purdue University, South Dakota State College, Wisconsin State Normal School.

*At Endowed Colleges and Universities*—Austin College, Beaver College, Beloit College, Billings Polytechnic Institute, Boston University, Bucknell College, Buena Vista Coll ge, Carleton College, Colby College, College of Emporia, Columbia University, De Pauw University, Emmanuel Missionary College, Goucher College, Howard College, Kansas City Polytechnic Institute, Knox College, Lawrence College, Lehigh University, Leland Stanford Junior University, Marietta College, Marquette University, McKendree College, Miami University, Morningside College, Mount Union College, Municipal University of Akron, New York University, Pomona College, Ripon College, St. Xavier College, Toledo University, Trinity College, Tulane University, University of Chicago, University of Denver, University of Notre Dame, University of Pittsburgh, University of Southern California, Vassar College, Western Reserve University.

## AGRICULTURAL AND MECHANICAL SCHOOLS.

| NAME. | Location. | Year Organ. | Governing Official. | No. of Stud'ts. | No. of Teach's |
|---|---|---|---|---|---|
| A & I State Normal (Neg.) | Nashville, Tenn | 1912 | W. J. Hale | 522 | 42 |
| Alabama Poly. Inst | Auburn, Ala | 1872 | S. Dowell, A. M., LL. D | 1,269 | 96 |
| Alcorn A. & M. (Neg.) | R dney, Miss | 1871 | L. J. Rohan | 25 | 30 |
| Chilocco Indian Agr Sch | Chilocco, Okla | | | | |
| Clemson Agric Col | Clemson College, S. C | 1889 | Dr. W. M. Riggs | 1,007 | 78 |
| Colorado Agriculture | Fort Collins, Col | 1887 | C. A. Lory | 950 | 77 |
| Colored A. & N. U | Langston, Okla | | | | |
| Conn. Agriculture | Storrs, Conn | 1881 | C. L. Beach | 440 | 44 |
| Florida A. & M. C. (Neg.) | Tallahassee, Fla | 1887 | N. B. Young | 400 | 40 |
| Georgia State C. of A | Athens, Ga. (Red and Black.) | 1907 | A. M. Soule | 1,100 | 47 |
| Georgia State In. (Neg.) | (nr.) Savannah, Ga | 1890 | C. G. Wiley | 350 | 20 |
| Hampton N. & A. Ind | Hampton, Va | 1858 | E. Gregg | 423 | 18 |
| Harvard Eng. School | Cambridge, Mass | 1847 | H. J. Hughes | 300 | 40 |
| Iowa State C. of A & M. A. | Ames, Iowa | 1858 | R. A. Pearson | 4,700 | 475 |
| Kansas St. Agric | Manhattan, Kan | 1863 | W. M. Jardine | 3,176 | 256 |
| Kentucky Nor. & Ind | Frankfort, Ky | 1886 | G. P. Russell | 402 | 27 |
| Louisiana St. A & M. C | Baton Rouge, La | 1860 | T. D. Boyd | 1,242 | 106 |
| Maryland State C | College Park, Md | 1807 | A. F. Woods | 2,200 | 185 |
| Massachusetts Agric | Amherst, Mass | 1867 | K. L. Butterfield | 800 | 80 |
| Michigan Agric. C | East Lansing, Mich | 1857 | D. Friday | 1,484 | |
| Mississippi A. & M. C | Agric. Col., Miss | | | | |
| Mississippi I. & T. Sch | Columbia, Miss | 1918 | Prof. W. Jacobs | 407 | 45 |
| Montana State C | Bozeman, Mont | 1893 | A. Atkinson | 708 | 67 |
| Negro A. & Tech | Greensboro, N. C | 1891 | Dr. J. B. Dudley | 444 | 28 |
| New Hampshire Col | Durham, N. H | 1868 | R. D. Hetzel, LL. D | 973 | 88 |
| N. M. C. of A. & M. A | State College, N. M | 1889 | H. L. Kent | 392 | 45 |
| N. Y. State Inst | Farmingdale, N. Y | | A. A. Johnson | 250 | 25 |
| N. C. A. & Eng. (State) | West Raleigh, N. C | 1889 | W. C. Riddick, C.D., LL.D. | 1,205 | 94 |
| North Dakota Agric | Fargo, N. Dak | 1891 | J. L. Coulter | 976 | 76 |
| No. Georgia Agric | Dahlonega, Ga | | | | |
| Oklahoma A. & M | Stillwater, Okla | 1890 | J. B. Eskridge | 2,279 | 107 |
| Oregon State Agric | Corvallis, Ore | 1885 | W. J. Kerr, LL. D | 3,914 | 267 |
| Prairie View S. Nor. (Neg.) | Prairie View, Tex | 1897 | B. Bizzell | 626 | 56 |
| Rhode Island State C | Kingston, R. I | 1892 | H. Edwards, LL. D | 401 | 40 |
| Rochester A. & M. Inst | Rochester, N. Y | 1885 | J. A. Randall | 2,600 | 60 |
| State A. & M | Orangeburg, S. C | 1896 | R. S. Wilkinson | 590 | 43 |
| S. Dak. State Sch. of Mines | Rapid City, S. Dak | 1885 | C. C. O'Hara | 187 | 15 |
| So. Dakota State C | Brookings, S. Dak | 1884 | W. E. Johnson | 1,053 | 74 |
| State Agri. & Mech. C | Normal, Ala | | | | |
| Southern Univ. (Neg.) | Baton Rouge, La | | | | |
| Tarleton, John, Agric | Stephenville, Tex | 1917 | J. T. Davis | 425 | 42 |
| Texas A. & M. C | College Station, Tex | 1876 | W. B. Bizzell, LL. D | 1,787 | 160 |
| Tuskegee Inst | Tuskegee, Ala | 1881 | Dr. R. R. Moton | 1,483 | 118 |
| Utah Agric. C | Logan, Utah | 1888 | E. G. Peterson | 1,197 | 80 |
| Virginia Nor. & Ind. Inst | Petersburg, Va | 1882 | J. M. Gandy | 1,094 | 72 |
| Virginia Poly. Inst | Blacksburg, Va | 1872 | J. A. Barruss | 975 | 65 |
| Washington State C | Pullman, Wash | 1890 | E. O. Holland | 2,212 | 164 |
| Winthrop N. & I. C | Rock Hill, S. C | 1886 | S. B. Johnson | 1,243 | 89 |

## CANADIAN COLLEGES.

| NAME. | Location. | Year Organ. | Governing Official. | No. of Stud'ts. | No. of Teach's |
|---|---|---|---|---|---|
| Acadia Univ | Wolfville, N. S | 1838 | G. B. Cutten | 307 | 21 |
| Alberta Univ | Edmonton, S. Alberta | 1908 | H. M. Tory, LL. D | 1,071 | 133 |
| Alma | St. Thomas, Ont | 1876 | P. S. Dobson, M. A | 275 | 18 |
| British Columbia U | Vancouver, B. C | 1912 | L. S. Blinck, M. S. A | 1,014 | 70 |
| Dalhousie Univ | Halifax, Nova Scotia | 1818 | A. S. MacKenzie | 712 | 97 |
| McGill Univ | Montreal Quebec | 1821 | Sir. A. W. Currie | 2,665 | 310 |
| McMaster Univ | Toronto, Ontario | 1887 | | 300 | 23 |
| Toronto, U. of | Toronto, Ontario | 1827 | Sir R. Falconer, K. C. M. G. | 4,626 | 626 |
| Macdonald College | Ste. A. de Bellevue, Q | 1907 | F. C. Harrison | 674 | 57 |
| Manitoba | Winnipeg, Manitoba | 1871 | J. MacKay, D. D | 55 | 6 |
| Mount Allison | Sackville, N. B | 1863 | B. C. Borden, D. D | 265 | 18 |
| New Brunswick U | Fredericton, N. B | 1800 | C. C. Jones | 200 | 12 |
| Nova Scotia Normal | Truro, N. S | 1854 | David Soloan | 300 | 11 |
| Queen's Univ | Kingston, Ontario | 1841 | R. B. Taylor, LL. D | 1,737 | 125 |
| Saskatchewan Univ | Saskatoon, Sask | 1907 | W. C. Murray | 897 | 57 |
| Victoria Univ | Toronto, Ontario | 1836 | | 570 | |

## RHODES SCHOLARSHIPS.

Two Rhodes Scholarships to the University of Oxford are assigned to each State in the Union. The scholarships are tenable for three years and have the value of £350 a year. To be eligible a candidate must be—(a) A male citizen of the United States, (b) Over 19 and not over 25 years of age, (c) Above sophomore standing in some recognized degree-granting university or college in the United States. Candidates may apply either from the State in which they have their ordinary private domicile, home, or residence, or from the State in which they have received at least two years of their college education.

Selections are made on the basis of the candidate's record in school and college supplemented by references of persons who know him and by a personal interview with the Committee of Selection. There is no written examination. Elections are made on the basis of—(1) Qualities of manhood, force of character, and leadership. (2) Literary and scholastic ability and attainments. (3) Physical vigor, as shown by interest in outdoor sports or in other ways. No restriction is placed on a Rhodes scholar's choice of studies. He may read for the Oxford B. A. in any of the Final Honor Schools, he may enter for any one of the so-called Diploma Courses, or, if qualified by previous training, may be admitted to read for advanced degrees such as the B. Sc., B. Litt., B. C. L., or Ph. D.

An election is held each year in two-thirds of the States of the Union. In 1923 one scholar will be elected in the following States: Ala., Ariz., Ark., Calif., Colo., Del., Fla., Ga., Idaho, Iowa, Kan., La., Mich., Minn., Miss., Mo., Mont., Neb., Nev., N. M., N. C., N. D., Okla., Ore., S. C., S. D., Tex., Utah, Wash., W. Va., Wis., Wyo. Applications will be due on or before Oct. 21, 1923; the election will be held on Dec. 1, 1923; and the Rhodes scholars so elected will enter Oxford in October, 1924. Application blanks and further information may be obtained from the officers of any college or university in the United States or from President Frank Aydelotte, American Secretary to the Rhodes Trustees, Swarthmore College, Swarthmore, Pa. The Secretary of the Committee of Selection for New York State is Dr. Augustus S. Downing, State House, Albany.

The 1922 Rhodes scholar from New York is Jas. A. Ross, Jr., (Princeton University) 85 Schaeffer St., Brooklyn, N. Y.

## SCHOOLS OF THEOLOGY IN THE UNITED STATES.

| NAME. | Location. | Yr. Org. | Control. | Governing Official. | No. Stud. | No. Tch. |
|---|---|---|---|---|---|---|
| Andover Theological Sem | Cambridge, Mass | 1807 | Cong | Board of Trustees | 18 | 6 |
| Auburn Theological Sem | Auburn, N. Y | 1818 | Presby | G. B. Stewart, D. D | 44 | 13 |
| Augustana | Rock Island, Ill | 1860 | | Gustav Anderson | 1,022 | 82 |
| Austin Presbyterian | Austin, Tex | 1902 | Presby | T. W. Currie | 10 | 4 |
| Bangor Theological Sem | Bangor, Me | 1914 | Cong | W. J. Moulton, D. D | 29 | 7 |
| Berkeley Div. School | Middletown, Conn | 1854 | Epis | Rt. Rev. C. B. Brewsters | 16 | 5 |
| Bethany Bible School | Chicago, Ill | 1905 | Breth | A. C. Wieand, D. D | 301 | 25 |
| Bethel Acad. and Theo. Sem | St. Paul, Minn | 1905 | Baptist | St. Paul, Minn | 304 | 3 |
| Bible C. of Missouri | Columbia, Mo | 1897 | D. of C | Dean G. D. Edwards | 304 | 3 |
| Bible College | Lexington, Ky | 1865 | | A. D. Harmon, LL. D | 91 | 8 |
| Bible Teachers' Train. Sch | New York, N. Y | 1901 | Christ | Dr. W. W. White | 418 | 16 |
| Bloomfield Theological Sem | Bloomfield, N. J | 1869 | Presby | H. E. Richards | 71 | 14 |
| Bonebrake Theological Sem | Dayton, Ohio | 1871 | Breth | Rev. A. T. Howard | 78 | 6 |
| Boston Univ. Sch. of Theo | Boston, Mass | | | Rev. J. A. Beebe, LL. D | 375 | 24 |
| Brite Ch. of Bible | Fort Worth, Tex | 1914 | D. of C | C. D. Hall | 84 | 4 |
| Catholic U. of America | Washington, D. C | 1887 | R. C | Rt. Rev. T. J. Shahan, D. D | 1,835 | 90 |
| Cazenovia Seminary | Cazenovia, N. Y | 1824 | M. E | Chas. E. Hamilton | 250 | 16 |
| Central Theological Sem | Dayton, Ohio | 1907 | Ref. Ch | Rev. H. J. Christman | 30 | 7 |
| Chicago Theological Sem | Chicago, Ill | | Cong | | 30 | 8 |
| Concordia Theological Sem | St. Louis, Mo | 1839 | Luth | Prof. J. H. Fritz | 361 | 12 |
| Crane Theological Sem | Tufts C., Mass | 1869 | Univ | L. S. McCollester, D. D | 18 | 4 |
| Crozer Theological Sem | Upland, Pa | 1868 | Baptist | Rev. M. G. Evans, LL. D | 63 | 9 |
| Drake U., Col. of Bible | Des Moines, Ia | 1881 | | A. Holmes | 70 | 4 |
| Drew Theological School | Madison, N. J | 1866 | M. E | E. S. Tipple, D. D | 200 | 34 |
| Emanuel Missionary Col | Berrien Sp'gs, Mich | 1910 | | Prof. F. Griggs | 440 | 32 |
| Episcopal Theological Sem | Cambridge, Mass | 1867 | P. E | H. B. Washburn, D. D | 22 | 13 |
| Epworth Seminary | Epworth, Iowa | 1857 | M. E | F. Q. Brown | 51 | 8 |
| Eugene Bible University | Eugene, Ore | 1895 | D. of C | E. C. Sanderson | 242 | 18 |
| Evan. Luth. Theo. Sem | Maywood, Ill | 1891 | Ev.Luth | | 60 | 5 |
| Evangelical Theological Sem | Naperville, Ill | 1873 | Evang | G. B. Kimmel, D. D | 86 | 5 |
| Garrett Biblical Inst | Evanston, Ill | 1855 | M. E | C. M. Stuart | 377 | 24 |
| Gen. Theo. Sem., P. E. Ch | New York, N. Y | 1817 | Epis | E. Fosbroke, D. D | 92 | 14 |
| Genesee Wesleyan Sem | Lima, N. Y | 1830 | M. E | E. D. Shepard, D. D | 185 | 16 |
| Hartford Theo. Sem | Hartford, Conn | 1833 | | W. D. MacKenzie, D. D | 47 | 10 |
| Harvard Theo. School | Cambridge, Mass | 1922 | Unit | W. L. Sherry, D. D | 56 | 8 |
| Howard U., Sch. of Theo | Washington, D. C | 1867 | | D. B. Pratt | 37 | 12 |
| Hebrew Union | Cincinnati, Ohio | 1875 | Jewish | Union of Am. Heb. Cong | 190 | 12 |
| Iliff School of Theology | Denver, Colo | 1892 | M. E | | 103 | 7 |
| Jewish Theo. Sem | New York, N. Y | 1886 | Jewish | Dr. Cyrus Adler | 65 | 21 |
| Kimball School of Theology | Salem, Ore | 1906 | M. E | H. J. Talbott | 92 | 8 |
| Lane Seminary | Cincinnati, Ohio | 1829 | Presby | W. McKibben, D. D | 43 | 6 |
| Lutheran Theo. Sem | Philadelphia, Pa | 1864 | Luth | Rev. H. E. Jacobs, D. D | 97 | 10 |
| Lynchburg College | Lynchburg, Va | 1903 | Christ | J. T. T. Hundley | 192 | 22 |
| McCormick Theo. Sem | Chicago, Ill | 1829 | Presby | J. G. McClure, D. D | 170 | 17 |
| Maine Wesleyan Sem | Kent Hill, Me | 1824 | Meth | J. O. Newton | 200 | 14 |
| Meadville Theo. School | Meadville, Pa | 1844 | Unit | F. C. Southworth, D. D | 16 | 6 |
| Mt. St. Alphonsus Theo. Sem | Esopus, N. Y | 1868 | R. C | F. J. Reichert, D. D | 135 | 12 |
| Moravian C. & Theo. Sem | Bethlehem, Pa | 1807 | Morav | Rt.Rev.J.T.Hamilton,D.D. | 85 | 7 |
| New Brunswick Theo. Sem | N. Brunswick, N. J | 1784 | Ref. Ch | Rev. Dr. J. P. Searle | 27 | 9 |
| New Church Theo. Sem | Cambridge, Mass | 1866 | | W. L. Worcester | 12 | 7 |
| Northern Baptist Theo. Sem | Chicago, Ill | 1913 | Baptist | G. W. Taft | 104 | 12 |
| Norwegian-Danish Theo. Sem | Evanston, Ill | 1883 | | O. Firing | 24 | 3 |
| Oberlin Theological Sem | Oberlin, O | 1833 | | H. C. King | 38 | 9 |
| Ouachita Baptist | Arkadelphia, Ark | 1886 | | C. E. Dicken, LL. D | 263 | 21 |
| Pacific School of Religion | Berkeley, Cal | 1869 | Undnm | G. F. Swartz | 54 | 8 |
| Princeton Theological Sem | Princeton, N. J | 1812 | Presby | J. R. Stevenson, D. D | 195 | 15 |
| Rochester Theological Sem | Rochester, N. Y | 1850 | Baptist | C. A. Barbour, D. D | 84 | 9 |
| St. John's Diocs. Seminary | Little Rock, Ark | 1911 | R. C | W. H. Aretz, S. T. D | 36 | 7 |
| St. Mary's Theological Sem | Cleveland, O | 1849 | R. C | Rev. J. A. McFadden | 59 | 5 |
| St. Vincent C. & Eccl. Sem | Beatty, Pa | 1846 | R. C | Rt. Rev. A. Stehle | 577 | 45 |
| San Francisco Theological Sem | San Anselmo, Cal | 1871 | | Rev. W. H. Landon | 106 | 10 |
| Seabury Divinity School | Faribault, Minn | | | | 25 | 6 |
| Southern Baptist Theo. Sem | Louisville, Ky | 1859 | Baptist | E. Y. Mullins, D. D | 416 | 15 |
| Southern Meth. U. Sch. of Theo | Dallas, Tex | 1915 | Meth | H. M. Whaling, Jr | 1,441 | 84 |
| S'west'n Bapt. Theo. Sem | Waco, Tex | 1901 | Baptist | L. R. Scarborough, D. D | 581 | 34 |
| Suomi C. and Seminary | Hancock, Mich | 1896 | Ev.Luth | Rev. J. Wargelin, A. B | 105 | 12 |
| Union Theological Sem | Richmond, Va | 1812 | Presby | W. W. Moore | 112 | 9 |
| Union Theo. Sem. of City of N. Y. | New York City | | Interd'l | | 320 | 30 |
| Vanderbilt University | Nashville, Tenn | 1873 | | J. H. Kirkland | 1,245 | 198 |
| Virginia Theo. Sem and Col | Lynchburg, Va | 1888 | Baptist | R. C. Woods | 557 | 26 |
| Wartburg Theological Sem | Dubuque, Iowa | 1854 | Luth | M. Fritschel | 48 | 5 |
| Western Theological Sem | Pittsburgh, Pa | | Presby | | 55 | 11 |
| Xenia Theological Seminary | St. Louis, Mo | 1794 | | Joseph Kyle | 34 | 7 |
| Yale Divinity School | New Haven, Conn | 1822 | | Dean C. R. Brown | 180 | 20 |

## WORKERS' COLLEGE AT KATONAH, N. Y.

(From a 1922 bulletin of the U. S. Department of Labor.)

Brookwood, the first resident college for workers in this country and located at Katonah, N. Y., has been in operation for some months. This experiment in adult education is being carried out under the supervision of two committees, one of which consists of the Presidents of the federations of labor of several States and representatives of several trade unions, including the teachers' union of New York City, and endeavors to enlist the co-operation of labor organizations in the work and to see that the courses offered are applicable to the needs of the labor movement.

The other committee, composed of professors from Columbia University, the University of Pennsylvania, and Amherst College, is an advisory body which assists in so planning the courses offered as to make them valuable to the class of students for whom they are intended.

About 20 students, 7 of whom are women, are in attendance. The students, most of whom are from positions of some sort in labor organizations, are older than those in colleges generally, the average age being 25 years. The government of the college is democratic, each member—student or teacher—having one vote in its management. All students are carrying the same work during the first year of the operation of the college, namely, history of civilization, economics, statistics, English literature, grammar for those who need it, and a course in debate and argumentation.

Once a week a debate is held and the following day a period of two hours is devoted to criticism of the "effectiveness of the argument and the soundness of presentation."

## COLLEGES WITH $1,000,000 ENDOWMENT OR OVER.

| Institution. | Location. | Amount. | Institution. | Location. | Amount. |
|---|---|---|---|---|---|
| Alabama Univ..... | Tuscaloosa, Ala.... | $1 099 653 | MacDonald College. | Quebec, Can..... | 4,000,000 |
| Allegheny College.. | Meadville, Pa. .... | 1.130,000 | McCormick Theo. Sem..... | Chicago, Ill..... | 2.200,000 |
| Amherst College.... | Amherst, Mass..... | 6 000,000 | McGill University.. | Montreal..... | 16,356,000 |
| Andover Theo. Sem. | Cambridge, Mass... | 1 000 000 | McMaster Univ. .. | Toronto..... | 1,000,000 |
| Antioch College ... | Yellow Springs, O.. | 1 000 000 | Middlebury College. | Middlebury, Vt.... | 1,958,887 |
| Auburn Theo. Sem.. | Auburn N Y ..... | 1 065 196 | Missouri Univ ..... | Columbus, Mo..... | 1,176,468 |
| Barnard College.... | New York City .... | 4,300 000 | Mt. Holyoke College | So. Hadley, Mass... | 2,350,000 |
| Bates College.. ... | Lewiston, Me.. ... | 1.200,000 | Newcomb Mem. Col., H. Sophie... | New Orleans, La... | 2,225,000 |
| Beloit College..... | Beloit, Wis..... | 1,800,000 | New Hampshire Col. of Agric..... | Durham, N. H..... | 1,030,000 |
| Berea College ..... | Berea, Ky..... | 2,500,000 | New York Univ.... | New York, N. Y... | 2,558,534 |
| Bethany College.... | Bethany, W Va.... | 1,100,000 | North Carolina, Univ. of..... | Chapel Hill, N. C... | 1,458,540 |
| Boston Univ ..... | Boston, Mass..... | 3.058,831 | No. Dak. Agric. Col. | Fargo, N. Dak. ... | 1,904,850 |
| Bowdoin College.... | Brunswick, Me..... | 2.683,367 | North Dakota Univ. | Grand Forks, N.D.. | 2,203,000 |
| Bradley Poly. Inst.. | Peoria, Ill..... | 1,750,000 | Northwestern Univ. | Chicago, Ill..... | 5,800,000 |
| Brown Univ ..... | Providence, R. I.... | 6,452,979 | Oberlin College..... | Oberlin, Ohio..... | 6,643,969 |
| Bryn Mawr College. | Bryn Mawr, Pa.... | 4,802,782 | Ohio State Univ.... | Columbus, O..... | 1,051,307 |
| Buffalo Univ..... | Buffalo, N. Y..... | 5.177,100 | Ohio Wesleyan Univ. | Delaware, O..... | 1,700,000 |
| Cal. Inst. of Tech.. | Pasadena, Cal..... | 5.000,000 | Park College..... | Parkville, Mo..... | 1,040,554 |
| California Univ.... | Berkeley, Cal..... | 8,300 000 | Peabody, Geo., Col. | Nashville, Tenn.... | 2,362,683 |
| Carleton College.... | Northfield Minn... | 1.682,966 | Pennsylvania Univ.. | Philadelphia, Pa.... | 12,135,000 |
| Carnegie Inst. Tech. | Pittsburgh Pa..... | 15.000,000 | Princeton Univ .... | Princeton, N. J..... | 11,900,000 |
| Case Sch. Ap. Sci... | Cleveland, Ohio.... | 2,670,139 | PrincetonTheo. Sem. | Princeton, N. J..... | 3.564,936 |
| Cath. Univ. of Amer | Washington, D. C... | 5,000,000 | Radcliffe College.... | Cambridge, Mass... | 2,500,000 |
| Centre College..... | Danville, Ky..... | 1.100 000 | Rensselaer Poly. Inst. ..... | Troy, N. Y..... | 2,658,100 |
| Chicago Univ. of... | Chicago, Ill..... | 29.850.000 | Rice Institute..... | Houston, Tex..... | 10,000,000 |
| Cincinnati, Univ. of. | Cincinnati, Ohio.... | 4 134.852 | Richmond, Univ. of. | Richmond, Va..... | 1,534,511 |
| Clark Univ..... | Worcester, Mass.... | 4.230,000 | Robert College..... | Constantinople..... | 1,750,000 |
| Coe College..... | Cedar Rapids, Ia.... | 1.200,000 | Rochester Theo. Sem. | Rochester, N. Y.... | 1,952,685 |
| Colby College..... | Waterville, Me..... | 1,100,000 | Rochester, Univ. of. | Rochester, N.Y..... | 14,538,011 |
| Colgate Univ..... | Hamilton, N. Y..... | 3.458.166 | Rose Poly..... | Terre Haute, Ind... | 1,000,000 |
| Colorado College.... | Colorado Springs... | 1,700,000 | Rutgers College.... | New Brunswick, N.J. | 1,500,000 |
| Columbia Univ.... | New York N.Y..... | 35.819,971 | St. Mary's College.. | St. Mary's, Kan.... | 1,347,507 |
| Conn. College for Women..... | New London, Conn. | 1,000,000 | Simmons College... | Boston, Mass..... | 2,432,607 |
| Cornell College.... | Mount Vernon, Ia.. | 1,589,000 | Smith College..... | Northampton, Mass. | 5,000,000 |
| Cornell University.. | Ithaca, N.Y..... | 18.829,400 | Stetson, J. B., Univ | De Land, Fla..... | 1,023,000 |
| Crozer Theo. Sem... | Chester, Pa..... | 1,500,000 | South, Univ. of.... | Sewanee, Tenn.... | 1,062,686 |
| Dalhousie Univ.... | Halifax, N. S..... | 1,350,000 | SouthBap.Theo.Sem | Louisville, Ky ..... | 1,600,000 |
| Dartmouth College. | Hanover, N. H.... | 6,000,000 | SouthernMeth.Univ. | Dallas, Texas..... | 1,580,000 |
| Decatur College.... | Decatur, Ill..... | 1,376,000 | Southern Cal. Univ.. | Los Angeles, Cal... | 1,129,265 |
| Delaware Univ..... | Newark, Del..... | ..... | Stevens Inst. Tech.. | Hoboken, N. J..... | 1,575,000 |
| Denison Univ..... | Granville, Ohio..... | 2,000,000 | Swarthmore College. | Swarthmore, Pa.... | 3,000,000 |
| De Pauw Univ..... | Greencastle, Ind.... | 2,000,000 | Teachers' College... | New York, N Y..... | 2,590,115 |
| Emory Univ..... | Atlanta, Ga..... | 2,050,000 | Texas Univ ..... | Austin, Tex ..... | 5,000,000 |
| Garrett Bib. Inst.. | Evanston, Ill..... | 1,560,868 | Trinity College..... | Hartford, Conn.... | 1.800,000 |
| Gen. Theo. Sem., P.E. Ch. in U.S... | New York, N. Y... | 2,453,974 | Tufts College..... | Medford, Mass. .... | 2.732,500 |
| Goucher College.... | Baltimore, Md.... | 1,325,000 | Tulane Univ ..... | New Orleans, La... | 4,610,584 |
| Grinnell College... | Grinnell, Ia..... | 2,850,000 | Tuskegee Nor. Inst.. | Tuskegee, Ala.... . | 2,603,539 |
| Hamilton College.. | Clinton, N. Y.... | 2,401,747 | Union College..... | Schenectady, N Y .. | 2.000,000 |
| Haverford College.. | Haverford, Pa..... | 3,200,000 | Vanderbilt Univ.... | Nashville, Tenn.... | 4,686,585 |
| Hamline Univ..... | St. Paul, Minn..... | 1,100,000 | Vassar College..... | Poughkeepsie, N.Y.. | 4,762,764 |
| Harvard Univ..... | Cambridge, Mass... | 47,000,000 | Vermont, Univ. of.. | Burlington, Vt..... | 1,000,000 |
| Hobart College..... | Geneva, N. Y..... | 1,530,000 | Virginia, Univ. of... | Charlottesville, Va. | 3,565,251 |
| Johns Hopkins Univ. | Baltimore, Md..... | 11,000,000 | Washington Univ... | St. Louis, Mo. .... | 9,867,773 |
| Kan. St. Agri. Col... | Manhattan, Kan... | 1,547,988 | Washington, Univ. of | Seattle, Wash..... | 4.389,256 |
| Kenyon College.... | Gambier, Ohio..... | 1,035,000 | Wash'ton & Jef. Col. | Washington, Pa.... | 1,000.000 |
| Knox College..... | Galesburg, Ill..... | 1,400,000 | Wash'ton & Lee U... | Lexington, Va..... | 1,166,218 |
| Lafayette College.. | Easton, Pa..... | 1,900,000 | Wellesley College... | Wellesley, Mass.... | 3,627,388 |
| Lake Forest College. | Lake Forest, Ill.... | 1,200,000 | Wesleyan Univ..... | Middletown, Conn.. | 3,485,078 |
| Lawrence College... | Appleton, Wis..... | 1.821 755 | West. Res. Univ.... | Cleveland, Ohio .... | 4,119,798 |
| Lehigh Univ..... | Bethlehem, Pa..... | 3,000,000 | Westhampton Col... | U. of Richmond, Va. | 1,427,558 |
| Leland Stanford Jun. Univ..... | Stanford Univ., Cal. | 26,450,000 | Whitman College.... | Walla Walla, Wash. | 1,180,000 |
| Lindenwood College | St. Charles, Mo.... | 1,600,000 | Williams College.... | Williamstown, Mass | 3,428,204 |
| Macalester College.. | St. Paul, Minn..... | 1,153,190 | Wooster College.... | Wooster, Ohio..... | 1,165,542 |
| Marietta College... | Marietta, Ohio..... | 1,132,720 | Worcester Poly. Inst | Worcester, Mass.... | 2.040,000 |
| Marquette Univ.... | Milwaukee, Wis.... | 1.217,850 | Yale University..... | New Haven, Conn.. | 32,662,012 |
| Maryland, Univ. of. | College Park, Md... | 1,175,276 | | | |
| Mass. Inst. Tech... | Cambridge, Mass... | 6,762,000 | | | |

Endowment figures for Andover Theological Seminary, Antioch College, Bowdoin College, Colby College, Peabody College, and Williams College, are those used in the 1922 ALMANAC, no later figures having been supplied by these institutions.

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## COLLEGE COLORS.

| Name. | Colors. |
|---|---|
| Adelphi | Brown and Gold. |
| Adrian | Canary and Black. |
| Akron Municipal Univ | Navy Blue and Old Gold. |
| Alabama, Univ. of | Crimson and White. |
| Alabama, Woman's Col. of | Red and Gray. |
| Albany Col.—Oregon | Orange and Black. |
| Albion College | Purple and Gold. |
| Albright College | Red and White. |
| Alfred Univ. | Royal Pur. & Old Gold. |
| Allegheny College | Navy Blue and Old Gold. |
| Alma College | Maroon and Cream. |
| American Univ. | Red, White and Blue. |
| Amherst | Purple and White. |
| Antioch College | Old Gold and Blue. |
| Arizona, Univ. of | Blue and Red. |
| Arkansas College | Red and White. |
| Arkansas, Univ. of | Cardinal. |
| Armour Inst. of Tech | Yellow and Black. |
| Asbury College | Purple and White. |
| Ashland College | Purple and Gold. |
| Atlanta Univ. | Gray and Crimson. |
| Atlantic Christian Col. | Blue and White. |
| Aurora | Royal Blue and White. |
| Austin | Crimson and Gold. |
| Baker Univ. | Cadmium Orange. |
| Baldwin-Wallace College | Brown and Gold. |
| Barnard College | Light Blue and White. |
| Bates College | Garnet. |
| Baylor (fem.) College | Purple, White and Gold. |
| Baylor Univ. | Green and Gold |
| Beaver College | Scarlet and Gray. |
| Beloit College | Gold and Black. |
| Benedict College | Purple and Gold |
| Berea College | Cream and Blue. |
| Bessie Tift | Blue and Gold. |
| Bethany Col. (W. Va.) | White and Green. |
| Bethany Col. (Kan.) | Blue and Yellow. |
| Bethel Col., Newton, Kan. | Maroon and Gray. |
| Blue Mountain College | Dark Blue, Red and Gold and Yellow. |
| Blue Ridge College | Red and White. |
| Bluffton College | Purple and White. |
| Boston College | Maroon and Old Gold. |
| Boston Univ. | Scarlet and White. |
| Bowdoin | White. |
| Bradley Poly. Inst. | Maroon and White. |
| Brenau College | Orange and Black. |
| Bridgewater College | Crimson and Gold. |
| Brown Univ. | Brown. |
| Bryn Mawr | Yellow and White. |
| Bucknell Univ. | Orange and Blue. |
| Buena Vista | Salmon and Black. |
| Buffalo Univ. | White and Blue. |
| Cal. Inst. of Tech. | Orange and White. |
| California, Univ. of | Blue and Gold. |
| Campion College | Red and Black. |
| Catawba College | Blue and Gold. |
| Carleton College | Maize and Yale Blue. |
| Carnegie Inst. Tech. | Plaid. |
| Carroll College | Orange and White. |
| Carson and Newman Col. | Orange and Blue. |
| Carthage College | Maroon. |
| Case School Ap. Science | Brown and White. |
| Catholic Univ. of Amer. | Red and Black. |
| Catholic U. of Okla. | Crimson and Blue. |
| Cedar Crest College | White and Gold. |
| Cedarville College | Orange and Blue. |
| Centenary College | Maroon and White. |
| Central College, Fayette, Missouri | Nile Green and Black. |
| Central Baptist College | Brown and Gold. |
| Central Wesleyan Col. | Navy Blue and White. |
| Centre College | Gold and White. |
| Charleston, Col. of | Maroon and White. |
| Central Holiness | Old Rose and Silver. |
| Chattanooga, Univ. of | Old Gold and Blue. |
| Chicago, Univ. of | Maroon. |
| Chicora Col. for Women | Royal Blue and White. |
| Cincinnati Univ. | Red and Black. |
| Citadel, The | Blue and White. |
| City of N. Y., Col. of | Lavender and Black. |
| Clark Univ. | Red and Black. |
| Clarkson Col. of Tech. | Old Gold and Green. |
| Coe College | Crimson and Gold. |
| Coker College | Blue and Gold. |
| Colby | Blue and Gray. |
| Colgate Univ. | Maroon. |
| Colorado College | Black and Gold. |
| Colorado Sch. of Mines | Silver and Blue. |
| Colorado, Univ. of | Silver and Gold. |
| Colorado Woman's | Green and White |
| Columbia College | Purple and Gold. |
| Columbia Univ. | Light Blue and White. |
| Concordia College | Maroon and Gold. |
| Connecticut (fem.) | Blue and White. |
| Converse College | Royal Purple and Gold. |
| Cornell College | Purple and White. |
| Cornell Univ. | Carnelian and White. |

| Name. | Colors. |
|---|---|
| Cotner | Blue and White. |
| Cox Col. and Conserv't'y. | Red and White. |
| Creighton University | Blue and White. |
| Culver-Stockton College | Blue and White. |
| Cumberland University | Maroon and White. |
| Dakota Wesleyan Univ. | Blue and White. |
| Dallas, University of | Purple and Gold. |
| Dana College | Crimson and White. |
| Daniel Baker College | Blue and White. |
| Dartmouth College | Dark Green. |
| Davidson College | Red and Black. |
| Davis & Elkins College | Maroon and White. |
| Dayton, University of | Red and Blue. |
| Defiance College | Purple and Gold. |
| Denison University | Dark Red and White. |
| Denver University | Red and Gold |
| De Paul University | Blue and Red. |
| De Pauw University | Old Gold and Black. |
| Des Moines University | Orange and Black. |
| Detroit University | Red and White. |
| Dickinson College | Red and White. |
| Doane College, Nev. | Orange and Black. |
| Drake University | Blue and White. |
| Drexel Inst. | Gold. |
| Dropsie College | Blue and Yellow |
| Drury College | Scarlet and Gray. |
| Dubuque, Univ. of | Blue and White. |
| D'Youville College | Red and White. |
| Earlham College | Yellow and Cream. |
| Eastern College | Green and White. |
| Ellsworth College | Purple and Old Gold |
| Elmira College | Purple and Gold. |
| Elon College | Maroon and Gold |
| Emory Univ. | Gold and Blue. |
| Emory & Henry Col. | Lemon and Blue. |
| Emmanuel College | Blue and Gold. |
| Emmanuel Missionary | Green and White. |
| Empolia, College of | Crimson and White. |
| Erskine College | Old Gold and Maroon |
| Eureka College | Maroon and Gold. |
| Evansville College | Purple and White. |
| Fairmount | Black & SunflowerYellow. |
| Fargo College | Blue and Gold |
| Findlay College | Orange and Black. |
| Fisk University | Gold and Blue. |
| Flora MacDonald Col. | Blue and White. |
| Florida, Univ. of | Orange and Dark Blue. |
| Florida (fem.) | Garnet and Gold. |
| Fordham University | Maroon. |
| Franklin College (Ind.) | Navy Blue and Old Gold. |
| Franklin & Marsh'll Col. | Blue and White. |
| Friends University | Scarlet and Gray. |
| Furman University | Purple and White |
| Gallaudet | Buff and Blue. |
| Galloway College | Blue and Gold. |
| Geneva College | Gold and White |
| George Wash. Univ. | Buff and Blue |
| Georgetown Col. (Ky) | Orange and Black. |
| Georgetown Univ. (D.C.) | Blue and Gray. |
| Georgia School of Tech. | Old Gold and White. |
| Georgia, University of | Red and Black. |
| Gettysburg College | Orange and Blue. |
| Gonzago University | Blue and White. |
| Gooding College | Purple and White. |
| Goshen College | White and Purple. |
| Goucher College | Blue and Gold. |
| Grand Island College | Orange and Blue. |
| Grand View College | Purple and Gold. |
| Greensboro College | Light Green and White. |
| Greenville College | Orange and Black. |
| Greenville Women's | Light Blue and Gold. |
| Grenada | Black and Gold. |
| Grinnell College | Scarlet and Black. |
| Grove City College | Crimson. |
| Guilford College | Crimson and Gray. |
| Gustavus Adolphus Col. | Ebony and Gold. |
| Hamilton College (N.Y.) | Buff and Blue. |
| Hamline University | Red and Gray. |
| Hampden-Sidney College | Garnet and Gray |
| Hanover College | Red and Blue. |
| Harvard University | Crimson. |
| Hastings College | Red and White. |
| Haverford College | Scarlet and Black. |
| Hawaii, University of | Green and White. |
| Hedding College | Orange and Blue |
| Heidelberg University | Black, Orange and Red. |
| Henderson-Brown Col. | Red and Gray. |
| Highland College | Yellow and Green. |
| Hillsdale College | Ultramarine Blue. |
| Hiram College | Cherry Red & Sky Blue. |
| Hobart College | Orange and Purple. |
| Hollins College | Green and Gold. |
| Holy Cross | Purple. |
| Hood College | Blue and Gray. |
| Hope College | Orange and Blue. |
| Howard College | Crimson and Blue |
| Howard University | Blue and White. |
| Hunter College | Lavender and White |

| NAME. | Colors. |
|---|---|
| Huron College | Purple and Gold. |
| Idaho, College of | Purple and Old Gold. |
| Idaho, University of | Silver and Gold. |
| Illinois, University of | Orange and Blue. |
| Illinois Wesleyan Univ | Olive Green and White. |
| Illinois Woman's Col | Yellow and Blue. |
| Indiana Central | Cardinal and Gray |
| Indiana University | Crimson and Cream. |
| International Y.M.C.A | Maroon and White. |
| Iowa State University | Old Gold. |
| Iowa Wesleyan Univ | White and Purple. |
| Irving (fem.) College | Blue and Gold ; |
| Jamestown College | Black and Orange. |
| Jefferson College | Blue and Gold. |
| Jewell, Wm., College | Red and Black. |
| John B. Stetson Univ | Green and White. |
| Johns Hopkins Univ | Black and Old Gold. |
| Judson College | Red and Black. |
| Juniata College | Blue and Gold. |
| Kalamazoo College | Orange and Black. |
| Kansas City University | Purple and Gold. |
| Kansas, University of | Crimson and Blue. |
| Kansas Wesleyan Univ | Purple and Gold. |
| Kentucky, University of | Blue and White. |
| Kentucky Wesleyan Col | Purple and White |
| Kenyon College | Purple |
| King College | Maroon and Blue. |
| Kingfisher College | Green and White. |
| Knox College | Purple and Gold |
| Knoxville College | Garnet and Blue. |
| Lafayette College (Pa.) | Maroon and White. |
| La Grange College | Red and Black |
| Lake Erie College | Dark Green and White. |
| Lake Forest College | Ruby Red and Black. |
| Lander College | Blue and Gold. |
| La Salle College | Blue and Gold. |
| Lawrence College | White and Yale Blue. |
| Lebanon Valley College | Navy Blue and White. |
| Lehigh University | Seal Brown and White. |
| Lenoir College | Garnet and Black. |
| Lincoln College | Violet and White. |
| Lincoln Memorial Univ | Blue and Gray. |
| Lincoln University | Orange and Blue. |
| Lindenwood College | Gold and White. |
| Linfield College | Cardinal and Purple. |
| Little Rock College | Purple and White. |
| Livingston College | Black and Sky Blue. |
| Lombard College | Olive Green & Old Gold. |
| Loretto College | Gold and White. |
| Louisiana Col. (Pineville) | Orange and Navy Blue. |
| Louisville University | Scarlet and Black. |
| Lowell Textile School | Red and Black. |
| Loyola (Balt.)College | Green and Gray. |
| Loyola Univ., Chicago | Crimson and Gold. |
| Luther College | Blue and White. |
| Macalester College | Royal Blue and Gold. |
| McKendree College | Purple and White. |
| McPherson College | Crimson and White. |
| Manchester College | Black and Gold. |
| Maine, University of | Light Blue. |
| Manhattan College | Green and White. |
| Marietta College | Navy Blue and White. |
| Marion In t | Gold and Black. |
| Marquette University | Blue and Gold. |
| Maryland University | Sable and Gold. |
| Maryville College | Orange and Garnet. |
| Marywood College | Green and White. |
| Mass. Inst. of Tech | Cardinal and Gray |
| Meredith (fem.) College | Maroon and White. |
| Miami University | Red and White. |
| Michigan Col. of Mines | Green. |
| Michigan, University of | Maize and Azure. |
| Middlebury College | Blue and White. |
| Midland College | Orange and Black. |
| Milliken, James, Univ | Navy Blue and White. |
| Mills College | Gold and White |
| Millsaps College | Purple and White. |
| Milton College | Brown and Blue. |
| Milwaukee-Downer Col | Yale Blue. |
| Minnesota, Univ. of | Gold and Maroon. |
| Mississippi College | Yellow and Blue. |
| Miss. State Col., Women | Yellow and White. |
| Mississippi, Univ. of | Red and Blue |
| Missouri, University of | Black and Old Gold. |
| Missouri Valley College | Purple and Orange. |
| Missouri Wesleyan | Red and Black. |
| Monmouth College | Red and White. |
| Montana State Univ | Blue and Gold. |
| Mont. State Sch. of Mines | Copper and Green. |
| Moravian C. & S. (fem.) | Purple and Gold. |
| Morgan (Col.) College | Orange and Navy Blue. |
| Morris Brown U. (col.) | Purple and Black. |
| Mount Holyoke College | Blue. |
| Mount St. Charles Col | Purple and Gold. |
| Mount St. Joseph College (Dubuque) | Purple, White and Gold. |
| Mount St. Joseph's Col., (Balt.) | Purple and Cream. |
| Mount St. Mary's (Plainfield, N. J.) | Light Blue and Gold. |
| Mount St. Mary's (Emmitsburg, Md. | Blue and White. |
| Mt. St. Vincent, C. of | Gold and White. |
| Mount Union College | Royal Purple. |
| Muhlenberg College | Cardinal and Gray. |
| Municipal Un. of Akron | Navy Blue & Old Gold |
| Muskingum College | Black and Magenta. |
| Nebraska, Univ. of | Scarlet and Cream |
| Neb. Wesleyan Univ | Yellow and Brown. |
| Nevada, University of | Silver and Royal Blue. |
| Newcomb, H. S., Mem | Bronze and Blue. |
| New Hampshire State | Blue and White. |
| New Jersey Col., Women | Red and Black |
| N. M. State School of Mines | Gold and Silver. |
| N. Mexico, State Univ. of | Cherry and Silver |
| New Rochelle, College of | Blue and White. |
| N. Y. State College of Forestry | Orange. |
| New York University | Violet |
| Niagara University | Purple and White |
| No. Car., Woman's | Gold and White. |
| No. Carolina, Univ. of | White and Blue. |
| North Dakota Univ | Rose, Pink and Green. |
| Northeastern University, (Boston) | Black and Red |
| Northland College | Orange and Blue. |
| Northwestern Col., (Ill.) | Royal Purple. |
| Northwestern, (Wis.) | Black and Red. |
| Northwestern University (Chicago) | Royal Purple. |
| Norwich University | Maroon and Gold. |
| Notre Dame (Ind.) U. of | Gold and Blue. |
| Notre Dame (Md.) | Dark Blue and White. |
| Oakland City College | Blue and White. |
| Oberlin College | Crimson and Gold. |
| Occidental College | Orange and Black. |
| Ohio Northern Univ | Orange and Black. |
| Ohio State University | Scarlet and Gray. |
| Ohio, University of | Olive Green and White. |
| Ohio Wesleyan Univ | Scarlet and Jet. |
| Oklahoman Bapt U | Green and Gold. |
| Oklahoma City College | White and Gold. |
| Oklahoma Col., Women | Green and Gold |
| Oklahoma University of | Crimson and Cream. |
| Olivet College | Crimson |
| Omaha University | Black and Maroon. |
| Oregon, Univ. of | Green & Lemon Yellow. |
| Ottawa University | Wheat Yellow & Black. |
| Otterbein College | Cardinal and Tan. |
| Ouachita College | Purple and Gold. |
| Oxford (female) College | Light Blue and Gold. |
| Ozark., College of the | Purple and Gold. |
| Pacific, College of the | Orange and Black. |
| Pacific College, (Ore.) | Old Gold & Navy Blue |
| Pacific Union | Green and Yellow. |
| Pacific University | Crimson and Black. |
| Park College | Canary and Wine. |
| Parsons College | Old Rose and Green. |
| Payne, Howard | Navy Blue & Old Gold. |
| Penn College, Oscaloosa, (Iowa) | Old Gold and Blue. |
| Pa. Col. for Women | Purple and White. |
| Penn. Military College | Red, White and Yellow. |
| Penn. State College | Navy Blue and White. |
| Pennsylvania, Univ. of | Red and Blue. |
| Philippines, Univ. of | Red and Green. |
| Piedmont College | Green and Gold. |
| Pittsburgh, Univ. of | Blue and Gold. |
| Polytechnic Institute of Brooklyn | Blue and Gray. |
| Pomona College | Blue and White. |
| Porto Rico, Univ. of S. C | Red and White. |
| Presbyterian College of S. C | Garnet and Blue. |
| Princeton University | Orange and Black. |
| Providence College | White and Black. |
| Puget Sound | Maroon and White. |
| Purdue, University | Old Gold and Black. |
| Queens College | Dark and Light Blue. |
| Radcliffe College | Crimson and White. |
| Randolph-Macon College | Lemon and Black. |
| Randolph-Macon (fem.) | Black and Lemon. |
| Redlands University | Maroon and Silver Gray. |
| Reed College | Richmond Red. |
| Regis College | Brown and Gold. |
| Rensselaer Poly Inst | Cherry-White. |
| Rhode Island State Col | Blue and White. |
| Rice Inst. | Blue and Gray. |
| Richmond, Univ. of | Navy Blue and Crimson. |
| Ripon College | Crimson. |
| Roanoke College | Maroon and Gray. |
| Robert College | Blue and Crimson. |
| Rochester University | Yellow. |
| Rockford | Purple and White. |
| Rock Hill | Blue and White. |
| Rose Poly. Inst | Rose and White. |
| Rollins College | Blue and Gold. |
| Russell Sage College | Dark Green and White. |
| Rutgers College | Scarlet. |
| Sacred Heart, C. of | Red and White. |

| NAME. | Colors. | NAME. | Colors. |
|---|---|---|---|
| St. Ambrose | Blue and White. | Thiel College | Blue and Gold. |
| St. Bernard | Blue and White. | Toledo, Univ. of City | Blue and Gold. |
| St. Bonaventura's | Brown and White. | Transylvania College | Crimson. |
| St. Catherine | Purple and Gold. | Trinity College (N. C.) | Navy Blue. |
| St. Elizabeth | Blue and Gold. | Trinity (Hartford) | Old Gold and Dark Blue. |
| St. Francis's Col., Bklyn. | Red and Blue. | Trinity Col., Wash. D. C. | Purple and Gold. |
| St. Francis Xavier (Chic.) | Scarlet and Gray. | Trinity Univ | Maroon and White. |
| St. Francis Xavier (N.Y.) | Maroon and Blue. | Tufts College | Brown and Blue. |
| St. Genevieve's C. & A | White and Gold. | Tulane Univ | Olive and Blue. |
| St. Ignatius (Cal.) | Red and Blue. | Tulsa U., for H. Kendall | Orange and Black. |
| St. Ignatius (Ohio) | Blue and Gold. | Tusculum College | Princeton Orange & Blk. |
| St. John's (Bklyn) | Maroon and White. | Union College (Neb.) | Red and Black. |
| St. John's (Md.) | Black and Old Gold. | Union College, (N. Y.) | Garnet. |
| St. John's Univ | Cardinal and Blue. | Union Christian | Purple and Gold. |
| St. Joseph's, Philadelphia | Crimson and Gray. | Union U. (Jackson, Tenn) | Cardinal and Cream. |
| St. Lawrence Univ | Scarlet and Brown. | Ursinus College | Red, Old Gold & Black. |
| St. Louis Univ | Blue and White. | U. S. Military Acad | Black, Gold and Gray. |
| St. Mary's, (Oakl'd. Cal.) | Blue and Gold. | U. S. Naval Acad | Blue and Gold. |
| St. Mary's, Kan | Blue and White. | Upper Iowa Univ | Peacock Blue and White. |
| St. Mary's College, (Ky) | Green and White. | Utah, Univ. of | Crimson and Silver. |
| St. Mary's School | Blue and White. | Valparaiso Univ | Old Gold & Bright Brown. |
| St. Mary's C.&A.,(Wis.) | Blue and White. | Vanderbilt Univ | Black and Gold. |
| St. Mary of the Woods | Blue and White. | Vassar | Rose and Gray. |
| St. Michael's | Purple and Gold. | Vermont, Univ. of | Green and Gold. |
| St. Olaf | Old Gold and Black. | Villanova College | Navy Blue and White. |
| St. Peter's | Maroon and White. | Virginia Military Inst | Red, White and Yellow. |
| St. Stephen's College | Scarlet. | Va. Theo. Sem. & Col | Blue and White. |
| St. Teresa | White and Gold. | Virginia, Univ. of | Orange and Blue. |
| St. Thomas, Col. of | Purple and Gray. | Wabash College | White and Scarlet. |
| St. Viator's College | Purple and Gold. | Wake Forest College | Old Gold and Black. |
| St. Vincent C. & S | Gold and Green. | Wartburg College | Orange and Black. |
| St. Xavier | Blue and White. | Washburn College | Yale Blue. |
| Salem, A.&C.(Winst'n-S.) | Yellow and White. | Wash. Col. in Sta. of Md | Maroon and Black. |
| Salem Col. (W. Va.) | Olive Green and White. | Washington Missionary | Blue and White. |
| Santa Clara Univ | Red and White. | Washington State Col | Crimson and Gray. |
| Scott, Agnes | Purple and White. | Washington, Univ. of | Purple and Gold. |
| Seton Hall College | Blue and White. | Wash. U., (St. Louis) | Myrtle and Maroon. |
| Seton Hill C. for women | Scarlet and Gold. | Wash. & Jefferson Col | Red and Black. |
| Shorter College | White and Gold. | Washington & Lee Univ | Blue and White. |
| Silliman Collegiate Inst | White and Gold. | Waynesburg College | Orange and Black. |
| Simmons C., Abilene,Tex. | Purple (Royal) and Gold. | Wellesley College | Deep Blue. |
| Simmons (Mass.) | Blue and Gold. | Wells College | Cardinal and White. |
| Simpson College | Red and Gold. | Wesleyan Col. for women | Lavender and Purple. |
| Sioux Falls College | Purple and White. | Wesleyan U. Middlet'n,C. | Cardinal and Black. |
| Skidmore Sch. of Arts | Yellow and White. | Western (fem.) C. Oxf., O. | Blue. |
| Smith College | White and Gold. | Western Maryland Col | Green and Gold. |
| South, Univ. of | Garnet and Black. | Western Reserve Univ | Red and White. |
| So. Carolina, Univ. of | Vermilion or Scarlet. | Western Union College | Maroon and Old Gold. |
| So. Dakota, Univ. of | Gold. | Westminster Col., Pa | Blue and White. |
| Southern Cal., Univ. of | Har. Red and Yale Blue. | Westminster Col., Mo | Royal Blue. |
| Southern Meth. Univ | Purple and White | West Virginia Univ | Old Gold and Blue. |
| Southwestern, College | Canary and Black. | West Virginia Wesleyan | Orange and Black. |
| Southwestern Univ., Tex. | Cardinal and Black. | Wheaton C. & Acad. Norton, Mass. | Blue and White. |
| Southwest'n Pres. Univ. | Cardinal. | Wheaton College | Orange and Black. |
| Stanford Univ | Blue and Red. | Whitman College | Blue and Gold. |
| Sterling College | Green and White. | Whitworth (fem.) | Crimson and Black. |
| Stetson, John B. & Univ. | Silver Gray and Cardinal. | Willamette Univ | Cardinal and Gold. |
| Stevens Inst. of Tech | Orange and Maroon. | William & Mary Col | White and Orange. |
| Susquehanna Univ | Garnet | Williams College | Royal Purple. |
| Swarthmore College | Rose and Green. | Wilmington College | (Lisle) Green and White. |
| Sweet Briar College | Orange | Wilson College | Silver and Blue. |
| Syracuse Univ | Cardinal and White. | Winthrop College | Garnet and Gold. |
| Tabor College | Crimson and Azure Blue. | Wisconsin, Univ. of | Cardinal. |
| Talladega College | Purple and Cream. | Wittenberg | Cream and Cardinal. |
| Tarkio College | Purple and Gold. | Wofford College | Old Gold and Black. |
| Taylor Univ | Light Blue and White. | Wooster, Univ. of | Black and Old Gold. |
| Teacher's College | Cherry and White. | Worcester Poly | Crimson and Steel Gray. |
| Temple Univ | Orange and White. | Wyoming, Univ. of | Brown and Yellow. |
| Tennessee, Univ. of | Purple and White. | Yale Univ | Blue. |
| Texas Christian Univ | Presbyterian Blue. | Yankton College | Yellow and White. |
| Texas Presbyterian Col | Orange and White. | York College | Blue and White. |
| Texas, Univ of | | | |

## CANADIAN COLLEGES.

| | | | |
|---|---|---|---|
| Acadia University | Garnet and Blue. | MacDonald College | Green and Yellow. |
| Alberta University | Green and Gold. | Manitoba | Purple and White. |
| British Columbia Univ | Blue and Gold | Mount Allison | Garnet and Gold. |
| Dalhousie University | Black and Gold. | New Brunswick Univ | Red and Black. |
| McGill University | Red and White. | Queen's University | Red, Yellow and Blue. |
| McMaster University | Silver Gray and Maroon. | Saskatchewan Univ | Green and White. |
| Toronto, Univ. of | Royal Blue and White. | | |

## AGRICULTURAL AND MECHANICAL SCHOOLS.

| | | | |
|---|---|---|---|
| Alabama Poly Inst | Orange and Blue. | N. Y State Institute | Green and White. |
| Clemson Agric. Col | Purple and Orange. | N. C. A. & Eng. (State) | Red and White. |
| Colorado Agric. Col | Green and Gold | North Dakota Agric | Green and Yellow. |
| Connecticut Agric. Col | Blue and White. | Oklahoma A. & M. | Orange and Black. |
| Georgia State C. of A | Red and Black. | Oregon State Agric | Orange and Black. |
| Iowa St. C. of A.&M A. | Cardinal and Gold. | Rhode Island State Col. | Blue and White. |
| Kansas State Agric. Col. | Royal Purple | S. Dakota St. Sch. of M. | Silver and Gold. |
| Kentucky Nor. & Ind. C | Green and Gold. | S. Dakota State Col | Yellow and Blue. |
| Louisiana St. A & M. C. | Old Gold and Purple. | Tarleton, John, Agric | Purple and White. |
| Maryland State Col | Sable and Gold. | Texas A. and M. C. | Red and White. |
| Mass. Agric. Col | Maroon and White. | Tuskegee Institute | Crimson and Gold. |
| Michigan Agric. Col | Green and White. | Utah Agric. Col | Blue and White. |
| Montana State Col | Blue and Gold. | Virginia Nor. & Ind. Inst. | Orange and Blue. |
| Negro Agric. & Tech | Blue and Gold. | Virginia Poly. Inst. | Orange and Maroon |
| New Hampshire Col | Blue and White. | Washington State Col | Crimson and Gray. |
| N. M. C. of A. & M. A. | Crimson and White. | Winthrop N. & I. Col | Garnet and Gold. |

SCHOOLS OF THEOLOGY.

| Name. | Colors. | Name. | Colors. |
|---|---|---|---|
| Auburn Theol. Sem..... | Red and Blue. | Kimball Sch. of Theol.... | Purple and White. |
| Augustana..... | Gold and Blue. | McCormick Theol. Sem... | White and Blue. |
| Bible Col. of Missouri.... | Red, White & Purple. | Maine Wesleyan Sem .... | Crimson and Gray. |
| Bible College (Ky.)..... | Crimson. | Moravian C. & T. Sem.... | Blue and Gray. |
| Bible Teach. Train Sch... | Royal Purple and White. | Northern Bap. Theol. S.. | Red and White. |
| Bloomfield Theol. Sem... | Maroon and Gold. | Oberlin Theol. Sem..... | Purple and White. |
| Bonebrake Theol. Sem... | Navy Blue & Steel Gray. | Ouachita Baptist..... | Purple and Gold. |
| Bright Ch. of Bible..... | Purple and White. | Pacific Sch. of Religion... | Green and Gold. |
| Catholic U. of America... | Red and Black. | Princeton Theol. Sem.... | Blue and Red. |
| Central Theol. Sem..... | Light Blue and White. | Rochester Theol. Sem.... | Royal Purple & Old Gold. |
| Chicago Theo. Sem..... | Scarlet and Cream White. | St. John's Diocesan Sem.. | Silver and Gold. |
| Crozer Theol. Sem... ... | Blue and White. | St. Vincent's C. & E. S... | Gold and Green. |
| Emmanuel Miss. Col.... | Green and White. | So. Meth. U. Sch. of T... | Red and Blue. |
| Epworth Seminary..... | Purple and Lavender. | So. West. Bap. Theol. S.. | Crimson and White. |
| Eugene Bible Univ..... | White and Gold. | Suomi C. and Sem..... | Blue and White. |
| Evan. Luth. Theol. Sem.. | Blue and Gold. | Union Theol. Sem..... | Blue and White. |
| Evangelical Theol. Sem... | White and Purple | Vanderbilt University.... | Gold and Black. |
| Garrett Biblical Inst..... | Purple and White. | Virginia Theol. S. & Col.. | Blue and White. |
| Genesee Wesleyan Sem... | Red and White. | Virginia Un. Theol. Sem.. | Blue and White. |
| Hartford Theol. Sem..... | Gold and Blue. | Xenia Theol. Sem ..... | Scar., Ultra Mar. & Cr'm. |
| Iliff School of Theology... | Blue and White. | Yale Divinity School..... | Blue. |
| Jewish Theol. Sem..... | Light Blue and White. | | |

## BEGINNINGS OF FAMOUS FOREIGN UNIVERSITIES.

THE University of Oxford is said to have been founded by King Alfred in 872.

The first college of the University of Cambridge was founded by Hugo, Bishop of Ely, in 1257.

The University of Paris was founded by King Philip II. about 1200.

The first university in the German Empire was at Prague, Bohemia, 1348.

Czar Alexander I. founded the Universities of St. Petersburg and Moscow in 1802.

The oldest Spanish university is that of Salamanca, founded in 1240.

The University of Copenhagen, Denmark, was founded in 1479.

The oldest Italian universities are Bologna, founded 1200; Padua, 1222; Naples, 1224; Genoa, 1243; Perugia, 1276; Macerata, 1290. There were nine more founded between 1300 and 1550. Italy was the greatest resort of students for the higher education in the middle ages.

Trinity College, Dublin, was incorporated by royal charter in 1591.

The University of Edinburgh was founded in 1582 by a charter granted by King James VI. of Scotland.

The University of Jagielle, of Cracow, Poland, where Copernicus received his education, was founded in 1364 by the Polish King Kazimiers the Great, and endowed by a later Polish King, Jagielle, in 1400.

Note—The dates of founding of the higher institutions in the United States and Canada will be found in the tables of American colleges and universities.

## INCOME AND EXPENSES OF YALE UNIVERSITY.

Yale University has sent to its alumni the following analysis showing the sources from which it gets its income and the way that income is spent. The item "alumni fund" is the yearly voluntary contribution of its alumni, and "annuities and adjustments" covers the money used in bringing the salaries of professors up somewhere near the high cost of living.

The figures show that the two sources of income, "tuition and fees" and "dormitory," which constitute the ordinary revenues of a business concern, together make up less than one-third of the amount required to run the university.

| Income. | Pct. | Expense. | Pct. |
|---|---|---|---|
| Investment..... | 46.9 | Instruction..... | 43.3 |
| Tuition and fees. | 25.6 | Property..... | 20.7 |
| Alumni fund..... | 12.0 | Annuities, etc.... | 9.3 |
| Dormitory..... | 7.1 | Administration.. | 8.5 |
| Gifts..... | 3.5 | Laboratories.... | 6.7 |
| Miscellaneous... | 2.0 | Library..... | 4.3 |
| | | Scholarships.... | 4.0 |
| Total..... | 97.2 | Printing..... | 3.2 |
| Deficit..... | 2.8 | | |
| | 100.0 | | 100.0 |

## MUNICIPAL LIBRARY EXPENDITURES AND CIRCULATION.

(From the 1922 report of the Public Library, Washington, D. C.)

| Cities (According to Pop.) | Expenditures. | Per Capita Expend. | Home Circulation. | Per Cap. Circ. | Cities (According to Pop.) | Expenditures. | Per Capita Expend. | Home Circulation. | Per Cap. Circ. |
|---|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Volumes.* | *Vols.* | | *Dollars.* | *Dollars.* | *Volumes.* | *Vols.* |
| N. Y. City.. | 2,287,370.52 | 0.398 | 18,266,644 | 3.18 | Minneapolis | 283,957.43 | .683 | 1,465,591 | 3.53 |
| N. Y. Pub.. | 1,254,417.03 | .395 | 10,226,366 | 3.22 | Newark.... | 219,115.00 | .528 | 801,116 | 1.93 |
| Brooklyn.. | 779,350.87 | .386 | 6,072,707 | 3.01 | New Orleans | 62,892.80 | .162 | 454,380 | 1.17 |
| Queens.... | 253,602.62 | .461 | 1,967,571 | 3.58 | Kansas City | 213,896.29 | .611 | 1,125,261 | 3.21 |
| Chicago... | 853,876.97 | .316 | 7,472,768 | 2.76 | Seattle.... | 288,702.01 | .893 | 2,097,858 | 6.49 |
| Philadelphia | 426,445.00 | .234 | 3,992,278 | 2.19 | Indianapolis | 256,893.12 | .818 | 1,191,981 | 3.79 |
| Detroit.... | 822,696.89 | .828 | 2,996,771 | 3.01 | Jersey City.. | 152,870.26 | .513 | 1,347,638 | 4.52 |
| Boston.... | 734,892.07 | .894 | 2,672,646 | 3.25 | Rochester... | 115,213.08 | .389 | 1,228,252 | 4.15 |
| Cleveland... | 859,269.06 | 1.078 | 4,672,252 | 5.86 | Louisville... | 130,306.08 | .455 | 1,207,348 | 4.22 |
| St. Louis... | 392,276.70 | .507 | 2,308,533 | 2.99 | Portland... | 274,446.76 | .995 | 2,037,545 | 7.38 |
| Baltimore... | 255,831.56 | .349 | 863,765 | 1.18 | Columbus.. | 48,250.00 | .175 | 334,112 | 1.21 |
| Los Angeles. | 408,296.68 | .583 | 3,603,181 | 5.01 | Denver..... | 122,425.04 | .477 | 1,121,717 | 4.37 |
| Pittsburgh.. | 496,468.89 | .827 | 2,124,125 | 3.54 | St. Paul.... | 219,917.85 | .880 | 1,385,000 | 5.54 |
| Old City... | 422,954.43 | ..... | 1,632,385 | ..... | Toledo..... | 113,703.31 | .467 | 1,103,371 | 4.54 |
| Allegheny.. | 73,514.46 | ..... | 491,740 | ..... | Oakland.... | 147,841.68 | .616 | 1,036,857 | 4.32 |
| Milwaukee.. | 246,214.85 | .457 | 2,199,359 | 4.08 | Providence.. | 203,450.44 | .856 | 685,949 | 2.89 |
| Buffalo..... | 218,049.75 | .430 | 2,049,082 | 4.04 | Atlanta.... | 64,925.00 | .324 | 437,062 | 2.18 |
| S. Francisco | 200,357.48 | .395 | 1,588,173 | 3.13 | Totals and averages... | 11,565,701.37 | .498 | 76,972,449 | 3.31 |
| Cincinnati.. | 292,757.80 | .593 | 2,083,420 | 4.22 | | | | | |
| Washington. | 152,091.00 | .347 | 1,018,414 | 2.33 | | | | | |

## CATHOLIC BOYS' BRIGADE OF THE UNITED STATES.

Founded in 1916, by the late Cardinal Farley, New York City—a national official organization for Catholic boys. National office: National Catholic Welfare Council, 1312 Massachusetts Ave., N. W., Washington, D. C. General Executive Headquarters, 128 West 37th Street, New York. This movement aims to improve, it is announced, the religious and civic character of boys. It has a program of athletics, sports, military exercises, signalling, first aid, civics, music, entertainments, hikes, camping, parades, contests and employment; it aims to promote patriotism, religious practices and higher education. Membership is open to all manly boys 10 years of age or over. *Junior and Senior division* branches all over the country and has its own uniform. Executive officers, N. Y. General headquarters, 130 West 37th St., New York City: Rev. Thomas J. Lynch, Director General; Rev. Fr. Kilian, O. M. Cap., Chief Commissioner; Michael F. Lonergan, Executive Secretary.

## ASSOCIATIONS AND SOCIETIES IN THE UNITED STATES.

The year of establishment is in parentheses. The other figures are those of membership. For organizations not in this list, see Index. Some in this list appear elsewhere with more detail.

**Academy of Design of N. Y., Nat.** (1828), 175 W. 109th St., N. Y.; 279; Pres., E. H. Blashfield; Sec., C. C. Curran.

**Academy of Medicine, N. Y. City** (1847), 17 W. 43d St.; 1,650; Pres., Dr. G. D. Stewart; Sec., Dr. R. S. Haynes.

**Academy of Sciences, N. Y.** (1817), care Amer. Museum Nat. History, 77th St. and Central Park West; 450; Sec., R. W. Tower.

**Acorn, Colonial Order of, N. Y. Chapter** (1894), 100 Broadway, N. Y.; 125; Chancellor, C. S. Van Rensselaer.

**Actors' Equity Association** (1913), 115 W. 47th St., N. Y.; 12,000; Pres., J. Emerson; Exec. Sec., F. Gillmore.

**Actors' Fidelity League** (1919), 11 E. 45th St., N. Y.; 500; Pres., H. Miller; Sec., H. Kyle.

**Actors' Fund of America** (1882), 701 Seventh Ave., N. Y.; 3,000; Pres., D. Frohman; Sec., W. C. Austin.

**Actuarial Society of America** (1889), 256 Broadway, N. Y.; 325; Pres., R. Henderson; Sec., J. S. Thompson.

**Advancement of Colored People, Nat. Association for the** (1909), 70 Fifth Ave., N. Y.; 110,000; Sec., J. W. Johnson.

**African Blood Brotherhood** (1919), 2299 Seventh Ave., N. Y.; 50,000; Pres., C. V. Briggs; Sec. T. Burrell.

**Albany (N. Y.) Institute and Historical and Art Society** (1791), 125 Washington Ave., Albany, N. Y.; 800; Pres., J. M. Clarke; Sec., H. H. Kohn.

**Alden Kindred of N. Y. City and Vicinity** (1921), 340 Dean St., Brooklyn; 60; Pres., John Alden; Sec., Miss C. A. Bissell.

**Alliance Francaise de N. Y.** (1907), 32 Nassau St., N. Y.; 750; Pres., C. A. Downer; Sec., M. L. Bergeron.

**Amateur Athletic Union of U. S.** (1888), 290 Broadway, N. Y.; 2,000,000; Pres., W. C. Prout; Sec., F. W. Rubien.

**Amen Corner** (1900), N. Y.; 30; Pres., L. Seibold; Sec., T. O. McGill.

**American Association for the Advancement of Science** (1874), Smithsonian Institute Bldg., Washington, D. C.; 12,000: Sec., Dr. B. E. Livingston.

**American Colleges, Association of** (1915), 111 Fifth Ave., N. Y.; 275; Pres., C. A. Richmond, Union U., Schenectady, N. Y.: Exec. Sec., R. L. Kelly.

**Amer. Board of Commissioners for Foreign Missions** (1810), Boston, Mass.; 800; Sec., J. L. Barton, D. D.; Cor. Sec., C. H. Patten, D. D.

**American College of Surgeons** (1913), 40 E. Erie St., Chicago, Ill.; 6,000; Director General, Dr. F. H. Martin.

**American Committee for Devastated France** (1918), 16 E. 39th St., N. Y.; 8,000; Exec. Ch., Miss Anne Morgan; Sec., Miss E. Scarborough.

**American Cross of Honor** (1906), Washington, D. C.; Pres., T. H. Herndon; Sec., A. M. Taylor.

**American Dramatists and Composers, Society of** (1890), 148 W. 45th St., N. Y.; 250; Pres., E. C. Carpenter; Sec., P. Wilde.

**American Federation of Labor** (1881), Washington, D. C.; 4,000,000; Pres., S. Gompers; Sec., F. Morrison.

**American Humane Education Society** (1889), 180 Longwood Ave., Boston, Mass.; 700; Pres., Dr. F. H. Rowley; Sec., Guy Richardson.

**American Institute of the City of N. Y.** (1828), 322 W. 23d St.; 500, Pres., E. F. Murdock; Sec., O. W. Ehrhorn.

**American Irish Historical Society** (1897), 132 E. 16th St., N. Y.; 1,500; Pres., Gen. J. I. C. Clarke; Sec., Gen. S. P. Cahill.

**American Legion** (1919), 1,042; Commander, A. W. Owsley, Texas; Adjt., L. Bolles, Indianapolis.

**American Legion, Woman's Auxiliary** (1919), 450; Pres., Dr. K. W. Barrett, Va.; Sec., Miss P. Curnick, Indianapolis.

**American Posture League** (1913), Metropolitan Tower, 1 Madison Ave., N. Y.; 1,000; Pres., G. J. Fisher, M. D., Sec., H. L. Taylor, M. D.

**American Scandinavian Foundation** (1911), 25 W. 45th St., N. Y.; 6,000. Pres., H. Holt; Sec., J. Creese.

**American Social Science Association** (1899), 280 Madison Ave., N. Y.; Pres., G. G. Battle; Sec., Talcott Williams, LL. D.

**American University Union in Europe,** Columbia Univ., N. Y.; Ch. Bd. of Trustees, H. P. Judson; Sec., J. W. Cunliffe.

**American Wars, Society of** (1897), 314 7th St., N. E., Washington, D. C.; 350; Commander General, Rear Admiral C. J. Badger, U. S. N.; Recorder General, Lieut. M. C. Summers.

**American Wars of the U. S., Society of, Commandery of State of N. Y.** (1910), 144 E. 74th St.; 300; Commander, Brig. Gen. O. B. Bridgman; Sec., Lieut. C. A. Manning.

**American Woman's Press Assoc.** (1903), Washington, D. C.; 300; Pres., Mrs. M. M. North, Herndon, Va.; Sec., Miss E. J. Bailey, Wapakoneta, Ohio.

**Americans, United Order of** (1893), Milwaukee, Wis.; 10,000; Nat. Pres., R. C. Sherrard; Sec., G. W. Blann.

**Antiquarian Society, American** (1812), Worcester, Mass.; 175; Pres., W. Lincoln; Sec., T. H. Gage.

**Anti-Saloon League of America** (1895), Westerville, Ohio; Pres., Bishop T. Nicholson, D. D., Chicago; Gen. Supt., Rev. P. A. Baker, D. D.; Sec., Rev. S. E. Nicholson, LL. D., Richmond, Ind.

**Anti-Saloon League of N. Y.** (1899), 906 Broadway; Supt., W. H. Anderson; Sec., G. C. Moor, D. D.

**Architectural League of N. Y.** (1888), 215 W. 57th St., N. Y.; 825; Pres., H. Greenley; Sec., R. F. Whitehead.

**Architects, American Institute of** (1857), Octagon House, Washington, D. C.; 2,540; Pres., W. B. Faville; Sec., W. S. Parker.

**Architects, N. Y. Society of** (1906), 29 W. 39th St., N. Y.; 400; Pres., J. R. Gordon; Sec., O. W. Johnson.

**Art Alliance of America** (1914), 65 E. 56th St., N. Y.; 1,000; Pres., Hon. H. White; Sec., Mrs. H. E. Brewer.

**Art Center, Inc.** (1920), 65 E. 56th St., N. Y.; 3,000; Pres., Helen S. Hitchcock; Sec., R. Greenleaf.

**Art Society of N. Y., Municipal** (1898), 119 E. 19th St.; 800; Pres., J. H. Hunt; Sec., Mrs. H. B. Keen.

**Artists, Society of Independent** (1916), 1947 Broadway, N. Y.; 600; Pres., J. Sloan; Sec., A. S. Baylinson.

**Arts, American Federation of** (1909), 1741 New York Ave., Washington, D. C.; 6,000; Pres., R. W. de Forest; Sec., Miss L. Mechlin.

**Arts and Letters, American Academy of** (1916), 15 W. 81st St., N. Y.; 50; Pres., W. M. Sloane; Sec., R. W. Johnson.

**Associated Advertising Clubs of the World** (1916), 110 W. 40th St., N. Y.; 25,000; Pres., L. E. Holland; Sec., J. H. Neal.

**Associated Press** (1900), 51 Chambers St., N. Y.; 1,300; Gen. Mgr., F. R. Martin; Sec., M. E. Stone.

**Association for Improving Condition of Poor,** N. Y. (1848), 105 E. 22d St., N. Y.; 22,000; Gen. Dir., B. B. Burritt; Sec., A. Nichols.

**Astronomical Society, American** (1899), Madison, Wis.; 400; Pres., W. W. Campbell; Sec., J. Stebbins.

**Audubon Societies, National Association of** (1905), 1974 Broadway, N. Y.; 5,000; Pres., T. G. Pearson; Sec., W. F. Wharton.

**Authors League of America, Inc.** (1912), 22 E. 17th St., N. Y.; 1,400; Pres., J. L. Williams; Sec., E. Schuler.

**Authors' League Fund** (1917), 22 E. 17th St., N. Y.; Pres., I. Bacheller; Sec. and Treas., E. Schuler.

**Automobile Association, American** (1902), 1108 16th St., N. W., Washington, D. C.; 210,000; Act. Exec. Ch., D. H. Lewis; Sec., A. Fifoot.

**Aztec Club of 1847** (1847), Washington, D. C.; 245; Pres., Brig. Gen. H. G. Gibson, U. S. A., Sec., Col. J. F. R. Landis, U. S. A.

**Bankers' Association, American** (1875), 5 Nassau St., N. Y.; 23,000; Pres., John H. Puelicher; Sec., W. G. Fitzwilson.

**Bankers' Association, N. Y. State** (1894), 128 Broadway, N. Y.; 1,121; Pres., H. Bissell, Buffalo, N. Y.; Sec., E. J. Gallien.

**Baptist Convention, Northern** (1907), 5109 Waterman Ave., St. Louis, Mo.; 3,500; Pres., F. E. Taylor, Indianapolis; Sec., W. C. Bitting.

**Baptist Convention, Southern, Home Mission Board** (1845), Atlanta, Ga.; 3,000,000; Cor Sec., B. D. Gray; Treas., C. S. Carnes.

**Baptist Young People's Union of America** (1891), 125 N. Wabash Ave., Chicago, Ill.; 1,000,000; Gen. Sec., J. A. White.

**Bar Association, American** (1878), Baltimore, Md.; 17,000; Pres., J. W. Davis, of N. Y. City; Sec., W. T. Kemp, of Baltimore, Md.

**Bar Association, Bronx County** (1902), 1187 Washington Ave.; 250; Pres., J. F. Donnelly; Sec., F. C. Hirleman.

**Bar Association, City of New York** (1870), 42 W. 44th St.; 2,729; Pres., J. Byrne; Sec., C. H. Strong.

**Bar Association, New York State** (1876), Albany, N. Y.; 3,536; Pres., W. D. Guthrie; Sec., C. W. Walton.

**Baron de Hirsch Fund** (1891), N. Y.; 13; Pres., E. S. Benjamin; Sec., M. J. Kobler.

**Ben Hur, Supreme Tribe of** (1894), Crawfordsville, Ind.; 80,000; Sup. Chief, Dr. R. H. Gerard; Sec., J. C. Snyder.

**Bible Society, American** (1816), Bible House, Astor Pl., N. Y.; 16,000; Pres., C. H. Cutting; Gen. Secs., W. I. Haven, F. H. Mann; Rec. Sec., D. S. Chamberlain.

**Big Brother Movement, Inc.** (1904), 200 Fifth Ave., N. Y.; 650; Gen. Sec., R. C. Sheldon; Sec., C. A. Taussig.

**Big Brother and Big Sister Federation, Inc.** (1917), 200 Fifth Ave., N. Y.; Exec. Sec., R. C. Sheldon; Sec., Mrs. W. Parker, Jr.

**Blind, N. Y. Association for** (1906), The Lighthouse, 111 E. 59th St.; Pres., Dr. J. H. Finley; Sec. (and founder), Miss W. Holt.

**Blue Goose, Ancient and Honorable Order of** (1906), Milwaukee, Wis.; 5,000; Pres., M. M. Hawxhurst; Sec., P. E. Rudd.

**B'nai B'rith, Ind. Order—District No. 1** (1843), 2307 Broadway, N. Y.; 12,000; Pres., A. M. Hillman, Worcester, Mass.; Sec., M. Levy.

**Board of Trade, Bronx** (1894), 137th St. and Third Ave.; 1,350; Pres., A. Goldman; Sec., C. E. Reid.

**Boat Owners' Association, N. Y.** (1914), 78 Broad St., N. Y.; 150; Pres., J. W. Ruth; Sec., E. Stavey.

**Book Publishers, Nat. Association of** (1920), 334 Fifth Ave., N. Y.; 60; Pres., J. W. Hiltman; Sec., F. G. Melcher.

**Booksellers' Association, American** (1900), 156 Fifth Ave., N. Y.; 500; Pres., S. I. Nye (care S. Kann Sons Co., Washington, D. C.); Sec., Belle M. Walker.

**Botanical Society of America** (1906), 800; Pres., H. C. Cowles (Univ. Chicago); Sec., I. F. Lewis, Univ. Va.

**Boy Scouts of America** (1910), 200 Fifth Ave., N. Y.; 548,152; Pres. of Nat'l Council, C. H. Livingstone: Sec., J. E. West.

**Boys' Club Federation, International** (1906), 110 W. 40th St., N. Y.; 150,000; Exec. Sec., C. J. Atkinson; Sec., J. T. Pratt, 52 Broadway, N. Y.

**Brewers' Association, U. S.** (1862), 50 Union Sq., N. Y.; 700; Pres., C. W. Feigenspan; Sec., H. F. Fox.

**Brooklyn Catholic Big Sisters** (1918), 320 Schermerhorn St.; 650; Pres., Helen P. McCormick; Sec., Mrs. J. M. Ryan.

**Brooklyn Chamber of Commerce** (1918), 32 Court St.; 3,500; Act. Pres., F. W. Rowe; Sec., M. Fesler.

**Brooklyn Federation of Jewish Charities** (1910), 12 Graham Ave., Brooklyn; 12,000; Exec. Dir., M. Abelman; Hon. Sec., W. N. Rothschild.

**Brotherhood of American Yeomen** (1897), Des Moines, Iowa; 235,824; Pres., G. M. Frink; Sec., W. E. Davy.

**Brotherhood Locomotive Firemen and Enginemen** (1873), Cleveland, Ohio; 107,000; Pres., D. B. Robertson; Sec., A. H. Hawley.

**Brotherhood of R. R. Trainmen** (1883), Cleveland, Ohio; 175,000; Pres., W. G. Lee; Sec., A. E. King.

**Brotherhood of St. Andrew** (1883), Church House, 202 S. 19th St., Philadelphia, Pa.; 10,000; Pres., E. H. Bonsall; Sec., G. F. Shelby.

**Building and Loan Associations, U. S. League of Local** (1892), Station A., Cincinnati, Ohio; 260 (delegates); Pres., J. E. Kinney, Columbus, Ohio; Sec., H. F. Cellarius.

**Building Trade Employers' Association of City of N. Y.** (1903), 34 W. 33d St., N. Y.; 950; Ch. of Board of Govs., C. G. Norman; Sec., S. B. Donnelly.

**Bureau of Municipal Research** (1907), 261 Broadway, N. Y.; 28; Dir., L. Gulick.

**Camp Fire Girls, Inc.** (1912), 31 E. 17th St., N. Y.; 150,000; Sec. and Nat'l Exec., L. F. Scott.

**Cancer, American Society for Control of** (1922), 370 Seventh Ave., N. Y.; 1,900; Exec. Sec., F. J. Osborne; Sec., T. M. Debevoise.

**Canners' Association, Nat.** (1909), 1739 H St., N. W., Washington, D. C.; Pres., J. Moore, 75 State St., Rochester, N. Y.; Sec., F. E. Gorrell.

**Carnegie Corporation of N. Y.** (1911), 522 Fifth Ave.; 10; Act. Pres., Dr. H. S. Pritchett; Sec., J. Bartram.

**Carnegie Endowment for International Peace** (1910), Washington, D. C.; Pres., Hon. Elihu Root; Sec., J. B. Scott.

**Carnegie Foundation for Advancement of Teaching** (1905), 522 Fifth Ave., N. Y.; 25; Pres., H. S. Pritchett; Sec., C. Furst.

**Carnegie Hero Fund Commission** (1904), 2307 Oliver Bldg., Pittsburgh, Pa.; 21; Vice Pres., W. J. Holland; Sec., F. M. Wilmot.

**Carnegie Institution of Washington** (1903), 16th and P Sts., Washington, D. C.; Pres., Dr. J. C. Merriam.

**Casualty Actuarial Soc.** (1914), 43 Cedar St., N. Y.; 212; Pres., A. H. Mowbray; Sec., R. Fondiller.

**Catholic Historical Society, U. S.** (1884), 346 Convent Ave., N. Y.; 400; Pres., S. Farrelly; Sec., J. H. Fargis.

**Catholic Men, National Council of;** Pres., Rr. Admiral W. S. Benson; Sec., P. J. M. Hally, Detroit, Mich.

**Catholic Order of Foresters** (1883), Chicago, Ill.; 160,000; High Chief Ranger, T. H. Cannon; Sec., T. F. McDonald.

**Catholic Society for the Propagation of the Faith** (1905), 343 Lexington Ave., N. Y.; 800,000; Pres., Rt. Rev. J. Freri, D. C. L.; Sec., Rev. T. J. Leonard.

**Catholic Welfare Council, Nat.** (1919), 1312 Massachusetts Ave., Washington, D. C.; Chairman, Most Rev. E. J. Hanna, Archbishop of San Francisco; Gen. Sec., J. J. Burke.

**Catholic Women, Nat. Council** (1920), 1312 Massachusetts Ave., Washington, D. C.; 700,000; Pres., Mrs. M. Gavin; Sec., Agnes G. Regan.

**Catholic Writers Guild** (1919), 220 W. 42d St., N. Y., Suite 2209; 350; Pres., A. Benington; Sec., T. C. Quinn.

**Central Mercantile Association** (1912), 111 Fifth Ave., N. Y.; 500; Sec., J. E. Kean.

**Chamber of Commerce of Borough of Queens, N. Y. C.** (1911), Bridge Plaza, North, Long Island City, N. Y.; 1,000; Pres., W. H. Johns; Sec., W. I. Willis.

**Chamber of Commerce of State of N. Y.** (1768), 65 Liberty St., N. Y.; 2,000; V. P. and Sec., C. T. Hone.

**Chamber of Commerce, Staten Island** (1895), S. I. Savings Bank Bldg., Stapleton, S. I.; 300; Pres., C. G. Kolff; Sec., W. H. Day.

**Chamber of Commerce of the U. S. A.** (1912), Washington, D. C.; 16,000; Pres., J. H. Barnes; Sec., D. A. Skinner.

**Charities Aid Association, N. Y. State** (1880), 105 E. 22d St.; 12,000; Sec., H. Folks.

**Charity Organization, Society of the City of New York** (1882), 105 E. 22d St.; 9,360; Pres., R. W. De Forest; Sec., L. Purdy.

**Chautauqua Institution** (1874), Chautauqua, N. Y.; 65,000; Pres., A. E. Bester; Sec., E. H. Smith.

**Chemical Industry, Society of** (1881), Headquarters, London, Eng.; American Section, 52 E. 41st St., N. Y.; 3,500; Ch., R. H. McKee; Sec., A. Plogge.

**Chemical Society, American** (1876), 1709 G. St., N. W., Wash., D. C.; 15,000; Pres., E. F. Smith; Sec., C. L. Parsons.

**Chicago Crime Commission** (1920), 21 N. La Salle St.; Pres., E. W. Sims; Sec., W. R. Abbott.

**Child Conservation League of America** (1913), 205 W. Monroe St., Chicago, Ill.; 33,500; Pres., Dr. W. S. Hall; Sec., Mrs. M. L. Beckwith.

**Child Labor Committee, Nat.** (1904), 105 E. 22d St., N. Y.; 17,000; Sec., Owen R. Lovejoy.

**Child Welfare Association, National, Inc.** (1912), 70 Fifth Ave., N. Y.; Pres., Hon. W. H. Wadhams; Gen. Sec., C. F. Powlison.

**Children's Aid Society** (1855), 105 E. 22d St., N. Y.; Pres., W. C. Osborne; Sec., C. L. Bruce.

**Christian Endeavor, United Society** (1881), 41 Mt. Vernon St., Boston, Mass.; 4,000,000; Pres., Rev. F. E. Clark, D. D.; Sec., E. P. Gates.

**Christian and Missionary Alliance** (1890), 690 Eighth Ave., N. Y.; 150,000; Pres., Rev. P. Rader; Sec., W. J. Poling.

**Church of the United Brethren in Christ, Board of Education of the** (1881), Dayton, O.; 20; Sec., W. E. Schell.

**Church Peace Union** (1914), 70 Fifth Ave., N. Y.; Gen. Sec., H. A. Atkinson.

**Cincinnati, Society of** (1783), 214 Chamber of Commerce, Baltimore, Md.; 1,058; Pres. Gen., W. Warren; Sec. Gen., J. C. Daves.

**Citizens' Union of the City of N. Y.** (1897), 41 Park Row, N. Y.; 5,000; Ch., W. J. Schieffelin; Sec., W. T. Arndt.

**City Managers' Association** (1914), 14,340 Euclid Ave., East Cleveland, Ohio; 500; C. M. Osborne; Sec., P. B. Wilcox.

**Civic Federation, The National** (1900), N. Y. City; Pres., A. B. Parker; Ch. Exec. Council, R. M. Easley.

**Civil Engineers, American Society of** (1852), 33 W. 39th St., N. Y.; 10,561; Pres., J. R. Freeman; Sec., J. H. Dunlap.

**Civil Liberties Union, American** (1920), 138 W. 13th St., N. Y.; 4,000; Dir., R. N. Baldwin.

**Civil Service Reform League, Nat.** (1881), 8 W. 40th St., N. Y.; 1,000; Pres., R. H. Dana; Sec., H. W. Marsh.

**Classical League, American** (1919), Princeton, N. J.; 1,900; Pres., Dean A. F. West, Ph. D.; Sec., Prof. S. H. Weber, Ph. D.

**Colonial Dames of America** (1891), 324 Lexington Ave., N. Y.; 850; Pres., Mrs. T. M. Cheesman; Rec. Sec., Miss Borrowe; Cor. Sec., Miss A. A. Sands.

**Colonial Dames, State of N. Y.** (1893), 541 Madison Ave., N. Y.; 830; Pres., Mrs. H. R. Fairfax; Sec., Mrs. E. Thorne.

**Colonial Daughters of America, National Society** (1907), Newport, Ky.; 800; Pres., Mrs. L. Maxwell, Edgecliffe Road, Walnut Hill, Cincinnati, Ohio; Sec., Miss M. Washington, 616 Lexington Ave., Newport, Ky.

**Colonial Sons and Daughters** (1920), 15 W. 107th St., N. Y.; Gov. Gen., Miss E. F. Barker; Sec., A. Underhill.

**Colonial Wars, General Society of** (1892), 200 W. 58th St., N. Y.; 3,350; Gov. Gen., Col. W. W. Ladd; Sec.-Gen., Walter Geer.

**Commerce, Harlem Board of** (1896), 290 Lenox Ave., N. Y.; 450; Pres., J. G. Smith; Sec., F. I. Holmes.

**Commercial Travelers of America, United** (1888), Columbus, Ohio; 107,342; Sup. Counselor, F. J. Roeser; Sec., W. D. Murphy.

**Commission Merchants of U. S., Nat. League of** (1893), 627 Munsey Bldg., Washington, D. C.; 635; Pres., C. Franzell; Sec., R. S. French.

**Commonwealth Fund** (1918), 1 E. 57th St., N. Y.; Gen. Dir., Barry C. Smith.

**Community Councils (Inc.), of the City of New York** (1918), Room 2240 Municipal Bldg., N. Y.; 30,000; Pres., J. K. Clark; Sec., J. E. Dunningham.

**Conciliation, American Association for International** (1907), 407 W. 117th St., N. Y.; 20,000; Ch., Dr. N. M. Butler; Sec., H. S. Haskell.

**Confederate Veterans, United** (1889), New Orleans, La.; 7,500; Gen., S. S. Carr, Durham, N. C.; Adj., Gen. E. D. Taylor, Richmond, Va.; Asst. Adj. Gen., A. B. Booth.

**Consumers' League of New York** (1890), 289 Fourth Ave., N. Y.; Pres., Mrs. P. Jackson; Exec. Sec., Mrs. C. M. Beyer.

**Council of Women for Home Missions** (1908), 156 Fifth Ave., N. Y.; 200,000; Pres., Mrs. F. S. Bennett; Exec. Sec., Miss F. E. Quinlan.

**Court of Honor Life Association** (1895), Springfield, Ill.; 71,000; Pres.. W. L. Hereford; Sec., L. M. Dixon.

**Credit Men, Nat. Association of** (1896), 41 Park Row, N. Y.; 33,000; Sec.-Treas., J. H. Tregoe.

**Dairymen's League, Inc.** (1919), Utica, N. Y.; 72,000; Pres., G. W. Slocum; Sec., A. Manning.

**Dante League of America** (1917), at Nat. Arts Club, N. Y.; Pres., Hon. M. F. Egan; Sec., Miss E. F. Barker, 15 W. 107th St., N. Y.

**Daughters of the American Revolution, Nat. Soc.** (1890), Memorial Continental Hall, Washington, D. C.; 181,963; Pres., Mrs. G. M. Minor; Sec., Mrs. J. F. Yawger.

**Daughters of the American Revolution, Fort Washington Chapter** (1909), Isham Park House, 212th St. and Broadway, N. Y.; 45; Regent, Mrs. J. P. Marshall; Cor. Sec., Mrs. J. Wickham.

**Daughters of the American Revolution, N. Y. State Conference:** State Regent, Mrs. Charles W. Nash, Albany.

**Daughters of the American Revolution, Washington Headquarters Association** (1904), W. 160th St. and Jumel Terrace, N. Y.; 300; Pres., Mrs. O. M. Bostwick; Cor. Sec., Mrs. G. W. Smith; Rec. Sec., Mrs. L. G. Baldwin.

**Daughters of the Cincinnati** (1894), New York, N. Y.; 200; Pres., Miss R. Lawrence, 21 W. 9th St., N. Y.; Sec., Mrs. R. E. Tucker, 1100 Park Ave., N. Y.

**Daughters of the Confederacy, United** (1894), Newberry, S. C.; 100,000; Pres.-Gen., Mrs. L. R. Schuyler; Sec., Mrs. R. D.-Wright.

**Daughters of 1812, United** (1892), Hartford, Conn.; 5,500; Pres., Mrs. C. F. R. Jenne; Sec., Mrs. W. D. Caldwell, Canton, Ohio.

**Daughters of Holland Dames** (1895), N. Y.; 162; Directress General, Mrs. W. P. Edgerton; Sec., Mrs. V. V. Veeder.

**Daughters of the King** (1885), 84 Bible House, Astor Pl., N. Y.; 5,000; Pres., Mrs. A. Denmead; Sec., Miss Barbara Horn.

**Descendants of the Signers of the Declaration of Independence** (1907), Philadelphia, Pa.; 500; Pres., R. Duane; Sec., J. Calvert, 1615 Sansom St., Philadelphia.

**Dialect Society, American** (1889), Warren House, Cambridge, Mass.; 500; Pres., W. A. Neilson; Sec., P. W. Long.

**Dickens Fellowship** (1902), 14 Cliffords Inn, Fleet St., London, Eng.; 30,000; Sec., C. H. Green

**Diomedians of N. Y., Inc.** (1918), Evanston, Ill.; 350; Pres., Chas. E. Usher; Sec., F. E. Guinther, 51 West 48th St., N. Y.

**Drama League, Inc., N. Y.** (1913), 29 W. 47th St., N. Y.; 2,000; Pres., Dr. S. M. Tucker; Sec., Miss L. V. Day.

**Drama League of America** (1910), 59 E. Van Buren St., Chicago; 10,000; Pres., F. Neilson; Nat. Exec. Sec., H. A. Ehrensperger.

**Druggists' Association, Nat. Wholesale** (1876), 51 Maiden Lane, N. Y.; 750; Gen. Rep., F. E. Halliday; Sec., C. H. Waterbury.

**Eagles, Fraternal Order of** (1898), Kansas City, Mo.; 500,000; Gr. Pres., Col. H. Choynski; Sec., J. S. Parry.

**Early Settlers of America** (1636, 1888), Englewood, N. J.; 1,000; Sec., G. S. Wyckoff.

**Editorial Association, National** (1885), 709 Exchange Bank Bldg., St. Paul, Minn.; 2,500; Pres., J. C. Brimblecorn, Newton, Mass.; Sec., H. C. Hotaling.

**Education, American Council on** (1918), 818 Connecticut Ave., Washington, D. C.; Ch., L. D. Coffman; Dir., S. P. Capen; Sec., Ada Comstock, Smith College.

**Education Association, Nat.** (1857), 1201 16th St., N. W., Washington, D. C.; 130,000; Pres., Dr. W. B. Owen; Sec., J. W. Crabtree.

**Education, Council of Church Boards of** (1911), 111 Fifth Ave., N. Y.; 20; Gen. Sec., H. O. Pritchard; Exec. Sec., R. L. Kelly.

**Electric Light Association, Nat.** (1885), New York, N. Y.; 15,000; Exec. Mgr., M. H. Aylesworth; Sec., S. A. Sewall.

**Electric Railway Association, American** (1882-1905), 8 W. 40th St., N. Y.; 3,046; Pres., R. I. Todd; Exec. Sec., J. W. Welsh.

**Electrical Engineers, American Institute of** (1884), 33 W. 39th St., N. Y.; 14,566; Pres. Dr. F. B. Jewett; Sec., F. L. Hutchinson.

**Electrical Society, N. Y.** (1881), 29 W. 39th St., N. Y.; 851; Pres., J. M. Buchanan; Sec., G. H. Guy.

**Electrochemical Society, American** (1902), Columbia University, N. Y.; 2,100; Pres., C. G. Schluederberg; Sec., C. G. Fink.

**Engineering Foundation** (1914), 29 W. 39th St., N. Y.; 16; Ch., C. F. Rand; Sec., A. D. Flinn.

**Engineering Society, United** (1904), 29 W. 39th St., N. Y.; 12; Pres., J. V. Davis; Sec., A. D. Flinn.

**Engineers, Mechanical, American Society of** (1880) 29 W. 39th St., N. Y.; 17,000; Pres., D. S. Kimball; Sec., C. W. Rice.

**English Speaking Union of the U. S.,** 345 Madison Ave., N. Y.

**Erectors' Association, Nat.** (1906), 286 Fifth Ave., N. Y.; 50; Ch. Exec. Com., S. P. Mitchell; Sec., Miss Bessie L. Crocker.

**Ethnological Society, American** (1842), American Museum of Natural Hist.; 120; Pres., F. W. Hodge; Sec., Theresa Mayer.

**Eugenics Research Association** (1913), Cold Spring Harbor, L. I.; 400; Pres., H. Olson; Sec., H. H. Laughlin.

**Farm Organization, Nat. Board of** (1917), Temple of Agric. Hdqrtrs., 1731 I St., N. W., Washington, D. C.; 1,000,000; Ch., C. S. Barrett; Sec., C. A. Lyman.

**Farmers' Nat. Council** (1919), Bliss Bldg., Washington, D. C.; 750,000; Managing Dir., B. C. Marsh.

**Federal Council of the Churches of Christ in America** (1908); 105 E. 22d St., N. Y.; 30 Protestant denominations; 20,000,000; Pres., R. E. Speer: Secs., C. S. Macfarland and S. M. Cavert.

**Federation of Women's Clubs, General** (1890), 1734 N St., Washington, D. C.; 2,000,000; Pres., Mrs. T. G. Winter, 2617 Dean Boulevard, Minneapolis, Minn.; Sec., Mrs. H. O. Godfrey, 1766 Gerard Ave., S. Minneapolis; Dir., Miss Lida Hafford.

**Federation of Women's Clubs, N. Y. State** (1904), 317,704: Pres., Mrs. W. L. Comly, Port Chester, N. Y.; Sec., Mrs. W. H. Purdy, 136 Park Ave., Mount Vernon.

**Fifth Avenue Association, Inc.** (1907), 358 Fifth Ave., N. Y.; 1,350; Pres., R. G. Cooke; Gen. Mgr., W. J. Pedrick; Sec., T. W. Hughes.

**Fine Arts Society, American** (1889), 215 W. 57th St., N. Y.; 500; Pres., W. A. Coffin; Sec., C. J. Miller.

**Fire Underwriters, Nat. Board of** (1866), 76 William St., N. Y.; 180; Gen. Mgr., W. E. Mallalieu; Sec., Sumner Ballard.

**Fisheries Soc., American** (1910), 685; Exec. Sec., W. T. Bower, Bureau of Fisheries, Washington, D. C.

**Foreign Born Citizens, League of** (1913), 342 Madison Ave., N. Y.; 5,000; Pres., N. Phillips; Sec., H. Fields.

**Foreign Policy Association** (1918), 3 W. 29th St., N. Y.; 2,000; Ch. Exec. Com., J. G. McDonald; Sec., Miss C. Merriman.

**Foreign Press Correspondents in the U. S., Association of** (1918), 66 Broadway, N. Y.; 100; Pres., W. F. Bullock; Sec., S. J. Clarke.

**Foreign Trade Council, Nat.** (1914), 1 Hanover Sq., N. Y.; 75; Ch., J. A. Farrell; Sec., O. K. Davis.

**Foresters of America** (1790), 275 Grove St., Jersey City, N. J; 160,000; Sup. Ch. Ranger, G. P. Sullivan, Derby, Conn.; Sec., T. M. Donnelly.

**Foresters, Ind. Order of** (1881) Toronto, Can.; 170,000; Sup. Ch. Ranger, W. H. Hunter; Sec., G. E. Bailey.

**Foresters, Society of American** (1900), 930 F St., N. W., Washington, D. C.; 800: Pres., E. A. Sherman: Sec., W. N. Sparhawk.

**Foresters, United Order of**—Changed to Americans, United Order of.

**Forestry Association, N. Y. State** (1914), 93 State St., Albany, N. Y.; 1,000; Pres., Col. R. M. Thompson; Sec., J. R. Simmons.

**Founders and Patriots of America, N. Y. Society or Order of:** 225; Gov., L. A. Ames; Sec., C. S. Molineaux, 117 Fort Greene Pl., Brooklyn, N. Y.

**Fraternal Aid-Union** (1890), Lawrence, Kans.; 77,500; Sup. Pres., V. A. Young; Sec., S. S. Baty.

**Freemasonry, Ancient Accepted Scottish Rite, Supreme Council, 33d Degree, Northern** (1813), Boston, Mass.; 230,704; Sov. Gr. Commander, L. M. Abbott; Gr. Sec. Gen., R. A. Kierrefs, 299 Broadway, N. Y.

**Freemasonry, A. A. S. R., 33d Degree, Southern** (1801), House of the Temple, 16th and S Sts., N. W., Washington, D. C.; 214,000: Sov. Gr. Com., J. H. Cowles; Sec., P. W. Waidner.

**Free Trade League** (1918), 9 S. William St., N. Y.; 550; Pres., G. H. Putnam; Sec., E. J. Shriver.

**Friendly Aid Society** (1901), 246 E. 34th St.; 400: Pres., Hon. G. McAneny; Sec., Miss E. Kendall.

**Friends (Quaker), Gen. Conf.** (1900), 140 N. 15th St., Philadelphia, Pa.; 18,000; Ch., A. C. Jackson, 4530 Tacony St., Philadelphia; Sec., J. B. Walton.

**Game Protective Association, American** (1911), 233 Broadway, N. Y.; Pres., J. B. Burnham; Sec., G. M. Fayles.

**Gas Association, American** (1919), 342 Madison Ave., N. Y.: 2,810: Pres., D. D. Barnum: Sec.-Mgr., O. H. Fogg.

**General Society of War of 1812** (1894), 10 P. O. Square, Boston, Mass.; 700; Pres., Gen. J. Cadwalader: Sec., H. M. Leland.

**Genetic Association, American** (1903), Washington, D. C.; 3,500: Pres., Dr. D. Fairchild; Sec. E. W. Sheets.

**Geographical Society, American** (1851), Broadway at 156th St., N. Y.; 4,000; Pres., J. Greenough; Dir., I. Bowman.

**Geological Society of America** (1888), Amer. Mus. Nat. Hist., 77th St. and Central Park West, N. Y.; 500; Pres., C. Schuchert; Sec., E. O. Hovey.

**German Society of City of N. Y.** (1804), 147 Fourth Ave., N. Y.; 500; Pres., H. C. Kudlich; Sec., A. Behrens.

**Girl Scouts, Inc.** (1915), 189 Lexington Ave., N. Y.; 125,738; Pres., Mrs. H. Hoover; Dir., Mrs. J. D. Rippin.

**Grand Army of the Republic** (1866), Commander in Chief, Judge J. W. Willett, Tama, Iowa; Surgeon Gen., Dr. Geo. T. Harding, Marion, Ohio; Chaplain in Chief, Rev. J. H. Eppler, Gary, Ind.

**Grocers' Association of the U. S., Nat. Wholesale** (1906), 6 Harrison St., N. Y.; 1,500: Pres., J. W. Herscher; Sec., M. L. Touline.

**Harvard Alumni Association** (1840), 50 State St. Boston, and Wadsworth House, Cambridge, Mass.; 38,000; Pres., Robert Grant; Sec., J. W. D. Seymour.

**Hebrew Sheltering Guardian Society of N. Y.** (1879), Pleasantville, N. Y., Exec. Dir., L. W. Goldrich; Sec., B. Naumburg.

**Heckscher Foundation for Children** (1921), 1 E. 104th St., N. Y.; Pres., M. L. Bruce: Gen. Mgr., E. K. Coulter; Sec., E. Parks.

**Henry Wolcott, Society of Descendants of** (1904), 441 Pearl St., N. Y., 1,200; Pres., Herbert W. Wolcott, Buffalo, N. Y.; Sec., Mary Wolcott Green, Englewood, Fla.

**Hispanic Society of America** (1904), 155th St., W. of Broadway, N. Y.; 200; Pres., W. M. Huntington; Sec., G. B. Grinnell.

**Historical Association, American** (1889), 1140 Woodward Bldg., Washington, D. C.; 2,500; Pres., C. H. Haskins, Harvard U., Cambridge, Mass.; Sec., J. S. Bassett, Smith College, Northampton, Mass.

**Historical Association, N. Y. State** (1899), Glens Falls, N. Y; 1,000: Pres., Hon. D. B. Hasbrouck; Sec., F. B. Richards.

**Historical Society, Nat.** (1915), 37 W. 39th St., N. Y.; Pres., F. Allaben; Sec., Mabel T. R. Washburn.

**Historical Society, N. Y.** (1804), 170 Central Park West, N. Y.: 800; Pres., J. A. Weekes; Sec., S. Fish.

**Holland Society of New York** (1885), 90 West St., N. Y.; 1,000; Pres., Edw. De Witt; Sec., F. R. Keator.

**Home Market Club** (1887), 99 Bedford St., Boston, Mass.; 925; Sec., W. H. Cliff.

**Horological Institute of America** (1921), 1701 Massachusetts Ave., Washington, D. C.; Pres., G. W. Spier, U. S. Nat. Museum, Washington, D. C.; Sec., Paul Moore, Div. of Research Extension, Nat'l Research Council.

**Hospital Fund of N. Y., United** (1897), 105 E. 22d St., N. Y.; Pres., R. Olyphant; Sec., F. D. Greene.

**Hotel Association of New York City** (1878), 334 Fifth Ave., N. Y.: 350: Sec., I. Fluegelman; Asst. Sec., M. A. Cadwell.

**Huguenot Society of America** (1885), 2 W. 45th St., N. Y.; 460; Pres. Gen., Dr. W. J. Schieffelin; Sec., Miss Mary A. Jackson.

**Humane Association, American** (1877), Albany, N. Y.; 10,000; Pres., Dr. W. O. Stillman; Sec., N. J. Walker.

**Ice Industries, Nat. Association of,** 163 W. Washington St., Chicago, Ill.; 2,000; Pres., J. G. Black; Sec., L. C. Smith.

**Independent Order Free Sons of Israel** (1849), 21 W. 124th St., N. Y.; 8,000: Gr. Master, S. J. Liebeskind; Gr. Sec., H. J. Hyman.

**I. O. G. T., Nat. Gr. Lodge** (1851), Beverly, Mass.; 16,000; Nat. Chief Templar, Rev. E. C. Dinwiddie; Sec., W. O. Wylie.

**Indian Rights Association** (1882), Philadelphia, Pa.; 1,200: Pres., H. Welsh: Sec., M. K. Sniffen.

**Indian Wars of U. S., Order of** (1896), Washington, D. C.; 200; Commander, Lieut. Gen. Nelson A. Miles, U. S. A.; Recorder, Col. Chas. C. Walcutt, Jr.

**Industrial Workers of the World** (1905), Chicago, Ill.; 35,000: Gen. Sec.-Treas., J. Grady; Ch. Gen. Exec. Bd., R. E. Daly.

**International Brotherhood of Maintenance of Way Employees and Railway Shop Laborers,** 86,000; Grand Pres., F. H. Fljozdal, Dauphin, Manitoba.

**International Police Conference** (1922), Pres., Richard Enright; Sec., D. I. McKay: Honorary Presidents, F. Laguarda, Buenos Ayres; Alfred Keffer, Belgium: E. Trudel, Quebec, and H. Jorgensen, Copenhagen.

**International Seamen's Union of America,** Pres., A. Furuseth, A. F. of L. Bldg., Washington, D. C.; Sec.-Treas., T. A. Hanson, 355 N. Clark St., Chicago, Ill.

**Inventors, Nat. Institute of** (1914), 8 E. 14th St., N. Y.; 3,000; Exec. Sec., Rose Nerenstone; Sec., P. R. Fay.

**Iron and Steel Institute, American** (1908), 40 Rector St., N. Y.; 2,200; Pres., E. H. Gary; Sec., H. H. Cook.

**Japan Society, Inc.** (1907), 25 W. 43d St., N. Y.; 1,500; Pres., H. W. Taft; Sec., E. C. Worden; Exec. Sec., D. L. Dunbar.

**Jeanes, Anna T., Foundation** (1908), Charlottesville, Va.; Pres., J. H. Dillard; Sec., J. T. Emlen, 4th and Chestnut Sts., Philadelphia, Pa.

**Jewelers' Board of Trade, Nat.** (1899), 15 Maiden Lane, N. Y.: 1,300; Pres., G. H. Niemeyer; Sec., F. C. Backus.

**Jewish Agricultural and Industrial Aid Society** (1900), 174 Second Ave., N. Y.; Gen. Mgr., G. Davidson; Sec., M. Arkush.

**Jewish Charities, Brooklyn Federation of** (1910), 12 Graham Ave., Brooklyn, N. Y.: 12,000; Exec. Dir., M. Abelman; Sec., W. N. Rothschild.

**Jewish Historical Society, American** (1892), 531 W. 123d St., N. Y.; 455; Pres., A. S. W. Rosenbach; Sec., A. M. Friedenberg.

**Jewish Philanthropic Societies of New York City,** Federation for the Support of (1917), 114 Fifth Ave., N. Y.; 25,000; Pres., A. Lehman; Exec. Dir., S. Lowenstein; Sec., Dr. H. G. Friedman.

**Jewish Valor Legion** (1921), 101 W. 42d St., N. Y.; 650; Commander, S. G. Gumpertz; Adj., D. Bernstein.

**Jewish War Sufferers, Joint Distribution Committee of the American Funds for** (1914), 64 Water St., N. Y.; Ch. F. M. Warburg; Sec., A. Lucas.

**Juvenile Civic League** (1897), Municipal Bldg., N. Y.: 200,000: Supervisor, R. S. Simons; Sec., E. Cinetto.

**Kindergarten Association, Nat.** (1909), 8 W. 40th St., N. Y.; Pres., Maj. B. Martin; Cor. Sec., Miss B. Locke.

**Knights of Columbus** (1882), New Haven, Conn., 780,000; Sup. Knight, J. A. Flaherty; Sup. Sec., W. J. McGinley.

**Knights of the Golden Eagle** (1873), 814 N. Broad St., Philadelphia, Pa.; 73,340; Sup. Chief, G. R. Gregory; Sup. Master of Records, J. B. Treibler.

**Knights of Malta, Ancient and Illustrious Order of** (1889), 1345 Arch St., Philadelphia, Pa.; 70,000; Sup. Counselor, N. Ross; Sup. Sec., J. Gray.

**Knights of Pythias, N. Y. State Domain,** Grand Chancellor, Wm. J. Park, Buffalo; Grand Keeper of Records and Seal, Alonzo Bedell, Haverstraw, N. Y.

**Knights of Pythias, Supreme Lodge** (1894), Minneapolis, Minn.; 908,454; Sup. Chan., G. C. Cabell, Law Bldg., Norfo'k, Va.; Sec., B. M. Love.

**Ku Klux Klan, Knights of the, Inc.** (1915), Atlanta, Ga.; 350,000: Imperial Wizard, Col. W. J. Simmons; Sec., H. W. Evans.

**Labor Legislation, American Association for** (1906), 131 E. 23d St., N. Y.; 3,200; Sec., J. B. Andrews.

**Law, American Society of International** (1906), 2 Jackson Pl., Washington, D. C.; 1,800; Pres., Elihu Root; Sec., J. B. Scott.

**Lawyers' Association, New York County** (1908), 165 Broadway, N. Y.; 4,100; Pres., C. Strauss; Sec., J. E. O'Brien.

**League of American Pen Women** (1897), 1722 H St., Washington, D. C.; 1,400; Nat. Pres., Mrs. L. N. Geldert; Nat. Exec. Sec., Miss E. P. Van Dyne.

**League for Industrial Democracy** (1921), 70 Fifth Ave., N. Y.; 1,000; Pres., R. M. Lovett; Sec., H. W. Laidler.

**Legal Aid Society** (1876), 239 Broadway, N. Y.; 1,112; Sec., C. L. Kitchel; Atty. in Chief, L. McGee.

**Letter Carriers, Nat. Association of** (1889), A. F. of L. Bldg., Washington, D. C.; 42,000; Pres., E. J. Gainor; Sec., E. J. Cantwell.

**Letter Carriers, N. Y. State Association** (1890), Rochester, N. Y.; 4,000; Pres., J. T. Tinnelly, Albany, N. Y.; Sec., L. Van Duser.

**Library Association, American** (1876), 78 E. Washington St., Chicago, Ill.; 6,000; Pres., G. B. Utley; Sec., C. H. Milam.

**Life Underwriters, Nat. Association of** (1890), 25 W. 43d St., N. Y.; 14,000; Pres., J. L. Shuff; Exec. Sec., E. M. Ensign.

**Loyal Legion of the United States, Military Order of** (1865), 1805 Pine St., Philadelphia, Pa; 5,407: Com. in Chief, Lieut. Gen. N. A. Miles; Recorder in Chief, Capt. J. O. Foering.

**Loyal Orange Institution of U. S.,** Sup. Gr. Master, R. A. Gilmore, Holmesbury, Philadelphia, Pa.; Sup. Gr. Sec., W. J. Kirkland, 229 Rhode Island Ave., N. W., Washington, D. C.

**Lucy Stone League** (1921), 412 W. 47th St., N. Y.; 150; Pres., Ruth Hale; Sec., Jane Grant.

**Lumber Trade Association, New York** (1886), N. Y. City; 350; Pres., W. C. Reid; Sec., H. B. Coho.

**Luther League of America** (1895), 427 Drexel Bldg., Phila, Pa.; 30,000; Pres., W. Banker; Sec., H. Hodges.

**Maccabees** (1883), 5065 Woodward Ave., Detroit, Mich.; 275,580; Sup. Commander, D. P. Markey; Sec., T. Watson.

**Manufacturers of the U. S. A., Nat. Association** (1905), 50 Church St., N. Y.; 6,000; Pres., J. E. Edgerton, Nashville, Tenn.; Sec., G. S. Boudinot.

**Maritime Association of Port of New York** (1874), 78 Broad St., N. Y.; 1,120; Pres., C. H. Potter; Sec., W. F. Firth; Mgr., C. L. Bundy.

**Mathematical Society, American** (1894), 501 W. 116th St., N. Y.; 1,200; Pres., Prof. G. A. Bliss; Sec., Prof. R. G. D. Richardson.

**Mayflower Descendants, Society of** (1895) 44 E. 23d St., N. Y.; 850; Gov., H. C. Quimby; Sec., J. P. H. Perry.

**Mayors, New York State Conference of,** 25 Washington Ave., Albany, N. Y.; All cities in N. Y. State; Pres., Mayor Thomas A. Wilson of Binghamton; Sec., W. P. Capes.

**Mechanics, Junior Order United American, Nat. Council** (1853), Philadelphia, Pa.; 310,000; Nat. Councilor, G. A. Davis, 2323 Arunah Ave., Baltimore, Md.; Nat. Sec., M. W. Woods, P. O. Box 874, Philadelphia, Pa.

**Medical Association, American** (1897), 535 N. Dearborn St., Chicago; 89,481; Pres., R. L. Wilbur, Stanford Univ., Calif.; Sec., Dr. A. B. Craig.

**Medical Association, Southern** (1906), Birmingham, Ala.; 6,500; Pres., Dr. S. Harris; Soc. Mgr., C. P. Loranz.

**Medical Association, Women's, of New York City** (1900), 17 W. 43d St., N. Y.; 200; Pres., E. S. L'Esperance, M. D.; Sec., Mary Reeson, M. D.

**Medical Jurisprudence, Society of** (1883), N. Y. Academy of Medicine; 750; Pres., J. K. Clarke; Sec., L. H. Mass, M. D.

**Medical Society, State of New York** (1807), 17 W. 43d St., N. Y.; 9,630; Sec., E. L. Hunt.

**Mental Hygiene, Nat. Com. for, Inc.** (1915), N. Y. 165: Med. Dir., Dr. F. E. Williams: Sec., C. W. Beers.

**Merchants' Association of New York** (1897), 233 Broadway; 6.000; Pres., L. E. Pierson; Sec., S. O. Mead.

**Metric Association, American** (1916), 156 Fifth Ave., N. Y.: 700; Pres., Dr. G. F. Kunz, 405 Fifth Ave.; Sec., H. Richards.

**Mexican Society of New York** (1909), 117 Park Row, N. Y.; 550; Pres., F. Juarez; Sec., A. Paz.

**Microscopical Society, New York** (1878), Amer. Mus. Nat. Hist., W. 77th St.; 168; Pres., C. P. Titus; Cor. Sec., J. H. Fisher; Rec. Sec., T. I. Miller.

**Military Order of the Cootie, U. S. A.** (1920), Foster Bldg., Corvallis, Ore.; 12,000; Com. in Ch., F. W. Kime; Adj. Gen., R. Anderson.

**Military Society of the War of 1812—Veteran Corps of Artillery** (1790), 275; Col. Commandant, Col. C. E. Warren, 60 E. 42d St., N. Y. City; Sec., Maj. David Banks, 1155 Park Ave., N. Y.

**Military Surgeons of the U. S., Association of** (1890), Army Medical Museum, Washington, D. C.; 4,000; Pres., Capt. F. L. Pleadwell, M. C., U. S. Navy; Sec., Col. J. R. Church, U. S. A. Rtrd.

**Mining Congress, American** (1898), Munsey Bldg., Washington, D. C.; 5,000; Pres., W. J. Loring; San Francisco; Sec., J. F. Callbreath.

**Mission Society, N. Y. C.** (1866), 105 E. 22d St.; Pres., W. S. Coffin; Sec., L. H. Lewis.

**Mississippi Valley Association** (1919), 511 Locust St.; 1,000: Pres., J. E. Smith; Sec., R. H. Faxon; Treas., R. M. Johnston.

**Modern Brotherhood of America** (1897), Mason City, Iowa; 51,000; Pres., A. Hass; Sec., E. L. Balz.

**Modern Churchmen's Union in America** (1922), Pres., Dr. R, C. Smith, St. John's Ch., Washington, D. C.: Sec., Dr. H. N. Arrowsmith, Cathedral of the Incarnation, Baltimore, Md.

**Modern Woodmen of America** (1883), Rock Island, Ill.; 1,056,000; Head Consul, A. R. Talbot; Head Clerk, J. G. Ray.

**Moose, Loyal Order of, Rochester Lodge 113** (1909), 120 South Ave., Rochester, N. Y.: 9,000; Dictator, W. A. Marakle: Sec., F. G. Kunz.

**Motion Picture Producers and Distribs. of Amer., Inc.** (1922), 522 Fifth Ave., N. Y.; 15; Pres., Will H. Hays; Sec., C. Smith.

**Motion Picture Theatre Owners of America** (1922), 132 W. 43d St., N. Y.; Pres., S. S. Cohen; Sec., M. Van Praag, Kansas City, Kan.

**Motor Transport Association, National** (1922), Pres., P. Healey, Waterbury, Conn.; Treas., Alex. Spring, Waterbury, Conn.; Mgr., E. N. Burnitt.

**Municipal League, Nat.** (1894), 261 Broadway, N. Y.; 2,500; Pres., Col. H. M. Waite; Sec., H. W. Dodds.

**Museums, American Association of** (1906), 141 E. 29th St., N. Y.; 500: Pres., F. A. Whiting (Director of Cleveland Museum of Art); Sec., L. V. Coleman, 141 E. 29th St., N. Y.

**Nat. Institute of Public Administration** (1921), 261 Broadway, N. Y.: 28: Director, L. Gulick.

**National Institute of Social Sciences** (1912), 280 Madison Ave., N. Y.; 1,000: Pres., A. B. Fletcher, LL. D.: Sec., Miss R. Hahn.

**National Motorist Alliance** (1914), Palisade House, Englewood, N. J.; 6,000; Sec., G. S. Wyckoff.

**National Personnel Assoc.,** 20 Vesey St., N. Y.; Mng. Dir., W. J. Donald.

**National Police Conference** (1921), 240 Centre St., N. Y.; 750; Pres., R. E. Enright; Sec., D. I. McKay.

**National Security League** (1914), 17 E. 49th St., N. Y.; 25,000; Pres., S. S. Menken; Sec., E. L. Harvey.

**National Staff Assoc.** (1905), New York; 250; Pres., Mrs. A. G. Mohr, 204 Norwood Ave., Brooklyn, N. Y.; Sec., Mrs., M. M. North, Herndon, Va.

**National Union Assurance Society** (1881), Toledo, Ohio; 50,000; Pres., D. A. Helpman: Sec., E. A. Myers.

**Naturalists, American Society of** (1883), Ann Arbor, Mich.: 400; Pres., Prof. W. M. Wheeler, Bussey Institute, Forest Hills, Mass.; Sec., A. F. Shull.

**Naval Architects and Marine Engineers, Society of** (1893), 29 W. 39th St., N. Y.; 1800; Pres., W. M. McFarland; Sec., D. H. Cox.

**Naval Engineers, American Society of** (1888), Navy Dept., Washington, D. C.; 1,200; Pres., Rear Admiral C. W. Dyson, U. S. N.; Sec., Commander S. M. Robinson, U. S. N.

**Naval Militia, Vet. Association, First Battalion** (1912), Foot W. 97th St., N. Y.; 575; Pres., W. B. Duncan; Sec., J. L. Conway.

**Naval Order of the U. S.** (1890), 15 E. 40th St., N.Y.; 300; Commander, Major T. Bailey; Recorder, J. C. Moore.

**Naval Veterans, Nat. Association of** (1884), New Canaan, Conn.; 800; Commodore, L. Seafield; Sec., H. F. McCollum.

**Needlework Guild of America** (1896), 133 S. 12th St., Philadelphia, Pa.; 500,000; Nat. Exec. Sec., Miss R. K. Bender.

**Negro Business League, National** (1900), Tuskegee Institute, Ala.; 900; Pres., R. R. Moton; Sec., Albon L. Holsey.

**Neighborhood Houses of N. Y., United** (1919), 70 Fifth Ave., N. Y.; 50; Pres., Miss H. Righter; Dir., Mrs. J. C. Bernheim.

**New England Historical Genealogical Society** (1844), 9 Ashburton Pl., Boston, Mass.; 2,000; Pres., J. C. Chase; Rec. Sec., H. E. Scott; Cor. Sec., T. K. Lothrop.

**New York City Mission Society** (1827), 105 E. 22d St.; Pres., W. S. Coffin; Sec., L. H. Lewis.

**New York Civic League** (1911), 452 Broadway, Albany, N. Y.; Pres., Rev. O. R. Miller; Sec., W. S. Winans.

**New York Railroad Club**, 29 W. 39th St.; Pres., F. T. Dickerson.

**New York State Bureau of Municipal Information**, 25 Washington Ave., Albany, N. Y.; Dir., W. P. Capes.

**New York State Federation of Labor** (1864), 14 Jones Bldg., Utica, N. Y.; 700,000; Pres., J. P. Holland; Sec., E. A. Bates.

**Newspaper Club** (1922), 133 W. 41st St., N. Y.; 400; Pres., C. G. Hambridge (Times); Sec., F. H. Adams, of City News Association.

**Newspaper Executives, Nat. Association** (1918), Fort Worth, Tex.; 500; Pres., A. L. Shuman, of Fort Worth Star-Telegram; Sec., R. W. Perry.

**Newspaper Publishers' Association, Amer.** (1887), 63 Park Row, N. Y.; 650; Mgr., L. B. Palmer; Sec., J. S. Bryan.

**Non-Smokers' Protective League of America** (1911), 101 W. 72d St., N. Y.; 5,000; Pres., C. G. Pease, M. D.; Sec., E. di Pirani.

**Numismatic Society, American** (1858), Broadway and 156th St., N. Y.; 600; Pres., E. T. Newell; Sec., S. P. Noe.

**Nurses' Association, American** (1897), 370 Seventh Ave., N. Y.; 50,000; Pres., Miss Adda Eldredge; Sec., Miss A. G. Deans.

**Odd Fellows, Ind. Order of** (1819), 25 N. Liberty St., Baltimore, Md.; 2,676,582; Gr. Sire, L. J. Eastin, St. Joseph, Mo.; Sec., J. E. Kroh.

**Oil Chemists' Society, American** (1922), New Orleans, La.; 300; Pres., L. M. Tolman, Chicago; Sec., T. B. Caldwell, Wilmington, N. C.

**Oklahoma Society of New York** (1921), Hotel McAlpin, N. Y.; 375; Pres., A. Caruthers; Sec., T. J. McLaughlin.

**Order Eastern Star, Gen. Gr. Chapter** (1876), Masonic Temple, Washington, D. C.; 1,500,000. M. W. Gr. Matron, Mrs. E. L. Chapin; Sec., Mrs. M. E. Keyes.

**Order of Foreign Wars of the U. S. Military, N. Y. Commandery** (1895), 149 Broadway, N. Y.; 550; Commander, Brig. Gen. D. C. Weld, Jr.; Sec., A. E. Gunther, Jr., Capt. Inf. O. R. C., U. S. A.

**Order of the King's Daughters and Sons, International** (1886), 280 Madison Ave., N. Y.; 100,000; Pres., Mrs. R. J. Reed, 100 12th St., Wheeling, W. Va.; Exec. Sec., Mrs. C. A. Menet.

**Ordine Figli d'Italia, in America**, 231 E. 14th St., N. Y.; Gr. Master, Hon. S. A. Cotillo; Gr. Rec. Sec., Chev. Ai Santo Modica; Gr. Finan. Sec., C. Amoruso.

**Organists, National Association of**, Pres., T. T. Noble, N. Y.; Sec., G. B. Nevin, Johnstown, Pa.; Treas., J. Doane, N. Y.

**Oriental Society, American** (1842), New Haven, Conn. (care Yale Univ.); 600; Pres., E. W. Hopkins; Sec., Dr. C. J. Ogden, 628 W. 114th St., N.Y.

**Ornithologists' Union, American** (1888), Philadelphia, Pa.; 1,450; Pres., Dr. W. Stone, Acad. Nat. Science, Philadelphia; Sec., Dr. T. S. Palmer, 1939 Biltmore St., N. W., Washington, D. C.

**Osteopathic Association, American** (1897), 623 S. Wabash Ave., Chicago, Ill.; 3,500; Sec., C. J. Gaddis; Bus. Mgr., R. H. McClure.

**Overseas League**, Sec., E. G. M. Plant, 44 W. 20th St., N. Y.

**Owls, Order of** (1904), South Bend, Ind.; 643,748; Sup. Pres., J. W. Talbot; Sec., F. W. Bailey.

**Pan-American Society of the U. S., Inc.** (1912), 89 Broad St., N. Y.; 800; Pres., S. Mallet-Prevost; Sec., J. S. Prince.

**Pan-Pacific Union** (1917), Honolulu, Hawaii; 30 Trustees; Dir., A. H. Ford; Exec. Sec., Dr. F. F. Bunker.

**Paper and Pulp Association, American** (1878), 18 E. 41st St., N. Y.; 400; Pres., W. J. Raybold; Sec., H. P. Baker.

**Peace Foundation, World** (1910), 40 Mt. Vernon St., Boston, Mass.; Gen. Sec., E. Cummings.

**Peace Society, American** (1828), 613 Colorado Bldg., Washington, D. C.; 2,500; Pres., Hon. A. J. Montague; Sec., A. D. Call.

**Peace Society, New York** (1910), 70 Fifth Ave., N. Y.; Pres., O. S. Straus; Sec., C. H. Levermore.

**Philatelic Society, American, Inc.** (1886), 2,400; Pres., C. F. Heyerman, Detroit, Mich.; Sec., Dr. H. A. Davis, Denver, Col.

**Philharmonic Society of New York** (1842), 721 Fisk Bldg., N. Y.; 1,000; Ch. Brd. of Dir., C. H. MacKay; Sec. and Mgr., A. Judson.

**Pilgrim Society** (1820), Plymouth, Mass.; 1,500; Pres., Hon. A. Lord; Sec., W. M. Brewster.

**Pilgrims, The** (1903). Room 204, 217 Broadway, N. Y.; 900; Pres., Hon. C. M. Depew; Sec., A. E. Gallatin.

**Pilgrims of the U. S.** (1903), 217 Broadway, N. Y.; 900; Pres., C. M. Depew; Sec., A. E. Gallatin.

**Police Chiefs, International Association of** (now International Police Conference).

**Political Science, Academy of** (1880), Columbia Univ., N. Y.; 5,100; Pres., S. M. Lindsay; Sec., P. T. Moon.

**Post Office Clerks, Nat. Federation of** (1900), A. F. of L. Bldg., Washington, D. C.; 30,000; Pres., G. E. Hyatt; Sec.-Treas., T. F. Flaherty.

**Presbyterian Church in U. S. of A., Board of Foreign Missions** (1837), 156 Fifth Ave., N. Y., 24; Pres., Rev. G. Alexander, D. D.; Sec., Rev. S. White, D. D.

**Presbyterian Church in the U. S. of A., General Assembly** (1789), Witherspoon Bldg., Philadelphia, Pa.; 1,756,918; Stated Clerk, Rev. L. S. Mudge.

**Press Association, N. J.** (1857), 357 Springfield Ave., Summit, N. J.; 185; Pres., E. A. Bristor (Passaic Daily Herald); Sec., J. W. Clift.

**Press Association, N. Y. State** (1853), Waterloo, N. Y.; 200; Pres., P. A. Blossom, Brockport, N. Y.; Sec., Elias Vair.

**Prevention of Cruelty to Animals, American Society for** (1866), 50 Madison Ave., N. Y.; 2,000; Pres., F. K. Sturgis; Sec., R. Welling.

**Prevention of Cruelty to Children, N. Y. Society for the** (1875), 2 E. 105th St.; 2,290; Pres., M. Linn Bruce; Gen. Mgr., E. K. Coulter; Sec., A. M. Crane.

**Prince Hall Masons, Gr. Lodge State of N. Y.** (1845), 165 W. 131st St., N. Y.; 5,000; Gr. Master, D. W. Parker; Sec., A. A. Schomburg, 105 Kosciusko St., Brooklyn, N. Y.

**Prison Association of N. Y.** (1846), 135 E. 15th St., N. Y.; 3,500; Gen. Sec., E. R. Cass.

**Prison Association and Home, Women's** (1845), 110 Second Ave., N. Y.; 19; Gen. Mgr., Mrs. M. B. Steinmetz; Sec., Miss J. T. Emerson.

**Prisons and Prison Labor, Nat. Commission on** (1909), 2 Rector St., N. Y.; 1,425; Pres., A. Lewisohn; Sec., J. K. Jaffray.

**Probation Association, Nat.** (1921), 370 Seventh Ave., N. Y.; 1,300; Sec., C. L. Chute.

**Professional Woman's League, Inc.** (1892), 144 W. 55th St., N. Y.; 325; Pres.. Mrs. R. Bassett; Sec., Mrs. E. P. Matthiessen.

**Prohibition Federation, World** (1909), 289 Fourth Ave., N. Y.; Pres., Rev. C. Scanlon, LL. D.; Sec., Rev C. T Wilson, D. D.

**Proportional Representation League** (1921), 1417 Locust St.. Philadelphia, Pa.; 900: Pres.. R. S. Childs; Sec., C. G. Hoag.

**Protective Tariff League, American** (1885), 137 Centre St., N. Y.; 760: Sec and Treas., W. F. Wakeman.

**P. E. Church in the U. S. A., Domestic and Foreign Missionary Society of the** (1821), 281 Fourth Ave., N. Y.: 3,500,000; Pres., Rt. Rev. T. F Gailor. D. D.: Sec., Rev. F. J. Clark.

**P. E., N. Y. City Mission Society** (1833), 38 Bleecker St., N. Y.: Pres., Bishop W. T. Manning, D. D.; Supt. Rev L. E. Sunderland; Sec., H. P. Robbins.

**Psychical Research, American Society for** (1904), 44 E. 23d St., N. Y.: 1,000; Pres., Prof. W. McDougall: Sec., Gertrude O Tubby.

**Psychological Association, American** (1892), Emerson Hall, Cambridge, Mass.; 442; Pres., Prof. K. Dunlop; Sec., Prof. E. G. Boring.

**Psychological Corp** (1921), Grand Central Terminal. 20; Pres., J. McK. Cattell; Sec., D. R. Brimhall.

**Public Health Association, American** (1918), 370 Seventh Ave., N. Y.; 4,000; Pres., Dr. E. C. Levy; Sec., A. W. Hedrich.

**Public Schools (N. Y. City) Athletic League** (1902), 157 E. 67th St., N. Y.; 875,000; Pres., Gen. G. W. Wingate; Sec., Dr. A. K. Aldinger.

**Purity Federation, World's** (1901), La Crosse, Wis.; 30,000; Pres., B. S. Steadwell; Sec., Mrs. E. H. Pratt, Chicago.

**Purity, Nat. Christian League for Promotion of** (1890), 5 E. 12th St., N. Y.; Pres., E. B. Grannis.

**Railway Business Association** (1908), 600 Liberty Bldg., Philadelphia, Pa.; 600; Pres., A. B. Johnson; Sec., F. W. Noxon.

**Railway Conductors of America, Order of** (1868), Cedar Rapids, Iowa; 60,000; Pres., L. E. Sheppard; Sec., C. E. Whitney.

**Railway Mail Association** (1898) Portsmouth N. H.; 17,000; Pres., W. M. Collins; Sec.. B. E Ross.

**Real Estate Board of New York** (1908), 7 Dey St., N. Y.; 2,000; Pres., C. G. Edwards; Sec., W. H. Dolson.

**Real Estate Boards, N. Y. State Association of** (1913), Albany, N. Y.; 2,400; Pres., Exec. Sec., M. C. Dobson.

**Red Cross, American** (1905), Washington, D. C., 4,000,000 (5,000,000 Juniors); Ch. Central Com. J. B. Payne; Sec., Mabel T. Boardman.

**Red Men, Improved Order of** (1871), N. Y.; 36,000; Great Sachem, P. H. Danner, 80 Terrace, Buffalo, N. Y.; Sec., E. J. Boyd.

**Reform Association, Nat.** (1863), 209 9th St., Pittsburgh, Pa.; 50,000; Gen. Supt., Rev. J. S. Martin; Sec., L. C. Denise.

**Reform Bureau, International** (1896), 206 Pennsylvania Ave., S. E., Washington, D. C.; 1,200; Chancellor, L. C. Clark; Supt and Treas., W. F. Crafts.

**Reformed Church in the U. S., Board of Foreign Missions** (1881), Reformed Church Bldg., 15th and Race Sts., Philadelphia, Pa.; Sec., Rev. A. R. Bartholomew, D. D.

**Reserve Officers Association** (1922), Ch., Col. J. W. Delafield; Sec., R. E. B. McKenny

**Rhodes Scholars, Alumni Association of American** (1907), Swarthmore College, Swarthmore, Pa.; 450; Pres., L. W. Cronkhite, 142 Berkeley St., Boston, Mass.; Sec., F. Aydelotte.

**Rockefeller Family Assoc.** (1920), McAlpin Hotel, N. Y.; 60; Hon. Pres., Benjamin Rockefeller, Canon City, Col.; Pres., Chas. W. Rockefeller, Sunbury, Pa.; V. P., Jno. Rockefeller, Modesto, Cal.; Sec., Dr. Henry O. Rockefeller.

**Rockefeller Foundation** (1913), 61 Broadway, N. Y.; 15; Pres., Dr. G. E. Vincent; Sec., E. R. Embree.

**Roosevelt Memorial Association** (1919), 1 Madison Ave., N. Y.; 1,000,000; Pres., W. B. Thompson; Sec., H. Hagedorn.

**Roosevelt Memorial Association, Woman's** (1919), 1 E. 57th St., N. Y.; 40,000; Pres., Mrs. J. H. Hammond; Sec., Mrs. C. A. Bryan.

**Rotary Club, of Portland** (1910), 910 S. Michigan Ave., Chicago, Ill.; 300; Pres., J. R. Ellison; Sec., W. L. Whiting.

**Rotary Clubs, International Association of** (1910), Chicago, Ill.; 82,900; Pres., R. M. Havens, Kansas City, Mo.; Sec., C. R. Perry.

**Royal Arcanum, Sup. Council** (1877), 407 Shawmut Ave., Boston, Mass.; 129,000; Sup. Regent, C. E. Hoadley; Sec., S. N. Hoag.

**Rubber Association of America, Inc.** (1900), 250 W. 57th St., N. Y.; 669; Pres., H. T. Dunn; Sec. and Gen. Mgr., A. L. Viles.

**Russell Sage Foundation** (1907), 130 E. 22d St., N. Y.; Sec. and Gen. Dir., J. M. Glenn.

**Safety Council, Nat.** (1912), 168 N. Michigan Ave., Chicago; 3,500; Exec. Sec., W. H. Cameron.

**St. David's Society of the State of New York** (1841), 289 Fourth Ave., N. Y.; 236; Pres., Dr. S. M. Evans; Sec., G. M. Lewis.

**St. George's Society of New York** (1770), 361 W. Broadway, N. Y.; 1,050; Pres., J. V. Davies; Almoner, L. D. Langley.

**Santa Claus Association, Inc.** (1914), 1 W. 34th St., N. Y.; 100,000; Ch., J. A. Flaherty; V. Ch., S. Gompers; Founder, J. D. Gluck; Sec., L. L. Mayer.

**Savings and Loan Associations, Metropolitan League of** (1890), Westerleigh, N. Y., Richmond Borough; 48; Pres., H. C. Horton; Sec., A. W. McEwan.

**Savings and Loan Associations, N. Y. State League of**; Pres., W. D. Carter; Sec., A. W. McEwan, 2161 Bathgate Ave., N. Y.

**Savings Bank Association of State of N. Y.** (1894), 56 W. 45th St., N. Y.; 140; Pres., V. A. Lersner; Sec., W. J. Reeves.

**Scenic and Historic Preservation Society, American** (1895), 154 Nassau St., N. Y.; 500; Pres., G. F. Kunz, Sc. D.; Sec., E. H. Hall, L.H.D.

**School Garden Association of New York** (1908), 124 W. 30th St., N. Y.; 7,000; Pres., Dr. G. Straubmuller.

**Science Service, Inc.**, 1115 Connecticut Ave., Washington, D. C.; Pres., W. E. Ritter; Mgr. H. Wheeler

**Sciences, The Nat. Academy of, of the U. S. A.** (1863), Smithsonian Institution, Washington, D. C.; 244; Pres., C. D. Walcott; Home Sec., C. G. Abbot; For. Sec., R. A. Millikan, Inst. of Tech., Pasadena, Cal.

**Scottish Clans, Order of** (1878), Boston, Mass.; 248 Boylston St.; 25,000; Royal Chief, A. G. Findlay; Sec., T. R. P. Gibb.

**Seismological Society of America** (1906), San Francisco, Cal.; 450; Pres., B. Willis; Sec., S. D. Townley

**Seventy-Eighth ("Lightning") Division, Veterans of World War** (1922); Hon. Pres., Major Gen., J. H. McRae; Hon. V. P., Brig. Gen. S. B. Stanbury, Columbus, Ohio, and Brig. Gen. C. T. Hearn; Pres., Lieut. Col. A. J. L'Heureux; Sec., Sgt. J. D. Muntzer, South Orange, N. J.

**Silk Association of America** (1872), 354 Fourth Ave., N. Y.; 485; Pres., J. A. Goldsmith; Sec., F. G. Barry.

**Simplified Spelling Board** (1906), 4 Emerson Hall, Harvard Univ., Cambridge, Mass.; 300; Sec., Godfrey Dewey.

**Slater Fund, John F.** (1882), 61 Broadway, N. Y.; Pres., J. H. Dillard; Sec., Miss G. E. Mann.

**Social Hygiene Association, Inc., American** (1914), 370 Seventh Ave., N. Y.; 3,000; Gen. Dir., W. F. Snow, M. D.; Sec., D. R. Hooker, M. D.

**Social Sciences, Nat. Institute of** (1912), 280 Madison Ave., N. Y.; 1,000; Pres., A. B. Fletcher, LL.D.; Sec., Rosina Hahn.

**Society of Biblical Literature and Exegesis** (1880), 7 Buckingham Place, Cambridge, Mass.; 400; Sec., H. J. Cadbury.

**Society for Promoting the Gospel Among Seamen in the Port of New York** (1818-1918), 166 Eleventh Ave., N. Y.; Pres., W. B. Isham; Sec., H. K. Fowler.

**Sons of America, Patriotic Order of** (1847), Philadelphia, Pa.; 250,000; Pres., G. H. Moyer; Sec., H. Miller.

**Sons of the Revolution** (1876), Fraunces's Tavern, 54 Pearl St., N. Y.; 2,700; Pres., R. Olyphant; Sec., H. R. Drowne.

**Sons of the American Revolution, Empire State Society** (1890), 220 Broadway, N. Y.; 1,800; Pres., G. D. Bangs; Sec., Maj. C. A. Du Bois.

**Sons of the American Revolution, Nat. Society of the** (1906), Washington, D. C.; 20,000; Pres. Gen., Major W. I. L. Adams of Montclair, N. J.; Sec. Gen., F. B. Steele of Buffalo, N. Y.

**Sons of the American Revolution, N. J. Society** (1889), 33 Lombardy St., Newark, N. J.; 1,925; Pres., Hon. A. Lyon, Sec., D. L. Pierson.

**Sons of Confederate Veterans** (1876), Memphis, Tenn.; 55,000; Com. in Chief, McDonald Lee; Adj. in Chief, Carl Heriton.

**Sons of Temperance of North America, National Division** (1842), Orillia, Ont.; 12,000 (in America); Most Worthy Patriarch, E. R. Nickerson, Shag Harbor, Nova Scotia; Sec., Theo. N. Willmot.

**Sons of Veterans, U. S. A.** (1881), The Capitol, Washington, D. C.; 54,000; Com. in Ch., C. Ireland; Sec., H. H. Hammer, Reading, Pa.

**Spanish War Veterans, United, Dept. of N. Y.** (1904), Room 7, City Hall, N. Y.; Dept. Com., C. G. Lawrence; Adj., J. J. Falls.

**Spiritualist Association, Nat.** (1893), Washington, D. C.; 600,000; Pres., G. B. Warne; Sec., G. W. Kates.

**Sponsors of U. S. Navy, Society of** (1908), 415; Pres., Mrs. R. C. Langdon, 707 University Parkway, Roland Park, Baltimore, Md.; Sec., W. S. Turpin, 1262 New Hampshire Ave., Washington, D. C.

**Steamship Owners' Association, American** (1904), 11 Broadway, N. Y.; 70; Pres., H. H. Raymond; V. P. and Gen. Mgr., W. L. Marvin.

**Sulgrave Institute** (1909), 3903 Woolworth Bldg., N. Y.; 10,000; Chancellor, A. B. Parker; Ch. Bd. Govs., J. A. Stewart; Sec., A. B. Humphrey.

**Sunday School Union, American** (1817), 1816 Chestnut St., Philadelphia, Pa.; 1,200; Pres., M. L. Finckel; Sec., W. H. Hirst.

**Sunday School Association, World's** (1907), 216 Metropolitan Tower, 1 Madison Ave., N. Y.; 30,000,000; Pres., J. Wanamaker; Ch. Exec. Com., J. W. Kinnear; Sec., W. G. Landes.

**Suppression of Vice, New York Society for the** (1873), 215 W. 22d St., N. Y.; 250; Pres., Rev. A. P. Atterbury; Sec., J. S. Sumner.

**Symphony Society of New York** (1878), 33 W. 42d St., N. Y., Pres., H. H. Flagler; Sec., R. Welling.

**Teachers, American Federation of** (1916), 166 W. Washington St., Chicago, Ill.; 6,000; Pres., C. B. Stillman; Sec., F. G. Stecker.

**Teachers' Association, N. Y. State** (1845), 617 N. Goodman St., Rochester, 18,500; Pres., J. A. De Camp, Utica; Sec., R. A. Searing.

**Teachers' Council, New York City** (1913), Hall of Bd. of Educ., 500 Park Ave., N. Y., 45; Pres., W. J. McAuliffe; Sec., F. J. Arnold.

**Temperance Society, Nat.** (1866), 289 Fourth Ave., N. Y., 100; Pres., Rev. C. Scanlon; Sec., A. R. Kimball.

**Temple Sisterhoods, Nat. Federation of** (1913), Merchants Bldg., Cincinnati, Ohio, 40,000; Pres., Mrs. J. Wiesenfeld; Sec., Mrs. B. Loewenstein.

**Theosophical Society, American Section** (1875), 826 Oakdale Ave., Chicago, Ill.; 6,000, Pres., L. W. Rogers; Sec., H. P. Martin.

**Tobacco Merchants' Association of the U. S.** (1915), 5 Beekman St., N. Y.; 1,517; Pres., J. A. Bloch; Mng. Dir., C. Dushkind.

**Toy Manufacturers of the U. S., Inc.** (1916), 200 Fifth Ave., N. Y.; 112; Sec., F. D. Dodge.

**Tract Society, American** (1841), 101 Park Ave., N. Y.; Pres., W. P. Hall; Sec., Rev. W. H. Mathews, Ph. D.

**Trade and Transportation, New York Board of** (1873), 41 Park Row, N. Y.; 740; Pres., L. Kohns; Sec., F. S. Gardner.

**Trade Union League, Women's** (1904), 247 Lexington Ave., N. Y.; 20,000; Pres., Rose Schneiderman; Sec., Mabel Leslie.

**Travelers' Aid Society, New York** (1907), 465 Lexington Ave., N. Y.; Gen. Sec., Miss V. M. Murray.

**Tree Planting Association of New York City** (1897), 100 Broadway, N. Y., 150; Pres., C. T. Terry; Sec., T. R. V. Fike.

**Tuberculosis Association, Nat.** (1904), 370 Seventh Ave., N. Y., 3,487; Pres., Dr. L. Brown; Sec., Dr. G.M. Kober; Mg. Dir., Dr. L. R. Williams.

**Tuberculosis Association, New York** (1904), 370 Seventh Ave., N. Y.; 3,600; Man. Dir., Dr. L. R. Williams.

**Twenty-Seventh Division Association** (1920), 829 Municipal Bldg., N. Y. City; 30,000; Pres., Brig. Gen., G. A. Wingate; Sec., Lieut. Col. N. Engel.

**Typographical Union No. 6, New York** (1860), Room 616, World Bldg., N. Y.; 9,000; Pres., L. H. Rouse; Sec., J. S. O'Connell.

**Typothetae of America, United** (1919), 608 S. Dearborn St., Chicago, Ill.; 5,000; Sec., E. T. Miller.

**Ulster Protestant Association,** Pres. A. E. Kelly; Secs., Geo. Lundie and W. J. Thompson.

**Underwriters of N. Y., Board of—and Nat. Board of Marine Underwriters** (Consolidated 1921), 25 S. William St., N. Y.; 43 (marine ins. co's); Pres., C. Eldert; Sec., C. Platt.

**Union of American Hebrew Congregations** (1873), Merchants' Bldg., Cincinnati, Ohio; Branch, 24 E. 21st St., N. Y.; 36,310; Pres., C. Shohl; Sec., Rabbi G. Zepin.

**Union Society of the Civil War** (1908), New York, N. Y.; 300; Pres. Gen., Thos. Ewing; Sec., W. R. Jones.

**Unitarian Ministerial Union** (1921), Quincy, Mass.; Pres., F. A. Weil; Sec.-Treas., C. R. Joy, 24 Spruce St., Dedham, Mass.

**United American Men, Nat. Council** (1845), Harrisburg, Pa.; 40,000; Nat'l Councillor, H. T. Swain, Georgetown, Del.; Sec., H. O. Holstein.

**United Mine Workers of America** (1890), Indianapolis, Ind.; 500,000; Pres., J. L. Lewis, Sec., W. Green.

**United Order of Americans** (1893), Milwaukee, Wis.; 10,000; Pres., R. C. Sherwood; Sec., G. W. Blann.

**United Press Association** (1907), 63 Park Row, N. Y.; Pres., W. H. Hawkins; Sec., R. E. Fancher.

**Universalist Gen. Convention** (1866), 176 Newbury St., Boston, Mass.; 55,000; Ch. Brd of Trustees, L. S. McCollester, D. D.; Tufts College, Mass., Sec., Rev. R. F. Etz.

**University Professors, American Association of** (1915), Cambridge, Mass. (Mass. Inst. of Technology), 4,500; Pres., Prof. J. V. Denney (Ohio State Univ.); Sec., H. W. Tyler.

**University Women, American Association of** (1882). 1634 Eye St., N. W., Washington, D. C.; 15,000; Pres., Miss Ada Comstock, Dean of Smith College; Exec. Sec., Miss Ruth French.

**Urban League, Nat.** (1913), 127 E. 23d St., N. Y.; 20,000; Pres., L. H. Wood, Exec. Sec., E. K. Jones.

**Vedanta Society** (1898), 34 W. 71st St., N. Y.; 100, Pres., E. Shaughnessy; Sec., Miss A. L. Stuart.

**Veteran Firemen's Association of New York City** (1885), 128 W. 17th St., N. Y.; 500, Pres., P. Hanlon; Sec., G. C. Reinhardt.

**Veterans of Foreign Wars of the U. S** (1899), 32 Union Sq., N. Y., 100,000, Com. in Chief, T. L. Huston; Adj. Gen., R. W. Elton.

**Volunteers of America** (1896), 34 W. 28th St., N. Y., 10,000, Pres., Gen. Ballington Booth, Sec., J. W. Merrill.

**War Mothers of N. Y. State, Nat. Amer.** (1922), 159 W. 84th St., N. Y.; 500, State War Mother, Mrs. Ida C. Goodwin; Sec., Mrs. W. S. Titus, 234 Central Park West, N. Y. C.

**War Mothers, Nat. Amer.** (1922), N. Y., Nat'l War Mother, Mrs. R. E. Digney, White Plains, N. Y., Rec. Sec., Mrs. R. Sargent, San Francisco; Cor. Sec., Mrs. J. C. Goodwin, 159 W. 84th St., N. Y. C.

**Weights and Measures, American Institute of** (1917), 115 Broadway, N. Y., 600, Pres., W. R. Ingalls, Sec., C. C. Stutz.

**West End Association of New York City** (1875), 2 Rector St., 720; Pres., A. W. Otis; Sec., A. W. McEwan, 56 Pine St., N. Y.

**Wireless Operators of America, Nat. League of** (1922), Englewood, N. J., 6,000, Sec., G. S. Wyckoff.

**Woman Suffrage Assoc., Nat Amer.,** 171 Madison Ave., N. Y. City, 2,000,000, Pres., Mrs. C. C. Catt; Sec., Mrs. F. J. Shuler.

**Women, Nat. Council of, U. S. A.** (1888), St. Louis, Mo.; 10,000,000, Pres., Mrs. P. North-Moore, 3125 Lafayette Ave., St. Louis, Sec., Mrs. M. M. North, Herndon, Va.

**Women's Christian Temperance Union, Nat.** (1874), 1730 Chicago Ave., Evanston, Ill., 500,-000; Pres., Miss A. A. Gordon, Cor. Sec., Mrs. F. P. Parks.

**Women's International League for Peace and Freedom** (1915), Room 305 Blackstone Bldg., 14th and H. Sts., Washington, D. C.; 2,500 (in U. S.); Nat. Ch., Mrs. L. B. Lewis, Sec., R. D. Du Bois. (International Section, 6 Rue du Vien, Geneva, Switzerland.)

**Women's Municipal League of City of N. Y.** (1894), 14 E. 46th St., N. Y.; 1,500; Pres., Mrs. F. D. Hodgdon; Sec., Marion B. Kelley.

**Woman's Nat. Dem. Club** (1922), Hotel Wellington, Seventh Ave. and 55th St., N. Y.; 1,500; Pres., L. R. Sire; Sec., B. E. Dalton.

**Women Voters, Nat. League of** (1922), 532 17th St., N. W., Washington, D. C.; Pres., Mrs. M. W. Park; Sec., Eliz. J. Hauser.

**Women's Relief Corps, Nat.** (1883), Des Moines, Iowa; 222,000, Nat. Pres., Mrs. M. L. Basham, 803 Euclid Ave., Des Moines, Sec., Mrs. J. I. Berry, Cedar Rapids, Iowa.

**Woodmen of the World** (1890), W. O. W. Bldg., Omaha, Neb.; 542,000, Sov. Commander, W. A. Frazer; Sec., J. T. Yates.

**Woodrow Wilson Foundation** (1922), 150 Nassau St., N. Y.; 100,000; Ch. Hon. F. D. Roosevelt; Exec. Dir., H. Holt.

**Woolen and Worsted Manufacturers, American Association of** (1905), 45 E. 17th St., N. Y.; 250; Pres., J. P. Stevens; Sec., J. J. Nevins.

**World Agriculture Soc.,** Pres., Dr. K. L. Butterfield (Pres. Mass. Agric. Col., Amherst); Exec. Sec. L. H. Parker, Amherst.

**World's Student Christian Federation** (1895), 347 Madison Ave., N. Y.; 257,000, Ch., Dr. J. R. Mott, Secs., Misses R. Rouse, S. Bidgrain, M. Wrong, Mr. H. L. Henriod, C. D. Hurrey and T. Z. Koo.

**Yellowstone Trail Association, Inc.** (1918), Minneapolis, Minn.; Gen. Mgr., H. O. Cooley; Sec., B. R. Mandel.

**Young Men's Christian Association of City of New York** (1852), 2 W. 45th St., 28,000, Gen. Sec., W. T. Diack.

**Young Men's Hebrew Association** (1874), 148 E. 92d St., N. Y.; 3,000; Pres.; Hon. I. Lehman: Sec., L. L. Levinger.

**Young Women's Christian Association, Nat. Board** (1906), 600 Lexington Ave., N. Y.; 600,-000; Pres., Mrs. R. E. Speer, Sec, Miss M. Crotty.

**Young Women's Christian Association of the U. S** (1911). 112 E. 4th St., Little Rock, Ark.; 800, Pres., Mrs. E. B. Kinsworthy, Gen. Sec., Mrs. E. C. Wicker.

**Young Women's Hebrew Association** (1902), 31 W. 110th St., N. Y. 4 800, Pres. Mrs. I. Unterberg Exec. Dir., Mrs. R. F. Schwartz; Sec., Mrs S. I. Hyman.

**Zionist Organization of America** (1920). 55 Fifth Ave., N. Y.; 35,000; Ch. Nat. Exec. Com., Louis Lipsky.

## MASONIC GRAND LODGES IN THE U. S. AND CANADA.

| STATE. | No. of Members. | Grand Secretary. | Residence of Secretary. | STATE. | No. of Members. | Grand Secretary. | Residence of Secretary. |
|---|---|---|---|---|---|---|---|
| Alabama | 46,624 | G.A. Beauchamp | Montgomery. | Nebraska | 34,647 | F. E. White | Omaha. |
| Alb'ta, Can. | 10,485 | S. Y. Taylor | Calgary. | Nevada | 2,313 | E.D.Vanderleith. | Carson City. |
| Arizona | 4,360 | G. J. Roskruge | Tucson. | N.Brunsw'k | 4,897 | J. T. Hartt | St. John. |
| Arkansas | 31,609 | Fay Hempstead. | Little Rock. | N. Hamp | 13,344 | H. M. Cheney | Concord. |
| B.Columbia | 10,112 | W.De W. Smith. | N. W'minster | New Jersey. | 62,253 | Isaac Cherry | Trenton. |
| California | 85,181 | John Whicher | S. Francisco. | N. Mexico | 4,761 | A. A Keen | Albuquerque. |
| Canada | 84,285 | W. McG. Logan. | H'milt'n,Ont. | New York | 272,634 | R. J. Kenworthy | New York. |
| Colorado | 26,242 | Wm. W. Cooper. | Denver. | N. Carolina. | 32,925 | W. W. Wilson | Raleigh. |
| Connecticut | 34,703 | Geo. A. Kies | Hartford. | N. Dakota | 13,582 | W. L. Stockwell. | Fargo. |
| Delaware | 5,375 | J. F. Robinson | Wilmington. | Nova Scotia | 8,781 | James C. Jones | Halifax. |
| Dist. of Col. | 16,306 | A. W. Johnston | Washington. | Ohio | 163,657 | J. H. Bromwell | Cincinnati. |
| Florida | 18,933 | W. P. Webster | Jacksonville. | Oklahoma | 48,432 | W. M. Anderson. | Okla. City. |
| Georgia | 62,855 | Frank F. Baker. | Macon. | Oregon | 21,112 | J. F. Robinson. | Portland. |
| Idaho | 8,203 | G. E. Knepper | Boise. | Pennsylv'ia. | 168,914 | John A. Perry | Philadelphia. |
| Illinois | 230,588 | Owen Scott | Camp Point. | Pr Edw.Isl. | 1,037 | E. T. Carbonell | Charlottet'n. |
| Indiana | 108,021 | Wm. H. Swyntz. | Indianapolis. | Quebec | 10,066 | W.W.Williamson | Montreal. |
| Iowa | 73,535 | N. R. Parvin | Cedar Rapids | Rhode Isl'd. | 14,217 | S. P. Williams | Providence. |
| Kansas | 69,150 | A. K. Wilson | Topeka. | Saskatch'an | 12,378 | W. B. Tate | Regina. |
| Kentucky | 60,021 | A. M. Woodruff. | Louisville. | S. Carolina. | 20,301 | O. F. Hart | Columbia. |
| Louisiana | 25,959 | J. A. Davilla | New Orleans. | S. Dakota | 16,460 | G. A. Pettigrew | Sioux Falls. |
| Maine | 38,499 | Chas. B. Davis. | Portland. | Tennessee | 35,570 | S. M. Cain | Nashville. |
| Manitoba | 8,756 | J. A. Ovas | Winnipeg. | Texas | 107,692 | W. B. Pearson. | Waco. |
| Maryland | 25,822 | George Cook | Baltimore. | Utah | 3,690 | S. H. Goodwin. | Salt Lake C. |
| Mass'chu'ts | 92,418 | F. W. Hamilton. | Boston. | Vermont | 17,012 | H. H. Ross | Burlington. |
| Michigan | 120,013 | Lou B. Winsor. | Grand Rapids | Virginia | 35,296 | C. A. Nesbitt | Richmond. |
| Minnesota | 51,014 | John Fishel | St. Paul. | Washington | 33,954 | H. W. Tyler | Tacoma. |
| Mississippi | 26,978 | Edw. L. Faucett. | Meridian. | W. Virginia. | 28,027 | J. M. Collins | Charleston. |
| Missouri | 100,093 | Frank R. Jesse. | St. Louis. | Wisconsin | 42,394 | W. W. Perry | Milwaukee. |
| Montana | 17,676 | Cornelius Hedges | Helena. | Wyoming | 5,986 | J. M. Lowndes. | Casper. |

Total membership—U. S., 2,592 977; Canada, 151,373; Latin America, 13,730; Australasia, 109,338; United Kingdom, 380,000; Continental Europe, 75,000.

### GRAND LODGE F. & A. M., STATE OF N. Y.

*Grand Master*—Arthur S. Tompkins, Nyack. *Deputy Grand Master*—William A. Rowan, New York. *Senior Grand Warden*—Harold J. Richardson, Lowville. *Junior Grand Warden*—Charles H. Johnson, Albany. *Grand Treasurer*—Jacob C. Klinck, Brooklyn. *Grand Secretary*—Robert Judson Kenworthy, Masonic Hall, New York City.

### UNITED GRAND LODGE OF ENGLAND, 1921-1922.

*Grand Master*—His Royal Highness the Duke of Connaught and Strathearn, K. G. *Pro-Grand Master*—Br. the Rt. Hon. Lord Amptbill, G. C. S. I., G. C. I. E. *Deputy Grand Master*—Br. Sir Frederick Halsey, Bart., P. C. *Grand Wardens*—H. R. H. the Prince of Wales, and Viscount Birkenhead, the ex-Lord Chancellor. *Grand Chaplains*—the Dean of Chester, Very Rev. F. S. M. Bennett, and Prebendary C. Bazell. *Grand Treasurer*—Seth S. Somers. *Grand Registrar*—Wm. F. Hamilton, LL. D., K. C.

## ODD FELLOWS INDEPENDENT ORDER OF.

Officers of the Sovereign Lodge: *Grand Sire*—Lucian J. Eastin, St. Joseph, Mo.; *Grand Secretary*—J. Edward Kroh, Baltimore. Total membership in the order, in the world, 2,676,582, of which 1,972,601 are males. There are 17,010 lodges, and 3,578 subordinate encampments, the latter having 350,634 members. The number of Rebekah lodges is 9,900, with a membership of 1,026.779. They are women. The total amount of relief paid out in 1921 was $7,660,354.71.

The New York State Officers are: *Grand Master*—Harold S. Arthur, 164 Sterling St., Watertown, N. Y. *Grand Secretary*—Harry Walker, 31 Union Square West, N. Y. City. Membership in the Empire State, as of Jan. 1, 1922, was 911 lodges, with 147,385 members. Rebekah lodges numbered 618. Relief paid out in the State in 1921 was $486,490.63.

## MILITARY ORDER OF THE LOYAL LEGION OF THE UNITED STATES.

*Commander in Chief*—Lieut. Gen. Nelson A. Miles, U. S. A., Washington, D. C. *Recorder in Chief*—Brevet Capt. John O. Foering, 1805 Pine St., Philadelphia, Pa.

The Military Order of the Loyal Legion of the United States was organized by officers and ex-officers of the Army, Navy and Marine Corps of the United States who took part in the war of 1861-65. Total membership of the Loyal Legion, 5,407, as of April 30, 1922.

### ROLL OF COMMANDERIES, OCTOBER 1, 1922.

| No. | Commandery of the— | H'dqua'ters. | Instituted. | Recorder. | Address. |
|---|---|---|---|---|---|
| 1 | State of Pa | Philadelphia | Apr. 15, 1865 | Brevet Captain John O. Foering | 1805 Pine St., Philadelphia. |
| 2 | State of N. Y. | N. Y. City. | Jan. 17, 1866 | Brevet Lieut.-Col. W. S. Cogswell | 140 Nassau St., New York. |
| 3 | State of Me | Portland | Apr. 25, 1866 | John F. Dana | 57 Exchange St., Portland. |
| 4 | State of Mass. | Boston | Mar. 4, 1868 | Capt. Chas. W. C. Rhoades | Cadet Armory, Boston. |
| 5 | State of Cal | S. Francisco. | Apr. 12, 1871 | Col. William C. Alberger | 74 New Montg'm'y St., S.F. |
| 6 | State of Wis. | Milwaukee. | May 15, 1874 | Act.Asst.P'ym'ster J.W.Meacham | Enterprise Bldg., Milw'kee |
| 7 | State of Ill | Chicago | May 8, 1879 | Lieut.-Col. George V. Lauman | 320 Ashland Bk., Chicago. |
| 8 | Dist. of Col. | Washington. | Feb. 1, 1882 | Grahame H. Powell | Kellogg Bldg., Washington. |
| 9 | State of Ohio | Cincinnati | May 3, 1882 | Capt. John M. Blair | Masonic Temple. Cin'nati. |
| 10 | State of Mich. | Detroit | Feb. 4, 1885 | Brig.-Gen. Chas. A. Coolidge | Memorial Hall Bg., Detroit |
| 11 | State of Minn. | St. Paul | May 6, 1885 | First Lieut. S. H. Towler | Minn.Soldiers' Home, Mpls |
| 12 | State of Ore. | Portland | May 6, 1885 | First Lieut. Joseph E. Hall | Ainsworth Bldg., Portland. |
| 13 | State of Mo. | St. Louis | Oct. 21, 1885 | Capt. W. F. Henry | Temple Bldg., St. Louis. |
| 14 | State of Neb. | Omaha | Oct. 21, 1885 | First Lieut. Frank B. Bryant | 625 N. 41st Ave., Omaha. |
| 15 | State of Kan. | Leavenw'th. | Apr. 22, 1886 | Capt. John T. Taylor | Wulfekuhler Bk.Bg., L'w'th |
| 16 | State of Iowa | Des Moines. | Oct. 20, 1886 | Brevet Capt. Elbridge D. Hadley | 222 Youngerman Bk.,D.M. |
| 17 | State of Col. | Denver | June 1, 1887 | Lieut. Wm. H. Whitehead | Kittredge Bldg., Denver. |
| 18 | State of Ind. | Indianapolis | Oct. 17, 1888 | R. Carl Scott | 55 & 56 When Bldg., Ind's. |
| 19 | State of Wash. | Seattle | Jan. 14, 1891 | Capt. Horton C. Force | 1212 Hoge Bldg., Seattle. |
| 20 | State of Vt. | Burlington | Oct. 14, 1891 | Capt. H. S. Howard | Stannard Mem. Hall, Burl. |
| 21 | State of Md. | Baltimore | Dec. 8, 1904 | Edwin C. Irelan | 508 Md.Casualty Bg., Balt. |

## THE KNIGHTS OF COLUMBUS.

(By John B. Kennedy of K. of C. Headquarters.)

The Knights of Columbus—the leading Catholic laymen's organization in the world—was founded by Rev. M. J. McGivney in 1882 in St. Mary's parish, New Haven, Conn. From an original membership of eleven it grew from city to city in Connecticut and then from State to State and beyond national boundaries, until its membership is more than 800,000, and it operates in the United States and its possessions, in Canada, Newfoundland, Mexico and Cuba. It has more than 2,000 councils, many of which own club buildings and are governed by State jurisdictions, of which there are 55, and by a Supreme Council, composed of elected State representatives, while executive power is vested in a board of directors. The primary object of the Knights of Columbus is to associate Catholic men for religious and civic usefulness. There are four degrees of membership, none of which has any secret or oathbound stipulation—the competent ecclesiastical and civic authorities being empowered to demand and receive the degree work of the order.

The Knights have maintained since their inception an insurance feature for members. Insurance on members now in force approximates $250,000,000. The solvency of the order, as measured by actuarial standards, is over 126 per cent. Non-insurance members are associates. The order was originally made up of only insurance members. Previous to their emergence into general public notice as an agency of war welfare work the Knights had done educational and social work. They founded the first chair of American history in this country—at the Catholic University, Washington—and they endowed the same university with $500,000 for fifty scholarships in perpetuity. State and local councils also supported educational and social work. The Knights aided the victims of many catastrophes.

An important work of the Knights has been their nine-year fight against extreme radicalism through the medium of public forums. Lecturers have been sent through the country to combat materialistic Socialism. This work has met with success and is being continued. The K. of C. first entered war welfare work in the Spanish-American War. When the war with Germany started they raised $1,500,000 among their members and began at the cantonments at home. Later, on Gen. Pershing's invitation, the Knights went overseas and there, as well as at home, supported by a fund of $14,000,000 donated by people of all classes, they carried on an intensive and extensive work.

In all, the Knights received approximately $40,000,000 from the American people. With the balance remaining at the conclusion of active war work, they financed a Nation-wide chain of employment bureaus, finding work for 500,000 former service men at a minimum wage of $20 per week; they awarded 416 free college scholarships to former service men in institutions like Yale and Georgetown, and inaugurated a Nation-wide chain of free night schools for service men and women, with nominal charges for civilians. These schools graduated over 40,000 pupils last year. There are more than 100 of them in operation teaching technical, business and elitzenship courses. The balance of the war camp fund on hand is for use in continuing the educational work in hand and in conducting hospital relief work for the ex-service men in the public health service hospitals, the Knights of Columbus having been specially designated to co-operate with the Red Cross in providing for the comfort and entertainment of these men for whom the war is not yet over.

The most recent national activities of the Knights of Columbus have been the conduct of an American history movement for the improvement of history teaching, in which the K. of C. offered prizes in a monograph contest, both prizes being won by non-Catholics; the institution of the K. of C. National Correspondence School at New Haven for war veterans of America, which in its first year of existence enrolled 35,000 men in 30 free technical and clerical courses, and the expansion of K. of C. hospitalization service so that in 411 hospitals, 165 K. of C. workers, all of war experience, serve some 29,000 war veterans in the same manner in which they were served overseas.

In round figures, the Knights are spending at the rate of $2,500,000 per year in behalf of the American war veterans.

## ELKS, BENEVOLENT AND PROTECTIVE ORDER OF.

Grand Lodge officers (elected at Atlantic City, N. J., July 11, 1922)—*Grand Exalted Ruler*—J. Edgar Masters, Charlerol, Pa. *Grand Esteemed Leading Knight*—Frederick A. Morris, Mexico, Mo. *Grand Esteemed Loyal Knight*—Harry A. Ticknor, Pasadena, Cal. *Grand Esteemed Lecturing Knight*—Fred O. Nuetzel, Louisville, Ky. *Grand Secretary*—Fred C. Robinson, Congress Hotel, Chicago. *Grand Treasurer*—P. J. Brennan, Denison, Tex. *Grand Trustee* (five-year term)—Robert A. Scott, Linton, Ind. *Grand Tiler*—Clement Scott, Vancouver, Wash. *Grand Inner Guard*—Albert E. Hill, Spartanburg, S. C.

The Elks Support Fund has provided vocational training, at a cost of $69,000 to 106 disabled American boys. The total receipts of the W.r Relief Commission, June 5, 1920, to June 15, 1921, were $428,010; disbursements, $191,734. The membership, as of July 1, 1922, was approximately 850,000. Members by States, as of April 1, 1922—Guam, 189; Ala., 3,206; Alaska, 1,502; Ark., 6,518; Ariz., 7,711; Cal., 49,995; Canal Zone, 185; Col., 21,165; Conn., 14,977; N. Dak., 6,623; S. Dak., 9,336; Del., 1,055; Dist. of Col., 2,674; Fla., 5,552; Ga., 5,097; Hawaii, 1,191; Idaho, 9,002; Ill., 47,103; Ind., 28,780; Iowa, 21,336; Kan., 15,748; Ky., 10,388; La., 14,730; Me., 3,985; Md., 4,018; Mass., 36,633; Mich. 31,037; Minn., 18,569; Miss., 4,500; Mo., 15,447; Mont., 8,415; Neb., 13,192; Nev., 2,920; N. H., 5,131; N. J., 37,837; N. Y., 70,862; N. Mex., 3,395; N. C., 14,326; Ohio, 49,066; Okla., 13,063; Ore., 17,653; Pa., 66,793; Philippines, 629; Porto Rico, 304; R. I., 5,728; S. C., 2,213; Tex., 22,602; Tenn., 6,006; Utah, 4,840; Vt., 2,109; Va., 8,157; Wash., 31,487; W. Va., 11,275; Wis., 22,084; Wyo., 4,318. The largest lodge is No. 22, Brooklyn, 10,328 members.

Disbursements for charity in the last three years: (1919) $1,258,560; (1920) $1,566,234; (1921) $2,044,218.

## THE SALVATION ARMY.

(Prepared by That Organization).

National headquarters, 122 West 14th Street, New York City.

In 1920 the United States branch of the movement underwent a thorough reorganization. Three territories were created, with headquarters respectively in New York, Chicago and San Francisco. Separate editions of the War Cry were published in each territory. Commander Evangeline Booth was, up to the time of going to press, in general charge of the work in the entire country.

International officials—William Bramwell Booth eldest son of the founder of the Salvation Army, is General of the entire organization, the international headquarters being in London, England. His wife, Mrs. Bramwell Booth, has charge of the work in the British Isles. Next in rank comes Commissioner Edward J. Higgins, Chief of the Staff, who some years ago was Chief Secretary for the work in the United States of America.

### DOMESTIC STATISTICS.

The Salvation Army in the United States has (as of year ending Sept. 30, 1921) 1,117 corps and outposts, 3,728 officers and cadets, 67 hotels for men, 2 for women and 11 boarding houses for young women, with total accommodation, 7,386; beds supplied, 1,711,118, meals supplied 704,819; 88 industrial homes with accommodations for 2,103 and 1,714,505 meals and 529,437 beds supplied; 6 children's homes, with accommodations for 670, and 206,600 beds and 634,123 meals supplied; 12 slum posts and nurseries, with 76,615 children sheltered in a year; 23 rescue homes and maternity hospitals, with accommodations for 1,709, and 4,393 girls and 2,491 children admitted; Christmas dinners for 293,171, and toys for 108,846 children; 1,383,943 persons afforded temporary relief outside industrial homes and hospitals; outside employment found for 27,310 men and 8,089 women; 336,478 lbs. of ice and 3,274,591 lbs. of coal distributed.

### INTERNATIONAL STATISTICS.

(Year ending December 31, 1921.)

Countries and colonies occupied. 73; languages in which Gospel is preached, 46; corps and outposts, 12,211; social institutions, 1,286; day schools, 752; naval and military homes, 35; officers and cadets engaged in social work, 3,697; persons without rank employed wholly in S. A. work, 5,941, local officers (senior and junior), 74,469; bandsmen (senior) 26,017, bandsmen, (junior) 7,419, songsters, 30,943, corps cadets, 18,846; periodicals issued, 83; total copies per issue, 1,461,880.

## YOUNG MEN'S CHRISTIAN ASSOCIATIONS OF NORTH AMERICA.

General offices, 347 Madison Avenue, New York City. Officers: *Chairman*—Alfred E. Marling *Vice Chairmen*—James W. Specrs, Roger H. Williams, William D. Murray, Abner Kingman. *Treasurer*—B. H. Fancher. *General Secretary*—John R Mott. *Consulting General Secretary*—Richard C Morse The International Committee was incorporated April 16, 1883. It is now composed of an authorized membership of 200 representative business men scattered throughout North America It is the agent of the International Convention of Young Men's Christian Associations, charged with encouraging, promoting and supervising Christian welfare work among men and boys

The International Committee in its organization includes the Home Division with its five regions and eleven departments its Foreign Division and its continued work among soldiers in warring countries where armies are not yet done away with

Forty-two State Committees and the National Council of Canada, co-operating with both the local and international work, maintain closer relations with the local associations in the States and Provinces of North America. These State organizations have 196 secretaries, $1,319,000 of association property and promote the State-wide interests of the movement.

Under the combined co-operative interests of the General Agencies of Supervision there are (Sept. 1, 1922) 1,978 local associations and specific organizations: 5 464 employed officers: 95 795 committeemen, directors and volunteer leaders: 883,169 members, of which 228,860 are boys. The net property of the movement, including State work and international, is $150.400,000' total contributions from friends toward the operating expenditures of the movement $11,551.100, and total operating expenditures of the movement. $47.682,400. These figures do not include any war work data. The service of the association to men and boys includes a great variety of activities among the more important of which are 69 892 socials and entertainments: 67,922 more or less permanent positions found for men: over 56,000 beds in Y dormitories used by men over 15,000,000 times during the year, 68,556 men and boys in Y summer camps, 1,679 industrial plants served physically, educationally, and otherwise. 14,000 foreign-born men taught to speak and write English, and 13,000 trained in citizenship, 110 639 in regular standard educational classes· 303 434 men and boys in regular gymnasium classes: 201 182 enrolled in the regular Bible study classes; over 8 000. 000 attending definite religious meetings; 37,131 decisions for the Christian life and 11,664 united with the church of their choice.

The foreign work of the North American associations has been brought more helpfully than ever under more careful review. It includes work in 21 different countries where at the expense of the North American associations, secretaries from North America are allocated to aid in the development of both the national work of a country like China, as well as in the local associations of such country. In this foreign wor there are 357 different associations with 767 employed officers 214 of which are from America and the rest native; 15,905 members with correspondingly large social physical educational and religious activities. Among the most notable gatherings on the foreign field the past year was that of the World's Student Christian Federation at Peking, attended by over 800 delegates from 32 nations. The $4,000,000 foreign association building programme which was interrupted by the great war, has been resumed, and. it is hoped, will soon be carried to a successful issue.

While the Armistice was signed over 4 years ago, yet large areas overseas are still in war conditions. The National War Work Council was dissolved in March, 1922, after it had passed the remaining part of its work over to a special group of the International Committee. There are still a number of American workers in charge of the association welfare work among from 1,000,000 to 1,500,000 men in such countries as Poland, Greece, Turkey, Italy, Czecho-Slovakia. The reducing process of this war work is being made as fast as possible. Less than a dozen American secretaries are left in connection with the A. F. G. on the Rhine.

## YOUNG MEN'S CHRISTIAN ASSOCIATIONS OF THE STATE OF NEW YORK.

The State Executive Committee of the Young Men's Christian Associations of the State of New York has its general office at 2 West 45th Street, Room 1001, New York City *Chairman*—William M. Kingsley *Treasurer*—Samuel Woolverton. *State Secretaries*—Frank W Pearsall and Fred I. Eldridge. This committee was incorporated under the laws of New York, April 14, 1886. Included in the regular activities the State Committee owns and operates Camp Dudley at Westport-on-Lake Champlain as a summer camp for boys. The membership in the State is 101,940, divided as follows: *General*, 80,507, of which 18,400 are boys; railroad, 17,031; student, 2,245; county and small town, 1,252; colored, 766. Property holdings and funds paid in amount to $21,296,635. A meeting of the State association comprising the 171 associations in the State, is held in February.

## YOUNG MEN'S CHRISTIAN ASSOCIATION OF THE CITY OF NEW YORK.

General office, 2 West 45th Street Room 1402, New York City. Officers: *President*—William M. Kingsley *Treasurer*—Cleveland E. Dodge. *General Secretary*—Walter T. Diack. *Comptroller*—Henry M. Orne. The association maintains work for men and boys at 37 points· 19 general, 9 student, 5 railroad, 1 merchant seamen's and 3 army. Branches of the association: 1 Twenty-third Street, 215 West 23d Street. 2 West Side, 318 West 57th Street 3. Harlem. 5 West 125th Street. 4. East Side, 153 East 86th Street. 5. Institute, 222 Bowery near Prince Street 6. Washington Heights, temporarily without a building. 7. Bronx Union, 470 East 161st Street, corner Washington Avenue. 8. Intercollegiate. office 2 West 45th Street. 9 French, 109 West 54th Street. 10. Army, Forts Jay and Slocum, office 2 West 45th Street. (Work also for sailors, National Guard, and soldiers in hospitals) 11. West 135th Street. for colored men, 181 West 135th Street 12. Bowery, 8 East Third Street, near the Bowery. 13. Railroad, New York Central and New Haven Lines, 309 Park Avenue, corner 49th Street. West 72d Street and North River; Mott Haven, 179 East 150th Street, and New Durham, N. J., Railroad Men's Building. 14. Railroad, Pennsylvania Railroad, Eighth Avenue and 32d Street. 15. Merchant Seamen's, 525 West 23d Street.

College associations affiliated with the Intercollegiate Branch: Club House, 346 West 57th Street. Rooms for medical students at 410 East 26th Street. Office, 2 West 45th Street. 1. College of the City of New York. 2. College of Physicians and Surgeons. 3. Columbia University. 4. Cornell University Medical College. 5. New York University. 6. Union Theological Seminary. 7. University and Bellevue Hospital Medical College.

The total membership of the city is 380,389, including 3,143 boys. There are 917 employees, including 191 paid teachers. There are 14,843 gymnasium members, and 8,726 physical examinations were given. 3,062 members served on committees. 8 819 students in evening educational classes, 173,-500 books drawn from libraries, lodgings furnished, 809,149, 2,329,106 meals supplied, 7,660 situations secured, 4,553 religious meetings attended by 380.-389, sleeping accommodations for 2,202 and men directed to rooms outside of buildings, 10,878.

## THE NATIONAL HEALTH COUNCIL.

The National Health Council is an organization composed of the ten leading national voluntary health agencies of this country, together with the United States Public Health Service as a conference member.

The members are as follows: American Public Health Association American Red Cross. American Social Hygiene Association American Society for the Control of Cancer, Conference of State and Provincial Health Authorities of North America, Council on Health and Public Instruction of the American Medical Association. National Child Health Council National Committee for Mental Hygiene. National Organization for Public Health Nursing, National Tuberculosis Association, United States Public Health Service (conference member).

The officers of the council are: Chairman, Dr. Livingston Farrand; Vice Chairman, Dr. L. K. Frankel; Recording Secretary, Dr. S. J. Crumbine; Treasurer, Dr. Wm. F. Snow; Executive Officer, Dr. H. B. Armstrong.

Each member organization elects a representative and alternate to serve on the council. The Surgeon General represents the United States Public Health Service.

The American Child Health Association and the National Child Labor Committee are indirectly members through their affiliation with the National Child Health Council.

## YOUNG WOMEN'S CHRISTIAN ASSOCIATION OF THE U. S. OF AMERICA.

(Contributed by that organization.)

THE purpose of the Young Women's Christian Association is to advance the physical, social, intellectual and spiritual interest of young women, and to promote growth in Christian character and service, and to become a social force for the extension of the Kingdom of God. The Convention is held biennially in April. The officers of the Association are: President, Mrs. Paist, of Philadelphia, Pa.; Vice-Presidents, Mrs. John Hanna, of Dallas, Texas; Mrs. C. R. Wilson, of Detroit, Mich.; Secretaries, Mrs. E. B. Kinsworthy, of Little Rock, Ark., and Miss Marjorie Collier, of Colorado College.

The National Board of the Young Women's Christian Associations is the Executive Committee of the organization, to which the work of the organization is intrusted during the interim of conventions. The officers of the National Board are: President, Mrs. Robert E. Speer; Chairman of the Executive Committee, Mrs. John French; Secretary, Miss Katharine Lambert; Treasurer, Mrs. Samuel J. Broadwell. The General Secretary is Miss Mabel Cratty. It operates through its headquarters and five regional offices. The headquarters building and National Training School are located at 600 Lexington Ave., New York City. The regional offices are in New York; St. Louis, Mo.; Chicago, Ill.; Denver, Col.; San Francisco, Cal.; Atlanta, Ga.

The National Board of the Young Women's Christian Associations interests itself in the city, student, town and country Associations throughout the United States and its territories, and through its Foreign and Overseas Department. It works with other members of the World's Committee of the Young Women's Christian Association in carrying on Association work for the women and girls in Europe, the Near East, the Orient, and South America. Work in the Oriental countries is undertaken by the Association only upon the invitation of the Mission Boards already working in the country. At present work is being carried on under this department in fifteen countries, with a staff of 224 Secretaries.

### THE Y. W. C. A. IN THE UNITED STATES.

There are in the United States 1,152 affiliated Young Women's Christian Associations, with 280 branches. The Young Women's Christian Association of the United States has a membership of 584,000, real property amounting to over $25,000,000, and gross budgets of local Associations, approximately, for 1921, of $22,000,000, about 75 per cent. of which is met by earnings from cafeterias, boarding homes, etc. The National Board during 1921 expended upon its regular work $2,679,245, of which $299,821 was for promoting work in China, Japan, India and South America. The National Board has endowment yielding, approximately, $100,000 annually and income producing features which in 1921 brought in $813,524. Contributions from Associations and individuals totalled $1,242,872.

Under the Continuation Committee of the National War Work Council there was still going on during 1921 certain war work of post-war significance, financed by the balance of sums originally appropriated for this work from war work funds.

### THE Y. W. C. A. IN NEW YORK CITY.

It has in New York City thirteen Association residences, offering comfortable, clean and "homey" rooms at a moderate price. These have 1,114 beds and during 1921, 27,479 girls were housed; 6,186 known placements were made through the Young Women's Christian Association room registry service during the year 1921. There are eleven cafeterias and dining rooms, including those connected with the residences, which furnish wholesome, inexpensive food. Young Women's Christian Association Bureaus for Employment and Vocational Advice in 1921 placed 13,070 girls in positions; 10,665 girls attended Young Women's Christian Association educational classes covering more than forty-five subjects as varied as stenography, Spanish, domestic science and costume designing; foreign-born women and girls of sixty nationalities availed themselves of the service of the baby clinics and employment departments and joined language classes and recreational activities of International Institutes. Attendance in gymnasium classes was 31,970; total swimming pool attendance, 101,631; total attendance at religious service, 103,931.

Officers of the Metropolitan Board: President, Mrs. William Fellowes Morgan; First Vice-President, Mrs. William W. Rossiter; Second Vice-President, Mrs. Dwight Morrow; Secretary, Mrs. William Sloane Coffin; Treasurer, Mrs. William Henry Hays; Assistant Treasurer, Mrs. Warren A. Ransom; Chairman of Finance, Mrs. E. P. Townsend.

## THE AMERICAN LEGION.

(National Headquarters, Indianapolis, Indiana.)

The American Legion, composed of men and women who served honorably in the armed forces of the United States in the World War, was organized in Paris, France, in 1919. The 1922 convention was held at New Orleans, Oct. 16-20.

### NATIONAL OFFICERS.

*Commander*—Alvin Owsley, Denton, Tex. *Vice Commanders*—Edward J. Barrett Sheboygan, Wis.; Watson B. Miller, Washington, D. C.; E. Erle Cocke, Dawson, Ga.; Robert O. Blood, Concord, N. H.; C. P. Plummer, Casper, Wyo. *Chaplain*—Father William P. O'Connor, Cincinnati, O. *Adjutant*—Lemuel Bolles, Indianapolis, Ind. *Treasurer*—Robert H. Tyndall, Indianapolis, Ind. *Judge Advocate*—Robert A. Adams, Indianapolis, Ind. *Historian*—Eben Putnam, Wellesley Farms, Mass. *Assistant Adjutant*—Russell G. Creviston, Indianapolis, Ind.

Among the distinguished guests of the Legion at the convention were: Gen. John J. Pershing, Kenesaw Mountain Landis, Samuel Gompers, Charles Bertrand, member of the Chamber of Deputies, Paris, France, and President of the Inter-allied Veterans' Federation; Major J. B. Brunnell Cohen, representing the British Legion; Gen. James Dinkins, Assistant Adjutant of the United Confederate Veterans; Gen. E. K. Russ, National Vice-Commander-in-Chief of the Grand Army of the Republic; M. Reni-Mel, France; Admiral Magruder, U. S. N. There were Legion delegates not only from every State in the Union, but from Argentina, Brazil, Great Britain, Chile, China, Cuba, Guatemala, India, Japan, New Zealand, Porto Rico, Portuguese West Africa, Venezuela, Panama, and Mexico.

Among the resolutions adopted by the Legion in the convention was one that the American Legion stand for the carrying out of its obligations to the disabled of war and that should another war arise "when the American people are aware of the extent of war profiteering, a national determination will have developed that in any future war there shall be a draft not only of service men, but of the laboring man and capitalist as well. Had there been such a draft, the fundamental basis of adjusted compensation now temporarily thwarted by executive action would never have arisen."

### THE AMERICAN LEGION AUXILIARY—NATIONAL BODY.

The following officers were elected by the second annual convention of the American Legion Auxiliary at New Orleans: *President*—Dr. Kate Waller Barrett, Alexandria, La.; *Vice Presidents*—Mrs. Frank E. Fleming, Augusta, Ga.; Mrs. Flora Spaulding, Manchester, N. H.; Mrs. Margaret Simon, Denver, Col; Mrs. Jennie R. Neeley, Tacoma, Wash.; Mrs. Donald McCrae, Jr., Council Bluffs, Ia. *Secretary*—Katherine R. Lewis, Indianapolis, Ind. *Treasurer*—Miss M. I. McCoy, Topeka, Kan. *Historian*—Mrs. Belle Nye, Albuquerque, N. M. *Chaplain*—Mrs. F. O. Burdick, Wichita Falls, Tex.

### AMERICAN LEGION AUXILIARY—N. Y. STATE BODY.

*President*—Mrs. William G. Keens, Albany, N. Y.; *Secretary*—Mrs. Arthur A. Ransom, Hall of Records, New York City; *Executive Committeewoman*—Mrs. William G. Keens, Albany.

(Note: For other officers communicate with Mrs. Arthur A. Ransom, Hall of Records, New York City.)

### THE AMERICAN LEGION—DEPARTMENT OF NEW YORK.

Officers: *Commander*—Albert S. Callan, Chatham, N. Y.; *Vice Commander*—C. W. A. Cannon, Richmond Hill, L. I., N. Y.; *Adjutant*—John R. Schwartz, 305, Hall of Records, New York City, N. Y.; *National Executive Committeeman*—F. B. McLean, Binghamton, N. Y.; *Finance Officer*—William T. Huise, Westhampton Beach, L. I., N. Y.; *Chaplain*—Rev. Arthur A. LeMay, Soldiers and Sailors' Home, Bath, N. Y.; *Service Officer*—Carl W. Sudhoff, 302, Hall of Records, New York City, N. Y.

(Note: For district and county Chairmen communicate with John R. Schwartz, Adjutant, 305, Hall of Records, New York City.)

## NATIONAL GRANGE, PATRONS OF HUSBANDRY.

*Master*—S. J. Lowell, Fredonia, N. Y. *Secretary*—C. M. Freeman, Tippecanoe City, Ohio. Washington, D. C., Office, 630 Louisiana Avenue, N. W., T. C. Atkeson in charge.

OFFICERS OF STATE GRANGES.

MASTERS.

California, Geo. R Harrison, Sebastopol.
Colorado, John Morris, Golden.
Connecticut, Allen B. Cook, Niantic.
Delaware. Jacob Roosa, Milford.
Idaho, W. W Deal, Nampa.
Illinois, E. A. Eckert, Mascoutah.
Indiana, Jesse Newson, Columbus, R. 10.
Iowa, A. B Judson, Balfour.
Kansas, B. Needham, Lane.
Kentucky, Thos. Urmston, Cynthiana.
Maine, W. J. Thompson, South China.
Maryland, B. John Black, Roslyn.
Massachusetts. E. H. Gilbert, Walpole.
Michigan, A. B. Cook, Owosso.
Minnesota, R. W. Roberts, Austin.
Missouri, C. O. Raine, Hayti.
Montana, Clark Bumgarner, Fife.
Nebraska, Geo. Bischel, Kearney.
New Hampshire, Herbert N. Sawyer, Atkinson.
New Jersey, David H. Agans, Three Bridges.
New York, Albert Manning, Otisville.
North Dakota, T. M. Williams, Des Lacs.
Ohio, Harry A. Caton, Fresno.
Oklahoma, A. E. Geer, Lamont.
Oregon, C. E. Spence, Oregon City, R. F. D. 3.
Pennsylvania, John A. McSparran, Furniss.
Rhode Island, C. Palmer Chapman, Westerly.
South Dakota, W H. Hutchinson, White.
Vermont, O. L. Martin, Plainfield.
Washington, A. S. Goss, Maynard Bldg., Seattle.
West Virginia, H. E. Williams, Trout.
Wisconsin, Herman Ihde, Neenah.
Wyoming, C. H. Peake, Douglas.

SECRETARIES.

California, Mrs. Martha L. Gamble, Santa Rosa.
Colorado, Rudolph Johnson, Boulder
Connecticut, Ard. Welton, Plymouth.
Delaware, Wesley Webb, Dover.
Idaho, Ferrin G. Harland, Payette.
Illinois, Miss Jeannette E. Yates, Dunlap.
Indiana, W. R. Gant, Columbus, R. 10.
Iowa, Mrs. Mary E. Lawson, Oakland, R. 2.
Kansas, A. E. Wedd, Lenexa.
Kentucky, Mrs. O. C. Hafer, Hebron.
Maine, E. H. Libby, Auburn.
Maryland, Mrs. Elizabeth O. Jean, Woodlawn.
Massachusetts, Wm. N. Howard, No. Easton.
Michigan, Miss Jennie Buell. Ann Arbor.
Minnesota, Mrs. John Herzog, Austin.
Missouri, Miss Lulu Fuqua, Hannibal.
Montana, Mrs. P. J. Anderson, Conrad.
Nebraska, Thos. A. Hodson, Gothenburg.
New Hampshire, George R. Drake, Manchester.
New Jersey, Mrs. Mary Brown, Swedesboro.
New York, F. J. Riley, Sennett.
North Dakota, Mrs. Fannie Koester, Beulah.
Ohio, W. G. Vandenbark, Zanesville, R. F. D.
Oklahoma, W. C. Gillespie, Oklahoma City.
Oregon, Miss Bertha Beck, Albany, R. No. 3.
Pennsylvania, Fred Brenckman, Harrisburg.
Rhode Island, Mrs. C. L. Chase, Newport, Box 494.
South Dakota, C. W. Amesden, Millbank.
Vermont, A. A. Priest, Randolph.
Washington, F. W. Lewis, Tumwater.
West Virginia, F. M. Brown, Pliny.
Wisconsin, J. G. Seyfert, Eagle River.
Wyoming, Miss Margaret Bundy, Hillsdale, Box 157.

## THE FEDERAL COUNCIL OF THE CHURCHES OF CHRIST IN AMERICA.

The Federal Council of the Churches of Christ in America was established in 1908 by the official action of thirty Protestant denominations in the United States to represent them and act for them in matters of common interest. The bodies thus composing the Federal Council are:

Baptist Churches, North; National Baptist Convention; Free Baptist Churches; Christian Church: Christian Reformed Church in North America; Churches of God in N. A. (General Eldership); Congregational Churches; Disciples of Christ; Friends; Evangelical Synod of N. A : Evangelical Association; Methodist Episcopal Church; Methodist Episcopal Church, South; African M. E. Church; African M. E. Zion Church; Colored M. E. Church in America; Methodist Protestant Church; Moravian Church; Presbyterian Church in the U. S. A.; Presbyterian Church in the U. S. (South); Primitive Methodist Church; Protestant Episcopal Commissions on Christian Unity and Social Service; Reformed Church in America; Reformed Church in the U. S.; Reformed Episcopal Church; Reformed Presbyterian Church, General Synod; Seventh Day Baptist Churches; United Brethren Church; United Evangelical Church; United Presbyterian Church; United Lutheran Church (consultative member).

The work of the Federal Council is carried on through several important commissions, interdenominational in membership, dealing with various fields of the churches' interest. Through the Commission on Evangelism the evangelistic agencies of the various denominations co-operate in organizing united evangelistic efforts by the churches in communities throughout the country. The Commission on the Church and Social Service carries on extensive educational and research work concerning the church and social questions, particularly emphasizing better industrial relations and organizing conferences between churches and representatives of employers and labor to promote co-operation and a Christian spirit in industry. The Commission on International Justice and Goodwill is pursuing a vigorous programme in behalf of Christian internationalism, stressing at the present time a campaign for the reduction of armament and better relations with the Orient. The Commission on Councils of Churches is responsible for organizing and developing local federations or councils of churches in the larger communities, with a view of making the churches more effective forces in the community life. Among the important developments of the past year were the creation of the Commission on the Church and Race Relations, for the purpose of working for co-operation between the white and the Negro races in securing better conditions for the Negro people; and the establishment of the Committee on Mercy and Relief, as a central agency of the churches in the relief of the Russian famine and other similar appeals. Other important Commissions deal with Christian Education, Temperance, Relations with France and Belgium and Relations with Religious Bodies in Europe.

The Central Office of the Council is at 105 East 22d Street, New York City. Offices are also maintained in the Woodward Building, Washington, D. C., and at 19 South La Salle Street, Chicago, Ill. The officers of the Council are: *President*, Robert E. Speer; *Treasurer*, Alfred R. Kimball; *General Secretaries*, Charles S. Macfarland and Samuel M. Cavert. The officers and secretaries of the Commissions are as follows: On *Evangelism and Life Service*, Rev. J. Ross Stevenson, Chairman; Rev. Charles L. Goodell, Executive Secretary; on *Christian Education*, Rev. William Adams Brown, Chairman; on the *Church and Social Service*, Shelby M. Harrison, Acting Chairman; Rev. Worth M. Tippy, Executive Secretary; Rev. F. Ernest Johnson, Research Secretary; on the *Church and Race Relqtions*, John J. Eagan, Chairman, Dr. George E. Haynes and Rev. W. W. Alexander, Executive Secretaries; on *Temperance*, Carl E. Milliken, Chairman; on *International Justice and Goodwill*, Dr. John H. Finley, Chairman; Rev. Sidney L. Gulick, Secretary; on *Relations with France and Belgium*, William Sloane Coffin, Chairman; on *Relations with Religious Bodies in Europe*, Bishop James Cannon, Jr., Chairman; on *Councils of Churches*, Fred B. Smith, Chairman; Rev. Roy B. Guild, Executive Secretary.

## MOOSE, LOYAL ORDER OF.

*Director General*—James J. Davis, Washington, D. C. *Supreme Dictator*—Hon. T. W. Pierson, New Orleans, La. *Supreme Secretary*—Rodney H. Brandon, Mooseheart, Ill. Instituted 1888. Lodges, 1,669; members, Loyal Order of Moose, 558,057; women of Mooseheart Legion, 32,570; Junior Order of Moose, 5,178; total, 595,805.

New York Lodge, No. 15: *Dictator*—P. A. Shanor, 1465 Broadway. *Secretary*—E. H. Theis, 101 W. 127th St.

## AMERICAN FEDERATION OF LABOR.

*Executive Council*—President, Samuel Gompers; Secretary, Frank Morrison; Treasurer, Daniel J. Tobin, 222 E. Michigan St., Indianapolis, Ind.; First Vice-President, James Duncan, 25 School Street, Quincy, Mass.; Second Vice-President, Jos. F. Valentine, Commercial Tribune Bldg., Cincinnati, Ohio; Third Vice-President, Frank Duffy, Carpenters' Bldg., Indianapolis, Ind.; Fourth Vice-President, William Green, 1102-8 Merchants' Bank Bldg., Indianapolis, Ind.; Fifth Vice-President, W. D. Mahon, 104 East High Street, Detroit, Mich.; Sixth Vice-President, T. A. Rickert, 175 West Washington Street, Chicago, Ill.; Seventh Vice-President, Jacob Fischer, 222 East Michigan Street, Indianapolis, Ind.; Eighth Vice-President, Matthew Woll, 6111 Bishop Street, Chicago, Ill.

Headquarters. A. F. of L. Building, Washington, D. C.

In the Federation are 111 national and international unions, representing 34,000 local unions, 5 departments, 40 State branches, 983 city centrals, and 799 local trade and Federal labor unions.

The building trades, metal trades, mining, railroad and union label trades departments are all at Washington

### STATE BRANCHES, A. F. OF L.

State branches and central bodies of the A. F. of L. are maintained for legislative and educational purposes, and they have no power to call strikes or negotiate wages or working conditions. Following are the chief officers of the State branches:

Alabama. Lewis Bowen, Birmingham.
Arizona. Thos. A. French, Phoenix.
Arkansas. L. H. Moore, Fifth and Scott Streets, Little Rock.
California. Paul Scharrenberg, 525 Market Street, San Francisco.
Colorado. Ed. Anderson, Denver.
Connecticut. I. M. Ornburn, 215 Meadow Street, New Haven.
Delaware. Fred W. Stierle, Wilmington.
Florida. W. P. Mooty, Miami.
Georgia. Louie P. Marquardt, Atlanta.
Idaho. Al Reynolds, Labor Temple, Boise.
Illinois. Victor A. Olander, 164-166 W. Washington Street, Chicago.
Indiana. Adolph J. Fritz, United Building, Indianapolis.
Iowa. Earl C. Willey, Sioux City.
Kansas. William Howe, Topeka.
Kentucky. Peter J. Campbell, Louisville.
Louisiana. Ernest H. Zwally, Shreveport.
Maine. H. B. Brawn, Augusta.
Maryland-District of Columbia. Henry Broening, American Building, Baltimore.
Massachusetts. Martin T. Joyce, Emberton Building, Boston.
Michigan. John J. Scannell, Detroit.
Minnesota. George W. Lawson, 75 West Seventh Street, St. Paul.
Mississippi. Jos. W. Jones, Meridian.
Missouri. R. T. Wood, Springfield.
Montana. J. T. Taylor, Helena.
Nebraska. Frank M. Coffey, Labor Bur., Lincoln.
Nevada. E. C. Mulcahy, Sparks.
New Hampshire. Chas. H. Bean, Jr., Franklin.
New Jersey. Henry F. Hilfers, 16 Clinton Street, Newark.
New Mexico. Jas. J Votaw, Albuquerque.
New York. Edw. A. Bates, Jones Building, Utica.
North Carolina. C. G. Worley, Asheville.
North Dakota. N. M. Aune, Grand Forks.
Ohio. Thomas J. Donnelly, Ferris Building, Columbus.
Oklahoma. Victor S. Purdy, Oklahoma City.
Oregon. W. E. Kimsey, Portland.
Pennsylvania. C. F. Quinn, Commonwealth Trust Company Building, Harrisburg.
Porto Rico. Free Federation of Workingmen, Rafael Alonso, San Juan.
Rhode Island. Lawrence A. Grace, 37 Weybosset Street, Providence.
South Carolina. T. B. Cooper, Columbia.
South Dakota. H. A. Tripp, Sioux Falls.
Tennessee. W. C. Birthwright, Nashville.
Texas. Robert McKinley, Temple.
Utah. J. J. Sullivan, Labor Temple, Salt Lake City.
Vermont. Nelson A. Malmgren, Rutland.
Virginia. J. Gribben, Newport News.
Washington. W. M. Short, Seattle.
West Virginia. H. L. Franklin, Charleston.
Wisconsin. J. J. Handley, Millwaukee.
Wyoming. Ward Hudson, Cheyenne.

### THE RAILWAY BROTHERHOODS.

Brotherhood of Locomotive Engineers, President, Warren S. Stone, B. of L. E. Building, Cleveland, Ohio.

Brotherhood of Locomotive Firemen and Enginemen, President, W. S. Carter, 901 Guardian Building, Cleveland, Ohio.

Brotherhood of Railroad Trainmen. President, W. G. Lee, American Trust Building, Cleveland, Ohio.

Order of Railway Conductors of America. President, L. E. Sheppard, Masonic Temple, Cedar Rapids, Iowa.

### ORDER OF RAILWAY CONDUCTORS.

*Officers of the Grand Division*—L. E. Sheppard, President, Cedar Rapids, Iowa; A. B Garretson, Advisory Counselor, Cedar Rapids, Iowa: S N. Berry, Senior Vice-President, Cedar Rapids, Iowa; C. E. Whitney, General Secretary and Treasurer, Cedar Rapids, Iowa; E. P. Curtis, Vice-President, Crystal City, Tex.; W. M. Clark, Vice-President, 5927 Wabash Avenue, Chicago, Ill.; W. C. Turner, Vice-President, 3111 Eads Avenue. St. Louis, Mo.; M. C. Carey, Vice-President, Apt. 30, Algonquin. Port Huron, Mich.; J. A. Phillips, Vice-President, 1332a Shawmut Place, St. Louis, Mo.; J. M. Larisey, Vice-President, 4 Liberty Street, Charleston, S. C.; J. T. Hughes, Vice-President, 1157 Portland Avenue, St. Paul, Minn.; F. H. Nemitz, Argonaut Hotel, San Francisco; P. Elkins, Grand Inside Sentinel, 3915 Tonty St. Louis, Mo.; W. P Sheahan, Grand Outside Sentinel, Commercial Hotel, Springfield, Ill.

*Trustees*—J. D. Condit, Chairman, West Hotel, Minneapolis, Minn.; J. H. Mooney, 3532 N Gratz Street, Philadelphia, Pa.; A. Anderson, 237 S. Chautauqua Avenue, Wichita, Kan.

*Insurance Committee*—C. F. Bishop, Chairman, 307 N. Walnut Street, Danville, Ill.; H. S. Hopkins, Vice-President, 43 High Street, Skowhegan, Me; M J. Land, 212 N. Irving Street, Cartersville, Ga.

The order was organized July 6, 1869, and on Sept. 1, 1920, it had 54,344 members.

## INTERNATIONAL SEAMEN'S UNION OF AMERICA.

Established April 22, 1892.

Andrew Furuseth, President, A. F. of L. Bldg., Washington, D. C.; Patrick Flynn, First V. P., 58 Commercial St., San Francisco, V. A. Olander, Second V. P., 166 W. Washington St., Chicago, Thos. Conway, Third V. P., 71 Main St., Buffalo, N. Y., P. B. Gill, Fourth V. P., 84 Seneca St., Seattle, Wash.; Percy J. Pryor, Fifth V. P., 1½ Lewis St., Boston; Wm. H. Brown, Sixth V. P., 202 Atlantic Ave., Boston; Oscar Carlson, Seventh V. P., 70 South St., New York, N. Y.

Thos. A. Hanson, Secretary-Treasurer, 355 No. Clark St., Chicago.

Affiliated with American Federation of Labor and International Seafarers' Federation.

District Unions—Eastern and Gulf Sailors' Association. Headquarters, 1½ Lewis St., Boston. Branches—New York, 70 South St.; Baltimore, 1710 Thames St.; Philadelphia, 13 So. Second St.; Norfolk, Va., 54 Commercial Place; Mobile, Ala., 69½ St. Michael St.; New Orleans, La., 206 Julia St.; Galveston, Tex., 321 Twentieth St.; Providence, R. I., 335 Eddy St.; Port Arthur, Tex., 132 Proctor St.

Marine Cooks and Stewards Assoc. of the Atlantic and Gulf—Headquarters, 12 South St., New York. Branches—New York, 514 Greenwich St.; Boston, 6 Long Wharf; New Orleans, 228 Lafayette St., Baltimore, 804 So Broadway; Philadelphia, 140 So. Third St.; Galveston, 2117½ Avenue A.; Providence, R I., 515 Eddy St.

Fishermen's Union of the Atlantic—Boston, 202 Atlantic Ave

Sailors' Union of the Great Lakes—355 No. Clark St., Chicago

Marine Firemen, Oilers, Water-tenders and Coal Passers' Union of the Great Lakes—71 Main St., Buffalo.

Marine Cooks' and Stewards' Union—25 West Eagle St., Buffalo.

Sailors' Union of the Pacific—58 Commercial St., San Francisco

Alaska Fishermen's Union—49 Clay St., San Francisco

Deep Sea Fishermen's Union of the Pacific—84 Seneca St., Seattle

United Fishermen of the Pacific—Astoria, Oregon.

Ferry Boatmen's Union—59 Clay St., San Francisco.

Fish Trap, Pile Drivers' and Web Workers at Puget Sound and Alaska—Bellingham, Wash.

## DAILY NEWSPAPER CIRCULATION AND REVENUES.

(U. S. Census Figures. They relate to the year 1919.)

| STATES. | Morning Dailies. | Evening Dailies. | Average Daily Circulation Per Issue, Excluding Sunday. | | Revenues of Daily Newspapers in Year of 1919, Including Morning, Evening and Sunday. | | Sunday Papers. | |
|---|---|---|---|---|---|---|---|---|
| | | | Morning. | Evening. | Subscriptions and Sales. | Advertising. | No. | Average Combined Circulation Per Issue. |
| Alabama | 5 | 19 | 78,552 | 152,078 | $1,124,075 | $2,822,628 | 10 | 182,761 |
| Arizona | 8 | 12 | 28,237 | 28,758 | 311,814 | 1,058,420 | 9 | 32,126 |
| Arkansas | 11 | 21 | 71,015 | 56,970 | 784,794 | 1,840,995 | 7 | 83,685 |
| California | 58 | 110 | 692,553 | 854,360 | 8,318,593 | 19,511,106 | 46 | 908,858 |
| Colorado | 14 | 30 | 66,187 | 221,795 | 1,621,675 | 4,701,610 | 11 | 252,981 |
| Connecticut | 8 | 28 | 94,403 | 256,797 | 1,780,021 | 4,335,651 | 8 | 119,765 |
| Del. and Dist. Col. | 5 | 4 | 100,955 | 180,578 | 1,734,750 | 5,382,097 | 5 | 257,937 |
| Florida | 11 | 24 | 84,280 | 81,544 | 829,403 | 2,387,418 | 13 | 89,177 |
| Georgia | 10 | 20 | 121,177 | 177,551 | 2,388,259 | 5,229,915 | 14 | 335,912 |
| Idaho, Wyo., N. Mex., Utah | 12 | 28 | 116,299 | 159,562 | 1,620,072 | 3,491,977 | 7 | 44,251 |
| Illinois | 50 | 118 | 1,481,980 | 1,759,274 | 24,240,370 | 30,469,318 | 41 | 1,886,084 |
| Indiana | 31 | 107 | 312,339 | 597,614 | 4,011,292 | 9,965,256 | 18 | 276,880 |
| Iowa | 13 | 45 | 185,352 | 532,255 | 3,479,150 | 7,811,242 | 14 | 266,152 |
| Kansas | 17 | 53 | 140,284 | 193,289 | 1,856,768 | 4,113,111 | 11 | 128,997 |
| Kentucky | 12 | 20 | 145,660 | 170,191 | 1,518,393 | 3,338,047 | 11 | 169,396 |
| Louisiana | 5 | 12 | 91,728 | 141,432 | 1,255,697 | 3,081,096 | 6 | 247,556 |
| Maine | 5 | 7 | 52,652 | 69,424 | 624,242 | 1,311,994 | 5 | 88,996 |
| Maryland | 7 | 11 | 173,908 | 264,727 | 2,094,455 | 5,553,850 | 3 | 339,196 |
| Massachusetts | 18 | 66 | 854,217 | 1,231,070 | 12,485,975 | 22,527,505 | 17 | 1,444,846 |
| Michigan | 17 | 56 | 274,911 | 745,738 | 5,461,753 | 13,558,379 | 14 | 507,916 |
| Minnesota | 12 | 38 | 183,019 | 509,257 | 4,480,091 | 9,039,831 | 9 | 444,523 |
| Mississippi | 3 | 11 | 26,372 | 30,108 | 303,893 | 723,303 | 3 | 37,355 |
| Missouri | 21 | 60 | 672,797 | 935,809 | 6,903,708 | 16,696,502 | 18 | 1,205,673 |
| Montana | 11 | 11 | 67,121 | 44,397 | 912,305 | 1,984,675 | 10 | 88,093 |
| Nebraska | 15 | 14 | 146,361 | 224,948 | 2,251,176 | 5,342,148 | 9 | 255,702 |
| Nevada | 4 | 3 | 7,448 | 7,362 | 111,364 | 252,320 | (See Wyoming) | |
| New Hampshire and Vermont | 7 | 18 | 39,005 | 88,103 | 572,758 | 1,149,134 | | |
| New Jersey | 11 | 29 | 96,000 | 485,851 | 2,026,481 | 7,310,624 | 9 | 146,713 |
| New Mex. (see Idaho) | | | | | | | (See Wyoming) | |
| New York | 86 | 128 | 3,111,151 | 3,808,174 | 49,535,807 | 63,889,825 | 54 | 4,469,074 |
| No. Carolina | 9 | 24 | 95,217 | 84,189 | 1,175,141 | 2,486,254 | 11 | 116,753 |
| No. Dakota and So. Dakota | 10 | 24 | 65,797 | 101,046 | 1,273,442 | 2,451,493 | 8 | 60,907 |
| Ohio | 37 | 128 | 564,883 | 1,933,072 | 10,533,938 | 28,236,258 | 29 | 1,087,733 |
| Oklahoma | 11 | 51 | 130,408 | 217,264 | 1,384,644 | 4,463,481 | 20 | 187,199 |
| Oregon | 8 | 25 | 90,870 | 202,334 | 1,435,855 | 3,635,282 | 11 | 191,330 |
| Pennsylvania | 58 | 143 | 1,154,415 | 1,892,832 | 16,062,244 | 33,249,476 | 29 | 1,612,115 |
| Rhode Island | 3 | 9 | 37,967 | 153,795 | 797,608 | 2,611,697 | (See Maine) | |
| So. Carolina | 7 | 10 | 65,176 | 51,546 | 676,529 | 1,707,667 | 9 | 79,606 |
| So. Dakota (see No. Dakota) | | | | | | | (See No. Dak.) | |
| Tennessee | 6 | 12 | 166,940 | 220,389 | 1,916,271 | 4,303,994 | 6 | 241,792 |
| Texas | 38 | 77 | 300,965 | 437,447 | 4,198,369 | 12,351,867 | 46 | 561,534 |
| Utah (see Idaho) | | | | | | | 3 | 106,076 |
| Vt. (see New H.) | | | | | | | | |
| Virginia | 13 | 18 | 97,477 | 159,730 | 1,322,966 | 3,681,212 | 11 | 179,338 |
| Washington | 14 | 28 | 141,932 | 376,696 | 2,919,094 | 7,029,343 | 13 | 288,724 |
| West Virginia | 10 | 21 | 77,110 | 78,940 | 867,282 | 1,821,833 | 9 | 73,561 |
| Wisconsin | 9 | 48 | 77,720 | 527,493 | 3,587,372 | 6,592,026 | 7 | 243,173 |
| Wyo. (see Idaho) | | | | | | | 8 | 28,467 |
| Total | 720 | 1,721 | 12,582,841 | 20,445,789 | 192,819,519 | 373,501,890 | 604 | 19,368,913 |

Sunday paper figures for Maine include Rhode Island; those for Wyoming include New Mexico and Nevada. Sunday newspaper circulation (combined, per issue), was 16,479,943 in 1914, and 13,347,282 in 1909. Morning dailies in 1914 numbered 794, as against 760 in 1909. Evening dailies numbered 1,786 in 1914, as against 1,840 in 1909. Circulation per issue of morning dailies was 11,692,368 in 1914; that of evening dailies in 1914 was 17,085,086.

## DAILY AND WEEKLY NEWSPAPERS IN THE UNITED STATES.

(From the 1922 N. W. Ayer & Son American Newspaper Annual and Directory).

| STATE. | Daily | Wkly | STATE. | Daily | Wkly | STATE. | Daily | Wkly | STATE. | Daily | Wkly |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 27 | 138 | Indiana | 129 | 391 | Nevada | 8 | 25 | S. Carolina | 16 | 90 |
| Alaska | 6 | 10 | Iowa | 51 | 647 | N. Hamp. | 14 | 61 | S. Dakota | 17 | 309 |
| Arizona | 20 | 47 | Kansas | 68 | 523 | New Jersey | 43 | 243 | Tennessee | 16 | 178 |
| Arkansas | 39 | 213 | Kentucky | 32 | 186 | N. Mexico | 6 | 87 | Texas | 112 | 665 |
| California | 169 | 511 | Louisiana | 14 | 134 | New York | 202 | 967 | Utah | 6 | 70 |
| Colorado | 42 | 283 | Maine | 13 | 63 | N. Carolina | 38 | 163 | Vermont | 10 | 67 |
| Connecticut | 34 | 88 | Maryland | 15 | 97 | N. Dakota | 9 | 254 | Virginia | 32 | 152 |
| Delaware | 3 | 25 | Mass. | 88 | 321 | Ohio | 153 | 532 | Virgin Isles | 5 | 1 |
| Dist. of Col. | 6 | 27 | Michigan | 66 | 455 | Oklahoma | 58 | 393 | Washington | 39 | 243 |
| Florida | 33 | 140 | Minnesota | 47 | 622 | Oregon | 34 | 180 | W. Virginia | 29 | 138 |
| Georgia | 30 | 221 | Mississippi | 16 | 145 | Pennsy'nia | 186 | 646 | Wisconsin | 56 | 445 |
| Hawaii | 9 | 16 | Missouri | 74 | 613 | Philippines | 18 | 11 | Wyoming | 8 | 83 |
| Idaho | 12 | 119 | Montana | 18 | 201 | Porto Rico | 11 | 10 | | | |
| Illinois | 155 | 895 | Nebraska | 26 | 491 | Rhode Is. | 12 | 21 | Total | 2,382 | 13,660 |

Tri-weeklies, 94; Semi-weeklies, 532; fortnightlies, 102; Semi-monthlies, 348; monthlies, 3,51[illegible]; bi-monthlies, 120; quarterlies, 410; miscellaneous, 80. Total of all kinds in U. S. and Colonies, 20,887, published in 10,025 separate places.

Canada and Newfoundland—Dailies, 135; weeklies, 973; total of all kinds, 1,466.

Aggregate daily circulation in U. S. and Canada—Morning papers, 12,000,000; evening papers, 19,000,000; Sunday papers, 15,000,000.

Total circulation of newspapers and periodicals in the United States in 1919, according to the Census of Manufactures, was 220,008,686 copies.

## AMERICAN BOOK PRODUCTION, 1921-1920.

(Compiled by The Publishers' Weekly, N. Y.)

| International Classification. | For 1921. | | | | | | | For 1920. | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | New Publications. | | | By Origin. | | | | New Publications. | | | By Origin. | | | |
| | New B'ks. | New Editions | Pamphlets | American Authors | English & Other For. Authors. Am. Man. | English & Other For. Authors. Imported. | Total. | New B'ks. | New Editions. | Pamphlets | American Authors | English & Other For. Authors. Am. Man. | English & Other For. Authors. Imported. | Total. |
| Philosophy | 199 | 24 | 46 | 195 | 20 | 54 | 269 | 209 | 33 | 32 | 211 | 20 | 43 | 274 |
| Religion | 460 | 41 | 94 | 485 | 10 | 100 | 595 | 467 | 37 | 161 | 535 | 21 | 109 | 665 |
| Sociology | 355 | 34 | 233 | 502 | 21 | 99 | 622 | 353 | 43 | 363 | 679 | 25 | 55 | 759 |
| Law | 111 | 22 | 58 | 176 | 4 | 11 | 191 | 70 | 39 | 57 | 157 | 2 | 7 | 166 |
| Education | 111 | 14 | 91 | 188 | 1 | 27 | 216 | 101 | 10 | 123 | 203 | 11 | 20 | 234 |
| Philology | 165 | 33 | 43 | 136 | 33 | 72 | 241 | 141 | 54 | 49 | 121 | 72 | 51 | 244 |
| Science | 227 | 61 | 385 | 577 | 5 | 91 | 673 | 182 | 49 | 281 | 448 | 8 | 56 | 512 |
| Technical Books | 331 | 83 | 148 | 452 | 1 | 109 | 562 | 259 | 93 | 183 | 471 | 5 | 59 | 535 |
| Medicine, Hygiene | 169 | 86 | 44 | 238 | 2 | 59 | 299 | 132 | 75 | 83 | 258 | 2 | 30 | 290 |
| Agriculture | 64 | 19 | 86 | 147 | 0 | 22 | 169 | 49 | 18 | 223 | 279 | 0 | 11 | 290 |
| Domestic Economy | 38 | 4 | 21 | 56 | 3 | 4 | 63 | 22 | 6 | 21 | 46 | 0 | 3 | 49 |
| Business | 181 | 25 | 61 | 243 | 0 | 24 | 267 | 144 | 24 | 78 | 238 | 1 | 7 | 246 |
| Fine Arts | 153 | 8 | 34 | 138 | 3 | 54 | 195 | 94 | 6 | 30 | 88 | 3 | 39 | 130 |
| Music | 53 | 6 | 16 | 56 | 1 | 18 | 75 | 44 | 5 | 23 | 64 | 2 | 6 | 72 |
| Games, Amusement | 59 | 4 | 24 | 69 | 0 | 18 | 87 | 50 | 10 | 52 | 98 | 2 | 12 | 112 |
| General Literature | 296 | 34 | 79 | 279 | 30 | 100 | 409 | 248 | 53 | 50 | 263 | 30 | 58 | 351 |
| Poetry and Drama | 263 | 49 | 100 | 391 | 48 | 73 | 512 | 409 | 44 | 105 | 437 | 63 | 58 | 558 |
| Fiction | 683 | 277 | 12 | 765 | 169 | 38 | 972 | 778 | 345 | 31 | 861 | 232 | 61 | 1,154 |
| Juvenile Books | 482 | 65 | 29 | 476 | 39 | 61 | 576 | 410 | 67 | 22 | 422 | 31 | 46 | 499 |
| History | 376 | 48 | 148 | 422 | 19 | 131 | 572 | 503 | 36 | 172 | 542 | 36 | 133 | 711 |
| Geography, Travel | 216 | 45 | 67 | 233 | 12 | 83 | 328 | 144 | 22 | 56 | 168 | 17 | 37 | 222 |
| Biog'phy, Genealogy | 297 | 19 | 46 | 241 | 28 | 93 | 362 | 271 | 14 | 29 | 213 | 32 | 69 | 314 |
| Gen. Works, Misc | 49 | 7 | 18 | 61 | 2 | 11 | 74 | 21 | 3 | 11 | 29 | 0 | 6 | 35 |
| Total | 5,438 | 1,008 | 1,883 | 6,526 | 451 | 1,352 | 8,329 | 5,101 | 1,086 | 2,235 | 6,831 | 615 | 976 | 8,422 |

These figures include pamphlets of which 2,235 were recorded in 1920; 2,853 in 1919; 2,376 in 1918.

American book production (1918) new books, 8,085; new editions, 1,152.

### BOOK INDUSTRY IN THE UNITED STATES.

According to the United States Census of Manufactures, there were published in 1919, in this country, $127,578,093 worth of books and pamphlets, and $14,762,182 worth of sheets of music and books of music.

### BOOK PRODUCTION IN GREAT BRITAIN, 1921–1920.

(Compiled by The Publishers' Weekly, N. Y.)

| Classes of Literature. | New Books. | | | New Editions. | Totals for 1921. | Totals for 1920. |
|---|---|---|---|---|---|---|
| | New Books. | Translations. | Pamphlets. | | | |
| Philosophy | 205 | 18 | 10 | 41 | 274 | 276 |
| Religion | 563 | 36 | 69 | 107 | 775 | 679 |
| Sociology | 536 | 15 | 220 | 52 | 823 | 870 |
| Law | 131 | 3 | 59 | 81 | 274 | 363 |
| Education | 173 | 1 | 66 | 21 | 261 | 253 |
| Military and Naval | 229 | 2 | 55 | 21 | 307 | 269 |
| Philology | 127 | 1 | 6 | 14 | 148 | 205 |
| Science | 447 | 12 | 63 | 78 | 600 | 597 |
| Technology | 450 | 7 | 171 | 115 | 743 | 720 |
| Medicine, Public Health, etc | 269 | 7 | 56 | 104 | 436 | 446 |
| Agriculture, Gardening | 127 | 1 | 58 | 25 | 211 | 218 |
| Domestic Arts | 47 | .... | 2 | 10 | 59 | 73 |
| Business | 125 | .... | 30 | 27 | 182 | 138 |
| Fine Arts | 219 | 2 | 17 | 29 | 267 | 184 |
| Music (Works about) | 53 | 7 | 5 | 8 | 73 | 65 |
| Games, Sports, etc | 112 | 1 | 10 | 25 | 148 | 161 |
| Literature | 292 | 16 | 19 | 76 | 403 | 366 |
| Poetry and Drama | 385 | 25 | 81 | 126 | 617 | 563 |
| Fiction | 967 | 51 | 4 | 904 | 1,926 | 2,104 |
| Juvenile | 483 | 7 | 50 | 217 | 757 | 770 |
| History | 388 | 16 | 36 | 38 | 478 | 525 |
| Description and Travel | 392 | 11 | 64 | 71 | 538 | 436 |
| Geography | 106 | .... | 7 | 23 | 136 | 168 |
| Biography | 303 | 26 | 15 | 53 | 397 | 374 |
| General Works | 190 | .... | .... | 3 | 193 | 181 |
| Total | 7,319 | 265 | 1,173 | 2,269 | 11,026 | 11,004 |
| | | 8,757 | | | | |
| Total for 1920 | | 8,738 | | 2,266 | 11,004 | |

Production in previous years—(1910), 10,804; (1911), 10,914; (1912), 12,067; (1913), 12,379; (1914) 11,537; (1915), 10,665; (1916), 9,149; (1917), 8,131.

### BIG MONEY FOR RARE BOOKS.

The rare books collected by Henry Huth of England and sold at London in 1919 fetched $1,500,000. of which $100,000 was for the Shakespeare quartos, etc., now at Yale University.

The books of Robert Hoe, sold at New York in 1911-12, fetched $1,932,000.

## CHURCH MEMBERS IN UNITED STATES, BY STATES, 1916.

(Figures taken from official U. S. Religious Census.)

| STATE. | All Denom'tions. | Roman Catholic. | Methodist | Baptist. | Presbyterian. | Congregational | Prot. Epis. | Unitarian. | Lutheran. | Reformed. |
|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 1,099,465 | 37.482 | 323.400 | 518 706 | 20,428 | 4,822 | 10,069 | ..... | ..... | ..... |
| Arizona | 117,014 | 84 742 | 5.651 | 2,927 | 4 353 | 539 | 2,318 | ..... | ..... | ..... |
| Arkansas | 583 209 | 21 120 | 176,806 | 287,349 | 18.213 | 740 | 4,431 | ..... | ..... | 107 |
| California | 893 366 | 494 539 | 96.818 | 39.570 | 54 011 | 34,180 | 30,018 | 3,343 | 7,582 | 448 |
| Colorado | 257,977 | 104,982 | 38.584 | 18.548 | 25,667 | 11.782 | 8,437 | 638 | 2,738 | 221 |
| Connecticut | 724,692 | 483 834 | 36,181 | 26,243 | 3,143 | 71,188 | 48,854 | 316 | 14,971 | 1,600 |
| Delaware | 86,524 | 30.183 | 37,521 | 3,651 | 6 197 | ..... | 4,656 | ..... | 940 | ..... |
| Dist. of Col | 164,413 | 51 421 | 20,836 | 39 978 | 9 338 | 3 255 | 18,295 | ..... | 3,050 | 705 |
| Florida | 324,856 | 24 650 | 114.821 | 131 107 | 10 170 | 2,878 | 10,399 | 184 | ..... | ..... |
| Georgia | 1,234 132 | 18 214 | 387.775 | 721,140 | 25 181 | 6.119 | 11 098 | ..... | ..... | ..... |
| Idaho | 135,386 | 17.947 | 11,373 | 5,682 | 6.943 | 2,827 | 2,404 | ..... | ..... | 83 |
| Illinois | 2,522,373 | 1,171,381 | 287 931 | 170,452 | 114 857 | 57,926 | 40,725 | 1.593 | 187,746 | 9,196 |
| Indiana | 1 777.341 | 272 288 | 271.596 | 85 786 | 59,209 | 5 768 | 8,848 | 376 | 47,879 | 10,642 |
| Iowa | 937 334 | 262.513 | 199.036 | 44,939 | 68,899 | 39.524 | 8,126 | 1,004 | 83,925 | 7,575 |
| Kansas | 610 347 | 128.948 | 151.348 | 60 383 | 45 263 | 16,893 | 5,843 | 258 | 30,512 | 1,420 |
| Kentucky | 967,602 | 160 185 | 155.129 | 367 731 | 48,423 | 712 | 9,383 | ..... | ..... | 2,058 |
| Louisiana | 863 067 | 509 910 | 81,273 | 213.018 | 9,636 | 1,765 | 11,632 | ..... | ..... | ..... |
| Maine | 255,293 | 148,530 | 22,551 | 35,492 | 320 | 21,641 | 5,628 | 2,488 | ..... | ..... |
| Maryland | 602.587 | 219.530 | 161.287 | 44.055 | 19,603 | 875 | 38,469 | ..... | 33,555 | 15,801 |
| Massachusetts | 1,977 482 | 1,410,208 | 75,965 | 86 551 | 10,319 | 133,509 | 75,217 | 41,587 | ..... | 271 |
| Michigan | 1.181 431 | 572.117 | 144 094 | 49.766 | 48,989 | 35,597 | 33,409 | 1,478 | 101,608 | 14,903 |
| Minnesota | 931.388 | 415.664 | 59.576 | 28.156 | 32 494 | 22,987 | 22,635 | 1,898 | 264,649 | 1,914 |
| Mississippi | 762 977 | 32,160 | 226.356 | 441.293 | 19.758 | 371 | 6,132 | ..... | ..... | ..... |
| Missouri | 1.370.551 | 445.352 | 241.751 | 252.107 | 67,628 | 10,479 | 14,309 | 911 | 45,303 | 1,204 |
| Montana | 137 566 | 78 113 | 13,873 | 4,073 | 6 792 | 3,841 | 4,607 | 375 | 9,129 | 136 |
| Nebraska | 440 791 | 135 537 | 81,879 | 19,643 | 26,333 | 19,423 | 7,931 | 549 | 66,906 | 3,597 |
| Nevada | 16 145 | 8 742 | 777 | 356 | 501 | 261 | 1,207 | ..... | 444 | ..... |
| New Hampshire | 210 736 | 136 020 | 13 574 | 17.335 | 908 | 20,084 | 6,155 | 3,890 | ..... | ..... |
| New Jersey | 1,337,983 | 790 764 | 131.211 | 80.918 | 102,290 | 10,839 | 67,996 | 1,291 | 19,680 | 38,772 |
| New Mexico | 209 809 | 177.727 | 11 505 | 6,721 | 3,892 | 366 | 1,718 | ..... | ..... | ..... |
| New York | 4,315 404 | 2 745 552 | 328 250 | 182,443 | 222,888 | 65,021 | 227,685 | 6,288 | 73,581 | 73,991 |
| North Carolina | 1,080 723 | 4 989 | 338.979 | 535,299 | 69,898 | 3,125 | 18,545 | 994 | 19,450 | 6,109 |
| North Dakota | 225,877 | 95 859 | 13,479 | 6.268 | 9.295 | 8,913 | 2,455 | ..... | 72,026 | 1,435 |
| Ohio | 2,291 793 | 843 856 | 399,045 | 105.753 | 160,413 | 45,606 | 47,175 | 1,700 | 93 192 | 56,101 |
| Oklahoma | 424.492 | 47,427 | 113,202 | 129,436 | 23,618 | 3,419 | 3,566 | ..... | 3,899 | 486 |
| Oregon | 179,468 | 49,728 | 30.381 | 15,635 | 16,672 | 6,373 | 5,726 | 532 | 4,499 | 755 |
| Pennsylvania | 4,114 527 | 1,830,532 | 427,509 | 194,262 | 405,493 | 16,444 | 118,687 | 1,828 | 371.674 | 210,978 |
| Rhode Island | 344.060 | 261,312 | 7,801 | 18.771 | 2,205 | 10,531 | 20,176 | 1,412 | ..... | ..... |
| South Carolina | 794 126 | 9,514 | 278,854 | 413.630 | 38,361 | 501 | 11,000 | ..... | 14,788 | 46 |
| South Dakota | 199,017 | 72 113 | 21,429 | 8,852 | 9,855 | 11,762 | 11,792 | ..... | 46,947 | 2,100 |
| Tennessee | 840,133 | 23,015 | 286,133 | 320,442 | 71,823 | 2,185 | 9,910 | 124 | ..... | 374 |
| Texas | 1,784,620 | 402,874 | 418,121 | 646,494 | 68,229 | 2,377 | 17,116 | 414 | 19,187 | ..... |
| Utah | 280,848 | 10,000 | 1,848 | 1,305 | 2,254 | 1,616 | 1,469 | ..... | ..... | ..... |
| Vermont | 145.682 | 78 178 | 16,808 | 9,797 | 1,157 | 22,912 | 6,000 | 1,833 | ..... | ..... |
| Virginia | 949.136 | 36.671 | 147,954 | 456,095 | 49 186 | 360 | 33,593 | 235 | 14,610 | 2,440 |
| Washington | 283 709 | 97,418 | 40 020 | 17,738 | 30,559 | 16,137 | 10,881 | 2,176 | 17,359 | 385 |
| West Virginia | 427,865 | 60,337 | 154,519 | 78,679 | 27.349 | 316 | 6,831 | 265 | ..... | 1,015 |
| Wisconsin | 1,162,032 | 594,836 | 63,331 | 20,425 | 23.459 | 30,534 | 18,451 | 508 | 297,310 | 10,427 |
| Wyoming | 39,505 | 12,801 | 4,293 | 1,841 | 2,514 | 1,951 | 3.890 | ..... | 704 | ..... |

## CHURCH MEMBERS IN THE CHIEF AMERICAN CITIES, 1916.

| CITY. | All Denom'tions. | Roman Catholic. | Methodist | Baptist. | Presbyterian. | Congregational | Prot. Epis. | Unitarian. | Lutheran. | Reformed. |
|---|---|---|---|---|---|---|---|---|---|---|
| Baltimore | 296,599 | 137.730 | 41,784 | 33,511 | 9,105 | ..... | 17,209 | ..... | 15,538 | 5,570 |
| Boston | 401.498 | 294,914 | 9,053 | 15.959 | ..... | 15,458 | 17.790 | 9,327 | ..... | ..... |
| Buffalo | 277,045 | 193.220 | 10,333 | 6 029 | 8,441 | ..... | 10.004 | ..... | 12,514 | 4,342 |
| Chicago | 1,058,785 | 718,114 | 33,676 | 36,309 | 27.408 | 15,448 | 22,233 | ..... | 56,784 | ..... |
| Cincinnati | 167 028 | 101,931 | 12,268 | 10,648 | 9,269 | ..... | 5,623 | ..... | ..... | ..... |
| Cleveland | 357,261 | 261,427 | 16,725 | 12,374 | 8,286 | 7,808 | 9,924 | ..... | ..... | 3,854 |
| Denver | 71,847 | 28,772 | 10,038 | 5,694 | 5.741 | 3,768 | 3,632 | ..... | 1,611 | ..... |
| Detroit | 330,600 | 204,796 | 19,789 | 9,690 | 14.113 | 3,658 | 10,915 | ..... | 24,260 | ..... |
| Jersey City | 146,490 | 109,436 | 4 612 | 2,865 | 2,774 | ..... | 5,755 | ..... | 5,078 | 4,392 |
| Kansas City | 103,905 | 32,311 | 18 063 | 17,533 | 7,993 | 2,350 | 2.300 | ..... | ..... | ..... |
| Los Angeles | 122,697 | 49,107 | 16 598 | 8,362 | 9.763 | 5,643 | 6,027 | ..... | 2,096 | ..... |
| Louisville | 129,529 | 53,474 | 10.789 | 29,536 | 7,057 | ..... | 4,499 | ..... | 2,655 | 1,419 |
| Milwaukee | 201.082 | 126,921 | 4.592 | 2,465 | 3,198 | ..... | 3,601 | ..... | 38,084 | ..... |
| Minneapolis | 122,259 | 51 776 | 9.778 | 8,016 | 7,205 | 6,327 | 5,183 | ..... | 17,063 | ..... |
| New Orleans | 195 617 | 147,696 | 6 695 | 11,369 | 3,878 | ..... | 6,630 | ..... | 6,025 | ..... |
| New York City | 2,101 233 | 1,545,562 | 50 745 | 45,954 | 61,707 | 25,230 | 106.611 | ..... | 33,629 | 25,706 |
| Philadelphia | 776,422 | 436 700 | 55.848 | 63,958 | 62,929 | ..... | 52,629 | ..... | 20,062 | 11,310 |
| Pittsburgh | 377,703 | 225,362 | 25.678 | 18,652 | 41,169 | ..... | 7,541 | ..... | 9,190 | ..... |
| Richmond | 82,944 | 10,776 | 12,021 | 41,234 | 4,498 | ..... | 6,382 | ..... | ..... | ..... |
| St. Louis | 392,453 | 281,627 | 17,827 | 17,425 | 9,864 | ..... | 6,579 | ..... | 16,001 | ..... |
| San Francisco | 174,745 | 139,676 | 3,889 | ..... | 3,377 | 1,885 | 3,599 | ..... | ..... | ..... |
| Seattle | 72,986 | 29,862 | 5,876 | 3,810 | 10,428 | 4,207 | 3,825 | ..... | 966 | ..... |
| Washington | 164,413 | 51,421 | 20,836 | 39,978 | 9,338 | 3,255 | 18,295 | ..... | 3,050 | ..... |

In the above table, figures for each denomination include those of whatever branches of that denomination use the same general name, both white and colored.

## BISHOPS OF THE METHODIST EPISCOPAL CHURCH.

| | Residence. | Elected. |
|---|---|---|
| *James M. Thoburn | Miss. Bis., Meadville, Pa. | 1888 |
| *Earl Cranston | New Richmond, Ohio | 1896 |
| *Joseph C. Hartzell | Miss. Bis., Blue Ash, Ohio. | 1896 |
| *John W. Hamilton | Washington, D. C. | 1900 |
| Joseph F. Berry | Philadelphia, Pa. | 1904 |
| Wm. F. McDowell | Washington, D. C. | 1904 |
| William Burt | Buffalo, N. Y. | 1904 |
| Luther B. Wilson | New York City, N. Y. | 1904 |
| *Thomas B. Neely | Philadelphia, Pa. | 1904 |
| *Isaiah B. Scott | Miss. Bis., Nashville, Tenn. | 1904 |
| William F. Anderson | Cincinnati, Ohio | 1908 |
| John L. Nuelsen | Zurich, Switzerland | 1908 |
| William A. Quayle | St. Louis, Mo. | 1908 |
| Edwin H. Hughes | Boston, Mass. | 1908 |
| Frank M. Bristol | Chattanooga, Tenn. | 1908 |
| Homer C. Stuntz | Omaha, Neb. | 1912 |
| Theo. S. Henderson | Detroit, Mich. | 1912 |
| William O. Shepard | Portland, Ore. | 1912 |
| Francis J. McConnell | Pittsburgh, Pa. | 1912 |
| Frederick D. Leete | Indianapolis, Ind. | 1912 |
| *Richard J. Cooke | Athens, Tenn. | 1912 |
| Wilbur P. Thirkield | Mexico City, Mex. | 1912 |
| Herbert Welch | Seoul, Korea | 1916 |
| Thomas Nicholson | Chicago, Ill. | 1916 |
| A. W. Leonard | San Francisco, Cal. | 1916 |
| W. F. Oldham | Buenos Ayres, Argentina | 1916 |
| C. B. Mitchell | St. Paul, Minn. | 1916 |
| Francis W. Warne | Lucknow, India | 1920 |
| John W. Robinson | Bombay, India | 1920 |
| Eben S. Johnson | Cape Town, South Africa | 1920 |
| Lauress J. Birney | Shanghai, China | 1920 |
| Fred B. Fisher | Calcutta, India | 1920 |
| Ernest L. Waldorf | Wichita, Kan. | 1920 |
| Charles E. Locke | Manila, P. I. | 1920 |
| ErnestG. Richardson | Atlanta, Ga. | 1920 |
| Charles W. Burns | Helena, Mont. | 1920 |
| Anton Bast | Copenhagen, Denmark | 1920 |
| Edgar Blake | Paris, France | 1920 |
| George H. Bickley | Singapore, Straits Settle't. | 1920 |
| F. T. Keeney | Foochow, China | 1920 |
| H. Lester Smith | Bangalore, India | 1920 |
| Charles L. Mead | Denver, Col. | 1920 |
| Robert E. Jones | New Orleans, La. | 1920 |
| Matthew W. Clair | Monrovia, Liberia | 1920 |

*Retired.

## BISHOPS OF THE METHODIST EPISCOPAL CHURCH SOUTH.

| | Residence. | Elected. |
|---|---|---|
| E. R. Hendrix | Kansas City, Mo. | 1886 |
| Warren A. Candler | Atlanta, Ga. | 1898 |
| James Atkins | Waynesville, N. C. | 1906 |
| Collins Denny | Richmond, Va. | 1910 |
| W. B. Murrah | Memphis, Tenn. | 1910 |
| R. G. Waterhouse | Emory, Va. | 1910 |
| Edwin D. Mouzon | Nashville, Tenn. | 1910 |
| John M. Moore | Dallas, Tex. | 1918 |
| W. F. McMurry | Louisville, Ky. | 1918 |
| U. V. W. Darlington | Huntington, W. Va. | 1918 |
| H. M. Du Bose | San Francisco | 1918 |
| W. N. Ainsworth | Macon, Ga. | 1918 |
| James Cannon, Jr. | Birmingham, Ala. | 1918 |
| H. M. Dobbs | Anniston, Ala. | 1922 |
| J. E. Dickey | Waco, Tex. | 1922 |
| W. B. Beauchamp | Nashville, Tenn. | 1922 |
| S. R. Hay | Shanghai, China | 1922 |
| H. A. Boaz | Seoul, Korea | 1922 |

## BISHOPS OF THE COLORED M. E. CHURCH.

The Bishops of the Colored Methodist Episcopal Church in America are: Isaac Lane (retired), Jackson, Tenn; R. S. Williams, Augusta, Ga.; Elias Cottrell, Holly Springs, Miss.; C. H. Phillips, Cleveland, Ohio; R. A. Carter, Chicago, Ill.; N. C. Cleaves, St. Louis, Mo.; R. T. Brown, Birmingham, Ala.; J. C. Martin, Jackson, Tenn.; J. A. Hamlett, Nashville, Tenn.; J. W. McKinney, Sherman, Texas.

## BISHOPS OF THE REFORMED EPISCOPAL CHURCH.

Robert L. Rudolph.....Philadelphia, Pa. | Willard Brewing.....Toronto, Can.

## MODERATORS OF THE PRESBYTERIAN CHURCH IN THE U. S.

The Rev. Dr. C. C. Hays, for thirty-one years pastor of the First Church, Johnstown, Pa., was chosen, at Des Moines, Iowa, on May 18, 1922, by the 134th General Assembly, to be the Moderator of the Presbyterian Church in the United States.

## BISHOPS OF THE PROTESTANT EPISCOPAL CHURCH.

**Alabama**—Charles M. Beckwith, Montgomery; William G. McDowell, Jr., Coadjutor, Auburn.

**Alaska**—Peter Trimble Rowe (miss.), Seattle, Wash.

**Arizona**—Julius W. Atwood (miss.), Phoenix.

**Arkansas**—James R. Winchester, Little Rock; E. W. Saphore, Suffragan, Little Rock; E. J. Demby, Little Rock.

**California**—William Ford Nichols, San Francisco; E. L. Parsons, Coadjutor, San Francisco. Sacramento: W. H. Moreland. San Joaquin: L. C. Sanford (miss.) Fresno. Los Angeles: Joseph H. Johnson, Pasadena; W. B. Stevens, Coadjutor.

**Colorado**—I. P. Johnson, Denver; Frederick Ingley, Coadjutor.

**Connecticut**—Chauncey B. Brewster, Hartford. Middletown: E. C. Acheson, Suffragan.

**Dakota, North**—J. Pontz Tyler (miss.), Fargo.

**Dakota, South**—H. L. Burleson, Sioux Falls. W. B. Roberts, Suffragan.

**Delaware**—Philip Cook, Wilmington.

**District of Columbia**—Alfred Harding, Washington.

**Florida**—Edwin Gardner Weed, Jacksonville. Southern: Cameron Mann (miss.), Orlando.

**Georgia**—Frederick F. Reese, Savannah. Atlanta: Henry J. Mikell.

**Idaho**—Frank H. Touret, Boise.

**Illinois**—Charles Palmer Anderson; S. M. Griswold Suffragan, Chicago. Quincy: M. Edward Fawcett. Springfield: G. H. Sherwood, Springfield.

**Indiana**—Joseph M. Francis, Indianapolis. Northern Indiana: John H. White, South Bend.

**Iowa**—Theodore N. Morrison, Davenport. Des Moines; Harry S. Longley, Coadjutor.

**Kansas**—James Wise, Topeka. Salina: Rober H. Mize.

**Kentucky**—Charles Edward Woodcock, Louisville. Lexington: Lewis W. Burton.

**Louisiana**—Davis Sessums, New Orleans.

**Maine**—Benjamin Brewster, Portland.

**Maryland**—John G. Murray, Baltimore. Easton: Geo. W. Davenport.

**Massachusetts**—William Lawrence; Charles L. Slattery, Coadjutor; S. G. Babcock, Suffragan, Boston. Western: Thomas F. Davies, Springfield.

**Michigan**—Charles David Williams, Detroit. Marquette: R. Le R. Harris. Western: J. N. McCormick, Grand Rapids.

**Minnesota**—Frank A. McElwain, Minneapolis. Duluth: James D. Morrison; Granville G. Bennett, Coadjutor.

**Mississippi**—Theodore D. Bratton, Jackson. Wm. Mercer Green, Coadjutor.

**Missouri**—Daniel Sylvester Tuttle, St. Louis. St. Louis: F. F. Johnson, Coadjutor. Western: Sidney C. Partridge, Kansas City.

**Montana**—William F. Faber, Helena; H. H. H. Fox, Suffragan.

**Nebraska**—Ernest Vincent Shayler, Omaha. Western: George A. Beecher (miss.), Hastings.

**Nevada**—George C. Hunting (miss.), Reno.

**New Hampshire**—Edward M. Parker, Concord.

**New Mexico**—F. B. Howden (miss.), Albuquerque.

**New Jersey**—Paul Matthews, Trenton. Newark: Edwin S. Lines. Newark: Wilson R. Stearly, Coadjutor.

**New York**—Wm. T. Manning, New York City; Arthur S. Lloyd and Herbert Shipman, Suffragans. Central: Charles Tyler Olmstead. Utica: Charles Fiske, Coadjutor, Syracuse. Western: Charles H. Brent, Buffalo; G. A. Oldham, Coadjutor; D. L. Ferris, Suffragan. Albany: Richard H. Nelson. Long Island: Frederick Burgess, Garden City.

**North Carolina**—Joseph Blount Cheshire, Raleigh. Raleigh: Edwin A. Pennick, Charlotte, Coadjutor; H. B. Delany, Suffragan. East Carolina: T. C. Darst, Wilmington. Asheville: J. M. Horner (miss.).

**North Dakota**—John P. Tyler (miss.), Fargo.

**Ohio**—William Andrew Leonard, Cleveland. Toledo: Frank Du Moulin, Coadjutor. Southern: Boyd Vincent, Cincinnati. Theo. I. Reese, Coadjutor, Columbus.

**Oklahoma**—Theo. P. Thurston (miss.), Muskogee.

**Oregon**—Walter Taylor Sumner, Portland. Eastern: W. P. Remington (miss.), Pendleton.

BISHOPS GF THE PROTESTANT EPISCOPAL CHURCH—*Continued*

**Pennsylvania**—P. M. Rhinelander: Thos. J. Garland, Suffragan, Philadelphia. Pittsburgh: Alexander Mann. Bethlehem: E. Talbot. South Bethlehem. Harrisburg: James H. Darlington. Erie: John C. Ward.

**Rhode Island**—J. De W. Perry, Jr., Providence.

**South Carolina**—W. A. Guerry, Charleston. Upper South Carolina: Kirkman G. Finlay, Columbia.

**South Dakota**—Hugh L. Burleson, Sioux Falls. W. B. Roberts, Suffragan.

**Tennessee**—Thomas F. Gailor, Memphis. J. N. Maxon, Nashville Coadjutor.

**Texas**—George Herbert Kinsolving, Austin; Chas. S. Quin Coadiutor, Houston. Dallas: Alexander C. Garrett: H. T. Moore, Coadjutor. Western: William T. Capers. Northern: Edward A. Temple (miss.). Amarillo.

**Utah**—Arthur W. Moulton, Salt Lake City.

**Vermont**—Arthur C. A. Hall, Burlington. Burlington: George Y. Bliss, Coadjutor.

**Virginia**—William C. Brown, Richmond. Southern Norfolk: B. D. Tucker, A. C. Thomson, Portsmouth, Coadjutor. Southwestern: Robert C. Jett.

**West Virginia**—W. L. Gravatt, Charleston.

**Wisconsin**—William Walter Webb, Milwaukee. Fond du Lac: Reginald H. Weller.

**Washington**—Olympia: F. W. Keator, Tacoma. Spokane: Herman Page (miss.).

**Wyoming**—Nathaniel S. Thomas (miss.), Cheyenne.

**Africa**—Liberia: W. H. Overs; Theo. M. Gardiner, Suffragan, Cape Palmas.

**Brazil**—Southern: L. L. Kinsolving (miss.), Rio.

**China**—Frederick R. Graves (miss.). Shanghai. Hankow: Logan H. Roots, (miss.). Anking: D. Trumbull Huntington.

**Hayti**—H. R. Carson (miss.).

**Panama Canal Zone**—James C. Morris (miss.).

**Cuba**—Hiram R. Hulse (miss.).

**Virgin Islands**—C. B. Colmore, in charge.

**Dominica**—C. B. Colmore in charge.

**Japan**—John McKim (miss.), Tokio. Kioto: Henry St. G. Tucker (miss.).

**Hawaiian Islands**—John D. Lamothe (miss.), Honolulu.

**Mexico**—Henry D. Aves (miss.).

**Philippines**—Gouverneur F. Mosher (miss.).

**Porto Rico**—Chas. B. Colmore (miss.), San Juan.

A. R. Graves, late Bishop of Kearney, Sonora, Cal.

Bishop Thos. F. Gailor, Presiding Bishop and President Executive Council, 281 4th Ave., N. Y. City.

RETIRED BISHOPS.

Wm. M. Brown, late Bishop of Arkansas, Galion, O.

Lemuel H. Wells, late Spokane, Tacoma, Wash.

A. W. Knight, late Bishop of Cuba, Sewanee, Tenn.

James S. Johnston, late Bishop of West Texas, San Antonio.

Paul Jones, late Bishop of Utah, Orange, N. J.

E. W. Osborne, late Bishop of Springfield, Savannah, Ga.

G. M. Williams, late Bishop of Marquette, Annapolis, Md.

Henry B. Restarick, late Bishop of Hawaii, Honolulu.

R. L. Paddock, late Bishop of East Oregon, Hempstead, N. Y.

## ROMAN CATHOLIC STATISTICS FOR THE UNITED STATES.

(These figures are from the Official Catholic Directory for 1922, copyrighted by P. J. Kenedy & Sons.)

| Diocese. | Clergy. | Churches. | Parish Pupils. | Catholic Popular'n. |
|---|---|---|---|---|
| *Baltimore* | 565 | 229 | 33,182 | 287,458 |
| *Boston* | 784 | 295 | 80,626 | 900,000 |
| *Chicago* | 1,066 | 363 | 142,603 | 1,150,000 |
| *Cincinnati* | 413 | 218 | 36,139 | 218,000 |
| *Dubuque* | 268 | 232 | 15,873 | 111,500 |
| *Milwaukee* | 440 | 303 | 43,007 | 274,329 |
| *New Orleans* | 273 | 202 | 23,384 | 336,019 |
| *New York* | 1,141 | 395 | 99,590 | 1,473,291 |
| *Oregon City* | 153 | 116 | 7,300 | 60,000 |
| *Philadelphia* | 828 | 359 | 100,998 | 719,759 |
| *St. Louis* | 598 | 324 | 39,356 | 425,692 |
| *St. Paul* | 355 | 262 | 24,418 | 265,000 |
| *San Francisco* | 447 | 214 | 17,898 | 364,826 |
| *Santa Fe* | 94 | 386 | 4,954 | 149,164 |
| Albany | 271 | 201 | 27,323 | 215,412 |
| Alexandria | 38 | 75 | 2,746 | 43,312 |
| Alton | 210 | 161 | 10,633 | 87,000 |
| Altoona | 153 | 115 | 14,251 | 146,173 |
| Baker City | 27 | 53 | 964 | 7,218 |
| Belleville | 132 | 138 | 11,206 | 74,806 |
| Bismarck | 75 | 152 | 2,885 | 37,428 |
| Boise | 60 | 109 | 1,843 | 18,959 |
| Brooklyn | 587 | 255 | 73,580 | 821,337 |
| Buffalo | 448 | 240 | 45,160 | 342,000 |
| Burlington | 106 | 96 | 8,459 | 90,061 |
| Charleston | 33 | 38 | 1,206 | 10,000 |
| Cheyenne | 26 | 55 | 506 | 23,661 |
| Cleveland | 391 | 235 | 56,349 | 454,019 |
| Columbus | 178 | 142 | 14,211 | 105,067 |
| Concordia | 91 | 95 | 5,060 | 37,204 |
| Corpus Christi | 46 | 114 | 2,645 | 98,580 |
| Covington | 94 | 81 | 8,413 | 60,600 |
| Crookston | 53 | 78 | 1,617 | 28,325 |
| Dallas | 100 | 120 | 6,762 | 40,000 |
| Davenport | 143 | 123 | 6,938 | 57,257 |
| Denver | 197 | 249 | 9,633 | 113,722 |
| Des Moines | 93 | 91 | 4,550 | 37,977 |
| Detroit | 403 | 274 | 62,626 | 492,767 |
| Duluth | 78 | 98 | 4,077 | 64,215 |
| El Paso | 71 | 123 | 4,535 | 103,307 |
| Erie | 181 | 163 | 12,297 | 113,174 |
| Fall River | 177 | 98 | 13,436 | 176,354 |
| Fargo | 123 | 176 | 4,671 | 69,871 |
| Fort Wayne | 331 | 171 | 25,532 | 151,013 |
| Galveston | 115 | 140 | 6,728 | 89,616 |
| Grand Island | 58 | 102 | 1,729 | 21,843 |
| Grand Rapids | 187 | 220 | 21,595 | 148,584 |
| Great Falls | 60 | 126 | 2,342 | 34,276 |
| Green Bay | 245 | 226 | 21,292 | 159,875 |
| Harrisburg | 125 | 98 | 12,691 | 80,282 |
| Hartford | 426 | 254 | 44,497 | 545,147 |
| Helena | 100 | 101 | 8,000 | 63,169 |
| Indianapolis | 273 | 199 | 20,163 | 130,522 |
| Kansas City | 149 | 108 | 9,756 | 75,750 |
| La Crosse | 233 | 234 | 11,757 | 116,536 |
| Lafayette | 77 | 84 | 4,381 | 170,000 |
| Lead | 82 | 180 | 920 | 32,120 |
| Leavenworth | 185 | 126 | 9,513 | 64,291 |
| Lincoln | 106 | 138 | 3,474 | 35,512 |
| Little Rock | 88 | 105 | 4,104 | 23,192 |
| Louisville | 210 | 162 | 15,972 | 120,289 |
| Manchester | 158 | 112 | 19,900 | 141,489 |
| Marquette | 98 | 137 | 8,221 | 85,896 |
| Mobile | 141 | 111 | 7,801 | 46,300 |
| Monte'y-Los Ang. | 285 | 237 | 12,340 | 214,000 |
| Nashville | 53 | 58 | 4,326 | 25,450 |
| Natchez | 58 | 143 | 6,619 | 30,704 |
| Newark | 583 | 243 | 70,588 | 598,143 |
| Ogdensburg | 160 | 162 | 4,873 | 100,600 |
| Oklahoma | 108 | 157 | 7,028 | 56,965 |
| Omaha | 219 | 164 | 11,216 | 83,357 |
| Peoria | 243 | 231 | 14,623 | 118,585 |
| Pittsburgh | 623 | 384 | 73,871 | 550,000 |
| Portland | 172 | 160 | 18,137 | 154,424 |
| Providence | 265 | 110 | 21,622 | 275,450 |
| Richmond | 93 | 97 | 6,242 | 43,250 |
| Rochester | 224 | 153 | 25,704 | 185,876 |
| Rockford | 191 | 99 | 6,476 | 61,043 |
| Sacramento | 77 | 107 | 2,611 | 55,079 |
| St. Augustine | 57 | 77 | 4,337 | 51,014 |
| St. Cloud | 162 | 140 | 7,080 | 67,223 |
| St. Joseph | 98 | 98 | 3,951 | 44,161 |
| Salt Lake | 26 | 27 | 852 | 11,515 |
| San Antonio | 172 | 181 | 9,447 | 130,472 |
| Savannah | 66 | 60 | 4,479 | 20,517 |
| Scranton | 308 | 236 | 26,378 | 274,978 |
| Seattle | 139 | 140 | 5,458 | 80,000 |
| Sioux City | 158 | 143 | 9,596 | 66,914 |
| Sioux Falls | 156 | 197 | 5,864 | 70,842 |
| Spokane | 90 | 97 | 2,384 | 28,608 |
| Springfield | 392 | 214 | 34,085 | 332,758 |
| Superior | 102 | 154 | 4,435 | 58,792 |
| Syracuse | 161 | 137 | 16,344 | 173,200 |
| Toledo | 182 | 123 | 17,834 | 122,507 |
| Trenton | 231 | 216 | 27,056 | 211,416 |
| Tucson | 61 | 101 | 2,500 | 51,000 |
| Wheeling | 115 | 122 | 4,576 | 63,000 |
| Wichita | 117 | 147 | 5,143 | 40,752 |
| Wilmington | 59 | 51 | 4,939 | 34,300 |
| Winona | 124 | 124 | 7,210 | 68,800 |
| North Carolina | 45 | 63 | 1,045 | 8,254 |
| Ruthenian-Greek | 217 | 273 | 12,951 | 500,038 |
| Total | 22,049 | 16,615 | 1,852,498 | 18,104,804 |

Italic dioceses are archdioceses. Cardinals, 2; Archbishops, 17; Bishops 93; secular clergy, 16,026; religious clergy, 6,023; total clergy, 22,049; churches with resident priests, 10 994; missions with churches, 5,621; total churches, 16,615; seminaries 113; seminary students, 8,698; colleges for boys, 222; academies for girls, 718; parishes with schools, 6,258; orphan asylums, 304; orphans, 48,721; homes for the aged, 119.

Population and other figures in the above table cover *dioceses* and *archdioceses*, and no merely the cities named.

## ROMAN CATHOLIC HIERARCHY.

At the head of the Roman Catholic Church is the SUPREME PONTIFF, PIUS XI., Achille Ratti, born at Desio, Italy, May 30, 1857, made Archbishop of Milan, April, 1921; Cardinal, in pectore, June 14, 1921; elected Pope, as successor of Benedict XV., Feb. 6, 1922; crowned Feb. 12, 1922. The Pontiff is, in orders, a Bishop. His ecclesiastical title is: His Holiness, the Pope; Bishop of Rome and Vicar of Jesus Christ; Successor of St. Peter, Prince of the Apostles; Supreme Pontiff of the Universal Church; Patriarch of the West; Primate of Italy; Archbishop and Metropolitan of the Roman Province; Sovereign of the Temporal Dominions of the Holy Roman Church.

### THE COLLEGE OF CARDINALS.

NOTE—The College of Cardinals, when complete, is made up of 70 members, of whom 6 are Cardinal-Bishops, 50 are Cardinal-Priests, and 14 are Cardinal-Deacons. The College is the Senate of the Roman Church. They advise the Pope and elect his successor. The Cardinal-Bishops take their titles from the Suburban Sees of Rome: Porto and Santa Rufina, Albano, Palestrina, Sabina, Frascati, and Velletri.

### NEW RULE AS TO ELECTION OF A POPE.

The American Cardinals reached Rome too late to cast their ballots for a successor to Benedict XV. In consequence, the new Pope, Pius XI., has made a change in the regulations, extending the interval between the death of a Pope and the election of his successor, so as to give the foreign Cardinals a chance to take part.

| NAME. | Office or Dignity. | Nationality | Year of Birth. | Year of Creation. |
|---|---|---|---|---|
| **Cardinal-Bishops—** | | | | |
| Vincenzo Vannutelli | Bishop of Palestrina, Arch-priest of Patr. Liberian Basilica, Datary of the Pope | Italian | 1836 | 1889 |
| Gaegano de Lai | Bishop of Sabina | Italian | 1853 | 1907 |
| Antonio Vico | Bishop of Porto and Santa Rufina | Italian | 1847 | 1915 |
| Gennaro Granito Pignatelli di Belmonte | Bishop of Albano | Italian | 1851 | 1915 |
| Basilio Pompilj | Vicar-Gen. of the Pope, Card.-B'p of Velletri | Italian | 1858 | 1917 |
| Giovanni Cagliero | Bishop of Frascati | Italian | 1838 | 1915 |
| **Cardinal-Priests—** | | | | |
| Cardinal Logue | Archbishop of Armagh | Irish | 1840 | 1893 |
| Giuseppe Prisco | Archbishop of Naples | Italian | 1836 | 1896 |
| Jose Maria Martin de Herrera y de la Iglesia | Archbishop of Santiago de Compostela | Spanish | 1835 | 1897 |
| Giuseppe Francica-Nava di Bontife | Archbishop of Catania | Sicilian | 1846 | 1899 |
| Agostino Richelmy | Archbishop of Turin | Italian | 1850 | 1899 |
| Leo von Skrbensky | Archbishop of Olmutz | Austrian | 1863 | 1901 |
| Bartolomeo Bacilieri | Bishop of Verona | Italian | 1835 | 1901 |
| Rafael Merry del Val | Sec. of the Congr. of the Holy Office, Archp. Vatican Basil | Spanish | 1865 | 1903 |
| Joaquim Arcoverde de Albuquerque Cavalcanti | Archbishop of Rio de Janeiro | Brazilian | 1850 | 1905 |
| Ottavio Cagiano de Azevedo | Chancellor of the Church | Italian | 1845 | 1905 |
| Pietro Maffi | Archbishop of Pisa | Italian | 1858 | 1907 |
| Alessandro Lualdi | Archbishop of Palermo | Italian | 1858 | 1907 |
| Desire Mercier | Archbishop of Mechlin | Belgian | 1851 | 1907 |
| Pietro Gasparri | Camerlengo of the Church, Pontif. Secretary of State | Italian | 1852 | 1907 |
| Louis Henry Lucon | Archbishop of Rheims | French | 1842 | 1907 |
| Paulin Pierre Andrieu | Archbishop of Bordeaux | French | 1849 | 1907 |
| Antonio Mendes Bello | Patriarch of Lisbon | Portuguese | 1842 | 1911 |
| Francis Bourne | Archbishop of Westminster | English | 1861 | 1911 |
| William O'Connell | Archbishop of Boston | American | 1859 | 1911 |
| Willem von Rossum | | Dutch | 1854 | 1911 |
| Louis Nazarie Begin | Archbishop of Quebec | Canadian | 1840 | 1914 |
| John Csernoch | Archbishop of Esztergom (Gran) | Hungarian | 1852 | 1914 |
| Gustav Piffl | Archbishop of Vienna | Austrian | 1864 | 1914 |
| Andrew Francis Fruhwirt | | German | 1845 | 1915 |
| Alfonso Maria Mistrangelo | Archbishop of Florence | Italian | 1852 | 1915 |
| Rafael Scapinelli di Leguigno | | Italian | 1858 | 1915 |
| Petro Lafontaine | Patriarch of Venice | Italian | 1860 | 1916 |
| Donato Sbaretti | | Italian | 1856 | 1916 |
| Charles Ernest Dubois | Archbishop of Paris | French | 1856 | 1916 |
| Vittorio A. R. de Bianchi | | Italian | 1857 | 1916 |
| Tommaso Pio Boggiani | | Italian | 1863 | 1916 |
| Alessio Ascalesi | Archbishop of Benevento | Italian | 1872 | 1916 |
| Louis Joseph Maurin | Archbishop of Lyons | French | 1859 | 1916 |
| Alexander Kakowski | Archbishop of Warsaw | Polish | 1863 | 1919 |
| Edmund Dalbor | Archbishop of Posen | Polish | 1869 | 1919 |
| Adolph Bertram | Archbishop of Breslau | German | 1859 | 1919 |
| John S. y Romero | Archbishop of Saragossa | Spanish | 1843 | 1919 |
| Francisco Ragonesi | Nuncio in Spain | Spanish | 1850 | 1921 |
| Michael Faulhaber | Archbishop of Munich | German | 1869 | 1921 |
| Dennis J. Dougherty | Archbishop of Philadelphia | American | 1865 | 1921 |
| Juan B. y Vivo | Archbishop of Burgos | Spanish | 1864 | 1921 |
| Francisco A. V. y Barraquer | Archbishop of Tarragona | Spanish | 1868 | 1921 |
| Karl J. Schulte | Archbishop of Cologne | German | 1871 | 1921 |
| Giovanni Tacci-Ponelli | Pontifical Major Domus | Italian | 1863 | 1921 |
| John Bonzano | Late Apostolic Delegate to the U. S. | Italian | 1867 | 1922 |
| **Cardinal-Deacons—** | | | | |
| Gaetano Bisleti | Commenatory Grand Prior Sov. Order of Malta in Rome | Italian | 1856 | 1911 |
| Louis Billot | | French | 1846 | 1911 |
| Michele Lega | Prefect of the Holy Congregation | Italian | 1860 | 1914 |
| Francis Aidan Gasquet | | English | 1846 | 1914 |
| Nicolo Marini | | Italian | 1843 | 1916 |
| Oreste Giorgi | | Italian | 1856 | 1916 |
| Augusto Silj | Chamberlain of the Church | Italian | 1846 | 1919 |
| Camillo Laurenti | Sec. Congregation de Propaganda Fide | Italian | 1862 | 1921 |

A despatch from Rome, Nov. 16, 1922, announced that the Pope would confer the red hats of Cardinals on the Archbishops of Rennes and Toledo, the Bishop of Orleans, and on Mgr. Mori, Secretary of the Congregation of the Council, and on Father Ehrle, German Jesuit.

## ROMAN CATHOLIC HIERARCHY OF THE UNITED STATES.

### ARCHBISHOPS

| | | Cons. |
|---|---|---|
| Baltimore, Md. | Michael J. Curley | 1914 |
| Boston, Mass. | W. H. O'Connell, Cardinal | 1901 |
| Chicago, Ill. | George W. Mundelein | 1909 |
| Cincinnati, Ohio | Henry Moeller | 1900 |
| Dubuque, Iowa | James J. Keane | 1902 |
| Milwaukee, Wis. | Sebastian G. Messmer | 1892 |
| New Orleans, La. | John W. Shaw | 1910 |
| New York, N. Y. | Patrick J. Hayes | 1914 |
| Oregon City, Ore. | Alexander Christie | 1898 |
| Philadelphia, Pa. | D. J. Dougherty, Cardinal | 1903 |
| St. Louis, Mo. | John Joseph Glennon | 1896 |
| St. Paul, Minn. | Austin Dowling | 1912 |
| San Francisco, Cal. | E. J. Hanna | 1912 |
| Santa Fe, N. Mex. | Albert Daeger | 1902 |

### BISHOPS.

| | | Cons. |
|---|---|---|
| Albany, N. Y. | Edmund F. Gibbons | 1914 |
| Alexandria, La. | Cornelius Van de Ven | 1904 |
| Alton, Ill. | James Ryan | 1888 |
| Altoona, Pa. | J. J. McCort | 1920 |
| Baker City, Ore. | J. F. McGrath | 1914 |
| Baltimore, Md. | O. B. Corrigan (Auxiliary) | 1909 |
| Baltimore, Md. | T. J. Shahan (Rector, Catholic University) | 1914 |
| Belleville, Ill. | Henry Althoff | 1914 |
| Bismarck, N. Dak. | Vincent Wehrie, O. S. B. | 1910 |
| Boise, Idaho | Daniel M. Gorman | 1918 |
| Boston, Mass. | Jos. G. Anderson (Auxil'y) | 1909 |
| Brooklyn, N. Y. | Thos. E. Molloy | 1920 |
| Buffalo, N. Y. | William Turner | 1919 |
| Burlington, Vt. | Joseph J. Rice | 1910 |
| Charleston, S. C. | William T. Russell | 1917 |
| Cheyenne, Wyo. | P. A. McGovern | 1912 |
| Chicago, Ill. | | |
| Cleveland, Ohio | Joseph Schrembs | 1911 |
| Columbus, Ohio | J. J. Hartley | 1904 |
| Concordia, Kan. | Francis J. Tief | 1921 |
| Corpus Christi, Tex. | Emanuel B. Ledvina | 1921 |
| Covington, Ky. | Ferdinand Brossart | 1915 |
| Crookston, Minn. | Timothy Corbett | 1910 |
| Dallas, Tex. | Joseph P. Lynch | 1911 |
| Davenport, Iowa | James Davis | 1904 |
| Denver, Col. | J. Henry Tihen | 1911 |
| Des Moines, Iowa | Thomas W. Drumm | 1919 |
| Detroit, Mich. | M. J. Gallagher | 1915 |
| Duluth, Minn. | J. T. McNicholas, O. P. | 1918 |
| El Paso, Tex. | A. J. Schuler | 1915 |
| Erie, Pa. | J. M. Gannon | 1918 |
| Fall River, Mass. | Daniel F. Feehan | 1907 |
| Fargo, N. Dak. | James O'Reilly | 1910 |
| Fort Wayne, Ind. | Herman J. Alderding | 1900 |
| Galveston, Tex. | C. E. Byrne | 1918 |
| Grand Island, Neb. | J. A. Duffy | 1913 |
| Grand Rapids, Mich. | Edward D. Kelly | 1911 |
| Great Falls, Mont. | M. C. Lenihan | 1904 |
| Green Bay, Wis. | Paul P. Rhode | 1908 |
| Harrisburg, Pa. | P. R. McDevitt | 1916 |
| Hartford, Conn. | John J. Nilan | 1910 |
| | John G. Murray (Auxil'y) | 1920 |
| Helena, Mont. | John P. Carroll | 1904 |
| Indianapolis, Ind. | Joseph Chartrand | 1911 |
| Kansas City, Mo. | Thomas Lillis | 1904 |
| La Crosse, Wis. | | |
| Lafayette, La. | J. B. Jeanmard | 1918 |
| Lead City, S. Dak. | John J. Lawler | 1910 |
| Leavenworth, Kan. | John Ward | 1911 |
| Lincoln, Neb. | C. J. O'Reilly | 1903 |
| Little Rock, Ark. | John B. Morris | 1906 |
| Los Angeles, Cal. | John J. Cantwell | 1917 |
| Louisville, Ky. | Denis O'Donaghue | 1900 |
| Manchester, N. H. | G. A. Guertin | 1907 |
| Marquette, Mich. | Frederick Eis | 1899 |
| Mobile, Ala. | Edward P. Allen | 1897 |
| Nashville, Tenn. | Thomas S. Byrne | 1894 |
| Natchez, Miss. | John E. Gunn | 1911 |
| Newark, N. J. | John J. O'Connor | 1901 |
| New Orleans, La. | J. M. Laval (Auxiliary) | 1911 |
| New York, N. Y. | (Bishop Auxiliary) John J. Dunn | 1921 |
| Ogdensburg, N. Y. | J. H. Conroy | 1912 |
| Oklahoma, Okla. | Theophile Meerschaert | 1891 |
| Omaha, Neb. | J. J. Harty | 1903 |
| Peoria, Ill. | Edmund M. Dunne | 1909 |
| Philadelphia, Pa. | Michael J. Crane (Auxil'y) | 1921 |
| Pittsburgh, Pa. | Hugh C. Boyle | 1921 |
| Portland, Me. | Louis S. Walsh | 1906 |
| Porto Rico | Geo. J. Caruana | 1921 |
| Providence, R. I. | Wm. A. Hickey | 1919 |
| Richmond, Va. | D. J. O'Connell | 1908 |
| Rochester, N. Y. | Thos. F. Hickey | 1905 |
| Rockford, Ill. | Peter J. Muldoon | 1901 |
| St. Augustine, Fla. | Patrick Barry | 1922 |
| St. Cloud, Minn. | J. F. Busch | 1910 |
| St. Joseph, Mo. | M. F. Burke | 1887 |
| | Francis Gilfillan (Coadj.) | 1922 |
| Sacramento, Cal. | | |
| Salt Lake C., Utah | J. S. Glass, C. M. | 1915 |
| San Antonio, Tex. | Arthur Drossaerts | 1918 |
| Savannah, Ga. | Michael Keyes | 1922 |
| Seattle, Wash. | Edward O'Dea | 1896 |
| Scranton, Pa. | M. J. Hoban | 1896 |
| Sioux City, Iowa | Edmond Heelan | 1919 |
| Sioux Falls, S. Dak. | B. J. Mahoney | 1922 |
| Spokane, Wash. | A. F. Schinner | 1905 |
| Springfield, Mass. | Thos. M. O'Leary | 1921 |
| Superior, Wis. | | |
| Syracuse, N. Y. | | |
| Toledo, Ohio | Samuel A. Strich | 1921 |
| Trenton, N. J. | Thomas J. Walsh | 1918 |
| Tucson, Ariz. | Henry Granjon | 1900 |
| Wheeling, W. Va. | J. J. Swint (Auxiliary) | |
| Wichita, Kan. | Augustus Schwertner | 1921 |
| Wilmington, Del. | John J. Monaghan | 1897 |
| Winona, Minn. | Patrick R. Heffron | 1910 |

## MINTS AND ASSAY OFFICES.

**Mints**—Philadelphia, Freas Styer, Supt.; San Francisco, Michael J. Kelly, Supt.; Denver, Robert J. Grant, Supt.

**Assay Offices**—Carson City, Annie H. Martin, Assayer in charge; New Orleans, Leonard Magruder, Assayer in charge.

## UNITED STATES CIVIL SERVICE COMMISSION.

*Commissioners*—Geo. R. Wales, Vermont; Mrs. Helen H. Gardener, District of Columbia.

*Chief Examiner*—Herbert A. Filer, Maryland.
*Secretary*—John T. Doyle, New York.

## THE FEDERAL POWER COMMISSION.

*Commissioners—Chairman, Sec. of War*—John W. Weeks; *Sec. of the Interior*—Albert B. Fall; *Sec. of Agr.*—Henry C. Wallace; *Exec. Sec.*—O. C. Merrill; *Chief Eng.*—Col. Wm. Kelly, U. S. Army; *Chief Counsel*—Major Lewis W. Call, U. S. Army; *Chief Accountant*—Wm. V. King; *Chief Clerk*—F. W. Griffith.

## UNITED STATES BUREAU OF FISHERIES—DEPARTMENT OF COMMERCE.

(From data supplied by the Bureau.)

THE work of the Bureau of Fisheries comprises (1) the propagation of food fishes and their distribution to suitable waters; (2) the inquiry into the causes of decrease of food fishes in the lakes, rivers and coast waters of the United States, the study of the waters of the coast and interior in the interest of fish culture and the investigation of the fishing grounds of the Atlantic, Gulf, and Pacific Coasts, with the view of determining their food resources and the development of the commercial fisheries; (3) the collection and compilation of the statistics of the fisheries; (4) the study of the methods and apparatuses of the fisheries, preservation of fishery products and the development of uses for the little used or neglected products. The bureau also has jurisdiction over the fur seal herds and the salmon fisheries of Alaska. Office, Sixth and B Streets, Washington, D. C. The official force of the bureau is as follows: *Commissioner*—Henry O'Malley. *Deputy Commissioner*—Henry F. Moore. *Chief Clerk*—I. H. Dunlap. Assistants in charge of division: *Inquiry Respecting Food Fishes*—Willis H. Rich. *Fish Culture*—Glen C. Leach. *Statistics and Methods*—vacant. *Alaska Service*—Ward T. Bower.

## SOLDIERS' HOMES.

### NATIONAL HOME FOR DISABLED VOLUNTEER SOLDIERS.

*President of the Board of Managers*.....George H. Wood, National Military Home, Dayton, Ohio.

There are branches of the National Home at Dayton, Ohio; Milwaukee, Wis.; Togus, Me.; Hampton Va.; Leavenworth, Kan.; Santa Monica, Cal.; Marion, Ind.; Danville, Ill.; Johnson City, Tenn, and Hot Springs, S. D. The aggregate number of members cared for is about 25,000.

### STATE HOMES FOR DISABLED VOLUNTEER SOLDIERS.

| States. | Location. | States. | Location. | States. | Location. |
|---|---|---|---|---|---|
| California | Yountville | Missouri | St. James | Ohio | Sandusky, Madison |
| Colorado | Monte Vista | Montana | Columbus Falls | Oregon | Roseburg |
| Connecticut | Noroton Heights | Nebraska | Burkett, Milford | Pennsylvania | Erie |
| Idaho | Boise | New Hampshire | Tilton | Rhode Island | Bristol |
| Illinois | Quincy | New Jersey | Kearny, Vineland | South Dakota | Hot Springs |
| Indiana | Lafayette | New York | Bath, Oxford | Vermont | Bennington |
| Iowa | Marshalltown | North Dakota | Lisbon | Washington | Orting, Retsil |
| Kansas | Fort Dodge | Oklahoma | Oklahoma City | Wisconsin | Waupaca |
| Massachusetts | Chelsea | | | Wyoming | Buffalo |
| Michigan | Grand Rapids | | | | |
| Minnesota | Minnehaha | | | | |

### UNITED STATES SOLDIERS' HOME FOR THE REGULAR ARMY.

The United States Soldiers Home in the District of Columbia was established by an Act of Congress, approved March 3, 1851, for the relief and support of invalid and disabled soldiers of the Army.

Blank applications for admission may be obtained from the Board of Commissioners, U. S. Soldiers' Home, Washington, D. C.

There were on June 30, 1922, 1,016 resident beneficiaries; 49 on outdoor relief, 45 in St. Elizabeth's Hospital; 205 on furlough; and 71 at the Fitzsimons U. S. A. General Hospital, Denver, Col., for the treatment of tuberculosis, making a total of 1,166.

*Governor*—Major Gen. Tasker H. Bliss (retired). *Dep. Governor*—Major Parker W. West (retired). *Secretary-Treasurer*—Col. Robt. H. C. Kelton (retired), U. S. A. *Attending Surgeon*—Col. H. P. Birmingham (retired), U. S. A. *Quartermaster and Purchasing Officer*—Col. Walter C. Babcock (retired), U. S. A.

## UNITED STATES COAST GUARD.

The United States Coast Guard was created by an act of January 28, 1915, which combined the Revenue Cutter Service, organized by act of Congress approved August 4, 1790, and the Life Saving Service, which latter was originally operated under the Revenue Cutter Service, but on June 20, 1874, created a separate service under the Treasury Department.

The Coast Guard operates: (*a*) Twenty-seven seagoing cutters engaged in the assistance of vessels in distress, the enforcement of the navigation laws, the protection of the seal fisheries in Alaska, the destruction of derelicts, the conduct of the International Ice Observation and Ice Patrol Service off the Grand Banks of Newfoundland, and other maritime duties. (*b*) A number of inshore patrol and harbor tugs, inland water patrol vessels, and launches engaged in the service of the customs. (*c*) 277 Coast Guard stations, of which 227 are in active commission, engaged in saving life and property along the coast, and 8 in part commission. (*d*) A coast patrol system guaranteeing early assistance to vessels and persons in distress. (*e*) A communication system linking by telephone all Coast Guard stations and practically all compass stations. (*f*) One aviation station for the protection of life and property along the coast and at sea contiguous thereto.

The commissioned line officers of the service are appointed by the President, by and with the advice and consent of the Senate, from cadets who have completed a three-year course at the Coast Guard Academy, New London, Conn., similar to the course given at Annapolis. Engineer officers are appointed similarly from those who have completed a special course of one year at the academy.

## UNITED STATES STEAMBOAT INSPECTION SERVICE.

(By George Uhler, Supervising Inspector General of that Bureau of United States Department Commerce.)

The Steamboat Inspection Service, by Act of Congress, approved Feb. 14, 1903, was transferred from the Treasury Department to the Department of Commerce. The transfer went into effect July 1, 1903. The Supervising Inspector General of the Steamboat Inspection Service, George Uhler, reported to the Secretary of Commerce for the fiscal year ended June 30, 1922:

Number of annual certificates of inspection issued to domestic steam, motor vessels and barges, 7,206; decrease from previous year, 547. Number of annual certificates issued to foreign steamers, 337; decrease from previous year, 5. Total number of annual certificates of inspection issued to domestic and foreign, 7,543; decrease from previous year, 552.

Gross tonnage of domestic vessels, all kinds inspected, 10,975,357; decrease from previous year, 2,163,873. Gross tonnage of foreign steamers inspected, 2,956,520; decrease from previous year, 135,451. Total gross tonnage of domestic and foreign vessels inspected, 13,931,877; decrease from previous year, 2,299,124.

Number of officers' licenses issued, 26,044; increase over previous year, 47. Number of new life preservers inspected, 160,894, of which number 3,356 were rejected. Decrease in number of new life preservers inspected from previous year, 145,767. Number of marine boiler plates inspected at the mills by assistant inspectors, 2,259.

## THE UNITED STATES GOVERNMENT PRINTING OFFICE.

In this establishment practically all the printing and binding for the Government is performed, with the exception of postage stamps, stamped envelopes, paper money and bonds. The Public Printer is the executive officer of the Government Printing Office, is appointed by the President, and receives a salary of $6,000 a year. Directly, or through his principal officers, he purchases all the materials, paper and machinery, subject to provisions of certain laws; disburses all moneys; appoints all officers and employees under civil service rules and exercises general supervision over all affairs of the office. George H. Carter of Iowa is the Public Printer.

The Government Printing Office was established in 1860, at which time Cornelius Wendell sold his printing plant to the Government. That plant has gradually grown by additions and new buildings, until at the present time it contains approximately 15 acres of floor space and is well equipped with modern machinery for the rapid production of all classes of printing and binding. Congress now appropriates $2,000,000 as a working capital for this office and is entitled to that amount of printing. In addition, each department and independent establishment of the Government orders printing and makes payment of cost thereof to the Public Printer out of appropriations under their control.

Work is performed at cost, and the output runs in value to over $10,000,000 a year. During one year the compensation of employees amounts to $6,500,000, and the value of paper used to $3,100,000; about 80,000 different jobs are handled, ranging from envelopes and blanks to sumptuously bound volumes in large editions; two billion ems of type are set; 162,000 forms are sent to press; 2,100,000,000 chargeable impressions are run from presses; about one billion postal cards are printed; 200,000,000 sheets are folded; 75,000,000 signatures are sewed, and 33,000,000 copies are ruled.

## UNITED STATES PENSION STATISTICS.

| Year (Fisc'l) | Invalids on Roll. | Widows on Roll. | Total on Pen. Roll | Total Disburs. for Pensions. |
|---|---|---|---|---|
| 1878... | 131,649 | 92,349 | 223,998 | $26,786,009.44 |
| 1879... | 138,615 | 104,140 | 242,755 | 33,664,428.92 |
| 1880... | 145,410 | 105,392 | 250,802 | 56,689,229.08 |
| 1881... | 164,110 | 104,720 | 268,830 | 50,583,405.35 |
| 1882... | 182,633 | 103,064 | 285,697 | 54,313,172.05 |
| 1883... | 206,042 | 97,616 | 303,658 | 60,427,573.81 |
| 1884... | 225,470 | 97,286 | 322,756 | 57,912,387.47 |
| 1885... | 247,146 | 97,979 | 345,125 | 65,171,937.12 |
| 1886... | 270,346 | 95,437 | 365,783 | 64,091,142.90 |
| 1887... | 306,298 | 99,709 | 406,007 | 73,752,997.08 |
| 1888... | 343,701 | 108,856 | 452,557 | 78,950,501.67 |
| 1889... | 373,699 | 116,026 | 489,725 | 88,842,720.58 |
| 1890... | 415,654 | 122,200 | 537,914 | 106,093,850.39 |
| 1891... | 536,821 | 139,339 | 676,160 | 117,312,690.50 |
| 1892... | 703,242 | 172,826 | 876,068 | 139,394,147.11 |
| 1893... | 759,706 | 206,306 | 966,012 | 156,906,637.94 |
| 1894... | 754,382 | 215,162 | 969,544 | 139,986,726.17 |
| 1895... | 751,456 | 219,068 | 970,524 | 139,812,294.30 |
| 1896... | 748,514 | 222,164 | 970,678 | 138,220,704.46 |
| 1897... | 747,492 | 228,522 | 976,014 | 139,949,717.35 |
| 1898... | 758,511 | 235,203 | 993,714 | 144,651,879.80 |
| 1899... | 754,104 | 237,415 | 991,519 | 138,355,052.95 |
| 1900... | 752,510 | 241,019 | 993,529 | 138,462,130.65 |
| 1901... | 748,649 | 249,086 | 997,735 | $138,531,483.84 |
| 1902... | 739,443 | 260,003 | 999,446 | 137,504,267.99 |
| 1903... | 729,356 | 267,189 | 996,545 | 137,759,653.71 |
| 1904... | 720,921 | 273,841 | 994,762 | 141,093,571.49 |
| 1905... | 717,761 | 280,680 | 998,441 | 141,142,861.33 |
| 1906... | 701,483 | 284,488 | 985,971 | 139,000,288.25 |
| 1907... | 679,937 | 287,434 | 967,371 | 138,155,412.46 |
| 1908... | 658,071 | 293,616 | 951,687 | 153,093,086.27 |
| 1909... | 632,557 | 313,637 | 946,194 | 161,973,703.77 |
| 1910... | 602,180 | 318,903 | 921,083 | 159,974,056.08 |
| 1911... | 570,050 | 322,048 | 892,098 | 157,325,160.35 |
| 1912... | 538,000 | 322,294 | 860,294 | 152,986,433.72 |
| 1913... | 503,633 | 316,567 | 820,272 | 174,171,660.80 |
| 1914... | 470,331 | 314,908 | 785,239 | 172,417,546.26 |
| 1915... | 437,448 | 310,699 | 748,147 | 165,518,266.14 |
| 1916... | 403,120 | 306,452 | 709,572 | 159,155,089.92 |
| 1917... | 369,936 | 303,175 | 673,111 | 160,895,053.94 |
| 1918... | 340,313 | 306,582 | 646,895 | 179,835,329.00 |
| 1919... | 313,150 | 303,311 | 624,427 | 222,159,292.00 |
| 1920... | 285,110 | 299,363 | 592,190 | 213,295,314.00 |
| 1921... | 267,731 | 290,955 | 566,053 | 258,715,842.54 |
| 1922... | 256,918 | 282,965 | 547,016 | 253,807,583.37 |

Besides the 282,965 widows on the roll in 1922, there were 4,102 dependents, 2,106 minors, and 925 helpless children; of the 256,918 invalids 90 were army nurses of the Civil War. Of the total number of pensioners on June 30, 1922, there were 193,791 Civil War soldiers, as against 218,775 a year before. Of the widows 269,245 were of the Civil War as against 278,098 a year before. To pensioners in foreign countries were paid $1,319,231.39, as against $1,342,022.37 the year before. In the year ended June 30, 1922, there were 25,082 Civil War soldiers who died, as against 24,775 in the previous year.

The largest number of Civil War soldiers on the pension roll, 745,822, was in the year ended June 30, 1898. On June 30, 1922, there were surviving 49 widows of the War of 1812, 73 soldiers and 1,878 widows of the War with Mexico, 3,867 soldiers and 2,748 widows of the Indian Wars, as well as 55,153 pensioners of the War with Spain.

On June 30, 1922, there were 61 World War soldiers and 29 widows and other dependents of that war on the pension roll. For all information as to pensions other than World War, apply to the Commissioner of Pensions, Washington, D. C.

Congress, in May, 1922, passed an act making pensions (except civil) payable monthly.

### WORLD WAR PENSIONS.

World War pensions, &c., are handled by the U. S. Veterans' Bureau, formerly the Bureau of War Risk Insurance, Treasury Dept., Washington, D. C.

The rate of pay given veterans depends upon the degree of disability and the number of dependents. The following section from the War Risk Insurance Act as amended by Act of Congress, December 24, 1919, gives the rate of compensation paid for death or disability resulting from personal injury suffered, or disease contracted in the line of duty.

Section 302. That if the disability results from injury:

1. If and while the disability is rated as total and temporary, the monthly compensation shall be the following amounts: *a*. If the disabled person has neither wife nor child living, $80; *b*. If he has a wife and no child living, $90; *c*. If he has a wife and one child living $95; *d*. If he has a wife and two or more children living, $100; *e*. If he has no wife but one child living, $90; with $5 for each additional child. *f*. If he has a mother or father, either or both dependent on him for support, then in addition to the above amounts $10 for each parent so dependent.

2. If and while the disability is rated as partial and temporary, the monthly compensation shall be a percentage of the compensation that would be payable for his total and temporary disability equal to the degree of the reduction in earning capacity resulting from the disability but no compensation shall be payable for a reduction in earning capacity rated less than 10 per centum.

3. If and while the disability is rated as total and permanent the rate of compensation shall be $100 per month: Provided, however, that the loss of both feet or both hands, or the sight of both eyes, or the loss of one foot and one hand, or one foot and the sight of one eye, or one hand and the sight of one eye, or becoming helpless and permanently bedridden shall be deemed to be total permanent disability: Provided, further, that for double total permanent disability the rate of compensation shall be $200 per month.

4. If and while the disability is rated as partial and permanent the monthly compensation shall be a percentage of the compensation that would be payable for his total and permanent disability equal to the degree of the reduction in earning capacity resulting from the disability, but no compensation shall be payable for a reduction in earning capacity rated at less than 10 per centum.

The Veterans' Bureau, by the Act of August 9, 1921, took over from the Federal Board for Vocational Education, the work of providing for the vocational rehabilitation of disabled persons discharged from the military or naval forces, and also for their hospital care. The bureau also took over the work for veterans done by the U. S. Public Health Service.

Number of claims filed to July 1, 1922, 838,549; number of claims allowed, death, 58,875; number of claims allowed, disability, 351,940; total disbursements covering claims allowed as of July 1, 1922, $359,564,738.

The above figures cover compensation activities of the bureau since its creation.

For the fiscal year ended July 1, 1922, payments were made on 77,195 claims, of which 70,979 were disability claims and 6,216 death claims. The total disbursements for this fiscal period were $123,494,216.

On July 1, 1921, there were being hospitalized in all hospitals 26,869 patients of the bureau, classified as follows: tuberculosis, 10,849; neuro-psychiatric, 9,231; general medical and surgical 6,789.

## WHAT THE U. S. DOES TO HELP EX-SERVICE MEN.

The following bulletin is sent out by the Government with premium notices to ex-service men who have retained their war risk insurance:

THE UNITED STATES VETERANS' BUREAU is: 1. Paying out over $1,000,000 in cash every day, including Sunday, directly into the hands of the ex-service man or his dependents.

2. Providing, without cost, hospital care and treatment to 30,000 veterans. This care includes board and lodging and represents an expenditure by the Government of $60,000,000 per annum.

3. Giving vocational training, without cost, to over 100,000 disabled ex-service men at an expenditure for tuition and supervision of $30,000,000 per annum.

4. Mailing out 650,000 checks every month, representing $42,000,000.

5. Conducting an insurance business for over 600,000 ex-service men without any cost of administration to them. Insurance in force, $3,500,000,000.

6. Conducting over 50,000 medical examinations every month.

7. Giving outside treatment in cases where hospitalization is not required to 20,000 ex-service men every month.

8. Receiving 1,000 new claims every day, in addition to the 1,200,000 already on file, employing 4,000 ex-service men and women in carrying out the work.

9. Requiring for 1922 expenditures in behalf of the disabled ex-service man, $510,000,000—more than the entire expenditure of the whole United States in 1897.

10. The United States of America is already doing more for its disabled veterans than any other country in the world, despite the fact that their losses were far heavier than ours.

11. Do these facts indicate that the disabled ex-service man is being neglected?

C. R. FORBES, Director.

## THE CIVIL SERVICE OF THE UNITED STATES.

Classified employees upon reaching certain ages are automatically retired from the service unless certified for continuance. The requirement age for railway mail clerks is 62 years; for mechanics, post office clerks and carriers, 65 years, and for others 70 years. Those who have served 15 years or more are entitled to annuity based on length of service and salary received during the ten years preceding retirement. The minimum annuity is $180 and the maximum $720 per annum. Deduction of 2½% is made from salaries to provide for this annuity, which will be returned with 4% interest to persons leaving the service before retirement. In case of separation by death the deduction is returned to the person's heirs. If an annultant dies before he receives annuity equal to the deductions made from his salary, with interest, the difference is paid to his heirs.

The number of positions both classified and unclassified on June 30, 1922, was 69,980 in Washington, and 490,883 outside Washington. This made a reduction of 356,897 since the peak of the War.

U. S. NATIONAL CIVIL SERVICE STATISTICS.

| YEAR (F'cal.) | No. Compt. Posit. | Exam-ined. | Passed. | P. C. That Pas'd | Ap-pointed | P. C. Ap. of Pas'd |
|---|---|---|---|---|---|---|
| 1888... | 22,577 | 11,281 | 6,868 | 60.9 | 2,616 | 38.0 |
| 1899... | 29,650 | 19,060 | 11,978 | 62.8 | 3,780 | 31.6 |
| 1890... | 30,626 | 22,994 | 13,947 | 60.7 | 5,182 | 37.2 |
| 1891... | 33,873 | 19,074 | 12,786 | 67.0 | 5,300 | 42.0 |
| 1892... | 37,523 | 19,460 | 12,160 | 62.5 | 3,961 | 32.5 |
| 1893... | 43,915 | 24,838 | 14,008 | 56.5 | 4,291 | 30.6 |
| 1894... | 45,821 | 37,379 | 22,131 | 59.2 | 4,704 | 19.8 |
| 1895... | 54,222 | 31,036 | 19,811 | 63.9 | 4,793 | 24.2 |
| 1896... | 87,044 | 31,179 | 20,714 | 65.4 | 5,086 | 24.6 |
| 1897... | 85,886 | 50,571 | 29,474 | 58.3 | 3,047 | 10.3 |
| 1898... | 89,306 | 45,712 | 30,600 | 66.9 | 7,870 | 25.7 |
| 1899... | 93,144 | 49,164 | 36,312 | 74.0 | 9,557 | 26.3 |
| 1900... | 94,893 | 46,602 | 34,965 | 75.0 | 9,889 | 28.3 |
| 1901... | 106,205 | 48,093 | 33,521 | 69.7 | 10,291 | 30.7 |
| 1902... | 107,990 | 60,558 | 40,500 | 66.9 | 13,298 | 32.8 |
| 1903... | 135,453 | 109,829 | 87,983 | 80.1 | 40,270 | 45.7 |
| 1904... | 154,093 | 127,846 | 100,078 | 78.3 | 48,909 | 48.8 |
| 1905... | 171,807 | 113,053 | 111,741 | 78.1 | 38,996 | 35.0 |
| 1906... | 184,178 | 117,277 | 91,345 | 77.9 | 39,050 | 42.7 |
| 1907... | 194,332 | 129,317 | 93,920 | 72.6 | 43,003 | 45.8 |
| 1908... | 206,637 | 161,793 | 120,760 | 74.6 | 42,153 | 34.9 |
| 1909... | 234,940 | 158,484 | 123,449 | 77.9 | 40,943 | 33.2 |
| 1910... | 222,276 | 115,644 | 87,769 | 75.9 | 43,585 | 49.7 |
| 1911... | 227,657 | 105,024 | 70,159 | 66.8 | 23,256 | 33.2 |
| 1912... | 217,392 | 106,078 | 59,251 | 55.9 | 20,969 | 35.4 |
| 1913... | 282,597 | 141,905 | 94,350 | 66.5 | 35,154 | 37.3 |
| 1914... | 292,460 | 215,587 | 147,526 | 68.4 | 41,935 | 28.4 |
| 1915... | 292,291 | 167,795 | 114,632 | 68.3 | 36,398 | 31.8 |
| 1916... | 296,926 | 154,722 | 113,792 | 73.5 | 42,057 | 37.0 |
| 1917... | 326,899 | 212,114 | 122,280 | 57.6 | 86,312 | 70.5 |
| 1918... | 561,669 | 551,391 | 387,963 | 70.4 | 213,530 | 55.0 |
| 1919... | 492,316 | 438,259 | 299,826 | 68.4 | 179,533 | 60.0 |
| 1920... | 422,963 | 293,327 | 193,915 | 66.1 | 116,309 | 59.9 |
| 1921... | 365,651 | 303,309 | 203,209 | 67.0 | 101,711 | 50.1 |
| 1922... | 354,560 | 201,999 | 126,212 | 62.4 | 47,170 | 37.4 |

## UNITED STATES COAST AND GEODETIC SURVEY.

The Coast and Geodetic Survey of the Department of Commerce is charged with the survey of the coasts of the United States and coasts under the jurisdiction thereof, and the publication of charts covering said coasts.

The results obtained are published in annual reports and in special publications; charts upon various scales, including sailing charts, general charts of the coast, harbor charts, tide tables and current tables issued annually in advance: coast pilots with sailing directions covering the navigable waters; notices to mariners issued weekly as a joint publication of the Coast and Geodetic Survey and the Bureau of Lighthouses, and containing current information necessary for safe navigation; magnetic charts and publications; catalogues of charts and publications and such other publications as may be required to carry out the organic law governing the survey.

STATISTICS AS OF JULY, 1922.

There are about 340,000 square miles of precise triangulation and 3,300 linear miles of precise traverse completed in the United States. Nearly as much again of this precise control work remains to be done before it is brought within fifty miles of every place in the United States. This is the minimum amount required to give adequate control to local surveys. There is tertiary triangulation along the whole coast of the United States proper, but this needs constant revision due to changes in the shore line and to the loss of stations. The necessary triangulation in the Philippine Islands is nearly completed. Alaska, however, has only about one-third of its coast covered by tertiary triangulation. Precise triangulation in the interior of Alaska has just been started.

About 45,000 miles of precise levels have been completed in the United States, and there are about 24,000 miles still to be done to bring the levels within fifty miles of every place in the United States. This is considered the minimum amount necessary to give adequate control for local level lines. There were about 20,000 square miles of precise triangulation, about 400 linear miles of precise traverse and about 900 linear miles of precise levels completed during the past fiscal year.

The first magnetic survey of the United States is nearly finished. Constant revision is needed because of loss of stations from various causes. Observations must be repeated at many stations on account of changes in value of the magnetic elements.

There remains yet to be surveyed 166,000 square miles of water area off the Atlantic and Gulf coasts, besides 5,000 square miles to be developed by dragging close to the shore and such resurveys from time to time in shallow waters as may be necessitated by changes. On the Pacific Coast 67,800 square miles have yet to be done, in addition to 1,400 square miles of dragging and repeated resurveys of shallow water subject to changes. The hydrographic survey of all Alaska is not more than 10 per cent. completed, but a large part of the most frequented waters is surveyed. In the Philippine Archipelago the surveys are 72 per cent. complete. Around the Hawaiian, Porto Rican and Virgin Islands much hydrographic surveying has been accomplished, but there yet remains about three years work for a surveying vessel in each locality.

The foregoing statement refers to the first surveys. Resurveys will at all times be necessary along many parts of the coasts and in harbors, due to changes that are always going on.

## SMILE, POSTMAN! SMILE!

Postmaster General Work, in the Daily Postal Bulletin, April 21, 1922, issued the following rules to Post Office employees:

"1. Smile, use courtesy to all—equals and subordinates, as well as superiors. It requires the use of about thirty-six muscles to smile and of ninety-seven to frown. Why work overtime?

"2. Respect the authority of others and the personal dignity and feelings of subordinates; we are all human beings, not machines.

"3. Criticise constructively. Show how to improve conditions and how to correct and avoid error.

"4. To a patron accept blame for the mistakes of the office: do not air inside differences. If you are doing your best, assume that your fellow workers are doing theirs.

"5. Don't encourage gossip, belittle or adversely criticise a fellow worker. We all have good points, and like credit for good performance.

"6. Be generous when another gets it 'in the neck Fortune's wheel is always turning and you may be on the under side some day.

'7 Don't hide behind cryptic statements and take advantage of the double meanings of words. Cultivate clearness, come clean. Let others know where you stand and what you mean. The old order of secrecy and stealth is gone; speed, analysis, plain speaking and publicity serve better.

"8. Let us have co-operation, intelligent effort, team work and understanding. The old days where only the heads were presumed to have intelligence and the workers were supposed to obey orders blindly and implicitly are gone The executive or supervisor who can get the work out through loyalty and team work rather than direct force of authority is by far the most valued man.

"'All things whatsoever ye would that men should do unto you, do ye even so unto them.' "

## UNITED STATES PATENT OFFICE STATISTICS SINCE 1838.

(By the Com. of Patents. Appl. inc. patents, designs, and reissues. Caveat Law repealed June 25, 1910.)

| YEAR. | Applications. | Caveats Filed. | Patents. | Cash Received. | YEAR. | Applications. | Caveats Filed. | Patents. | Cash Received. |
|---|---|---|---|---|---|---|---|---|---|
| 1838 | ..... | ..... | 520 | $42,123.54 | 1880 | 23,012 | 2,490 | 13,947 | $749,685.32 |
| 1839 | ..... | ..... | 425 | 38,019.97 | 1881 | 26,059 | 2,406 | 16,584 | 853,665.89 |
| 1840 | 765 | 228 | 473 | 38,056.51 | 1882 | 31,522 | 2,553 | 19,267 | 1,009,219.45 |
| 1841 | 847 | 312 | 495 | 40,413.01 | 1883 | 34,576 | 2,741 | 22,383 | 1,146,240.00 |
| 1842 | 761 | 291 | 517 | 36,505.63 | 1884 | 35,600 | 2,582 | 20,413 | 1,075,798.80 |
| 1843 | 819 | 315 | 519 | 35,315.81 | 1885 | 35,717 | 2,552 | 24,233 | 1,188,089.15 |
| 1844 | 1,045 | 380 | 497 | 42,509.26 | 1886 | 35,968 | 2,513 | 22,508 | 1,154,551.40 |
| 1845 | 1,246 | 452 | 503 | 51,076.14 | 1887 | 35,613 | 2,622 | 21,477 | 1,144,509.60 |
| 1846 | 1,272 | 448 | 638 | 50,264.16 | 1888 | 35,797 | 2,251 | 20,506 | 1,118,516.10 |
| 1847 | 1,531 | 533 | 569 | 63,111.19 | 1889 | 40,575 | 2,481 | 24,158 | 1,281,728.05 |
| 1848 | 1,628 | 607 | 653 | 67,576.60 | 1890 | 41,048 | 2,311 | 26,292 | 1,340,372.66 |
| 1849 | 1,955 | 595 | 1,077 | 80,752.78 | 1891 | 40,552 | 2,408 | 23,244 | 1,271,285.78 |
| 1850 | 2,193 | 602 | 993 | 86,927.05 | 1892 | 40,753 | 2,290 | 23,559 | 1,286,331.88 |
| 1851 | 2,258 | 760 | 872 | 95,738.61 | 1893 | 38,473 | 2,247 | 23,769 | 1,242,871.64 |
| 1852 | 2,639 | 996 | 1,019 | 112,056.34 | 1894 | 38,439 | 2,286 | 20,867 | 1,187,439.58 |
| 1853 | 2,673 | 901 | 961 | 121,527.45 | 1895 | 40,680 | 2,415 | 22,057 | 1,245,246.93 |
| 1854 | 3,324 | 868 | 1,844 | 163,789.84 | 1896 | 43,982 | 2,271 | 23,373 | 1,324,059.83 |
| 1855 | 4,435 | 906 | 2,013 | 216,459.35 | 1897 | 47,905 | 2,176 | 23,794 | 1,375,641.72 |
| 1856 | 4,960 | 1,024 | 2,505 | 192,588.02 | 1898 | 35,842 | 1,659 | 22,267 | 1,137,734.48 |
| 1857 | 4,771 | 1,010 | 2,896 | 196,132.01 | 1899 | 41,443 | 1,716 | 25,527 | 1,325,457.03 |
| 1858 | 5,364 | 943 | 3,710 | 203,716.16 | 1900 | 41,980 | 1,731 | 26,499 | 1,350,828.53 |
| 1859 | 6,225 | 1,079 | 4,538 | 245,942.15 | 1901 | 46,449 | 1,842 | 27,373 | 1,449,398.16 |
| 1860 | 7,653 | 1,084 | 4,819 | 256,352.59 | 1902 | 49,641 | 1,851 | 27,886 | 1,552,859.08 |
| 1861 | 4,643 | 700 | 3,340 | 137,354.44 | 1903 | 50,213 | 1,771 | 31,699 | 1,642,201.81 |
| 1862 | 5,038 | 824 | 3,521 | 215,754.99 | 1904 | 52,143 | 1,808 | 30,934 | 1,657,326.53 |
| 1863 | 6,014 | 787 | 4,170 | 195,593.29 | 1905 | 54,971 | 1,896 | 30,399 | 1,806,758.14 |
| 1864 | 6,972 | 1,063 | 5,020 | 240,919.98 | 1906 | 56,482 | 1,885 | 31,965 | 1,790,921.38 |
| 1865 | 10,664 | 1,932 | 6,616 | 348,791.84 | 1907 | 58,762 | 1,967 | 36,620 | 1,910,618.14 |
| 1866 | 15,269 | 2,723 | 9,450 | 495,665.38 | 1908 | 61,475 | 2,110 | 33,682 | 1,896,847.67 |
| 1867 | 21,276 | 3,597 | 13,015 | 646,581.92 | 1909 | 65,839 | 1,948 | 37,421 | 2,042,828.14 |
| 1868 | 20,445 | 3,705 | 13,378 | 681,565.86 | 1910 | 64,629 | 970 | 35,930 | 2,025,536.69 |
| 1869 | 19,271 | 3,624 | 13,986 | 693,145.81 | 1911 | 69,121 | ..... | 34,084 | 2,019,388.03 |
| 1870 | 19,171 | 3,273 | 13,321 | 669,456.76 | 1912 | 70,976 | ..... | 37,731 | 2,118,158.30 |
| 1871 | 19,472 | 3,366 | 13,033 | 678,716.46 | 1913 | 70,367 | ..... | 35,788 | 2,084,417.79 |
| 1872 | 18,246 | 3,090 | 13,590 | 699,726.39 | 1914 | 70,404 | ..... | 41,850 | 2,251,892.82 |
| 1873 | 20,414 | 3,248 | 12,864 | 703,191.77 | 1915 | 70,069 | ..... | 44,934 | 2,290,773.47 |
| 1874 | 21,602 | 3,181 | 13,591 | 738,278.17 | 1916 | 71,033 | ..... | 45,927 | 2,345,540.94 |
| 1875 | 21,638 | 3,094 | 14,837 | 743,453.36 | 1917 | 70,373 | ..... | 42,760 | 2,258,377.10 |
| 1876 | 21,425 | 2,697 | 15,595 | 757,987.65 | 1918 | 59,615 | ..... | 39,941 | 1,977,518.82 |
| 1877 | 20,308 | 2,809 | 14,187 | 732,342.85 | 1919 | 80,400 | ..... | 38,598 | 2,417,071.77 |
| 1878 | 20,260 | 2,755 | 13,444 | 725,375.55 | 1920 | 86,815 | ..... | 39,882 | 2,679,948.31 |
| 1879 | 20,059 | 2,620 | 13,213 | 703,931.47 | 1921 | 93,328 | ..... | 41,401 | 2,775,982.33 |

Figures in column under "Patents" caption include designs (3,277) and reissues (239). Cash expended in 1921 was $2,612,429.

The first patent issued in the U. S. in 1922 was numbered 1,401,948. Up to Jan. 1, 1920, the total number of patents that had been issued by chief foreign countries, from the beginning, was as follows: France, 612,032; Great Britain, 562,258; Belgium, 289,061; Canada, 194,255; Italy, 163,013; Austria, 107,850; Switzerland, 85,364; Austria-Hungary, 75,596; Hungary, 74,354; Spain, 61,364; Sweden, 49,614; Japan, 35,292; Denmark, 32,901; Russia, 32,308; Norway, 31,844; Australia, 22,154; New Zealand, 20,198; Mexico, 19,127; Argentina, 16,921; Brazil, 11,786; Portugal, 10,576; Holland, 9,260; Finland, 8,455; Union of South Africa, 5,825; Chili, 3,714; Cuba, 3,301; Turkey, 2,560; Uruguay, 1,331; Colombia, 1,313.

## NATIONAL CEMETERIES.

(Figures show, respectively, acres and interments.)

Alexandria (Pineville), La., 8.24, 4,610; Alexandria, Va., 5.50, 3,570; Andersonville, Ga., 120, 13,737; Andrew Johnson (Greeneville), Tenn., 15, 36; Annapolis, Md., 4.125, 2,565; Antietam (Sharpsburg), Md., 11, 4,816; Arlington (Ft. Myer), Va., 408.03, 32,438.

Balls Bluff (Lecsburg), Va., .0057, 25; Barrancas, Fla., 8.56, 1,691; Baton Rouge, La., 7.50, 3,211; Battle Ground (Takoma Park Sts.), D. C., 1.033, 44; Beaufort, S. C., 29, 9,572; Beverly, N. J., 1, 248.

Camp Butler (Springfield), Ill., 6.02, 1,609; Camp Nelson, Ky., 9.50, 3,667; Cave Hill (Louisville), Ky., 4.29, 5,032; Chalmette (Arabi), La., 16, 13,231; Chattanooga, Tenn., 129.53, 14,050; City Point, Va., 7.49, 6,206; Cold Harbor (Richmond), Va., 1.75, 1,971; Corinth, Miss., 20, 6,747; Crown Hill (Indianapolis), Ind., 1.37, 893; Culpepper, Va., 6, 1,376; Custer Battlefield (Crow Agency), Mont., 640, 1,619; Cypress Hills (Brooklyn), N. Y., 18.14, 9,027.

Danville, Ky., .31, 362; Danville, Va., 3.50, 1,331.

Fayetteville, Ark., 6.63, 1,346; Finns Point (Salem), N. J., 2.50, 2,642; Florence, S. C., 3.76, 3,016; Fort Donelson (Dover), Tenn., 15.34, 682; Fort Gibson, Okla., 6.90, 2,514; Fort Harrison (Richmond), Va., 1.55, 819; Fort Leavenworth, Kan., 15, 5,805; Fort McPherson (Brady), Neb., 20, 882; Fort Scott, Kan., 10.26, 1,023; Fort Smith, Ark., 14.74, 2,482; Fredericksburg, Va., 12.005, 15,203.

Gettysburg, Pa., 14.87, 3,725; Glendale, Va., 2.12, 1,200; Grafton, W. Va., 3.40, 1,302.

Hampton, Va., 19.611, 12,309.

Jefferson Barracks, Mo., 50, 13,157; Jefferson City, Mo., 2, 872.

Keokuk, Iowa, 2.75, 956; Knoxville, Tenn., 9.85, 3,734.

Lebanon, Ky., 2.50, 879; Lexington, Ky., .75, 1,716; Little Rock, Ark., 23.12, 7,160; Loudon Park (Baltimore), Md., 3.69, 4,377.

Marietta, Ga., 24, 10,480; Memphis, Tenn., 43.91, 14,618; Mexico City, Mex., 2, 1,558; Mill Springs (Somerset), Ky., 3.50, 740; Mobile, Ala., 2.68, 1,179; Mound City, Ill., 10.50, 5,490.

Nashville (Madison), Tenn., 65, 16,817; Natchez, Miss., 11.07, 3,530; New Albany, Ind., 5.46, 3,246; Newbern, N. C., 7.69, 3,430.

Philadelphia (Pittsville Sta.), Pa., 13.26, 3,803; Poplar Grove (Petersburg), Va., 8.65, 6,227; Port Hudson, La., 8, 3,855.

Quincy, Ill., .459, 320.

Raleigh, N. C., 7.83, 1,226; Richmond, Va., 9.74, 6,600; Rock Island, Ill., 1, 462.

Salisbury, N. C., 6, 12,167; San Antonio, Tex., 3.63, 2,498; San Francisco (Presidio Sta.), Cal., 9.5, 8,902; Santa Fe, N. M., 9.44, 1,185; Seven Pines (Richmond), Va., 1.55, 1,403; Shiloh (Pittsburg Landing), Tenn., 10.05, 3,632; Soldiers' Home, D. C., 16, 8,258; Springfield, Mo., 11, 2,581; St. Augustine, Fla., 1.33, 1,820; Staunton, Va., 1.15, 773; Stone River (Murfreesboro), Tenn., 20.10, 6,149.

Vicksburg, Miss., 40, 17,197.

Wilmington, N. C., 5, 2,402; Winchester, Va., 4.89, 4,553; Woodlawn (Elmira), N. Y., 2.36, 3,302.

Yorktown, Va., 3, 2,203.

Total, 392,080.

Of the interments, 238,837 are those of known, 153,243 those of unknown dead.

About 19,700 of the bodies are those of Confederates, being mainly in the National Cemeteries at Arlington, Camp Butler, City Point, Cypress Hills, Finns Point, Fort Smith, Hampton, Jefferson Barracks, Little Rock, Philadelphia, Springfield and Woodlawn.

## THE UNITED STATES CENSUS.

(From data supplied by the Bureau.)

The Constitution requires a census of the United States decennially. The first was in 1790 under the supervision of the President; subsequent censuses, to and including that of 1840, were under the Secretary of State. In 1849 the census work was transferred to the newly organized Department of the Interior, where it remained until the passage, in 1903, of the act creating the Department of Commerce and Labor, by which the Census Bureau was transferred to the new department. Meanwhile Congress, March 6, 1902, had made the Census Office a permanent bureau. Since March 4, 1913, when the Department of Commerce and the Department of Labor were separately organized, the Bureau of the Census has been attached to the former. The work is divided into two branches, the decennial census and special statistical inquiries, the latter mostly made between the decennial censuses.

The Fourteenth Decennial Census was taken as of January 1, 1920. It covers: (1) population, (2) agriculture (including irrigation and drainage), (3) manufactures, (4) forestry and forest products, and (5) mines, quarries, and oil and gas wells. The cost of this census is estimated at $20,179,000, in addition to which $2,371,000 will be spent in carrying on the annual investigations of the bureau during the three-year census period (July 1, 1919, to June 30, 1922). Of the first named amount, $12,500,000 covers the cost of collecting the data through approximately 87,000 enumerators, in addition to supervisors, clerks, and special agents.

The permanent work of the bureau is provided for by the act of Congress approved March 6, 1902, and amendatory and supplemental acts, and include the gathering and publishing of statistical facts pertaining to the dependent, defective, and delinquent classes; wealth, public indebtedness, and taxation; births and deaths; financial and other activities of cities; finances of States; religious bodies; marriages and births; transportation by water; electrical industries; Federal employees; cotton and tobacco stocks, and business conditions. These inquiries are made at intervals ranging in length from ten years to two weeks. The census of manufactures, in addition to forming part of the decennial census, is taken in each mid-decennial year; and a biennial census of products of manufacturing industries and a quinquennial census of agriculture will also be taken hereafter. Special inquiries are made from time to time at the direction of the President, the Secretary of Commerce, or Congress.

The Director of the Census is appointed by the President and receives $7,500 per annum during the three-year decennial census period and $6,000 during the seven "intercensal" years. The Director is William M. Steuart, of Michigan; Assistant Director, Joseph A. Hill, of New Hampshire. The permanent organization includes five chief statisticians —for Population, William C. Hunt; for Manufactures, Eugene F. Hartley; for Statistics of States and Cities, Starke M. Crogg; for Agriculture, Cotton and Tobacco, William L. Austin; and for Vital Statistics, William H. Davis. The permanent employees of the bureau of Washington number approximately 700, and in addition about 700 special agents are employed intermittently in the South for the collection of cotton statistics. The total office force of the bureau, including temporary employees, during the three-year decennial census period reached a maximum of about 6,000.

## THE NATIONAL PARKS AT A GLANCE.

(Number, 19; total area, 11,304 square miles.)

| National Parks in Order of Creation. | Location. | Area in Sq. Miles | Distinctive Characteristics. |
|---|---|---|---|
| Hot Springs, 1832 | Middle Arkansas | 1½ | 46 hot springs possessing curative properties. |
| Yellowstone, 1872 | No'western Wyoming | 3,348 | Geysers; boiling springs; mud volcanoes; petrified forests; Grand Canyon of the Yellowstone. |
| Sequoia, 1890 | Middle eastern California | 252 | 12,000 sequoia trees over 10 feet in diameter, some 25 to 36 feet in diameter; cave. |
| Yosemite, 1890 | Middle eastern California | 1,125 | Valley of world-famed beauty; lofty cliffs; many waterfalls of extraord'y height; 3 groves of big trees. |
| General Grant, 1890 | Mid. east'n California | 4 | Created to preserve Gen. Grant Tree, 35 ft. in diam. |
| Mount Rainier, 1899 | W. central Washington | 324 | 28 glaciers; 48 sq. miles of glacier, 50 to 500 ft. thick. |
| Crater Lake, 1902 | Southwestern Oregon | 249 | Lake of extraordinary blue in crater of extinct volcano; sides 1,000 feet high; lava; fishing. |
| Wind Cave, 1903 | South Dakota | 17 | Miles of galleries and chambers containing peculiar formation. |
| Platt, 1904 | Southern Oklahoma | 1⅛ | Many sulph. and oth. springs possess medicinal value. |
| Sullys Hill, 1904 | North Dakota | 1⅛ | An important wild animal preserve. |
| Mesa Verde, 1906 | So'western Colorado | 77 | Most notable, best preserved prehistoric cliff dwellings. |
| Glacier, 1910 | No'western Montana | 1,534 | 250 glacier-fed lakes; 60 small glaciers; precipices thousands of feet deep. |
| Rocky Mount'n, 1915 | North middle Colorado | 397½ | Heart of the Rockies; snowy range, peaks 11,000 to 14,255 feet altitude. |
| Hawaii, 1916 | Hawaii | 118 | Kilauea & Mauna Loa on Hawaii, Haleakala on Maui. Only active volcano in U. S. proper; hot springs; mud geysers. |
| Lassen Volcano, 1916 | Northern California | 124 | |
| Mt. McKinley, 1917 | South central Alaska | 2,645 | Highest mountain in North America. |
| Grand Canyon, 1919 | North central Arizona | 958 | Greatest example of erosion in the world. |
| Lafayette, 1919 | Maine coast | 8 | Group of granite mountains on Mt. Desert Island. |
| Zion, 1919 | Southwestern Utah | 120 | Zion Canyon, 800 to 2,000 feet deep. |

There are also seven national military and other parks under the jurisdiction of the Secretary of War. They are as follows: Chickamauga and Chattanooga, Georgia and Tennessee; Shiloh, Tennessee; Gettysburg, Pennsylvania; Vicksburg, Mississippi; Antietam Battlefield, Maryland; Lincoln's birthplace, Kentucky; Guilford Court House, North Carolina.

The national parks and national monuments, unless otherwise stated, are under the supervision of the Secretary of the Interior. Congress, by act of August 25, 1916, created a National Park Service, and placed the administration of the national parks and monuments under the Department of the Interior in charge of a director of such service. General information, the annual administrative reports and copies of the rules and regulations relating to the parks may be obtained from the Director of the National Park Service, Washington, D. C., or the Superintendents of the parks.

### NATIONAL MONUMENTS.

Under the Act of Congress, approved June 8, 1906, interdepartmental regulations governing the excavation, appropriation, etc., of prehistoric ruins or objects of antiquity have been promulgated by the Secretaries of the Interior, Agriculture, and War. Application for permits to make excavations on the public lands, Indian reservations, or the national monuments named below should be addressed to the Secretary of the Interior. The following have been preserved from entry and set aside as national monuments: Devils Tower, Wyoming; Montezuma Castle, Arizona; Petrified Forest, Arizona; El Morro, New Mexico; Chaco Canyon, New Mexico; Muir Woods, California; Natural Bridges, Utah; Lewis and Clark Cavern, Montana; Tumacacori, Arizona; Navajo, Arizona; Shoshone Cavern, Wyoming; Gran Quivira, New Mexico; Katmai and Sitka, Alaska; Rainbow Bridge, Utah; Pinnacles, California; Colorado, Colorado; Papago Saguaro, Arizona; Capulin Mountain, New Mexico; Dinosaur, Utah; Verendrye, North Dakota; Casa Grande, Arizona; Scott's Bluff, Nebraska; Yucca House, Colorado.

Eleven other national monuments in national forests have also been set aside under this act and placed under the jurisdiction of the Secretary of Agriculture, to whom inquiries in regard thereto should be addressed. Two other national monuments (Big Hole Battlefield, in Montana, and Cabrillo, in California) are under the jurisdiction of the Secretary of War.

## NATIONAL FORESTS.

| Forest. | State. | Net Area, National Forest Land, Acres. |
|---|---|---|
| Absaroka | Mont. | 841,079 |
| Alabama | Ala. | 81,302 |
| Angeles | Cal. | 826,331 |
| Apache | Ariz. | 1,185,512 |
| Arapaho | Col. | 634,284 |
| Arkansas | Ark. | 652,565 |
| Ashley | Utah-Wyo. | 980,135 |
| Battlement | Col. | 660,823 |
| Beartooth | Mont. | 660,088 |
| Beaverhead | Mont. | 1,339,519 |
| Bighorn | Wyo. | 1,124,617 |
| Bitterroot | Mont. | 1,047,420 |
| Blackfeet | Mont. | 894,573 |
| Black Hills | S. D.-Wyo. | 620,556 |
| Boise | Idaho. | 1,062,698 |
| Bridger | Wyo. | 698,325 |
| Cabinet | Mont. | 829,184 |
| Cache | Idaho-Utah. | 770,131 |
| Califofnia | Cal. | 818,459 |
| Caribou | Idaho-Wyo. | 703,858 |
| Carson | N. M. | 869,320 |
| Cascade | Ore. | 1,022,312 |
| Challis | Idaho. | 1,253,856 |
| Chelan | Wash. | 1,967,388 |
| Cherokee | Ga.-N. C.-Tenn. | 203,429 |
| Chugach | Alaska | 5,129,544 |
| Clearwater | Idaho. | 785,376 |
| Cleveland | Cal. | 549,271 |
| Cochetopa | Col. | 907,000 |
| Coconino | Ariz. | 1,637,052 |
| Coeur d'Alene | Idaho. | 662,570 |
| Colorado | Col. | 853,641 |
| Columbia | Wash. | 785,224 |
| Colville | Wash. | 754,737 |
| Coronado | Ariz.-N. M. | 1,430,043 |
| Crater | Ore.-Cal. | 852,158 |
| Crook | Ariz. | 889,939 |
| Custer | Mont.-S. D. | 591,702 |
| Datil | N. M. | 2,641,521 |
| Deerlodge | Mont. | 829,984 |
| Deschutes | Ore. | 1,283,808 |
| Dixie | Utah-Ariz.-Nev. | 518,346 |
| Eldorado | Cal.-Nev. | 552,918 |
| Fillmore | Utah. | 701,696 |
| Fishlake | Utah. | 665,275 |
| Flathead | Mont. | 1,728,365 |
| Florida | Fla. | 320,273 |
| Fremont | Ore. | 849,526 |
| Gallatin | Mont. | 567,614 |
| Gila | N. M. | 1,596,296 |
| Gunnison | Col. | 905,382 |
| Harney | S. D. | 508,514 |
| Hayden | Wyo.-Col. | 394,011 |
| Helena | Mont. | 680,303 |
| Holy Cross | Col. | 1,171,921 |
| Humboldt | Nev. | 1,322,450 |
| Idaho | Idaho. | 1,864,321 |
| Inyo | Cal.-Nev. | 1,262,026 |
| Jefferson | Mont. | 1,041,822 |
| Kaibab | Ariz. | 752,217 |
| Kaniksu | Wash.-Idaho. | 445,917 |
| Klamath | Cal.-Ore. | 1,533,980 |
| Kootenai | Mont. | 1,332,355 |
| La Sal | Utah-Col. | 538,717 |
| Lassen | Cal. | 943,197 |
| Leadville | Col. | 930,568 |
| Lemhi | Idaho. | 1,097,779 |
| Lewis and Clark | Mont. | 810,731 |
| Lincoln | N. M. | 1,123,868 |
| Lolo | Mont. | 850,677 |
| Luquillo | Porto Rico. | 12,443 |
| Madison | Mont. | 931,885 |
| Malheur | Ore. | 1,043,777 |
| Manti | Utah. | 778,651 |
| Manzano | N. M. | 702,208 |
| Medicine Bow | Wyo. | 477,701 |
| Michigan | Mich. | 123,647 |
| Minidoka | Idaho-Utah. | 590,485 |
| Minnesota | Minn. | 190,602 |
| Missoula | Mont. | 1,030,677 |
| Modoc | Cal. | 1,461,599 |
| Mono | Cal.-Nev. | 1,258,328 |
| Monongahela | Va.-W. Va. | 55,652 |
| Montezuma | Col. | 697,742 |
| Nantahala | Ga.-N. C.-S. C. | 214,682 |
| Natural Bridge | Va. | 106,718 |
| Nebraska | Neb. | 205,944 |
| Nevada | Nev. | 1,175,355 |
| Nezperce | Idaho. | 1,658,587 |
| Ochoco | Ore. | 717,994 |
| Olympic | Wash. | 1,535,503 |
| Oregon | Ore. | 1,053,820 |
| Ozark | Ark. | 291,526 |
| Payette | Idaho. | 1,202,451 |
| Pend Orielle | Idaho. | 674,764 |
| Pike | Col. | 1,093,073 |
| Pisgah | N. C. | 213,668 |
| Plumas | Cal. | 1,153,044 |
| Powell | Utah. | 681,429 |
| Prescott | Ariz. | 1,447,024 |
| Rainier | Wash. | 1,316,517 |
| Rio Grande | Col. | 1,135,728 |
| Routt | Col. | 744,856 |
| St. Joe | Idaho. | 543,962 |
| Salmon | Idaho. | 1,620,265 |
| San Isabel | Col. | 599,096 |
| San Juan | Col. | 1,240,141 |
| Santa Barbara | Cal. | 2,017,398 |
| Santa Fe | N. M. | 1,364,585 |
| Santiam | Ore. | 607,097 |
| Sawtooth | Idaho. | 1,159,339 |
| Selway | Idaho. | 1,688,287 |
| Sequoia | Cal. | 1,879,779 |
| Sevier | Utah. | 718,252 |
| Shasta | Cal. | 849,656 |
| Shenandoah | Va.-W. Va. | 284,623 |
| Shoshone | Wyo. | 1,583,489 |
| Sierra | Cal. | 1,493,400 |
| Siskiyou | Cal.-Ore. | 1,346,901 |
| Sitgreaves | Ariz. | 631,474 |
| Siuslaw | Ore. | 545,750 |
| Snoqualmie | Wash. | 693,733 |
| Stanislaus | Cal. | 810,802 |
| Superior | Minn. | 857,339 |
| Tahoe | Cal.-Nev. | 512,748 |
| Targhee | Idaho-Wyo. | 1,357,297 |
| Teton | Wyo. | 1,880,825 |
| Toyiabe | Nev. | 1,883,837 |
| Tongass | Alaska | 15,443,900 |
| Tonto | Ariz. | 2,112,888 |
| Trinity | Cal. | 1,409,490 |
| Tusayan | Ariz. | 1,289,351 |
| Uinta | Utah. | 1,021,191 |
| Unaka | Tenn.-N. C.-Va. | 133,478 |
| Umatilla | Ore.-Wash. | 1,229,060 |
| Umpqua | Ore. | 1,010,206 |
| Uncompahgre | Col. | 778,291 |
| Wallowa | Ore. | 957,419 |
| Wasatch | Utah. | 609,576 |
| Washakie | Wyo. | 852,315 |
| Washington | Wash. | 1,461,193 |
| Weiser | Idaho. | 566,002 |
| Wenatchee | Wash. | 818,334 |
| White Mountain | N. H.-Me. | 436,371 |
| White River | Col. | 845,104 |
| Whitman | Ore. | 1,313,523 |
| Wichita | Okla. | 61,480 |
| Wyoming | Wyo. | 966,954 |
| Net total | | 156,837,282 |

The original forests of the United States covered about 822,000,000 acres and contained 5,200,000,000 board feet of timber. There are left (June 30, 1922) 463,000,000 acres of forest land, containing 2,215,000,000,000 board feet. Of this, 137,000,000 is in virgin timber, 112,000,000 acres is culled and second-growth timber large enough for sawing, 133,000,000 acres is partially stocked with smaller growth, and 81,000,000 acres is devastated and practically waste land. The present rate of timber consumption is more than four times the annual growth of the forests. Of the standing timber, 349,000,000,000 feet is in the New England, Mid-Atlantic, Central and Lake States; 1,141,000,000,000 feet is in the Pacific Coast States.

The National Forests include 156,837,282 acres (net). The annual revenue for the fiscal year ending June 30, 1922, was $5,068,527. Of this amount $1,646,996 was for grazing fees pertaining to the fiscal year 1921 authorized by Congress to be paid subsequent to June 30, 1921. The receipts collected in the fiscal year 1922, which properly pertained to that year, were $3,421,531. Cost of administration averages $4,000,000 a year. Thirty-three States have their own forestry departments.

The forest fire losses in 45 States for the six-year period, 1916-1921 inclusive, were $98,546,076. This damage was occasioned by 200,096 forest fires, which burned over 65,172,066 acres.

# The United States of America.

(FEDERAL REPUBLIC.)

| | *Continental.* | *Total.* |
|---|---|---|
| *AREA, square miles* | *3,026,789* | *3,743,510* |
| *POPULATION, 1920* | *105,710,620* | *117,859,495* |

The United States of America, oldest republic, is bounded on the north by Canada, on the east by the Atlantic Ocean and the Gulf of Mexico, on the south by the Gulf of Mexico and Mexico, and on the west by the Pacific Ocean. It comprises 48 States and the Federal District of Columbia. This is called for convenience in reference "Continental United States." Its non-contiguous areas are the Territories of Alaska and Hawaii; Porto Rico, the Philippine Islands, the Virgin Islands of the United States, American Samoa, Guam, Wake and scattered islands in the Pacific; and the Panama Canal Zone, all aggregating 716,721 square miles, which, added to the 3,026,789 square miles of continental United States, give a total of 3,743,510 square miles.

The population of continental United States, Census of 1920, was 105,710,620; of the non-contiguous areas (partly estimated) 12,148,875, the grand total being 117,859,495. (See pages 321 et seq. for population tables).

The general topography of continental United States is so varied, and the climate, natural resources and racial elements also, that the country may be said to be several countries articulated in one national body. In the eastern part, excepting on the south, are several mountain ranges of the Appalachian system, rising never to more than 6,000 to 7,000 feet of altitude, and ranging north and south. The Adirondacks, in northern New York State, are declared by the United States Geological Survey to have been the first land that rose from the original chaos in the western world, being, therefore, the oldest mountains in the United States.

Sweeping westward from the eastern mountains is a vast, fertile plain, the valley of the Mississippi River, a thousand miles wide and about as long, to where the mountain formation again is found, the Rocky Mountain range, highest in North America, beyond which westwardly is a tableland of mean elevation of 3,000 to 5,000 feet, and still further to the westward are other mountain ranges of lesser altitudes, with a low coast range skirting the shores of the Pacific Ocean.

The United States has seven great rivers—the Hudson, entering the Atlantic at the harbor of New York City in the northeastern corner of the country; the Delaware, entering the Atlantic through Delaware Bay, midway down the coast; the Potomac, entering the Atlantic through Chesapeake Bay, just south from Delaware Bay; the Mississippi, greatest of North American rivers in its relationship to civilization, rising in Minnesota, near to Canada, entering the Gulf of Mexico on the southern side of the country; the Ohio, flowing from the eastern mountains westwardly to join the Mississippi in the East Central part of the country; the Missouri, which flows from the northwestern mountains eastwardly to the Mississippi, being confluent with that stream just north of where the Ohio joins it; the Columbia, which rises in British territory, and flows across a vast tableland westof the Rocky Mountains, into the Pacific Ocean one-third of the way down that coast; the Colorado, non-navigable, which rises in the State of Colorado, flows in general course southwestwardly through Utah and Arizona, and between Arizona and California, into the Gulf of California, in Mexico.

Besides these streams, there are many of considerable and navigable size in the areas east from the Rocky Mountains, and the great St. Lawrence River, as the outlet of the Great Lakes on the northern border between the United States and Canada, skirts the northeastern boundary of the United States.

The Great Lakes, Superior, largest inland body of fresh water in the world; Huron, Erie, Michigan, and Ontario, are a striking phase of the geological formation, and carry immense passenger and freight tonnage. The Mississippi, Potomac, Delaware, Hudson and Columbia Rivers are navigable for considerable distances inland from the sea, and the Missouri for light-draught craft quite a distance up from the Mississippi.

Of the lesser rivers, the most important are the Connecticut, Susquehanna, James, Cumberland, Tennessee, Tombigbee, Warrior, Arkansas and Red in the eastern half of the country, and the Sacramento on the Pacific Coast; while the Rio Grande, rising in Colorado, non-navigable, save for 61 miles from its mouth, is the eastern half boundary between the United States and Mexico. (See pages 718-19.)

The largest river under the American flag is the Yukon in Alaska, which rises in small lakes in the Dominion of Canada, flows northwestwardly into Alaska, then westwardly and then southwestwardly into Norton Sound, which in turn makes into Bering Sea. It is navigable for more than 2,000 miles inland.

The climate of the United States is of every gradation, from the north temperate, with rather cold winters and pleasant summers, to the sub-tropical, with every variety of flora suitable to so wide a range of latitude. Eastwardly and westwardly, even greater variation is found. For there are regions of normal moisture precipitation in the northeast, of excessive precipitation in the southeast, of normal precipitation in the central tableland regions, and then of varying degrees of aridity and moistness as one proceeds westwardly, until on the coast of Oregon, at Tillamook, is the heaviest average precipitation in the United States—120 inches a year. (See tables 76-77.)

The Southwestern United States is marked by several almost deserts, susceptible of reclamation by irrigation, some of which were the beds of great inland salt water seas, at some points the present surface elevation being lower than the surface of the ocean.

The area of continental United States was acquired by various purchases, treaties and in wars, from England, France and Mexico, and the dependencies from Russia, Spain, Panama, the former Hawaiian Government, and Denmark. (See tables following.)

The Thirteen Original States included about 900,000 square miles, and were colonies when the War of the Revolution was fought against England, 1776-83.

In natural resources, the United States is one of the richest countries in the world. Its coal, oil, timber and precious metals exist in vast natural stores, and practically every base mineral known to civilization is deposited in its areas. The timber resources have been depleted seriously, but the Federal Forest Service has begun reforestation, and has matured plans to make the natural timber lands perpetual by replanting.

Improvement also of the rivers and harbors has proceeded to a large extent, although by no means as extensive as similar development in Europe. The great navigable rivers mentioned heretofore have been treated by the engineers for removal of obstructions in many places, great jetties have been built at the mouths of the Columbia and Mississippi, large terminal facilities provided at many of the ports, and plans are working out for the perfection of all of them according to modern standards. The most important domestic canal is the New York State Barge Canal; many others were permitted to lapse into non-use when railway transport absorbed attention so exclusively in the last half of the last century. (See pages 721-22.) The natural conditions, however, would permit of almost illimitable canal development if more artificial waterways are needed.

Originally an agricultural people, the presence of so vast natural stores of minerals and timbers, together with increased "pressure of population on land," has operated to induce great industrial development, until the United States is to-day one of the world's greatest merchants on the high seas, its steel, rubber goods, timber, cotton, machinery, foodstuffs and many other commodities going to the ends of the earth.

The increase of industrial interest has been coincidental with and in large part the cause of the very heavy immigration which came in before the present immigration restriction law was enacted. Many came to work in the mines and factories and in construction of railways and industrial works. Up to the latter part of the last century,

the population of the United States was in a majority rural—that is, dwelt on farms or in communities of fewer than 2,500 inhabitants. The increase of industrial concerns has attracted so many to the towns and cities that the 1920 census indicated town dwellers as 51.4 per cent. of the whole population. (See tables following.)

The agricultural interests of the country are very large. The Census Bureau reported for 1920 that of the approximate land area of 1,903,215,360 acres, all farm lands contained 955,863,715 acres; improved lands, 503,073,067 acres; or 50 per cent. of all the land in the farm lands classification; that the value of all farm property was $77,924,100,338; of land alone, $54,829,563,059; of buildings, $11,486,439,543; of implements, $3,594,772,928; and of livestock, $8,013,324,808; the value of all farm crops in 1919 being $14,755,364,894, against $9,523,514,211 in 1909, the increase having been due largely to very much higher prices.

On Sept. 1, 1922, the Department of Agriculture reported that the principal crops of the country would bring to the farmers $1,250,000,000 more than in 1921, prices having been lower in 1921 than before. (See pages 274 et seq.)

The value of mining products in 1921 was given by the United States Geological Survey as $4,056,000,000. (See tables following.)

The total value of the products manufactured in the United States returned in the Census of 1919 was $14,793,902,563. (See tables following.)

The United States has been known as a melting-pot of the peoples of the earth, its population, at first of the ancient races such as the Aztecs, then of the American Indian, and, in the first days of settlement by white people from Europe, English predominating. From the beginning, immigration has been numerous, and attained a million persons a year up to the beginning of the World War, Chinese and Japanese being rigidly restricted. (See tables on pages 354 et seq.) At the present time, other admissible aliens may come in at the rate of only 3 per cent. of their own nationality already here as shown in the 1910 census. (See pages 200-2.)

In the industrial centres, large numbers of Austrians, Italians, Germans and not a few Britons, with very many Slavs, have settled; and in the agricultural sections Scandinavians are numerous in the North Central States, and Germans from the Great Lakes to the border States.

The 1920 census assigned of the total 105,710,620 of population, native white, 81,108,161; native parentage, 58,421,957; foreign parentage, 15,694,539; with 6,991,665 of mixed parentage. Those of foreign parentage and of recently immigrated foreign blood number more than 30,000,000. (See tables on pages 321 et seq.)

By gradual increase of power, as well as increase of legal authority, the President of the United States is the most potent governmental head in the world. Under the Constitution, as originally interpreted, the President had relatively little initiative, but received direction by the Congress in all important matters, especially when they touched foreign affairs. In the last 50 years the balance has changed to a large degree, until the Executive establishment now exercises power little dreamed of when the Republic was established.

The army of the United States has been reduced by 100,000 men by recent reorganizations, leaving it, infantry, 46,423; cavalry 9,871; field artillery 17,173; coast artillery, 12,026; engineers, 5,020; air service, 8,500; signal corps, 2,184; quartermaster corps, 8,000; ordnance, 2,307; finance, 399; chemical warfare, 445; medical, 6,850. Camps for the training of a citizen army for reserve are maintained in several places.

A small contingent of the army is still in Germany, and its early withdrawal is contemplated.

Surplus war materials valued at $139,773,926 have been transferred to the Department of Agriculture for the use of the Bureau of Public Roads, including 29,325 motor vehicles.

The volume of actual circulating medium in this country, as of Sept. 10, 1922, was $4,392,300,000, or $39.93 per capita, the general stock of money being $8,303,549,241. More than a third was in gold and bullion, $3,858,548,202, held in the Federal Treasury or in reserve banks. Private holders have in their possession $416,387,032 of gold. This gold is about one-half the world's known store, it being estimated that since the world began there has been mined a total of $18,000,000,000 of gold, that $10,000,000,000 has been used in the arts or lost, and that $8,000,000,000 remains in the possession of Governments in the several countries. (See tables.)

The money of the United States is accepted at its gold par anywhere in the world. The circulating medium varies with the needs of business, by reason of the operation of the quasi-public Federal Reserve System, which provides a flexible method of expansion and contraction according as conditions change, and a co-ordination of the business credit of the country in a reservoir, precluding, it is held, the possibility of the former periodic panics.

The United States, having had to conquer so large an area and bring its material resources into use, has not developed its artistic life as have some older peoples; however, lately there has been much more attention to art, a phase being the bringing here of a vast accumulation of art treasures, purchased by wealthy Americans, while schools of the several arts are developing rapidly. (See pages 361 et seq.)

Scenically, the United States and its non-contiguous areas possess almost every variety of landscape and mountain view, Mt. McKinley, Alaska, the highest elevation in North America, 20,300 feet, being visible from sea level on Cook Inlet, probably the highest spot on earth to be seen from the surface of the ocean; Mt. Whitney, California, next, 14,501 feet. The scenic attractions are more and more appreciated, and six transcontinental railway routes and the developing automobile routes are thronged nowadays with tourists from all over the world. (See the several States and Territories following.)

The United States is now the second largest in merchant marine in the world, Great Britain leading. (See United States Shipping Board article elsewhere, also tables on pages 716-17.)

In naval strength it equals any. (See article on Washington Conference on Disarmament.)

The United States is not a member of the League of Nations.

## AREA OF UNITED STATES, AND OUTLYING POSSESSIONS, 1790-1920.

| Census Year. | U. S., Including Possessions. | | U. S., Excluding Possessions. | | | | Outlying Possessions. |
|---|---|---|---|---|---|---|---|
| | Gross Area (Land and Water). | Per Cent. of Area in 1920. | Gross Area (Land and Water). | Per Cent. of Area in 1920. | Land. | Water. | Gross Area. |
| | *Square Miles.* | | *Square Miles.* | | *Square Miles.* | *Square Miles.* | |
| 1790 | 892,135 | 23.8 | 892,135 | 29.5 | 867,980 | 24,155 | ..... |
| 1800 | 892,135 | 23.8 | 892,136 | 29.5 | 867,980 | 24,155 | ..... |
| 1810 | 1,720,122 | 46.0 | 1,720,122 | 56.8 | 1,685,865 | 34,257 | ..... |
| 1820 | 1,792,223 | 47.9 | 1,792,223 | 59.2 | 1,753,588 | 38,635 | ..... |
| 1830 | 1,792,223 | 47.9 | 1,792,223 | 59.2 | 1,753,588 | 38,635 | ..... |
| 1840 | 1,792,223 | 47.9 | 1,792,223 | 59.2 | 1,753,588 | 38,635 | ..... |
| 1850 | 2,997,119 | 80.1 | 2,997,119 | 99.0 | 2,944,337 | 52,782 | ..... |
| 1860 | 3,026,789 | 80.9 | 3,026,789 | 100.0 | 2,973,965 | 52,824 | ..... |
| 1870 | 3,617,673 | 96.6 | 3,026,789 | 100.0 | 2,973,965 | 52,824 | 590,884 |
| 1880 | 3,617,673 | 96.6 | 3,026,789 | 100.0 | 2,973,965 | 52,824 | 590,884 |
| 1890 | 3,617,673 | 96.6 | 3,026,789 | 100.0 | 2,973,965 | 52,824 | 590,884 |
| 1900 | 3,742,570 | 100.0 | 3,026,789 | 100.0 | 2,974,159 | 52,630 | 716,081 |
| 1910 | 3,743,397 | 100.0 | 3,026,789 | 100.0 | 2,973,890 | 52,899 | 716,608 |
| 1920 | 3,743,529 | 100.0 | 3,026,789 | 100.0 | 2,973,774 | 53,015 | 716,740 |

Water area does not include water surface of oceans, Gulf of Mexico, or Great Lakes, lying within jurisdiction of United States.

LAND AND WATER AREA OF STATES, ACCORDING TO RANK, 1920.

| State. | Rank in Gross Area. | Area in Square Miles. Gross. | Land. | Water. | State. | Rank in Gross Area. | Area in Square Miles. Gross. | Land. | Water. |
|---|---|---|---|---|---|---|---|---|---|
| United States | ..... | 3,026,789 | 2,973,774 | 53,015 | | | | | |
| Texas | 1 | 265,896 | 262,398 | 3,498 | Arkansas | 26 | 53,335 | 52,525 | 810 |
| California | 2 | 158,297 | 155,652 | 2,645 | North Carolina | 27 | 52,426 | 48,740 | 3,686 |
| Montana | 3 | 146,997 | 146,131 | 866 | Alabama | 28 | 51,998 | 51,279 | 719 |
| New Mexico | 4 | 122,634 | 122,503 | 131 | New York | 29 | 49,204 | 47,654 | 1,550 |
| Arizona | 5 | 113,956 | 113,810 | 146 | Louisiana | 30 | 48,506 | 45,409 | 3,097 |
| Nevada | 6 | 110,690 | 109,821 | 869 | Mississippi | 31 | 46,865 | 46,362 | 503 |
| Colorado | 7 | 103,948 | 103,658 | 290 | Pennsylvania | 32 | 45,126 | 44,832 | 294 |
| Wyoming | 8 | 97,914 | 97,548 | 366 | Virginia | 33 | 42,627 | 40 262 | 2,365 |
| Oregon | 9 | 96,699 | 95,607 | 1,092 | Tennessee | 34 | 42,022 | 41,687 | 335 |
| Utah | 10 | 84,990 | 82,184 | 2,806 | Ohio | 35 | 41,040 | 40 740 | 300 |
| Minnesota | 11 | 84,682 | 80,858 | 3,824 | Kentucky | 36 | 40,598 | 40,181 | 417 |
| Idaho | 12 | 83,888 | 83,354 | 534 | Indiana | 37 | 36,354 | 36,045 | 309 |
| Kansas | 13 | 82 158 | 81,774 | 384 | Maine | 38 | 33,040 | 29 895 | 3.145 |
| South Dakota | 14 | 77,615 | 76,868 | 747 | South Carolina | 39 | 30,989 | 30.495 | 494 |
| Nebraska | 15 | 77,520 | 76,808 | 712 | West Virginia | 40 | 24,170 | 24,022 | 148 |
| North Dakota | 16 | 70,837 | 70,183 | 654 | Maryland | 41 | 12,327 | 9 941 | 2,386 |
| Oklahoma | 17 | 70,057 | 69,414 | 643 | Vermont | 42 | 9,564 | 9,124 | 440 |
| Missouri | 18 | 69,420 | 68,727 | 693 | New Hampshire | 43 | 9,341 | 9,031 | 310 |
| Washington | 19 | 69,127 | 66,836 | 2,291 | Massachusetts | 44 | 8,266 | 8,039 | 227 |
| Georgia | 20 | 59,265 | 58,725 | 540 | New Jersey | 45 | 8,224 | 7,514 | 710 |
| Florida | 21 | 58,666 | 54,861 | 3,805 | Connecticut | 46 | 4,965 | 4,820 | 145 |
| Michigan | 22 | 57,980 | 57,480 | 500 | Delaware | 47 | 2,370 | 1,965 | 405 |
| Illinois | 23 | 56,665 | 56,043 | 622 | Rhode Island | 48 | 1,248 | 1.067 | 181 |
| Iowa | 24 | 56.147 | 55,586 | 561 | District of Col. | 49 | 70 | 60 | 10 |
| Wisconsin | 25 | 56,066 | 55,256 | 810 | | | | | |

Water area figures do not include water surface of oceans, Gulf of Mexico, or Great Lakes, lying within jurisdiction of United States.

GROSS AREA, BY SECTIONS AND DIVISIONS, 1920.

| Section and Division. | Rank in Gross Area. | Gross Area (Square Miles). | Pct. Total Gross Area. | No. of States. | Av'rage Gross Area of States. | Section and Division. | Rank in Gross Area. | Gross Area (Square Miles). | Pct. Total Gross Area. | No. of States. | Av'rage Gross Area of States. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U. S. | ..... | 3,026,789 | 100.0 | 48 | 63,057 | E. So. Cent. | 7 | 181,483 | 6.0 | 4 | 45 371 |
| | | | | | | W. So. Cent. | 3 | 437,794 | 14.5 | 4 | 109,449 |
| The North. | ..... | 935,462 | 30.9 | 21 | 44,546 | | | | | | |
| New Engl'd. | 9 | 66.424 | 2.2 | 6 | 11,071 | The West. | ..... | 1,189,140 | 39.3 | 11 | 108,104 |
| Middle Atl. | 8 | 102,554 | 3.4 | 3 | 34,185 | Mountain | 1 | 865,017 | 28.6 | 8 | 108.127 |
| E. No. Cent. | 6 | 248.105 | 8.2 | 5 | 49,621 | Pacific | 4 | 324,123 | 10.7 | 3 | 108,041 |
| W. No. Cent | 2 | 518,379 | 17.1 | 7 | 74,054 | | | | | | |
| | | | | | | E.of Miss.R. | ..... | 881 476 | 29.1 | 26 | 33,900 |
| The South. | ..... | 902,187 | 29.8 | 16 | 56,382 | W.of Miss.R. | ..... | 2,145,313 | 70.9 | 22 | 97,514 |
| South Atl'c. | 5 | 282,910 | 9.3 | 8 | 35,355 | | | | | | |

The North, with 60.2 per cent. of the total population of the United States in 1920, comprises only 30.9 per cent. of the total area. The corresponding proportions for the South are far less divergent, being 31.3 per cent. for population and 29.8 per cent. for area. For the West, in which only 8.4 per cent. of the total population of the United States was enumerated in 1920, the proportion of the total area is 39.3 per cent. The region east of the Mississippi River, with 70 per cent of the population in 1920, occupies only 29.1 per cent. of the area of the country, whereas the region west of the Mississippi with 30 per cent. of the population, comprises 70.9 per cent. of the area.

## TERRITORIAL EXPANSION OF THE UNITED STATES.

The area of the original thirteen States (1790) was 892,135 square miles.

| Division. | Yr. | Added. Square Miles | Division. | Yr. | Added. Square Miles. | Division. | Yr. | Added. Square Miles. |
|---|---|---|---|---|---|---|---|---|
| Louisiana purchase. | 1803 | 827,987 | Gadsden purchase. | 1853 | 29,670 | Add'nal Philippines | 1901 | 68 |
| Gained through | | | Alaska | 1867 | 590,884 | Panama Canal Zone | 1904 | 527 |
| treaty with Spain | 1819 | 13,435 | Hawaiian Islands. | 1898 | 6,449 | Danish West Indies | | |
| Florida | 1819 | 58,666 | Porto Rico | 1899 | 3,435 | (now Virgin Isl.). | 1917 | 132 |
| Texas | 1845 | 389,166 | Guam | 1899 | 210 | | | |
| Oregon | 1846 | 286,541 | Philippine Islands. | 1899 | 144,988 | Total added area | .... | 2.851.375 |
| Mexican cession | 1848 | 529,189 | Samoa | 1900 | 58 | Total United States including original 13 States | | 3 743 510 |

Payments for above were made by the United States as follows: Louisiana purchase, $15,440,000; Gadsden purchase, $10.000,000; Alaska, $7,200,000; Florida, $5,000,000; Hawaiian Islands, public debt assumed to the amount of $4,000,000; Mexican cession, $8,250,000.

The Treaty of Paris, of December 10, 1898, terminating the Spanish-American War, provided for a money payment to Spain (for relinquishing claim to Porto Rico, Guam, and Philippine Islands) of $20,000-000, and a subsequent treaty of November 7, 1900, provided for a further payment of $100.000 for other Philippine Islands.

By the first treaty the Philippine Islands were ceded to the United States, and the later treaty of November 7, 1900, ceded certain outlying islands of the Philippines not included in the first cession.

The United States did not acquire, by the Isthmian Canal Convention of November 18 1903 any title to territory in the Republic of Panama but merely a perpetual right of occupation, use, and control of and over a zone of land ten miles in width. For this privilege it paid to the Republic of Panama the sum of $10,000,000, and undertook to pay the sum of $250,000 annually so long as such occupancy continued, such payments beginning on February 26, 1913.

### TREATY WITH COLOMBIA.

The United States and the Colombian Congresses ratified, in 1921, a treaty of the United States with Colombia by which Colombia is to receive $25,000-000 (in yearly instalments of $5,000,000) as compen-

sation for the loss of territorial sovereignty over Panama and the Canal Zone. Ratifications of the two countries were exchanged at Bogota, Colombia, on March 1, 1922. The first payment of $5,000,000 to be made six months thereafter.

For the Danish West Indies, consisting of the islands of St. Croix, St. Thomas and St. John, the United States paid $25,000,000, and took possession on March 31, 1917. They then had 32,000 population.

No money payments were made upon the acquisition of the other Territories mentioned in the list.

## DIMENSIONS AND AREA OF THE UNITED STATES.

THE gross area of the United States is 3,026,789 square miles. The land area amounts to 2,973,774 square miles, and the water area—exclusive of the area in the Great Lakes, the Atlantic, the Pacific, and the Gulf of Mexico, within the three-mile limit—amounts to 53,015 square miles.

The southernmost point of the mainland is Cape Sable, Fla., which is in latitude 25° 07′and longitude 81° 05′. The extreme southern point of Texas is in latitude 25° 50′, and longitude 97° 24′. Cape Sable is therefore 49 miles further south than the most southern point in Texas.

A small detached land area of northern Minnesota at longitude 95° 09′ extends northward to latitude 49° 23′.

The easternmost point of the United States is West Quoddy Head, near Eastport, Me., in longitude 66° 57′ and latitude 44° 49′; the westernmost point is Cape Alva, Wash., in latitude 48° 10′, which extends into the Pacific Ocean to longitude 124° 45′.

From the southernmost point in Texas due north to the forty-ninth parallel, the boundary between the United States and Canada, the distance is 1,598 miles. From West Quoddy Head due west to the Pacific Ocean the distance is 2,807 miles. The shortest distance from the Atlantic to the Pacific across the United States is between points near Charleston, S. C., and San Diego, Cal., and is 2,152 miles.

The length of the Canadian boundary line from the Atlantic to the Pacific is 3,898 miles. The length of the Mexican boundary from the Gulf to the Pacific is 1,744 miles.

The average elevation of Delaware is only 60 feet above sea level, according to the United States Geological Survey, less than that of any other State in the Union, although its highest point, at Centreville, New Castle County, is 440 feet above sea level, higher than the highest points in Florida, Louisiana and the District of Columbia.

## POSITION OF THE CENTRE OF UNITED STATES POPULATION, 1790 TO 1920.

| Census Year. | Location. North Latitude | Location. West Longit'd. | Approximate Location by Important Towns. | Movement in Miles During Preceding Decade. From Point to Point in Direct Line. | Westward. | Northward. | Southward. |
|---|---|---|---|---|---|---|---|
| | ° ′ ″ | ° ′ ″ | | | | | |
| 1790.. | 39 16 30 | 76 11 12 | 23 miles east of Baltimore, Md. | ..... | ..... | ..... | ..... |
| 1800.. | 39 16 6 | 76 56 30 | 18 miles west of Baltimore, Md. | 40.6 | 40.6 | ..... | 0.5 |
| 1810.. | 39 11 30 | 77 37 12 | 40 miles northwest by west of Washington, D. C. (in Va.) | 36.9 | 36.5 | ..... | 5.3 |
| 1820.. | 39 5 42 | 78 33 0 | 16 miles east of Moorefield, W. Va. | 50.5 | 50.1 | ..... | 6.7 |
| 1830.. | 38 57 54 | 79 16 54 | 19 miles west southwest of Moorefield, W. Va... | 40.4 | 39.4 | ..... | 9.0 |
| 1840.. | 39 2 0 | 80 18 0 | 16 miles south of Clarksburg, W. Va. | 55.0 | 54.8 | 4.7 | ..... |
| 1850.. | 38 59 0 | 81 19 0 | 23 miles southeast of Parkersburg, W. Va. | 54.8 | 54.7 | ..... | 3.5 |
| 1860.. | 39 0 24 | 82 48 48 | 20 miles south by east of Chillicothe, Ohio. | 80.6 | 80.6 | 1.6 | ..... |
| 1870.. | 39 12 0 | 83 35 42 | 48 miles east by north of Cincinnati, Ohio. | 44.1 | 42.1 | 13.3 | ..... |
| 1880.. | 39 4 8 | 84 39 40 | 8 miles west by south of Cincinnati, O. (in Ky.) | 58.1 | 57.4 | ..... | 9.1 |
| 1890.. | 39 11 56 | 85 32 53 | 20 miles east of Columbus, Ind. | 48.6 | 47.7 | 9.0 | ..... |
| 1900.. | 39 9 36 | 85 48 54 | 6 miles southeast of Columbus, Ind. | 14.6 | 14.4 | ..... | 2.8 |
| 1910.. | 39 10 12 | 86 32 20 | In the city of Bloomington, Ind. | 39.0 | 38.9 | 0.7 | ..... |
| 1920.. | 39 10 21 | 86 43 15 | 1.9 miles west of Whitehall, Clay township, Owen County, Ind. 8.3 miles south-southeast of Spencer, Washington township, Owen County, Ind. | 9.8 | 9.8 | 0.2 | ..... |

West Virginia formed part of Virginia until 1861.

## MEDIAN LINES, 1880-1920.

| Census Year. | Median Parallel, North Latitude | Median Merid'n, West Longit'd. | Movement in Miles Dur'g Prec'd'g Decade. Median Paral'l, Northward. | Median Merid'n Westward. | Median Merid'n Eastward. |
|---|---|---|---|---|---|
| | ° ′ ″ | ° ′ ″ | | | |
| 1880... | 39 57 00 | 84 7 12 | ..... | ..... | ..... |
| 1890... | 40 2 51 | 84 40 1 | 6.6 | 27.0 | ..... |
| 1900... | 40 4 22 | 84 51 29 | 2.4 | 10.8 | ..... |
| 1910... | 40 6 24 | 84 59 59 | 2.3 | 7.5 | ..... |
| 1920... | 40 6 25 | 84 49 59 | 0.019 | ..... | 8.8 |

"The centre of population," says the U. S. Census Bureau, "may be considered as the centre of gravity for the population of the United States; that is to say, if the surface of the United States be regarded as a rigid, level plane, without weight, but having the population distributed thereon as at present, each individual inhabitant, being assumed to have the same weight as every other inhabitant, would exert a pressure on any given point in the plane directly proportional to his distance from that point. The centre of gravity for this plane, or the pivotal point on which it would balance, is the point referred to by the term 'centre of population.' That being the case, the cities of Seattle, San Francisco and Los Angeles, with a combined population of 1,398,661, exert a greater influence on the location of the centre of population than the cities of Baltimore, Boston, Buffalo, Cleveland, Philadelphia and Pittsburgh, with a combined population of 5,197,624."

The centre of area," or geographical centre, of the United States, which has nothing to do with the centre of population, is determined by drawing lines across the country's greatest width and greatest length. Ten years ago this intersection was located in Northern Kansas, ten miles north of Smith Center, the county seat of Smith County.

Besides the "centre of population" and the "centre of area," there is still another definition used by the Census Bureau—the "median lines." These lines divide the population evenly north and south of a parallel of latitude and east and west of a meridian of longitude.

## COAST LINE OF THE UNITED STATES.

(By the U. S. Coast and Geodetic Survey.)

*General Coast Line*—The figures under this heading give the length in statute miles of the general outline of the seacoast. The measurements were made with a unit measure of 30 minutes of latitude on charts as near the scale of 1-1,200,000 as possible. The shore line of bays, sounds and other bodies of water whose entrance width is greater than the unit measure is included to a point where such waters narrow to the width of the unit measure, and the distance across at such point is included. Where the entrance width of such waters is less than the unit measure, the distance across is included, but the shore line inside is not.

*Tidal Shore Line, Unit Measure 3 Statute Miles*—The figures under this heading give the length in statute miles of the shore line on tidal waters to points where such waters narrow to a width of 3 statute miles. The figures for Louisiana do not include the shore line of Lakes Maurepas and Pontchartrain, and the delta of the Mississippi River was measured as mainland. The measurements were made on charts of 1-200,000 and 1-400,000 scale when available.

*Tidal Shore Line, Unit Measure 1 Statute Mile*—The figures under this heading give the length in statute miles of the shore line on tidal waters to points where such waters narrow to a width of *one* statute mile, and include the shore line of those bodies of tidal waters more than 1 mile wide which lie close to the main waters, even though the entrance width is less than the unit measure. The measurements were made on charts of 1-80,000 scale for the Atlantic and Gulf coasts, on charts of 1-200,000 scale for the Pacific coast, and on charts as near those scales as available for the other regions.

*The Panama Canal Zone*—Islands outside the 3 nautical mile zone were not included.

### LENGTHS, IN STATUTE MILES, OF GENERAL COAST LINE AND TIDAL SHORE LINE OF UNITED STATES AND OUTLYING TERRITORY.

| Locality. | General Coast Line, Unit Measure 30 Minutes Latitude. | Tidal Shore Line, Unit Measure 3 Statute Miles. | | | Tidal Shore Line, Unit Measure 1 Statute Mile. | | |
|---|---|---|---|---|---|---|---|
| | | Mainland. | Islands. | Total. | Mainland. | Islands. | Total. |
| Maine | 228 | 339 | 337 | 676 | 558 | 761 | 1,319 |
| New Hampshire | 13 | 14 | ..... | 14 | 15 | 5 | 20 |
| Massachusetts | 192 | 295 | 158 | 453 | 421 | 250 | 671 |
| Rhode Island | 40 | 72 | 84 | 156 | 118 | 100 | 218 |
| Connecticut | ..... | 96 | ..... | 96 | 126 | 18 | 144 |
| New York | 127 | 30 | 440 | 470 | 31 | 798 | 829 |
| New Jersey | 130 | 242 | 156 | 398 | 392 | 368 | 760 |
| Pennsylvania | ..... | ..... | ..... | ..... | 13 | ..... | 13 |
| Delaware | 28 | 79 | ..... | 79 | 140 | 14 | 154 |
| Maryland | 31 | 322 | 130 | 452 | 770 | 275 | 1,045 |
| Virginia | 112 | 342 | 225 | 567 | 780 | 500 | 1,280 |
| North Carolina | 301 | 570 | 460 | 1,030 | 1,040 | 831 | 1,871 |
| South Carolina | 187 | 230 | 528 | 758 | 281 | 960 | 1,241 |
| Georgia | 100 | 110 | 493 | 603 | 166 | 727 | 893 |
| Florida: Atlantic | 399 | 411 | 207 | 618 | 714 | 507 | 1,221 |
| Gulf | 798 | 866 | 792 | 1,658 | 1,273 | 1,257 | 2,530 |
| Total | 1,197 | 1,277 | 999 | 2,276 | 1,987 | 1,764 | 3,751 |
| Alabama | 53 | 131 | 68 | 199 | 174 | 117 | 291 |
| Mississippi | 14 | 76 | 79 | 155 | 99 | 103 | 202 |
| Louisiana | 397 | 725 | 260 | 985 | 1,122 | 591 | 1,713 |
| Texas | 367 | 624 | 476 | 1,100 | 973 | 709 | 1,682 |
| California | 913 | 949 | 241 | 1,190 | 1,264 | 291 | 1,555 |
| Oregon | 296 | 312 | ..... | 312 | 429 | 60 | 489 |
| Washington | 157 | 479 | 429 | 908 | 1,037 | 684 | 1,721 |
| United States: Atlantic coast | 1,888 | 3,152 | 3,218 | 6,370 | 5,565 | 6,114 | 11,679 |
| Gulf coast | 1,629 | 2,422 | 1,675 | 4,097 | 3,641 | 2,777 | 6,418 |
| Pacific coast | 1,366 | 1,740 | 670 | 2,410 | 2,730 | 1,035 | 3,765 |
| Total | 4,883 | 7,314 | 5,563 | 12,877 | 11,936 | 9,926 | 21,862 |
| Alaska | 6,640 | 6,542 | 8,590 | 15,132 | ..... | ..... | ..... |
| Philippine Islands | 4,170 | ..... | ..... | 10,850 | ..... | ..... | ..... |
| Porto Rico | 311 | ..... | ..... | 362 | ..... | ..... | 412 |
| Guam | 78 | ..... | ..... | 84 | 85 | 7 | 92 |
| Hawaiian Islands | 775 | ..... | ..... | 810 | ..... | ..... | 842 |
| Panama Canal Zone | 20 | ..... | ..... | ..... | 29 | 4 | 33 |
| United States Samoan Islands | 76 | ..... | ..... | 91 | ..... | ..... | ..... |
| Virgin Islands | ..... | ..... | ..... | 101 | ..... | ..... | 150 |

### AREA OF THE GREAT LAKES OF THE UNITED STATES.

(Revised by Gilbert H. Grosvenor, Director National Geographic Society, Washington, D. C.)

| | Superior. | Michigan. | Huron. | Erie. | Ontario. |
|---|---|---|---|---|---|
| Greatest length in miles | 360 | 307 | 206 | 241 | 193 |
| Greatest breadth in miles | 160 | 118 | 101 | 57 | 53 |
| Deepest soundings in feet | 1,012 | 870 | 750 | 210 | 738 |
| Area in square miles | 32,060 | 22,336 | 22,978 | 9,968 | 7,243 |
| Drainage in square miles | 44,074 | 43,463 | 49,300 | 24,605 | 25,737 |
| Height above sea level in feet | 602.3 | 581.2 | 581.2 | 572.5 | 246.2 |
| Latitude, north | 46° 30′ | 41° 37′ | 46° 00′ | 41° 23′ | 43° 10′ |
| | 49° 00′ | 46° 06′ | 43° 00′ | 42° 53′ | 44° 10′ |
| Longitude, west | 84° 30′ | 84° 45′ | 80° 00′ | 78° 50′ | 76° 10′ |
| | 92° 06′ | 88° 00′ | 84° 45′ | 83° 30′ | 79° 53′ |
| Boundary line in miles | 280 | None | 220 | 250 | 160 |
| United States shore line in miles* (approx.) | 735 | 1,200 | 470 | 350 | 230 |

*Shore line scaled in steps of 5 miles and excludes islands.

ACRES PER INHABITANT IN THE UNITED STATES.

| Division and State. | 1920. | 1910. | 1900. |
|---|---|---|---|
| United States | 18.0 | 20.7 | 25.0 |
| GEOGRAPHIC DIVISIONS. | | | |
| New England | 5.4 | 6.1 | 7.1 |
| Middle Atlantic | 2.9 | 3.3 | 4.1 |
| East North Central | 7.3 | 8.6 | 9.8 |
| West North Central | 26.1 | 28.1 | 31.6 |
| South Atlantic | 12.3 | 14.1 | 16.5 |
| East South Central | 12.9 | 13.7 | 15.2 |
| West South Central | 26.9 | 31.3 | 42.1 |
| Mountain | 164.8 | 208.8 | 328.3 |
| Pacific | 36.6 | 48.6 | 84.4 |
| NEW ENGLAND. | | | |
| Maine | 24.9 | 25.8 | 27.6 |
| New Hampshire | 13.0 | 13.4 | 14.0 |
| Vermont | 16.6 | 16.4 | 17.0 |
| Massachusetts | 1.3 | 1.5 | 1.8 |
| Rhode Island | 1.1 | 1.3 | 1.6 |
| Connecticut | 2.2 | 2.8 | 3.4 |
| MIDDLE ATLANTIC. | | | |
| New York | 2.9 | 3.3 | 4.2 |
| New Jersey | 1.5 | 1.9 | 2.6 |
| Pennsylvania | 3.3 | 3.7 | 4.6 |
| EAST NORTH CENTRAL. | | | |
| Ohio | 4.5 | 5.5 | 6.3 |
| Indiana | 7.9 | 8.5 | 9.1 |
| Illinois | 5.5 | 6.4 | 7.4 |
| Michigan | 10.0 | 13.1 | 15.2 |
| Wisconsin | 13.4 | 15.2 | 17.1 |
| WEST NORTH CENTRAL. | | | |
| Minnesota | 21.7 | 24.9 | 29.5 |
| Iowa | 14.8 | 16.0 | 15.9 |
| Missouri | 12.9 | 13.4 | 14.2 |
| North Dakota | 69.4 | 77.8 | 140.7 |
| South Dakota | 77.3 | 84.3 | 122.5 |
| Nebraska | 37.9 | 41.2 | 46.1 |
| Kansas | 29.6 | 31.0 | 35.6 |
| SOUTH ATLANTIC. | | | |
| Delaware | 5.6 | 6.2 | 6.8 |
| Maryland | 4.4 | 4.9 | 5.4 |
| District of Columbia | 0.1 | 0.1 | 0.1 |
| Virginia | 11.2 | 12.5 | 13.9 |
| West Virginia | 10.5 | 12.6 | 16.0 |
| North Carolina | 12.2 | 14.1 | 16.5 |
| South Carolina | 11.6 | 12.9 | 14.6 |
| Georgia | 13.0 | 14.4 | 17.0 |
| Florida | 36.3 | 46.7 | 66.4 |
| EAST SOUTH CENTRAL. | | | |
| Kentucky | 10.6 | 11.2 | 12.0 |
| Tennessee | 11.4 | 12.2 | 13.2 |
| Alabama | 14.0 | 15.3 | 17.9 |
| Mississippi | 16.6 | 16.5 | 19.1 |
| WEST SOUTH CENTRAL. | | | |
| Arkansas | 19.2 | 21.4 | 25.6 |
| Louisiana | 16.2 | 17.5 | 21.0 |
| Oklahoma | 21.9 | 26.8 | 56.2 |
| Texas | 36.0 | 43.1 | 55.1 |
| MOUNTAIN. | | | |
| Montana | 170.4 | 248.8 | 384.5 |
| Idaho | 123.5 | 163.8 | 329.8 |
| Wyoming | 321.1 | 427.9 | 675.0 |
| Colorado | 70.6 | 83.0 | 122.9 |
| New Mexico | 217.6 | 239.5 | 401.4 |
| Arizona | 218.0 | 356.4 | 592.7 |
| Utah | 117.0 | 140.9 | 190.1 |
| Nevada | 908.0 | 858.4 | 1,660.2 |
| PACIFIC. | | | |
| Washington | 31.5 | 37.5 | 82.6 |
| Oregon | 78.1 | 91.0 | 148.0 |
| California | 29.1 | 41.9 | 67.3 |

## THE CONTINENTAL DIVIDE, AND TRIPLE DIVIDE PEAK.

The Rocky Mountain range is known as the Continental Divide.

Triple Divide Peak—the only mountain in the United States whose drainage flows into the Atlantic and Pacific Oceans and Hudson Bay—is located in Glacier County, Glacier National Park, Montana, in Township 33 North, Range 15 West. The United States Geographic Board has named the small creek flowing southwest from Triple Divide Peak, and tributary to Nyack Creek, Pacific Creek; the small creek flowing a little north of east and tributary to Cut Bank Creek, Atlantic Creek; and has changed the name of the creek flowing north from Norris Creek to Hudson Bay Creek.

The altitude of Triple Divide Peak is 8,001 feet.

## THE CAPITOL AT WASHINGTON.

The Capitol is situated in latitude 38° 53′ 20″.4 north and longitude 77° 00′ 35″.7 west from Greenwich. It fronts east, and stands on a plateau eighty-eight feet above the level of the Potomac. The entire length of the building from north to south is 751 feet 4 inches, and its greatest dimension from east to west 350 feet. The area covered by the building is 153,112 square feet. The dome of the original central building was constructed of wood, covered with copper. This was replaced in 1856 by the present structure of cast iron. It was completed in 1865. The entire weight of iron used is 8,909,200 pounds. The dome is crowned by a bronze Statue of Freedom, which is 19 feet 6 inches high and weighs 14,985 pounds. It was modelled by Crawford. The height of the dome above the base line of the east front is 287 feet 5 inches. The height from the top of the balustrade of the building is 217 feet 11 inches. The greatest diameter at the base is 135 feet 5 inches.

The rotunda is 97 feet 6 inches in diameter, and its height from the floor to the top of the canopy is 180 feet 3 inches. The Senate Chamber is 113 feet 3 inches in length by 80 feet 3 inches in width, and 36 feet in height. The galleries will accommodate 1,000 persons. The Representatives' Hall is 139 feet in length by 93 feet in width, and 36 feet in height. The cornerstone of the north wing of the original building was laid September 18, 1793, by President Washington with Masonic ceremonies. The foundation of the centre was laid March 24, 1818. The cornerstone of the extensions was laid July 4, 1851, by President Fillmore. The room now occupied by the Supreme Court was, until 1859, occupied as the Senate Chamber. Previous to that time the court occupied the room immediately beneath, now used as a law library.

## NICKNAMES OF THE STATES.

| | |
|---|---|
| Ala. | "Cotton," "Lizard," "Yallerhammers." |
| Ariz. | "Baby," "Sunset," "Apache." |
| Ark. | "Bear," "Bowie." |
| Cal. | "Golden," "El Dorado." |
| Col. | "Centennial," "Silver." |
| Conn. | "Constitution," "Nutmeg." |
| Del. | "Diamond," "Blue Hen's Chickens." |
| Fla. | "Everglade," "Land of Flowers." |
| Ga. | "Empire State of the South," "Cracker," "Buzzard." |
| Idaho. | "Gem." |
| Ill. | "Sucker," "Prairie." |
| Ind. | "Hoosier." |
| Iowa. | "Hawkeye." |
| Kan. | "Sunflower," "Jayhawk." |
| Ky. | "Blue Grass," "Corn-Cracker," "Dark and Bloody Ground." |
| La. | "Pelican," "Creole." |
| Me. | "Pine Tree," "Old Dirigo." |
| Md. | "Old Line," "Cockade." |
| Mass. | "Bay," "Old Colony." |
| Mich. | "Wolverine," "Auto." |
| Minn. | "Gopher," "North Star." |
| Miss. | "Bayou," "Eagle," "Magnolia." |
| Mo. | "Ozark," "Iron Mountain," "Show Me." |
| Mont. | "Stub Toe," "Bonanza," "Treasure." |
| Neb. | "Antelope," "Black Water," "Cornhusker." |
| Nev. | "Silver," "Sage Brush." |
| N. H. | "Granite." |
| N. J. | "Jersey Blue," "Garden," "New Spain," "Mosquito." |
| N. M. | "Sunshine," "Spanish." |
| N. Y. | "Empire," "Excelsior." |
| N. C. | "Old North," "Turpentine," "Tar Heel." |
| N. D. | "Flickertail," "Sioux." |
| Ohio. | "Buckeye." |
| Okla. | "Sooner." |
| Ore. | "Beaver," "Web-Foot." |
| Pa. | "Keystone," "Steel," "Coal." |
| R. I. | "Little Rhody," "Plantation." |
| S. C. | "Palmetto." |
| S. D. | "Sunshine," "Swiagecat." |
| Tenn. | "Big Bend," "Volunteer," "Hog-and-Hominy." |
| Tex. | "Lone Star," "Beef." |
| Utah. | "Deseret," "Beehive," "Mormon." |
| Vt. | "Green Mountain." |
| Va. | "Old Dominion," "Mother." |
| Wash. | "Evergreen," "Chinook." |
| W. Va. | "Panhandle," "Mountain." |
| Wis. | "Badger," "Copper." |
| Wyo. | "Equality" (Suffrage Pioneer). |

## ORIGIN OF THE NAMES OF THE STATES AND TERRITORIES.

ALABAMA—Alibama was the Indian name of a tribe in Southern Alabama—a Mushhogean tribe of the Creek Confederacy. Alibamu is from the Choctaw words alba aya mule, meaning "I open or clear the thicket."

ALASKA—From "Al-ay-es-ka," a native Eskimo or Innuit word, meaning Great Country.

ARIZONA—From Ariconac, "Few Springs." Papago name of a ranch in Sonora.

ARKANSAS—Algonkin name of the Quapaw Indians.

CALIFORNIA—Spanish "Calida formax," a hot furnace.

COLORADO—Spanish, meaning red.

COLUMBIA, DISTRICT OF—A poetical adoption of the name of Columbus; applied to the territory in 1791 by the Federal Commissioners who laid it out.

CONNECTICUT—Indian, "Quonecktacut," Long River or River of Pines.

DELAWARE—Named after Lord De La War, of England, Governor of Virginia, who entered the Bay in 1610.

FLORIDA—Spanish words, "Pascua Florida," Feast of Flowers (Palm Sunday), on which day it is said to have been named, in 1512, by Juan Ponce de Leon.

GEORGIA—Named after King George II of England.

HAWAII—English spelling of Owhyhee, where Capt. Cook was killed by the natives in 1779.

IDAHO—Indian words, "Edah hoe," Light on the Mountains.

ILLINOIS—Indian word, by some translated "The River of Men. A form of the word Iliniwek. "Ilini" meant "man," "iw" meant "is," and "ek," was a plural signification.

INDIANA—Named after Indians, State of Indians.

IOWA—The Ioways, or Aiaouez, or Alaouas were a Sioux tribe. The word means "sleepy ones." They called themselves "Pahoja," gray snow.

KANSAS—Name of a tribe of the Sioux.

KENTUCKY—From Wyandot (Iroquoian) name "Ken-tah-teh," meaning to-morrow, or Land of To-morrow.

LOUISIANA—Named by the Mississippi River navigator Robert de la Salle, in 1682, after King Louis XIV of France.

MAINE—From Maine, an ancient province of France, south of Normandy, owned by Queen Henrietta Maria of England, wife of King Charles I.

MARYLAND—Named in honor of the foregoing. Queen Henrietta Marie.

MASSACHUSETTS—An Algonkin Indian name from Massadchu-es-et, meaning "great-hill-small place," indicating a place at or about the big little hills.

MICHIGAN—The Mishigamaw or Mishawiguma were Indians. The word means "big lake" and was applied to Lake Michigan. "Michi" meant "great," and "gama" meant "water."

MINNESOTA—Sioux word for cloudy or smoky water.

MISSISSIPPI—Indian words "Sipu," Algonquin word for river; "Maesi," fish—Fish-River.

MISSOURI—The Missouri were Sioux of that name.

MONTANA—Spanish for mountainous; used now by Peruvians as a name for their Andean districts.

NEBRASKA—An Omaha Indian name for the "wide river," Platte.

NEVADA—A Spanish word, meaning "snow clad."

NEW HAMPSHIRE—Named, in 1629, after the County of Hampshire, England, by the patentee, Capt. John Mason of the Plymouth Council.

NEW JERSEY—In 1664 the Duke of York, of England, granted to Lord John Berkeley and Sir George Carteret a patent or deed to the present boundaries to be called Neva Caesaria, or New Jersey. Caesarea, or Caesaria, was the ancient name of the Island of Jersey of which Carteret had been administrator.

NEW MEXICO—Mexico is a word derived from the Aztec word "mexitli," title of their national war god.

NEW YORK—So called in honor of the Duke of York (1664), who got the patent from his brother, King Charles II of England, and sent an expedition and took possession of New Netherlands.

NORTH CAROLINA—The Carolinas were originally named, it is said, in honor of King Charles IX. of France by Jean Ribault, whose expedition (1562) was financed by Admiral Coligny. "Carolus" is the Latin word for Charles. In 1663, King Charles II. granted a patent to the land under the name of Carolina.

NORTH DAKOTA—"Dakota" means "alliance of friends," and is a Sioux Indian word. Koda in Santee dialect and Kola in Teton dialect are the root words.

OHIO—Iroquois name, denoting great.

OKLAHOMA—Choctaw word for "red people."

OREGON—The Oregon State Librarian, Cornelia Marvin, says various origins of the name have been suggested as follows: *Origanum*, a wild sage found on the coast; *Orejon*, or Oregones, a Spanish name for big-eared (Indian) men; Orgon, a river in Chinese Tartary; *Oyer-un-gen*, a Shoshone Indian word for "place of plenty;" *Aura agua*, Spanish word meaning gently falling waters; *Ouragan*, a French word for hurricanes; *Wau-re-gan*, an Algonkin word for "beautiful water."

PENNSYLVANIA—Penn-sylvania, from Penn; and Sylva, Latin word for grove or woods. Groves of Penn; so called in honor of William Penn, who, in 1681, got a deed for the State from King Charles II of England, in settlement of a debt which the British Government owed Penn's father. William called the country Sylvania, and the King prefixed it with "Penn."

PHILIPPINES—Spanish, "Islas Filipinas," discovered in 1521 by Magellan, whom the natives killed in a skirmish; named in honor of King Philip II of Spain by a colonizing expedition from Mexico.

PORTO RICO—From the Spanish "Puerto Rico," Rich Port.

RHODE ISLAND—"Isles of Rhodes" was the name, chosen by the General Court of the colony, in 1644. The name of one of the islands had been Aquedneck. The name of Providence Plantations then gradually lapsed.

SOUTH CAROLINA—(See North Carolina).

SOUTH DAKOTA—(See North Dakota).

TENNESSEE—Called, from 1784 to 1788, the State of Franklin. "Tennessee" is an Anglicized Indian word—Ten-asse, said to mean "a curved spoon."

TEXAS—According to Elizabeth H. West, State Librarian at Austin, "Texas is an Indian word meaning Friends or Allies. So far as I know, it has not an Aztec origin. It applied, originally, in the Indian usage to the Indian tribes about the early Spanish missions around Eastern Texas; and later to tribes ranging as far west as the Rio Grande, to designate a large number of tribes who were ordinarily allied against the Apaches."

UTAH—Named after the Utes, an Indian tribe.

VERMONT—From Verd and Mont, two French words meaning Green Mountains. The name is said to have been bestowed by Samuel de Champlain when he saw from the lake, later called after him, green hills to the East.

VIRGINIA—Named in honor of Elizabeth, daughter of Henry VIII, sometimes called by her courtiers the "Virgin Queen" of England. The name was bestowed by one of the courtiers, Sir Walter Raleigh, who fitted out the expedition of discovery in 1584.

WASHINGTON—Named after George Washington. When the bill creating the Territory of Columbia was introduced in the 32nd Congress, second session, the name was changed in the bill to Washington because of the existence of the District of Columbia.

WEST VIRGINIA—(See Virginia).

WISCONSIN—An Indian name which, according to Reuben Gold Thwaites, was originally spelled "Ouiscousin" by the French missionaries and in old French-American documents; also was spelled "Miscousing," "Ouisconching," "Ouiskensing." The Yankee settlers spelled it "Wiskonsan," then "Wiskonsin;" but Congress changed it to "Wisconsin."

WYOMING—(By the State Historian, Eunice G. Anderson)—What we would determine to be the most authentic publication upon the derivatives of the name of our State gives the following: "The word Wyoming was taken from Wyoming Valley, Pennsylvania, rendered famous from Campbell's beautiful poem, 'Gertrude of Wyoming.' The word means 'mountains and valleys alternating.' Or, as we construed it, 'Here God has bent down the backs of His mountains for man to make his habitations.'" This is given by Gen. Freeman.

## MOTTOES OF THE STATES OF THE UNION.

| State. | When Adopted. | Motto. |
|---|---|---|
| United States... | 20 June, 1782 | E Pluribus Unum (Many in One). |
| Alabama..... | 29 Dec., 1868 | Here We Rest. |
| Alaska..... | ..... | None. |
| Arizona..... | 1863 | Ditat Deus (God Enriches). |
| Arkansas..... | 3 May, 1864 | Regnant Populi (The People Rule). |
| California..... | ..... | Eureka (I Have Found It). |
| Colorado..... | 1861 | Nil Sine Numine (Nothing Without God). |
| Connecticut..... | Oct., 1842 | Qui Transtulit Sustinet (He Who Transplanted Still Sustains). |
| Delaware..... | ..... | Liberty and Independence. |
| D. of Columbia.. | ..... | Justitia Omnibus (Justice to All). |
| Florida..... | 1846 | In God We Trust. |
| Georgia..... | 5 Dec., 1799 | Wisdom, Justice, Moderation. |
| Idaho..... | 5 March, 1866 | Esto Perpetua. |
| Illinois..... | 26 Aug., 1818 | State Sovereignty—National Union. |
| Indiana..... | ..... | None. |
| Iowa..... | 25 Feb., 1847 | Our Liberties We Prize, and Our Rights We Maintain. |
| Kansas..... | 29 Jan., 1861 | Ad Astra per Aspera (To the Stars Through Difficulties). |
| Kentucky..... | 20 Dec., 1792 | United We Stand, Divided We Fall. |
| Louisiana..... | ..... | Union, Justice, and Confidence. |
| Maine..... | 9 Jan., 1820 | Dirigo (I Direct). |
| Maryland..... | 12 Aug., 1648 | Fatti Maschi Parole Femine (Manly Deeds and Womanly Words.) Scuto Bonae Voluntatis Tuae Coronasti nos (With the Shield of Thy Good-Will Thou Hast Covered Us). |
| Massachusetts... | 13 Dec. 1780 | Ense Petit Placidam sub Libertate Quietem (With the Sword She Seeks Quiet Peace Under Liberty). |
| Michigan..... | 1835 | Si Quaeris Peninsulam Amoenam Circumspice (If Thou Seekest a Beautiful Peninsula, Behold It Here). |
| Minnesota..... | 1858 | Etoile du Nord (The Star of the North). |
| Mississippi..... | 7 Feb., 1894 | Virtute et Armis. |
| Missouri..... | 11 Jan., 1822 | Salus Populi Supreme Lex Esto (Welfare of People Is the Supreme Law). |
| Montana..... | 24 May, 1864 | Oro y Plata (Gold and Silver). |
| Nebraska..... | 1 March, 1867 | Equality Before the Law. |
| Nevada..... | 24 Feb., 1866 | All for Our Country. |
| New Hampshire. | 11 Feb., 1785 | None. |
| New Jersey..... | 3 Oct., 1776 | Liberty and Prosperity. |
| New Mexico..... | 9 Sept., 1850 | Crescit Eundo (It Increases by Going). |
| New York..... | 1809 | Excelsior (Higher, More Elevated). |
| North Carolina.. | 1893 | Esse Quam Videri (To Be Rather Than to Seem). |
| North Dakota... | ..... | Liberty and Union, One and Inseparable Now and Forever. |
| Ohio..... | 6 April, 1866 | Imperium in Imperio (A Government Within a Government). |
| Oklahoma..... | ..... | Labor Omnia Vincit (Labor Ever Conquers). |
| Oregon..... | 1857 | The Union. |
| Pennsylvania.... | 2 March, 1809 | Virtue, Liberty, and Independence. |
| Rhode Island.... | 1864 | Hope. |
| South Carolina.. | ..... | Dum Spiro, Spero (While I Breathe I Hope). |
| South Dakota... | ..... | Under God the People Rule. |
| Tennessee..... | 1797 | Agriculture, Commerce. |
| Texas..... | ..... | None. |
| Utah..... | ..... | Industry. |
| Vermont..... | Sept., 1866 | Freedom and Unity. |
| Virginia..... | Oct., 1779 | Sic Semper Tyrannis (Thus Always to Tyrants). |
| Washington..... | 1853 | Ai-ki (By and By). |
| West Virginia... | 26 Sept., 1863 | Montani Semper Liberi (Mountaineers Always Freemen). |
| Wisconsin..... | ..... | Forward. |
| Wyoming..... | 1868 | Cedant Arma Togae (Let Arms Yield to the Gown). |

## STATE FLOWERS.

| Name of State. | Name of Flower. | By Whom Chosen. | Name of State. | Name of Flower. | By Whom Chosen. | Name of State. | Name of Flower. | By Whom Chosen. |
|---|---|---|---|---|---|---|---|---|
| Ala.... | Goldenrod..... | Schools. | Me.... | Pine Cone & T'sl. | Schools. | Ohio... | Scarlet Carnati'n | Legisl. |
| Ariz.... | Sahuaro Cactus. | Legisl. | Md.... | Blackeyed Susan | Legisl. | Okla... | Mistletoe..... | Legisl. |
| Ark.... | Apple Blossom.. | Legisl. | Mass... | Mayflower..... | Legisl. | Ore.... | Oregon Grape... | Legisl. |
| Cal.... | Golden Poppy... | Legisl. | Mich... | Apple Blossom.. | Legisl. | Pa..... | No choice..... | ..... |
| Col.... | Columbine..... | Schools. | Minn... | Moccasin Flower | Legisl. | R. I.... | Violet..... | Schools. |
| Conn... | Mountain Laurel | Legisl. | Miss... | Magnolia..... | Schools. | S. C.... | No choice..... | ..... |
| Del.... | Peach Blossom.. | Legisl. | Mo.... | No choice..... | ..... | S. Dak.. | Pasque Flower.. | Legisl. |
| D. of C. | No choice..... | ..... | Mont... | Bitter Root..... | Legisl. | Tenn... | Passion Flower.. | Hort. S. |
| Fla..... | Orange Blossom. | Legisl. | Neb.... | Goldenrod..... | Legisl. | Tex.... | Bluebonnet..... | Legisl. |
| Ga..... | Cherokee Rose.. | Legisl. | Nev.... | Sagebrush..... | People. | Utah... | Sego Lily..... | Legisl. |
| Idaho.. | Syringa..... | People. | N. H... | Purple Lilac.... | Legisl. | Vt..... | Red Clover..... | Legisl. |
| Ill..... | Wood Violet.... | Legisl. | N. J.... | Violet..... | Legisl. | Va..... | Amer. Dogwood. | Legisl. |
| Ind.... | Carnation..... | Legisl. | N. Mex. | Cactus..... | Schools. | Wash... | Rhododendron.. | People. |
| Iowa... | Wild Rose..... | People. | N. Y... | Rose..... | Schools. | W. Va.. | Rhododendron.. | Legisl. |
| Kan.... | Sunflower..... | Legisl. | N. C... | Goldenrod..... | People. | Wis.... | Violet..... | Schools. |
| Ky..... | Trumpet Vine... | People. | N. Dak. | Wild Prairie Rose | Legisl. | Wyo... | Indian Paintb'sh | Legisl. |
| La..... | Magnolia..... | Legisl. | | | | | | |

From time to time Congress has been asked to adopt a national flower, but has taken no step to that end.

# The States of the Union.

## ALABAMA.

*Area, square miles.....51,998.....28th in rank*
*Population, 1920.....1,449,661.....28th in rank*

Alabama, one of the States of the Old South, is in the heart of the cotton belt, in the East South Central group, on the Gulf of Mexico, bounded on the north by Tennessee, on the east by Georgia, on the south by the Gulf and Florida, and on the west by Mississippi.

It is level and largely alluvial along the seashore and for a considerable distance inland, rising to hilly or low mountainous elevations in the northeast. Forests originally covered most of the area, but have been materially reduced by non-conservation methods of lumbering. The State is well watered, river navigation being available, notably the Tombigbee and Warrior Rivers together for 400 miles inland, and ocean carriage on the Gulf.

On the Tennessee River rapids at Muscle Shoals are the nitrate fixation plants built by the Federal Government in the World War, but not carried to point of production. Henry Ford of Detroit, automobile, tractor, railroad and steel works magnate, seeks possession of the plants for nitrate making and development of latent water power, the contract therefor being before the Federal Government.

Agriculture is the chief interest, although in the past thirty years the mineral industries have been wonderfully developed, Birmingham being known as "the Pittsburgh of the South." In 1920, 2,392,962 tons of pig iron were produced, the State ranking sixth. Alabama, as one of the 16 cotton States, raises normally about one-fifteenth of the country's cotton on about one-thirteenth of the cotton land areas of the Nation. Corn, white and sweet potatoes, oats, tobacco, sugar, hay and fruits abound.

The Census of 1920 showed the iron and steel industries, in value of products, $121,998,000, was second to agriculture, $304,348,638, and ahead of lumber and timber products, $55,139,000, yellow pine being 91.3 per cent. of the cut, with 1,642,588,000 board feet, the oak cut being 61,189,000. Gum, maple, ash, hickory, cypress and tupelo also supply lumber. Cotton mills are becoming important. Coal production is large.

Practically all of the State's foreign commerce passes through Mobile, that Gulf port having been in past years relatively unimportant, but having attained, rapidly, commercial prestige since the mineral industry development began.

Railroad mileage in 1921 was 5,378.

A feature of Alabama is the high proportion of Negro population. Two of each five persons are black. Alabama is intensely American, there being only about 20,000 foreign-born. In some portions of the State, known as "the black sections," however, the Negro population is about 80 per cent. of the total. The rate of illiteracy, by the 1920 census, was 16.1 per cent. of the total population. Of the 1,038,692 native whites, 65,394 were illiterate, or 6.3 per cent.; and of the 674,004 Negroes, 210,690 were illiterate, or 31.3 per cent. Excellent progress, however, is making toward a higher standard, the percentage of illiterates having been reduced from 22.9 in 1910.

A famous agency for this improvement is the Tuskegee Normal and Industrial Institution, founded in 1880 by the late Dr. Booker T. Washington, a Negro acknowledged as leader of his race. The enrolment was 1,736. The enrolment at the University of Alabama, a State endowed and controlled institution, at which only whites matriculate, was 1,860, with 1,315 students in other higher educational institutions.

## ARIZONA.

*Area, square miles.....113,956.....5th in rank*
*Population, 1920.....334,162.....46th in rank*

Whereas Alabama has 45 persons and Massachusetts 479 to the square mile, Arizona, a mountain State, has only 3—and of the 334,162 of population, there are 60,325 Mexicans, which fact, together with the warm climate and the ease of life there, made Arizona one of the picturesque States in the frontier days. Although then precisely characteristic of "the West," it is now modernized, with every agency of civilization.

It is situate in southwestern United States, west from New Mexico, east from California, and south from Utah and Colorado, and is on the boundary between the United States and Mexico.

Arizona prides itself on being a man-made State. Vast reaches of arid and semi-arid lands, useless before irrigating water was turned on, have been made highly productive. Agriculture has greatly increased, and new irrigation projects promise further enrichment. The topography is broken, being mountainous in portions of every section; the northern plateau is 4,000 to 7,000 feet in altitude, and the southern from 500 to 2,500. On the broad plains and mountain sides livestock graze, and through the valleys the irrigating waters are led. Long staple cotton has been developed as a principal crop, other products being wheat, corn, barley, oats, hay, potatoes and immense quantities of sub-tropical fruits. Dates thrive. Ostrich farming is a feature.

Mining is extremely important. Copper mines in the State are among the greatest in the world, the most famous being the United Verde, owned by former United States Senator W. A. Clark, now a resident of New York. In 1919 the value was $84,217,141, Michigan being second. Gold, silver, lead and zinc are also produced. Manufacturing is unimportant, excepting for the large smelting interests.

Railroad mileage in 1921 was 2,478.

Apart from the generally picturesque character of the State, tourists are attracted by the Roosevelt Dam, supplying irrigating waters for the Salt River Valley, one of the two greatest dams in the world, and the Grand Canyon of the Colorado River, one of the scenic wonders of the world, 200 miles long, and averaging 12 miles wide and one mile deep.

Livestock raising lends both economic value and the element of the picturesque to life in Arizona, the industry having caused the development of many very large ranches, some of which comprise hundreds of thousands of acres, with the "cowboy" an essential factor.

On the lower areas the surface of the earth is low, since they were the bed of a primal sea, in which are immense deposits of the several kinds of salts, such as potash, nitrates and others, from which in time it is expected that there will be extractions of great mineral value.

Illiteracy among the native whites is low—2.1 per cent., while among the foreign-born, mostly Mexicans, it is 27.5.

Tucson is the seat of the University of Arizona, and Flagstaff has the Lowell Observatory. Phoenix, the capital and largest city, is the centre of the richest agricultural district, the Salt River Valley.

Arizona has a large population of Indians, 42,400 (1920), mostly Apaches, Navajos, Hopis, on reservations, a number exceeded only in Oklahoma. They occupy 18,653,014 acres, valued at $61,843,402, and with an income of $5,482,039.

## ARKANSAS.

*Area, square miles.....53,335.....26th in rank*
*Population, 1920.....1,752,204.....25th in rank*

Arkansas (pronounced Ar-kan-saw) is of the Old South, situate inland, in the West South Central group, Missouri bounding it on the north, Tennessee and Mississippi on the east, Louisiana on the south, and Oklahoma on the west, and is on the Mississippi River, down which much of its traffic flows. Its topography is mostly level, but in the west rise the mountainous elevations of the Ozarks.

Agriculture is the chief source of wealth. The 1920 census gave $340,813,256 as the value of all crops; lumber and timber products are next with $84,000,000, and there is considerable coal, lead and manganese mining. There are important phosphate deposits, later to become very valuable for land fertilization.

Arkansas produced one-thirteenth of the Nation's cotton on one-thirteenth of the cotton lands, being thus an average for per acre productivity. Its cotton mills are of growing importance.

Wheat, corn, oats, potatoes, white and sweet, hay, tobacco and fruits are produced. Roses are grown extensively for the making of perfumes.

The State is richly endowed with forest wealth, every sort of tree which grows in the temperate zone abounding, with much of the rapidly-disappearing hardwood which forms an important article of Arkansan commerce.

Railroad mileage in 1921 was 5,052.

The Negro represents one-third of the population, with the inevitable consequent illiteracy of 21.8 per cent. among them, that of the native-born whites being 4.5, and the average for the whole population, 9.4. As in all Southern States, keen effort is exerted to improve this matter, average illiteracy having fallen from 12.6 per cent. in 1910.

Likewise, as in most of the Southern States, the

Baptist Church comes first with communicants, the Methodist being second, and Roman Catholic and Presbyterian following in that order.

The Southern custom is followed by providing separate schools for black and white, about 500,000 pupils attending. Besides the State University at Fayetteville, with 650 students, there are several church colleges with about 750 students each.

The Hot Springs, a national reservation in the western part of the State, are world famed and support thousands who attend the wants of tourists.

## CALIFORNIA.

*Area, square miles.....158,297.....3d in rank*
*Population, 1920.....3,426,861.....8th in rank*

California, in the Pacific group, occupies about one-half of the Pacific coastline of the United States; is bounded on the north by Oregon, on the east by Nevada and Arizona, and on the south by Mexico. It is 1,000 miles long. Its topography is most varied and its climate as well. Every phase of surface character is presented, and the geological peculiarity of the North and South American Continents is here seen—the aged mountain ridge that runs from the Arctic Circle southward through the States into Mexico parallel to and near the seashore. There is much plains land, too, and every kind of soil that marks the temperate and sub-tropical zones, with practically all climates which are found in such regions. The State has no navigable rivers, except the lower Sacramento, but abundant waters in smaller streams enable immense irrigation of lands otherwise virtually useless. California is the leading State in irrigation, its enormous fruit, garden and much of the grain output being attributable largely thereto.

Californians especially pride themselves in the climate, which has such fame as to attract visitors from all corners of the earth, particularly in the winter. For their accommodation, numerous luxurious hotels are maintained. Touring is so general also that there are thousands of miles of excellent roads, and ownership of automobiles is so great as to give California second place in per capita relationship to the total number of motor cars.

Railroad mileage in 1921 was 8,356.

Agriculture is enormously developed. There are about 100,000,000 acres in the State, and the farms, which include orchards and vineyards, take up 29,365,667 acres, according to the 1920 census, of which 11,878,339 are improved, some highly so, the value of all being $3,431,021,861.

Literally every product of the temperate and sub-tropical zones is grown there—all cereals, forage crops, vegetables, fruits and nuts. Crops in 1920 were valued at $589,757,377, dairy products, $276,424,216, livestock, $204,378,445, with other large agricultural production.

Mining interests are extensive, in gold, silver, copper, lead and quicksilver.

The stores of petroleum are very large; California produces about the same amount as Texas, and is exceeded only by Oklahoma in output. The product in 1920 was 103,377,361 barrels. A peculiar sight is the oil derricks rising amid the comfortable homes of Los Angeles, and those set in the sea waters below Santa Barbara. The State produces all the borax mined in the United States, 120,320 tons being produced in 1920.

Enormous shipping is carried on, San Francisco being the chief port, the others being Los Angeles and San Diego.

The forests, in common with all States of the Pacific group, are very extensive, comprising every variety of tree which grows north of the purely tropical zone. Coniferous trees are most numerous. The giant redwood groves are the destination of many tourists. California no longer is an exporter of ordinary lumber, being compelled to buy from Oregon and Washington.

It is a State of romance in history. Acquired from Mexican political control in 1846, gold was discovered in 1848, and in 1849, the most remarkable "gold rush" ever known began, it being said that the gold produced thereafter enabled the United States to withstand so well the economic strain of the Civil War which began in 1861. The gold output in 1921 was $15,961,300; silver, $3,696,708.

Illiteracy is low—3.3 per cent. in 1920; it was 3.7 in 1910. Of the 2,075,467 native whites, only 8,747, or 4-10ths of 1 per cent., were illiterate, illiteracy among the foreign-born being 10.5. They are Orientals and Europeans, with some Mexicans.

The Japanese population in 1920 was 71,952, an increase of 30,596 in ten years; and of Chinese, 28,812, a decrease of 7,436

The State has three universities—Leland Stanford Jr., the University of California, which matriculates about 12,000; and the University of Southern California. There are many colleges.

One of the points of interest is the motion picture colony at Hollywood, a suburb of Los Angeles. The atmosphere is so clear that motion pictures may be taken on about 350 days of the year, while the topography and flora afford most varied "locations." Yosemite Park (national) is a scenic wonder. The retention of the Spanish influence in architecture, the climate and the profusion of vegetation where water flows on the lands, attract many tourists.

The United States Department of Agriculture lately has developed cotton growing, which has produced a fibre of the quality of the finest sea island, which, in turn, has given rise to the cotton mill industry. Other manufacturing is extensive, the investment being about $750,000,000, and the output about the same.

The Roman Catholic Church leads all religious bodies, the bequeathal to later generations of the work done by the Catholic missionaries who established a string of 26 missions a day's march apart from the Mexican line to upper San Francisco Bay.

## COLORADO.

*Area, square miles.....103,948.....7th in rank*
*Population, 1920.....939,629.....33d in rank*

Colorado, one of the mountain States, is bounded on the north by Wyoming and Nebraska, on the east by Nebraska and Kansas, on the south by New Mexico, and on the west by Utah.

Its topography is varied, being plains lands in the east and south, but rising to the elevations of the Rocky Mountain range in the west, some peaks towering to an altitude of 14,000 feet. The Union Pacific crosses Marshall Pass at above 10,846 feet, and the Denver & Rio Grande climbs the Tennessee Pass, near Leadville, at 10,219.

Soils vary from arid, when non-watered, to productive. Irrigation is extensive, and has lifted agriculture to first place in the State, ahead of mining and livestock, which come next. The 1920 census showed all crops valued at $181,065,239, even mineral production, $51,217,038, being behind, although the State abounds in mineral wealth, and development is rapid, with petroleum abundant and production great. Minerals produced are gold (second in output in the country), in 1921, $7,347,800; silver, $6,310,694; coal, $28,342,195; copper, zinc, lead, manganese, gypsum; and the State is first in radium output and second in tungsten.

The western ranges abound in forage grasses, on which large numbers of food animals and horses live and produce vast annual wealth.

The climate is warm in summer and cold in winter, but dry and stimulating. It is said that the sky is absolutely cloudless in Denver (the capital and chief city, 5,183 feet above the sea) on 300 days of the year. These qualities have attracted many persons desiring relief from tuberculosis.

Railway facilities are plentiful, and freight tonnage and tourist travel are heavy. The rapidly improving highways are covered by many trans-continental automobile parties, which, en route, seek the local attractions of mountain and valley, chief among which are the mineral springs at Colorado Springs, and everywhere there is unusual conformation and coloration. The State has developed a wonderful highway through the reserved State Park, which is scenic and diverse in interest. The Royal Gorge of the Arkansas, through which the Denver & Rio Grande runs, is justly famed.

Railroad mileage in 1921 was 5,519.

Illiteracy is low at 3.2 per cent. of the whole population in 1920; native white, 1.4 per cent., and foreign-born, 12.4. For a State of 939,629 population, there is unusually large provision for education, with 192,000 public school enrolment in 1919, and the State University at Boulder, University of Denver, State Agricultural College at Fort Collins, State Teachers' College at Greeley, the State Normal School at Gunnison, and the State School of Mines at Golden, which has advanced far in mineralogic science.

## CONNECTICUT.

*Area, square miles.....4,965.....46th in rank*
*Population, 1920.....1,380,631.....29th in rank*

Connecticut, one of the original Thirteen States of the Union, is situate in New England; bounded on the south by Long Island Sound, on the east by Rhode Island, on the north by Massachusetts, and on the west by New York. It was settled early in the seventeenth century by the Dutch from New York, then known as New Amsterdam, and by Puritans from Massachusetts at Hartford, in 1635.

In 1639 it adopted a written constitution, confirmed by a charter from King Charles II. in 1662, and replaced in 1818 by a State constitution.

The State is now intensely industrial, although earlier it was agricultural. The 1920 census indicated that 62.7 per cent. of the people live in towns of 10,000 or more population, and that, including smaller towns, 85 per cent. live urban lives, practically every town having industries. Connecticut presents an unusual contrast in the presence, especially in the western part, of hundreds of beautiful country homes of New York and other city folk, alongside of towns and villages in which industry flourishes.

Proportioned to population, no State has greater industrial strength or a wider range of manufactured products.

Connecticut's surface is broken, there being ridge after ridge, with verdant valleys between. Toward the shores of the Sound, the land is generally flat, but it rises to about 2,000 feet of altitude in the northwestern parts, where the Berkshire Hills begin and extend northward into Massachusetts and Vermont. Originally, the entire State was heavily wooded with all trees known to the temperate zone, hardwood and coniferous varieties abounding. Lumbering has reduced the timber supply materially. The water supply is large for industrial uses. The Connecticut River and the Housatonic are the principal streams, their valleys immensely productive. Tobacco is a very great source of wealth, 45,074,000 pounds being grown on 31,000 acres in 1921.

Besides its pre-eminence in manufacturing industry, Connecticut has in the capital, Hartford, also the insurance centre of the United States, with numerous powerful assurance companies covering every modern phase—life, fire, burglar, etc.

Its industrial output in 1920 was valued at $1,392,432,000, or almost exactly $1,000 per capita, in which there was a net of $706,494,000 added to materials used by the process of manufacture, in which 292,672 persons were employed, or considerably more than 20 per cent. of the total population. It was the large growth of industrial interest that brought in many foreigners as factory and other laborers, so that, although originally intensely New England in social composition, its population now is largely mixed.

The range of industrial output covers brass, bronze, copper products, very many kinds of machinery, silk goods, hardware, cutlery, electrical apparatus, rubber goods, woolens, ammunition, tires, hats, boots and shoes, steam fittings of all kinds, typewriters, firearms, needles, pins, paper, clocks, ordnance, knit goods, dyeing, lumber, clothing, engines and scores of other products.

Agriculturally, Connecticut has fallen off from her one-time superiority, the competition of the virgin soils of the Middle West and the Far West causing the abandonment of many farms a generation ago, these farms having been taken over in recent years for country homes. Against the large industrial output values, the 1920 census gave the value of all crops at $44,472,644.

In early days, shipping was important, but is to-day relatively negligible, excepting for coastwise water-borne traffic. The prevalence of good roads has enabled the development of many motor truck lines, which haul immense quantities of goods and materials to market without utilizing the railway for any part of the haul, while the same good roads have multiplied automobile tourist travel until the State accommodates very heavy vehicular traffic.

Railroad mileage, 1921, was 1,001.

Before the influx of foreigners, illiteracy was almost nil. It is now 6.2 per cent. for the State; 4-10ths of 1 per cent. for the native whites, and 12.8 for the foreign-born. The whole of New England was shown by the 1920 census to be 4.9 per cent. illiterate, and the United States 6 per cent.

Yale University, at New Haven, founded in 1701, has grown to be a world-famed institution, with 4,000 students. Trinity College in Hartford is the other principal higher institution, and there are normal schools for the training of teachers at New Britain, Danbury, New Haven and Willimantic. About 270,000 are enrolled in the public schools, or about 27 for each 108 of population.

## DELAWARE.

*Area, square miles.....2,390.....47th in rank*
*Population, 1920.....223,003.....47th in rank*

Delaware, one of the thirteen original States, next to Rhode Island the smallest, lies in the South Atlantic group, bounded on the north by Pennsylvania, on the east by New Jersey, Delaware Bay, and the Atlantic Ocean, on the south by Maryland, and on the west by Maryland and Pennsylvania. It is 110 miles long with an extreme breadth of 35 miles. The land is low lying, one-twentieth being marshy.

It is essentially agricultural, 85 per cent., 944,511 acres, of the 1,500,000 total State acreage, being in farms, and 653,052 improved, with corn and wheat the chief products, and also much fruit and tomatoes, Delaware being the second State in tomato packing, and famous for its peach crop. Its flat, alluvial soils, practically unbroken, yielded, Census of 1920, $23,058,906, or almost exactly $10 per capita for the 223,000 of population. Oysters and fish are taken extensively.

Relative to the size and population, Delaware has large manufacturing interests. Wilmington, at the northern tip of the State near Philadelphia, with 110,108 persons, about one-half the population, has most of the industries. Leather and knitting lead. The large parent plant of the duPont powder works is in the valley of the Brandywine.

Wilmington is the chief port, ship traffic passing up the Delaware River. A Government canal connects Delaware and Chesapeake Bays. A concrete motor highway completing a trunk line through the State was built at a cost of nearly $4,000,000 by Gen. T. Coleman duPont (U. S. Senator) as a gift to the State.

Railway mileage, 1921, was 335.

About 38,000 attend the public and other schools, and the percentage of illiteracy for the State was, in the 1920 census, 5.9, native white, 1.8, and 19.1 for the Negro, who totals 15 per cent. of the whole population. Educational progress is being made as proved by the 1910 illiteracy percentage, 8.1, reduced materially by 1920. Ability to read and write are requisites for voting.

Delaware is the only State to retain the whipping post as a punishment for criminals.

## DISTRICT OF COLUMBIA.

*Area, square miles.....70.....49th in rank*
*Population, 1920.....437,571.....42d in rank*

The District of Columbia is the seat of the Federal Government of the United States. Its area was originally 100 square miles taken from the sovereignty of Maryland and Virginia, Virginia's portion south from the Potomac being later ceded back to that State. It lies therefore on the west central edge of Maryland on the Potomac River, opposite Virginia. It is in the South Atlantic group. The District is co-terminus with the City of Washington.

Almost the entire activity is governmental, there being regularly employed therein from 100,000 to 120,000 persons. Industrial interest is mostly output for local consumption, although there has been effort by some to develop Washington, the Capital City, as an economic centre. Navigation is carried on via the Potomac River, which is a branch of Chesapeake Bay. The river was naturally capable of accommodating large vessels, and has been improved in depth and otherwise, so that heavy war or commercial craft may pass. Washington is the chief railway stopping point en route between North and South. The Union Station in Washington is said to be not only one of the most efficient in the world for passenger transportation handling but also one of the finest architecturally ever built. Railroad mileage, 1921, was 36.

The distinctive feature of the city municipally is the fact that the Government is by the Congress directly as to legislation, and by Executive Commissioners named by the President of the United States, confirmed by the Senate. Each House of the Congress has a Committee on District of Columbia, and taxation current and for improvements is, by and large, borne half by the Congress, half by the people locally.

Physically, the distinctive feature is the excellent town planning done there by Major Pierre l'Enfant, French engineer, at the instance of George Washington. By a peculiar accident, Washington obtained a most excellent physical arrangement, economic and social. Major l'Enfant, drawing on French history, laid out the city with wide diagonal avenues, traversing streets planned on the "gridiron" method. Major l'Enfant's idea was that, in the event of street riots, artillery could rake the city, and piling of barricades would be difficult if the diagonals were made very wide.

The result was a beautiful city with ideally economic traffic outlets in all directions, wide where needed, narrower where wide highways are not necessary. The streets are wonderfully shaded with a luxuriant growth of trees, which have been brought to high perfection by the United States Department of Agriculture, and brought, as well, from almost every country in the world.

There is generous provision for park space. There is the Mall, running from Capitol Hill toward and

around Washington Monument in large park spaces back of the White House and Executive Departments, being designed (under the newer improved plan, for which Charles Moore of Detroit was chiefly responsible), for the accommodation of a group of governmental structures on a scale apparently never before contemplated by any other Government in the world. There are many smaller parks scattered through the city, and little street crossing resting places. Rock Creek Park is one of the finest in the country for natural beauties.

Many wealthy Americans in late years have erected palatial dwellings in Washington, and there are many fine country estates nearby, with desirable suburban centres on all sides. The Census of 1920 returned 204 farms in the district.

Educationally, the District of Columbia is far advanced. The higher institutions are Georgetown University (Catholic), George Washington University, the Catholic University of America, the National Methodist University, Howard University for Negroes, and two normal schools for the training of teachers.

Illiteracy in the District is low at 2.8 for all, native white, 3-10ths of one per cent, Negro, 8.6, Negro population being almost exactly 25 per cent. of the total. About 6 per cent. are foreign-born.

## GEORGIA.

*Area, square miles* .....*59,265*.....*20th in rank*
*Population, 1920*.....*2,895,832*.....*12th in rank*

Georgia, of the South Atlantic group, which was one of the Thirteen Original States, is bounded on the north by Tennessee, North Carolina and South Carolina, on the east by South Carolina and the Atlantic, on the south by Florida, and on the west by Alabama.

Agriculture is very important. Of the total of about 40,000,000 acres, 25,000,000 are in farms, or 62.5 per cent.; and more than 13,000,000 actually improved, or about 32 per cent.

All crops, Census of 1920, were valued at $540,-613,626, of which $69,720,000 was for cotton in 1,681,907 bales from 4,720,498 acres, Georgia being the second cotton State, only Texas exceeding it. Crops are various—cotton, corn, oats, wheat, sugar cane; corn the most important cereal, with 69,975,-000 bushels produced in 1919.

Ten States exceed Georgia's 25,000 acres devoted to tobacco. Georgia comprehends all things grown in the temperate and sub-tropical zones, is improving its methods with enthusiasm, and livestock values are very high.

Manufacturing has, however, passed agriculture in relative importance, the value of the industrial output, Census of 1920, being $693,237,000. Cotton goods, from the lately developing mills, led with $192,186,000, and oil and cake from cottonseed followed with $99,320,000; so that, cotton and its several forms is Georgia's chief single interest. The cotton mills operate more than 2,000,000 spindles. The percentage of child labor, 1920, was 17.2 in Atlanta.

From the extensive forested area $25,836,000 of lumber and timber products were shipped, land fertilizers were valued at $47,480,000, and other industrial concerns include car works, shipbuilding, machinery, knit goods, flouring mills, food preparations and others.

The State has important mineral resources, coal, iron, manganese, gold and silver, not yet highly developed, and fisheries of oysters and other shellfish are considerable.

Transportation is highly developed, with abundant rail lines and large ocean shipping in and out from Savannah, chief port. A third of a billion of dollars of exports went therefrom in 1920, vessels up to 32 feet draft being accommodated at high tide across the bar, and 26 feet at all times.

Railroad mileage, 1921, was 7,326.

Negro population is 42 per cent. of the total, bringing up the percentage of illiteracy for the whole State to 16.3, that of native white being 5.4 and of Negroes 29.1. Illiteracy percentage in 1910 was 20.7. Of 2,895,832 population, there were, Census of 1920, 570,000 attending school.

Atlanta, chief city and capital, is accounted one of the progressive cities of the South, and nationally holds high place in banking strength.

Water power abounds, and manufacturing advance has been due largely to it.

The lumber cut, mostly pine, exceeds 500,000,000 feet, although production, as in most of the Southern States, is due soon to diminish to negligible quantities for exportation, owing to the enormous areas of the originally large forested lands having been cut over.

Okefonokee Swamp, in the southeastern corner, 400,000 acres, is like the Everglades of South Florida, potentially rich for agriculture when drained.

## FLORIDA.

*Area, square miles* .....*58 666*.....*21st in rank*
*Population, 1920*.....*968,470*.....*32d in rank*

Florida, a South Atlantic State, reputed to have been discovered by the Spaniard, Ponce de Leon in his search for the "fountain of perpetual youth," is the southeasternmost point of the United States, bounded on the north by Georgia and Alabama, on the east by the Atlantic Ocean, on the south by the Straits of Florida, and on the west by the Gulf of Mexico.

It is one of the three or four most important fruit States, its cultivated lands producing in all $80,-256,806 in 1919. Florida is lowest of all Southern States in cotton production. The sub-tropical products prevail in fruits and other land output.

A present and future source of great wealth are the natural deposits of phosphatic rock, whence normally, pre-war, more than 1,000,000 tons were exported for foreign use as land fertilizer, and much was used domestically. It produced $6,678,888 worth in 1919. It is the world's largest phosphate measure.

Florida being of coral formation, there are no high elevations, and in the southern part are vast swamps, the Everglades, which are being drained, providing large potential agricultural wealth.

Less than one per cent of the area is forested, but from it comes about one-half the national supply of turpentine and resin, known commercially as "naval stores."

The State is penetrated by several rivers, chief of which is the St. John, up which steamers ply for 150 miles. At the mouth lies St. Johns, said to be the oldest white settlement on the continent.

Railroad mileage, 1921, was 5,212.

Florida is the resort of very large numbers of winter tourists, there being a dozen places of that character scattered along both coasts and inland. Coastwise, the vegetation is sub-tropical and in the interior is a coniferous tree-clad, sandy region where citrus fruits have been developed highly.

The celebrated resort is Palm Beach on the east coast, to which go some of the most ardent devotees of fashion.

Three of each eight persons are Negro. The illiteracy reported in the 1920 census was 9.6 per cent., against 13.8 in 1910, indicating remarkable progress in popular education. Native white illiteracy was 2.9, and of Negroes 21.5. Public school enrolment was 196,405, and there are the John B. Stetson University of De Land, the University of Florida at Gainesville, Rollin's College at Winter Park, and the State College for Women at the capital, Tallahassee.

## IDAHO.

*Area, square miles*.....*83,888*.....*12th in rank*
*Population, 1920*.....*431,866*.....*43d in rank*

Idaho, of the mountain group, is situate astride the Rockies in the Pacific Coast region, bounded on the north by British Columbia and Montana, on the east by Montana and Wyoming, on the south by Utah and Nevada, and on the west by Oregon and Washington.

Its topography, mountainous with broad level plateaus It classes as of the irrigation States agriculturally, the lands when watered being exceedingly productive, fruit raising having been highly developed. Most of the plains lands which have not been reclaimed by irrigation remain unproductive, with considerable livestock interest thereon. The Rocky Mountains traverse the State, highest elevation being Mount Hyndman, 12,078 feet. The Snake River is the chief stream, is the western boundary of the southern two-thirds of the State, and is navigable for a considerable distance above Lewiston where it makes off into the State of Washington on its way 400 miles to the Pacific Ocean. The climate is dry and stimulating, warm in summer and cold in winter.

Idaho is undeveloped, having large mineral resources, and much land yet to be covered with irrigation waters. The Federal Reclamation Service has already built several important irrigation projects, and many private projects have been carried through.

Present mineral production is very great, especially in the northern or "Panhandle" section, where the lead output is second only to that of Missouri. Zinc production is sixth (value of both lead and zinc, 1921, $9,529,723) among the States, gold

eleventh (1921, $542,200); silver fifth (1921, $7,200,319); lead (1920, $22,292,000); and copper (1920, $491,000). But all the principal metals are present, and tungsten is a source of interest.

The value of the agricultural yields. Census of 1920, was $126,495,111, there being thirty States that exceeded it. Of the total of 60,000,000 acres, there were 42,106 farms, Census of 1920, comprising 8,375,873 acres, of which 3,266,386 were irrigated. Varied crops were raised, wheat, 27,079,000 bushels; oats, 7,740,000; barley, 2,784,000; potatoes, hay, all sorts of vegetables.

The livestock industry is very great, the wool clip alone in 1920 being 21,702,000 pounds; sheep, cattle and horses abounding, cattle numbering 642,000.

Normally, almost a billion feet of lumber are cut. The forest wealth is large, white and yellow pine, larch, white fir and cedar supply activity to many mills. It is claimed that the sawmill at Potlach, Idaho, cutting 750,000 feet daily, is the largest in the world. Idaho pine is famous for ship and yacht masts.

Railroad mileage, 1921, was 2,877.

Only Iowa, with 1.1 percentage of illiteracy shows a better record than Idaho and Oregon with 1.5 each; native white, figures of 1920 census, 3-10 of 1 per cent., foreign-born, 6.5. Educational institutions show an unusually large proportion in school—105,000 of the total State population of 431,866; or one for each four persons. Higher institutions are the University of Idaho at Moscow, the College of Idaho at Caldwell, and State normal schools at Lewiston and Albion.

A summer feature is the running of the dangerous but picturesque Snake River in flatboats, together with the unexcelled fishing in the mountain streams, where speckled trout are taken.

## ILLINOIS.

*Area, square miles.....56,665.....23d in rank*
*Population, 1920.....6,485,280.....3d in rank*

Illinois, the third most populous State of the Union, lies in the East North Central group, its northeastern corner touching Lake Michigan, the Mississippi River flowing along its western boundary line, the Ohio River along its southern end, and is bounded on the north by Wisconsin, on the east by Indiana, on the south by Kentucky and Missouri, and on the west by Missouri and Iowa. It is intensely industrial, agricultural, mining, and water and rail transportation in interest.

Illinois is almost uniformly level, being situate in a glacial moraine, and is alluvial in all parts, with a climate such as prevails in the whole of the Middle West. It is so level that a railway possesses one precisely straight line 100 miles long in which scarcely a dirt cut was necessary—a vast prairie, once largely wooded, now with but 10 per cent. of forest cover. With the exception of Iowa, no other State has so large a proportion of lands susceptible of cultivation.

It is provided with remarkable mileage of riverways, the Mississippi, the Ohio, and the Wabash, which skirts the southeastern corner. The Illinois River is the principal intrastate river. The artificial waterway is the important Chicago Drainage Canal, 40 miles from Chicago on Lake Michigan to Joliet on the Illinois River, a unique engineering device which supplies drainage out from the flat lake-coastal district around the city and the Chicago River, and really reverses the natural tendency to drain into Lake Michigan. Eventually, the canal will be extended by improving the Illinois River to the Mississippi, giving Chicago navigation from "the Lakes to the Gulf" of Mexico.

Traffic on the Great Lakes to and from Chicago (population, 1920, 2,701,705), which is the second most populous city in the country, is attaining immense proportions, in general cargo as well as in ore brought from the Minnesota, Wisconsin and Michigan mines to the great works of the United States Steel Corporation in Gary, Indiana, a suburb of Chicago.

Although second to Texas, which has 16,041 miles, Illinois, in 1921, with 12,188 miles of railway has the heaviest railway transport tonnage in the United States, Chicago being the greatest railway centre in the world.

The industrial interest of Illinois far exceeds its agricultural. The 1920 census gave the State $864,737,833 value of all crops, and $3,250,000,000 value of manufactured products. Were the products of the Gary works included, as economically they should be, the value would be vastly more; while for the same reason, the immense Standard Oil and other steel working industries of the East Chicago-Indiana, district, should be added. The range of industrial output is great—iron and steel, the greatest meat packing works—the Union Stockyards—in the world, machinery, electrical equipment, implements, furniture, motor cars and railway cars, woodenware, flour, woolen goods, and scores of other things. Between $2,500,000,000 and $3,000,000,000 is invested in manufacturing, the products going to all parts of the world.

Everything appertaining to the temperate zone is produced on Illinois lands—all cereals, vegetables, fruits and livestock. The 1920 census gave Illinois's corn production as 301,000,000 bushels, nearly 10 per cent. of the national crop; wheat, 65,675,000; oats, 123,960,000; and immense output of other crops. The Chicago Board of Trade is the principal grain dealing exchange in the country.

Bituminous coal underlies more than half the area of the State, Illinois ranking third in mineral output. The 1920 census assigns coal output values of $240,000,000, with oil and natural gas in generous measure. The other base minerals are found in that belt.

The 1920 census showed 1,116,099 pupils and students in all educational institutions reporting, about one in each six persons. Besides a very extensive public school system, there are 29 colleges and universities, and five State normal schools for training of teachers. The most prominent universities are the University of Illinois at Urbana, 9,403 students; the University of Chicago (endowed for more than $30,000,000 by John D. Rockefeller), 9,032; Northwestern University at Evanston, 4,759; Loyola University at Chicago, 1,621; James Milliken University at Decatur, 1,538.

Illinois shows 3.4 per cent. of illiteracy, Census of 1920, native white, 8-10 of 1 per cent., foreign-born, 11 per cent., and Negro (of whom there has been a remarkable influx induced by the late war demand for labor), 6.7 per cent. Of the 6,485,280 of population, Census of 1920, native-born whites were 5,092,382; foreign-born, 1,206,951; per cent. of native, 78.5; foreign, 18.6; Negro, 2.8. Chicago is the chief Polish centre of the country, with a large percentage of Jews and all classes of immigrants.

Tourists find a wealth of art centres in Chicago, such as the Field Museum and the Chicago Museum of Art, with many art schools. Chicago is a great national convention resort; the Auditorium, seating about 8,000, is usually the place of entertainment.

Chicago's park and boulevard system, as planned, is perhaps the most ambitious ever conceived by any city in the world, with three large parks already developed, connected by a wide boulevard along the lake front cutting through the heart of the city, the whole laid out by some of the greatest city planning and landscape architects in the world.

## INDIANA.

*Area, square miles.....36,354.....37th in rank*
*Population, 1920.....2,930,390.....11th in rank*

Indiana, in the East North Central region, touches Lake Michigan at the northwestern corner of the State and is bounded on the north by Michigan, on the east by Ohio and Kentucky, on the south by Kentucky, and on the west by Illinois. The Ohio River, important in navigation, skirts the entire southern side, and the Wabash River, also susceptible of greater navigation development, about half of the western boundary line. There are 550 miles of riverways navigable.

In general, Indiana occupies a fairly level tableland and was once a glacial moraine. The climate is characteristic of the Middle West, warm in summer and rather cold in winter.

Industry, with $1,901,846,000 output, Census of 1920, exceeds agriculture with $497,229,719 value of all crops, and mining, $59,926,558.

Transportation is heavy, with 7,586 miles of railways. Immense tonnage moves riverwise on the Ohio and Wabash, and also enormous tonnage enters and leaves the Lake Michigan ports of Whiting, Standard Oil town; Indiana Harbor, and Gary (United States Steel Corporation city), in iron ore, steel products, cereals and coal. Electric interurban traffic is the heaviest in the country.

Manufacturing comprehends practically all standard products—steel, machinery, very many motor cars, tinplate, cement, vehicles, flour, glass, oil refining, meat packing, there having been in the past 20 years, as in all Middle Western States, a vast industrial invasion to get nearer ultimate markets and obtain labor. Many Indianans (Hoosiers) divide their time between farm and factory.

The 1920 census showed the value of all crops to be $497,229,719, with corn leading—169,848,000 bushels—about 5 per cent. of the national crop; oats, 45,072,000; wheat, 24,144,000; and all other

temperate zone products, including fruits and livestock, generously represented.

Evansville, on the Ohio River, is the largest hardwood market in the country, selling not only the heavy State cut from hardwood forests of vast value, which formerly covered much of the State, but also handling immense output from Southern forests.

Indiana ranks sixth in coal production, bituminous and cannel—a very fine fuel for fireplaces—with $56,926,558, Census of 1920. There are oil wells also, the State ranking twelfth in production. Many other basic minerals are found.

Railroad mileage 1921, was 7,426.

The increase of industrial interest in the past two decades is the feature of Indiana's later history. In that space of time, the towns along the shore of Lake Michigan have been developed into vast beehives of industry, and Gary especially has become one of the chief steel points, increasing rapidly in population and being known also for its school system which has been copied largely in the East.

Coincidentally, Indiana has developed a remarkable school of fiction and drama writers, among them Booth Tarkington, George Ade, and Meredith Nicholson. In the southern part many mineral springs are found, principally at French Lick, where famous hotels entertain tourists from all parts of the world, and where mineral waters are bottled for domestic and foreign consumption.

Indiana has four educational institutions of fame—De Pauw University at Greencastle, with 1,025 students; Indiana University at Bloomington, 2,659; University of Notre Dame, Catholic, at South Bend, 1,123; Purdue University at Lafayette, 3,113. The public schools enroll 575,000 pupils. illiteracy is low at 2.2 per cent., Census of 1920; native white, 1.3; foreign-born white, 11.8; Negro, 9.5; native whites being 91.8 per cent. of the population; foreign-born, 5.9; Negro, 2.2. A racial phase was the influx of many Germans at the time of the German revolutionary movements of the last century, the result being that now from Fort Wayne southward the German population is predominant in many districts numerically and socially. That portion of the population has always been exceedingly thrifty and dependable economically, and has aided much in the late remarkable industrial development.

In the intense industrial district along the lake the foreign-born population predominates, with Slavs of the several European countries very numerous, and in the World War Indiana responded to the first call for volunteers as promptly as any State in the Union, as proved by the records in Washington.

For the last four decades the centre of population of the United States has been in the southern part of Indiana, moving very slowly west.

## IOWA.

*Area, square miles.....56,147.....24th in rank*
*Population, 1920.....2,404,021.....16th in rank*

Iowa lies in the East North Central part of the Middle West, bounded on the north by Minnesota, on the east by Wisconsin and Illinois, on the south by Missouri, and on the west by Nebraska and South Dakota. The Mississippi River flows along the entire eastern boundary line, and the Missouri River along three-fourths of the western line.

It is very level, only one point of elevation being 745 feet above the mean. Iowa claims the largest proportion of actually arable lands of all States and proves it by the immense agricultural production, soil and climate combining to give it that prestige, the climate being Middle West characteristically.

The value of all crops, Census of 1920, was $890,391,299, exceeded only by Texas with $1,071,542,103 on five times the land area of Iowa. Farm property exceeds $8,000,000,000 in value, its area being 33,474,896 acres of the total of 36,000,000 acres in the State. 14 per cent. of the corn of the country, Census of 1920, was produced in Iowa—444,190,000 bushels—wheat being low with 10,102,000, and potatoes high with 4,728,000 bushels, hay with 4,659,000 tons, and oats with 187,045,705 bushels.

Live stock interests are immense, with all animals raised in the temperate zone abundant, and dairy and poultry outputs likewise enormous.

Fruit interests are confined mostly to the smaller varieties, and garden stuff is heavily cultivated.

The farms number 213,439, averaging 156.8 acres and 134 actually improved. Iowa is the strongest centre of the late agricultural movement, which resulted in the rapid development of the American Farm Bureau Federation, the President, James Riley Howard, being an Iowan, and agrarian influence dominates the State. Iowa has the largest ratio of automobiles per capita of all States, the farmer-owned prevailing.

Transportation is highly developed, with railways literally ribbing the State, for vast through, as well as immense local, tonnage. River tonnage on the Mississippi moves in vast volume, with much on the Missouri.

Railroad mileage 1921, was 9,808. Interurban electric service is greatly developed.

Coal underlies about 19,000 square miles, the output, Census of 1920, being 6,300,000 tons, lead being found in the northeastern part, and quarry output heavy.

Manufacturing naturally consumes mostly agricultural products, in preparation of foodstuffs for the market—meat packing, flour, etc., with considerable development also of machinery making to supply the immense nearby markets. More than $500,000,000 is invested in manufacturing, the output, Census of 1920, having been $310,750,000.

Iowa leads all States in literacy. Only 1.1 per cent., Census of 1920, are illiterate, the percentage of native whites being 5-10 of 1 per cent. of foreign-born white, 4.9, and of Negro, 8.1. The State has a large percentage of native-born whites—89.8.

There are about 600,000 persons at school in Iowa, or one for each four of the population. The public school system is highly advanced, in method and provision for the people of all classes.

The College of Agriculture at Ames is claimed to be the leading institution of that character in the country. It has 4,859 students, and has pursued scientific investigation along all lines that appertain to agrarian interests, with much original research, and development of methods for crop and animal production and care.

The University of Iowa at Iowa City has 2,889 matriculated; Upper Iowa University at Fayette, 388, and Drake University at Des Moines, the capital, 1,460.

A signal enterprise is the utilization of vast electrical power in the Mississippi River at Keokuk, where a remarkable dam has been thrown across the river.

The diffusion of prosperity is indicated, Census of 1920, by the $391,505,000 deposits in savings banks by 905,970 persons, averaging $432.14 per account, or almost one account for each two and a half persons.

## KANSAS.

*Area, square miles.....82,158.....18th in rank*
*Population, 1920.....1,769,257.....34th in rank*

Kansas, a West North Central State, in almost the exact geographical centre of the United States, is bounded on the north by Nebraska, on the east by Missouri, on the south by Oklahoma, and on the west by Colorado. It is varied in topography, with prairies extending westward, where elevations of 4,000 feet are found. There is heavy forest cover in the eastern half, much hardwood, black walnut abounding. The climate is severe in winter and warm in summer, but constantly modified by the prevalent winds. The Missouri River skirts the northwestern side for 150 miles, giving navigation to St. Joseph, Atchison, Leavenworth and Kansas City, the only other considerable river being the Arkansas, which flows through from Colorado. The Kaw is another river.

Railway traffic is mostly east and west, and several of the largest systems have lines, with liberal provision for branch service, to care for the heavy through traffic and the large State production. Railroad mileage 1921, was 9,388.

Kansas is essentially agricultural, although natural mineral wealth adds heavily to production. The Census of 1920 gives $588,923,248 as value of all crops, livestock products not included.

The total acres in the State is 56,000,000, of which by the 1920 census there were 45,425,179 in farms, with 30,600,760 actually improved. Corn is the chief crop—132,786,130 bushels—next to wheat, 140,842,516 bushels, additional production running the gamut of temperate zone foodstuffs in cereals, tubers, sugar beets and the several kinds of animal foods. Farming is marked with the most modern of equipment in machinery. Cotton and tobacco are grown to some extent, the climate and soil being such as to enable the further development thereof when economic conditions demand.

In the western reaches of the valley of the Arkansas River irrigation is extensive and becoming more important (45,000 acres under water) as demand for land increases in the whole country. Dairy and poultry products run above $60,000,000 annually.

Kansas derives wealth from livestock husbandry second to cereal producing. The herds range in the western and southwestern portions mostly, although not relatively so important as in the earlier days

Manufacturing, including smelting of ore, refining of oils, meat handling, and milling is very extensive, the 1920 census assigning $913,667,000 as the value of the products of all industries. Slaughtering and meat packing leads with $427,663,000, and flour milling comes next with $206,881,000, and oil refining with $63,786,000, while car building and repairing by the railways adds annually $28,231,000, and butter alone $24,444,000.

The coal fields underlie more than 15,000 square miles and, Census of 1920, produced 5,982,143 tons, and the oil measures, which are very extensive, yielded 38,501,000 barrels of petroleum. There are zinc, lead and salt.

Kansas has only 1.6 per cent. of illiteracy, that of the native whites being 6-10 of 1 per cent. of foreign-born whites, 10.5; and of the Negroes, 8.8; the Kansas colored man having advanced far along the roadway toward normal literacy. The attendance at all educational institutions is more than 400,000, or about one for each four persons, with 7,500 students in the six colleges.

Kansas was one of the first States to adopt Prohibition, and a unique present feature is the State Industrial Court, which essays to prevent strikes, and which the Governor, Henry Allen, alleges is used more by laborers initiating cases than by employers.

The diffusion of prosperity is to be judged by the fact that agricultural, livestock, dairying, mineral and manufacturing annual production totals about $1,700 000,000, or about $2,180 for each man, woman and child in the State.

## KENTUCKY.

*Area, square miles.....40,598.....36th in rank*
*Population, 1920.....2,416,630.....15th in rank*

Kentucky, grouped as East South Central, a border State between the North and South, is bounded on the north by Indiana and Ohio, on the east by West Virginia and Virginia, on the south by Tennessee, and on the west by Indiana and Illinois. The Mississippi River touches the westernmost tip, and the Appalachian Mountains cross the eastern side, the Ohio River skirting the entire northern boundary. Navigable rivers flow past the State for a total distance of 813 miles. The topography is broken, with many hills dotting the tablelands, of which the famous Blue Grass region in the northern part, east from Louisville, is best known and most productive.

Agriculturally, the State is very productive; $347,338,888 is given by the Census of 1920 as the value of all crops, which included the highest quantity of tobacco of all States, 467,500,000 pounds; and a most varied list of temperate zone products, shading off into those distinctively Southern. The corn crop in 1921 was 82,150,000 bushels.

Livestock interest is important, Kentucky horses having been for long world famed, its thoroughbreds not being excelled anywhere. Other domestic animals abound, and fruits are extensive.

Coal mined in 1920 was 27,678,572 tons, and petroleum lifted, 8,692,000 barrels.

Forest wealth is great, coniferous and hardwood trees abounding, and normally yielding annually $20,000,000.

Manufacturing engages about $200,000,000 of capital, and outputs about $250,000,000 of products, and mostly uses raw materials that come from the soils, although clothing industry is developing.

Railroad mileage, 1921, was 3,929.

The illiteracy percentage is 8.4, that of native whites being 7, of foreign-born 7.3, and of Negroes 21. The State public school system enrolls about 550,000, and four universities, 5,200.

The distinctive natural phenomenon is the 9,000 square miles in Central Kentucky which is ribbed with underground passages and caves, chief of which is the Mammoth Cave, with its 150 miles of connecting passages.

In the old days before Prohibition, Kentucky was famed for its whiskeys, Bourbon County, at Paris, in the Blue Grass region, having lent its name to the corn liquor of that name formerly made and consumed in the United States.

The Kentucky mountains, picturesque and beautiful, have for years been the scene of feuds between families, which descended from father to son through generations, and which often broke in bloody conflicts, now happily passing away.

## LOUISIANA.

*Area, square miles.....48,506.....30th in rank*
*Population, 1920.....1,798,509.....22d in rank*

Louisiana, situate in the West South Central region, on the Gulf of Mexico, at the mouth of the Mississippi River, is bounded on the north by Arkansas and Mississippi, on the east by Mississippi State and the Gulf, on the south by the Gulf, and on the west by Texas. It is practically all alluvial built up from the silt brought down by the Mississippi River, which has thrust out a long point into the Gulf, as the southernmost part of the State.

There are no hills of consequence, and much of the lands are lower than the immediate banks of the great river, powerful levees being necessary to protect from constant overflow. As a consequence of the downwash of river sedimentary matter, the lands were naturally highly enriched, and subsequent overflowing of the waters has added food values to the soils, as does the Nile in Egypt.

The western part, immediately next to Texas, shades off toward the drier character of climate and soils, the climate of Louisiana for the greater part being rather moist and very warm in summer, with little of winter cold. It is semi-tropical.

The Sabine River bounds the State on the west, and with the Red River and the Mississippi, Louisiana has 4,794 miles of navigable waterways, much of it being on the large bayous in the south.

The Mississippi River has always largely determined the character of New Orleans, chief city, for there river traffic from earliest days has been extensive, and New Orleans has dominated the State economically. For some years after the Civil War of 1861-5, river traffic fell off, but is now being revived, and is expected to grow to very heavy volume.

Railroad mileage, 1921, was 5,223.

Agriculturally, Louisiana is prolific—rice, cotton, sugar cane, corn, sweet potatoes, tobacco, especially fine, fruits of all sub-tropical sorts, and nuts are produced largely. The value of all crops, Census of 1920, was $231,506,000. Nearly all the sugar cane and molasses produced in the country comes from Louisiana, the value being $44,000,000, 1920 census. Cotton values the same year were $53,-250,000. Livestock interests are extensive. It is second in output of lumber.

The State ranks fifth in petroleum output, 1920 census, 35,649,000 barrels. Sulphur also is largely produced. There are more than 6,000 square miles water covered, suitable for the propagation of oysters; the shrimp catch is very valuable, and commercial fishing an important industry. Trappers market muskrat, opossum, raccoon, mink and other furs in great quantities.

Manufacturing industry centres mostly around the use of soil raw materials, the annual output being worth about $300,000,000.

Foreign trade through the port of New Orleans is large, 1920 exports equalling $589,409,222, and imports $252,313,000, mainly of cotton and cottonseed, wheat brought down the Mississippi, flour, rice and other products.

There were, in 1921, 355,000 enrolled in the public schools of a population of more than 1,800,000, divided, two-thirds white and one-third Negro. Much of the population retains the original French blood, and considerable numbers the mixture of French and Spanish, which produced the Creoles. About 6,000 attend the colleges and universities.

New Orleans, the chief city, is a welcome resort for tourists in the winter, having picturesqueness and the flavor of olden times, the annual Mardi Gras being the principal attraction. Much through passenger traffic flows through New Orleans to and from the Pacific Coast, railway and steamer facilities being well supplied.

## MAINE.

*Area, square miles.....33,040.....38th in rank*
*Population, 1920.....768,014.....35th in rank*

Maine, in New England, northeasternmost State, is bounded on the north by Quebec, Canada, on the east by New Brunswick, Canada, and the Atlantic Ocean, on the south by the Atlantic, and on the west by New Hampshire and Quebec.

It is naturally heavily wooded, mostly with coniferous trees, is of broken topography, rising to mountainous elevations in the northwest, Mount Katahdin, 5,268 feet, the highest, and slopes in broken form toward the coast, which is rugged, tortuous, picturesque and indented with many harbors, with many islands adjacent, and has very extensive natural water power sites, already somewhat developed, but assuring great industrial capacity in the future.

Its waters abound in fish, its forests in wild animals, and it has a climate rather intensely cold in winter, but beneficent in summer. It has more than 1,600 lakes, several more than 100 miles long. The coastline is 278 miles long.

Agriculture, lumbering, manufacturing, quarrying and fisheries are the chief industries.

Of the 20,000,000 total land acres, about one-third is farming area, of which about two-thirds is improved. Potatoes form the leading crop, the 1920 census showing 25,531,000 bushels worth $52,339,000. Hay is a large crop, and all vegetables and considerable small fruits are produced. The value of all crops, 1920 census, was $100,152,324. Livestock and dairy products add to the wealth, the milk production coming in part to supply New York City.

In granite output it ranks third, Vermont and Massachusetts exceeding; it is first in feldspar, and produces many other of the cruder minerals for building.

Lumber is the principal manufacturing product, the cut, Census of 1920, being 650,000,000 feet, white pine, spruce for wood pulp, hemlock, balsam, birch, cedar, oak, maple, beech, ash, and basswood or linden. The paper pulp mills produce $70,000,000 annually, and along the rivers are many water power motived textile, tanning, oilcloth, boots and shoes, canning, flour and machinery works. The total value of the manufacturing output, 1920, was $465,822,000, paper and wood pulp leading with $93,917,000, cotton goods next with $56,564,000, boots and shoes, $48,689,000 woolen goods, $42,442,000, lumber, $28,515,000, etc.

Transport by water is mostly coastwise, although there is some foreign. The railroad mileage, 1921, was 2,295.

Maine is distinctively a pleasure resort, summer bringing many thousands of tourists and residents for the season, and the fall many hunters. Luxurious hotels are maintained, and there are many private lodges and summer homes, while many artists go to paint the beauties of the Maine landscape and coastline.

Portland, the chief port, has a large steamer tourist traffic, as well as extensive freight tonnage by water and by rail.

Illiteracy percentage is 3.3, that of native whites 1.6, and of foreign-born 11.1. Public schools enroll about 170,000, and higher educational institutions rank well, with Bowdoin, at Brunswick, among the country's best.

## MARYLAND.

*Area, square miles.....12,327.....41st in rank*
*Population, 1920.....1,449,661.....28th in rank*

Maryland, a South Atlantic border State between the North and South, is bounded on the north by Pennsylvania, on the east by Delaware and the Atlantic Ocean, on the south and west by Virginia and West Virginia. It is penetrated from the south by Chesapeake Bay, a wide arm of the Atlantic, and an important channel of water-borne commerce which has made Baltimore a great seaport. The Potomac River flows along the western boundary line, also important in commerce. The topography is varied, low and flat in the portions toward the ocean, and rising to mountain levels in the western sections, Great Backbone Mountain, 3,400 feet, the highest. The State is distinctly separated by the bay into Eastern and Western shore parts, each having somewhat of social and industrial individuality. The climate is warm, with mild, humid winters.

The Census of 1920 showed $109,683,574 as the value of the crops, principally corn, tobacco, wheat, oats, hay, fruits of all kinds grown in the south temperate zone, vegetables being produced heavily for the markets of the larger cities as far north as New York. Products are varied and profitable on account of the proximity of big city markets.

Mining is principally of coal, about 3,600,000 tons being the normal output.

Manufacturing output, Census of 1920, was valued at $873,945,000, and ran the gamut of almost all classes. Shipbuilding led with $60,844,000, followed by clothing, $60,414,000, slaughtering and meat packing, $41,439,000 and the iron and teel industry, $19,884,000, which is fast growing to great importance. The census reports showed 60 classifications with more than $1,000,000 of output each, which afford profitable diversification in industry and employment for a versatile working folk.

Transportation is highly developed, water and rail. Railroad mileage, 1921, was 1,436. Baltimore is one of the country's principal ports, and is growing in importance much faster than the Nation's whole volume increases. Water traffic coastwise is very heavy, and several substantial steamer lines also ply between Baltimore and foreign ports. Much of the product of the South comes through Baltimore, and that port gets large share of the tonnage of the North and West.

The population is 17.9 per cent. Negro, and the percentage of illiteracy for the whole State is 5.6. The swiftness with which educational advantages for the masses is sweeping away illiteracy is shown by the figure of 5.6 for 1920, compared with 7.2 in 1910. In the schools were more than 250,000, and the higher institutions are celebrated. Johns Hopkins University, at Baltimore, is not excelled in any State or country for scholarship and breadth of scientific attainment. To its hospital go patients from all parts of the world to consult eminent specialists. There are other well-known higher institutions, Goucher's College one of them.

Along artistic lines there is high development, principal centres being Peabody Institute for Education in Music, the Maryland Institute School of Art and Design, Walter's Art Gallery, and others.

## MASSACHUSETTS.

*Area, square miles.....8,266.....44th in rank*
*Population, 1920.....3,852,356.....6th in rank*

Massachusetts, one of the Thirteen Original States, lies in New England, bounded on the north by Vermont and New Hampshire, on the east by Massachusetts Bay and the Atlantic Ocean, on the south by Rhode Island, Connecticut and the Atlantic, and on the west by Rhode Island and New York. The highest elevations are in the Berkshires in the west, about 2,400 feet maximum, and now a great summer resort of wealthy city dwellers.

It was naturally wooded in all portions, but retains only a fraction of the original forest wealth, which consisted of all trees which grow in the temperate zone, coniferous and hardwood.

The State has grown to a first place in industry, manufacturing having been developed very greatly, the 1920 census showing the value of all industrial products to be $4,011,182,000, divided into 100 classes each exceeding $5,000,000 annual output. The per capita industrial output is $1,045. Much of the industrial strength is due to the development of extensive water powers in the State's rivers, but coal operates many.

Cotton goods lead with $596,667,000; boots and shoes, $442,466,000; worsted goods, $237,443,000; leather tanning and finishing, $129,595,000; foundry and machine shop products, $111,853,000; slaughtering and meat packing, $110,238,000; woolen goods, $105,183,000; and nine classifications exceeding $50,000,000 output, 12 exceeding $25,000,000, and five exceeding $20,000,000. Practically everything manufactured in modern industry is included, excepting in those basic industries in which the cruder raw materials such as ores are needed. The census showed 11,906 establishments worthy being reported, employing 812,906 persons, paying in wages $766,623,378 capitalized for $2,947,108,527 utilizing 1,729,378 horsepower, consuming $2,260,713,126 of raw materials, and adding by the industrial effort $1,750,468,496 to the original value of the materials.

The State has abundant rail and coastwise shipping facilities; there were 2,106 miles of railroads in 1921, and 2,804 of electric lines. From the earliest generations, the New England States have been efficient in ocean-going shipping, and Massachusetts not less than any.

Massachusetts is the second densest populated State. The dense industrial and residential development is indicated by the 94.8 per cent. of urban population, which leaves agriculture, once dominant, reduced to 32,001 farms averaging 77.9 acres, value of all crops in the 1920 census being $53,700,925, taken from farm property valued at $300,471,743. In value, hay was the leading crop, tobacco next with $6,419,000, and potatoes with $6,000,000, others being wheat, corn, oats, rye, buckwheat, apples, maple sugar, and small fruits, cranberries abounding in the lands along the coast.

It is the leading fisheries State of New England, $11,000,000 of catch being reported in 1920. Mineral products consist chiefly of quarry outputs.

No State is further advanced in primary and higher educational facilities, although, owing to recent heavy influx of industrial foreigners, the percentage of illiteracy is not low at 4.7. Native whites show 4-10ths of 1 per cent., foreigners 12.8, and Negroes, 6.8.

Of the 3,852,356 of population, 1,077,534 are foreign-born, of which 262,021 are Canadians, 117,037 Italian, 163,171 Irish, 92,034 Russian, and the others from all foreign lands.

Enrolment in the schools was 618,828; normal schools number 11, and the list of higher institutions is long and impressive, the greatest proportioned to population in the country. These include Harvard University, Massachusetts Institute of Technology, the State Agricultural at Amherst, Tufts, Williams,

Clark, Worcester Polytechnic, Boston University. Institutions for women include Wellesley, Smith, Radcliffe, an offshoot of Harvard and Mount Holyoke Colleges; Simmons, Lasell and Auburndale.

The colony in pre-Revolutionary times was the centre of republic-making in the North, perhaps in the country, the Boston Tea Party, which signalized the revolt against "taxation without representation" by the mother country, England, taking place on the Boston waterfront. The first shot in the Revolution was fired at Concord, close to Boston, so that visitors to the "Hub" find the flavor of history on every hand. Boston and environs are therefore the resort of tourists.

As with all New England, the State is a great summer resort, the North Shore above Boston being the resort of summerers and many artists, and the long hooklike Cape Cod and the adjacent islands attract thousands. At Provincetown, at the tip of the Cape, the Mayflower made its first landing, moving next to Plymouth. A monument, dedicated by the late Theodore Roosevelt, stands at Provincetown to commemorate the landing.

## MICHIGAN.

*Area, square miles.....57,980.....22d in rank*
*Population, 1920.....3,668,412.....7th in rank*

Michigan, lying along the Canadian border, is divided by Lake Michigan into two parts: the northern peninsula has on the north Lake Superior, and on the south Wisconsin; the southern peninsula has Lake Michigan on the west, Lake Huron, Ontario, Canada, and Lake Erie on the east, and Indiana and Ohio on the south. The interests of the northern peninsula are mostly copper and timber. In the southern there are also minerals and timber, but manufacturing has grown to such large importance that it leads all other concerns.

The State is mostly flat and sandy, with large areas of cut-over timberlands, mostly coniferous, with rugged topography in the north. The State, the Federal Government and large private enterprises are now making great efforts for the reforestation of the land.

No State has greater water boundary lines proportioned to area, transport naturally is great by that means. Rail facilities are abundant, lines having sought the heavy tonnage of the recently developed industry. Railroad lines mileage 1921, was 8,734, and the great Sault Ste. Marie Ship Canal, between Lakes Huron and Superior, accommodates more tonnage than the Suez Canal or any other like canal. The 1920 census assigned it 68,235,554 tons, valued at $914,513,944, of which much is iron ore from Minnesota and copper from Michigan, vast supplies of grains, flour and timber, and coal and supplies for the Northwest.

Michigan is the automobile centre of the world, about two-thirds of the 2,000,000 cars produced annually being made there. There are 68 motor car factories outputting more than $1,000,000 a year, chief of which are the works of Henry Ford at Detroit, which, according to degree of production at the moment make up to 1,500,000 a year, besides farm tractors at Dearborn, nearby, and steel and other mills operated by the Fords. Besides the Ford cheap car, Detroit makes some of the finest built in the world.

There are 8,000 manufacturing establishments, capitalized at more than $2,500,000,000, which represents an increase of 73 per cent. in five years, paying wages of about $800,000,000 a year, using materials worth $2,000,000,000 and employing about 500,000 persons normally. Fifty makers of automobiles, bodies and parts in the State do an annual business of above $1,000,000.

Michigan leads all other States in output of chemicals, drugs, engines, threshing machines furniture and refrigerators. Fourteen copper, brass and bronze manufacturers exceed $1,000,000 of annual output. Stove-making is as great as in any State, and there are many other factories, there being 460 concerns that output more than $1,000,000 annually. Michigan cuts close to a billion feet of lumber.

Production of iron ore was valued in 1919 as $60,906,692; copper, $34,476,336; coal, 1,400,000 tons was produced in 1920 and of salt, 2,000,000 tons.

Agriculture adds annually, Census of 1920, $404,347,810 for all crops, potato production the third largest with a $32,000,000 crop. Sugar beet output is heavy, and all temperate zone crops are raised.

In shipbuilding it ranks seventh among the States. Fisheries catch annually 50,000,000 pounds.

There are more than 6,000 smaller lakes, where fishing and summer sports attract many. Apple production is fourth highest, and the State claims leadership in small fruits. Corn yields about $50,000,000.

Educationally, Michigan has its great State University at Ann Arbor, which was first to admit women matriculates, the oldest agricultural college in the country, many normal schools, and a public school system that enrolls 670,000; it has a literacy percentage of 3; native white, 7-10ths of 1 per cent.; and foreign-born, 9.9.

Detroit, by the Census of 1920, had 993,739, showing an increase of 527,978—113 per cent.—in the decade, and is now (1922) in the million population class. It has a large percentage of foreigners, being the second in Polish of the country.

Beautifully situate along many waterways, it bids successfully for metropolitan repute and constantly attracts newcomers from home and abroad. In summer time, the Mackinac Islands, Belle Island, Ausable and St. Mary's River are popular resorts.

## MINNESOTA.

*Area, square miles.....84,682.....11th in rank*
*Population, 1920.....2,387,125.....17th in rank*

Minnesota, of the West North Central, on the Canadian border line, is bounded on the north by Manitoba, Canada, on the east by Lake Superior and Wisconsin, on the south by Iowa, and on the west by the Dakotas. The Mississippi River rises in Minnesota. It is a State of widely variant natural resources and rapidly developing wealth; is in general a tableland of rolling, timbered, prairies excepting in the western parts, where timber is scarce, and of rugged character in the northeast, where immense deposits of ore, high-grade Bessemer prevailing, supply the steel concerns of Illinois, Pennsylvania and Ohio. Its climate is not excessively warm in summer, and is cold in winter time. There are about 10,000 lakes, many exceedingly beautiful, that abound in fish, and are the resort of pleasure-seekers from all parts of the Union in the summer.

Agriculturally, the State is rich, with $506,020,233 as the value of all crops reported by the 1920 census; a billion feet of lumber cut, mostly white pine; 34,593,000 tons of iron ore, worth $128,377,174, being 61 per cent. of the national production, shipped eastward by steamers on the Great Lakes; manufactures, $1,218,129,735 worth of product in 6,125 establishments, capitalized at $679,386,486, employing more than 147,678 persons, and using raw materials worth $883,989,777. The flouring mills are the principal concerns, leading the United States and the world in annual volume of output, $381,249,000.

Industry is considerably diversified, there being 65 lines, the annual output of each of which was reported by the 1920 census as more than $1,000,000, including meat packing, $146,361,000; butter, $88,862,000; lumber, $37,321,000; railway cars and repairs, $35,351,000; linseed oil, $33,238,000. Manufacture of machinery is now an important industry. Minneapolis and St. Paul the chief centres of all industry.

By adaptation, fruits have been made to thrive, until the crop is large of all kinds grown in the north temperate zone; while corn, in earlier years scarcely known, has by the same process been brought to high value, having won first prize in one national contest at the New Orleans Exposition. The 1920 census reported the crop at 118,000,000 bushels, wheat, once the chief crop, 37,710,000; oats, 90,000,000; with generous yields of all other cereals.

Twenty-five years ago, Minnesota ranked third in lumber output, but has fallen to eleventh place, although there remain an estimated 21,000,000,000 feet of spruce in the forests, which is very valuable for paper woodpulp in these years of diminishing supply. 80 per cent. of the cut is white pine, which also is rapidly disappearing.

Railroad mileage, 1921, was 9,114.

Minnesota has been especially fortunate in the heavy inflow of those European racial migrations from the northern countries whence come good farmers, Scandinavians in the majority, but with almost as many Germans; both nationalities settled in more or less clannish sections, but have helped to develop the State with great thrift and industry.

In illiteracy the State is among the lowest, only 1.8 per cent. being unable to read and write, against an average of 6 per cent. for the United States. The State claims one of the most efficient systems for popular education, with enrolment of about 550,000 in all institutions out of a population of 2,387,125. The University of Minnesota, upbuilt by its late President, Cyrus Northrop, has close to 10,000 students and ranks among the greatest of the country, with smaller colleges such as Hamline

University, St. Thomas, Macalester, Carleton, and a score of others scattered through the State, some supported by church denominations.

The grain trade control in Minneapolis is second only to that of the Chicago Board of Trade; and the water and rail shipping from and to Duluth, at the head of the Great Lakes, on Lake Superior's western end, is immense in ores, coal, cereals, and general freight. The Great Northern Railway Company maintains a fleet that traverses the lakes, and initiates shipments to and from all parts of the world via the lake route.

In the carrying of iron ores, the United States Steel Corporation, which owns mines and railways in the northern ore region, has developed a fleet of monster carriers and a system of prevention of waste time not excelled by any transport agency in the world.

## MISSOURI.

*Area, square miles.....69,420.....18th in rank*
*Population, 1920.....3,404,055.....9th in rank*

Missouri, a West North Central border State, is bounded on the north by Iowa, on the east by Illinois and Kentucky, on the south by Arkansas, and on the west by Oklahoma, Kansas and Nebraska. The Mississippi River skirts the entire eastern boundary line for 500 miles, and the Missouri River the northern half of the western line, cutting then through the State to confluence with the Mississippi at St. Louis. In all it has nearly 1,000 miles of navigable waterways.

Its topography is varied—upland table in the north and west, the Ozark Mountains in the centre and south, with low-lying river bottom areas in the extreme southeast. Its climate is a compromise between the north temperate and sub-tropical.

Economically, it partakes of the characteristics of both North and South, is strong agriculturally, timberwise, horticulturally, industrially and in education.

Manufactures exceed agriculture in value of products, reported by the 1920 census as more than $900,000,000, all crops being valued at $559,047,854. Manufactures rest chiefly on soil produce as raw materials, the list including meat packing, flour milling, machine-making and foundries, with very large production of boots and shoes, chemicals, tobacco products, paints and varnishes, corncob pipes, and lumber and timber products.

Industry centres in St. Louis, principal city, at the junction of the Mississippi and Missouri Rivers, and in Kansas City at the junction of the Kansas and Missouri Rivers on the western border, and is spreading rapidly into other parts, as well as increasing in volume.

Missouri is second in the production of zinc and lead, the value in 1919 being $15,879,177.

Agriculturally, it is a great State. There is a total of about 38,500,000 acres in all, of which the 1920 census assigns to farms 34,774,000, with more than 24,000,000 improved. The corn crop was 182,000,000 bushels, wheat and oats together more than 76,000,000, tobacco, 3,700,000 pounds. The crop of cotton, mostly in the southeast, was 78,000 bales on 117,000 acres, far above the average per acre production.

In livestock the Missouri mule, which is facetiously said to have won the war, has always been used much locally and exported to all other States and foreign countries.

Railroad mileage, 1921, was 8,117.

With 4.8 per cent. of Negro population, the average of illiteracy for the State is 3 per cent. for all classes: native white percentage, 2; and foreign-born, 9.6.

Although the native-born whites are 88.2 per cent., and foreign-born whites only 7, the influx of Germans in the revolutionary times of their native land in the last century left a large proportion of persons of that blood, especially in St. Louis, to this day, those now being practically all natives. They have been noted for thrift.

The schools enroll about 750,000 of a population of 3,404,055 by the 1920 census. The State University at Columbia, Washington University at St. Louis, twelve colleges and seven normal schools are the higher institutions.

St. Louis is the gateway for north and south travel as well as of freight traffic, and many tourists stop there en route. A feature is the famous bridge across the Mississippi, which is said to accommodate more freight cars than any other in the world. River traffic is immense, to and from New Orleans and intermediate points.

## MISSISSIPPI.

*Area, square miles.....46,865.....31st in rank*
*Population, 1920.....1,790,618.....23d in rank*

Mississippi, one of the States of the East South Central group, is bounded on the north by Tennessee, on the east by Alabama, on the south by Louisiana and the Gulf of Mexico, and on the west by Louisiana and Arkansas; the Mississippi River is the western boundary line. It is hilly but not rugged, and in general slopes downward to the great river and the Gulf shore. The climate and production are sub-tropical.

Agriculture is its chief interest. The 1920 census gave the value of all crops as $336,267,156, corn and cotton the main production. It was the sixth cotton State, producing 885,000 bales worth $173,820,000, with cottonseed by-products worth $28,000,000. Other crops are rice, sugar cane, oats, wheat, hay, peanuts, potatoes, and every character of fruit grown in its zone. Apples, plums, pears, apricots, melons, strawberries, peaches, and grapes grow in the western parts, with oranges, lemons, figs and olives in the Gulf coast sections. Nuts are abundant.

Dairying and fishing yield generously.

Manufacturing rests mostly on an agricultural basis for the utilization of the soil products of the State, the total value, Census of 1920, of industrial products being $197,747,000 for 2,455 establishments, employing 64,452 persons, capitalized at $154,117,000. Lumber and timber products lead with $87,508,000; oil and cake from cottonseed yielding $39,202,000. Cotton mills are not yet extensive.

The forest wealth is very great. Of the total of 33,000,000 acres, about 11,000,000 is forested, yellow pine chiefly. There is much of the fast disappearing hardwood.

Transport is supplied by the rail lines and by the Mississippi River, on which traffic, lessening in the recent era of rapid rail development, is growing again to great relative importance.

Railroad mileage, 1921, was 4,369.

Vicksburg is the chief city, and was the theatre of the famous siege by Gen. Grant, Union commander, who took the city in an action said by military authorities to have virtually settled the Civil War issue.

The old plantation life prevails as unchanged as in any Southern State, with spacious mansion houses and large estates, the homes of the old-time aristocracy of the age of the Southern cavalier.

The rate of illiteracy is high—17.2 per cent. on the average—owing to the large number of Negroes, who are 56.2 per cent. of the whole population. Native whites showed, Census of 1920, only 3.6 per cent. illiterate, but the Negroes 29.3. Rapid progress in popular education is being made, the illiteracy percentage in 1910 having been 22.4.

Public school enrolment is about 600,000, more than half of which is colored. A score of higher educational institutions are maintained, the University of Mississippi the leader, and there are several church colleges.

## MONTANA.

*Area, square miles.....146,997.....3d in rank*
*Population, 1920.....548,899.....39th in rank*

Montana, a mountain State, is bounded on the north by Canada, on the east by North and South Dakota, on the south by Wyoming and Idaho, and on the west by Idaho.

The Rocky Mountain range crosses the State in the west, with the Bitter Root range at the extreme western side, the country east of the Rockies sloping off into vast plains and smaller valleys between smaller hill elevations. Its rivers of note are the Missouri, up which crude boat navigation has passed for generations; the Yellowstone, Madison and Bitter Root. Of the 50,000,000 acres, the forests of about 30,000,000 acres are, with other areas, ranges for livestock grazing, which is important.

Mining, copper smelting and refining are the leading interests, producing two-thirds of the total industrial values reported in the 1920 census, $195,624,000; value of all crops being $69,975,000, the wool and sheep of the State ranking third, and cattle bringing in $28,000,000, while dairy and poultry products added about $38,000,000.

Irrigation, by Federal Government and private initiative, has been highly developed, resulting in the production of large quantities of the standard fruits, orchard and small, of the temperate zone, the State, although far north and high in elevation, being especially suited to that activity, largest development being in the Bitter Root, Missoula

and Flathead regions. Wheat, oats, flaxseed, barley, rye, corn, hay, potatoes and sugar beets are produced.

Montana has a stumpage of more than 58,000,000,000 feet of timber, of which much is the increasingly valuable white pine; other kinds are larch, spruce, cedar, Douglas fir, white fir, lodge-pole pine, valuable for telegraph poles, hemlock and yellow pine.

The mineral resources are very great. The 1920 census gave $77.032,000 as the value of coal and metals, excluding manganese, the latter being necessary in all modern steel-making processes. The wide fluctuations of copper, lead and zinc prices in the past few years have rendered the annual mineral output value exceedingly variable. The output value reported in 1920 was not much more than half that of the previous year.

The State produces the third largest amount of copper, and coal underlies about 20 per cent. of the whole State area. All of the metals and minerals are found in vast abundance, large fortunes having been made by organized mineral industry. Montana smelters utilize ore running so low as slightly under 2 per cent. of actual copper, so highly organized are the appliances.

The State leads in silver output (1921, $9,677,020), is second in zinc, eighth in lead, sixth in gold (1921, $1,725,600), and first in semi-precious stones. Considerable oil is produced, and valuable process minerals are graphite, gypsum and tungsten.

A million potential horsepower is available in the waters, of which almost one-third has been developed. Immense reservoirs have been constructed on the Madison and Missouri Rivers to give dependable water supplies.

Railroad mileage, 1921, was 5,072.

Montana is low in illiteracy—2.3 per cent.—that of native whites being only 3-10ths of 1 per cent. Public school enrolment, 1920 census, was 122,000, of a population of 548,000, and there are four well-equipped colleges and normal schools.

Scenically, Montana is not surpassed. Its lofty mountains are rugged and picturesque, and travel by rail or automobile takes one through beautiful and grand places. Glacier National Park, on the line between the United States and Canada, is one of the most wonderful public preserves in the world. Granite Peak, 12,834 feet high, is the highest of many very high elevations.

## NEBRASKA.

*Area, square miles.....77,520.....15th in rank*
*Population, 1920.....1,296,370.....31st in rank*

Nebraska, a West North Central State, is bounded on the north by South Dakota and Iowa, on the east by Iowa and Missouri, on the south by Kansas and Colorado, and on the west by Colorado and Wyoming.

Typical of the American western plains States, its lands a vast inclined plane, sloping off eastward to the Missouri River bottoms. No point rises more than 5,300 feet above sea level, while the average elevation is about 2,000. Its climate is typically north temperate, its products likewise, including almost every species appropriate to that latitude. In the east, rainfall is sufficient for crops, with little irrigation. In the west, irrigation is resorted to, and grows in importance. The live-stock industry is second to agriculture in primary wealth producing, Nebraska supplying very much of the Nation's meat, and packing a large portion of it in the stockyards at Omaha.

Of the 55,000,000 acres in the State, 42,338,000 are included by the census in farm lands, with 24,587,000 improved. The corn crop was 184,000,000 bushels, fourth in rank; wheat, 60,000,000, ranking third, and large quantities of oats, barley, rye, potatoes, buckwheat, flax, cloverseed and sorghum syrup, and sugar beets to some extent. Fruit raising is not extensive.

Nebraska is not rich in mineral wealth. In the west, potash lies in considerable quantity in solvent form in several lakes, from which in the war about 61,000 tons, 45 per cent. of the relatively low United States production, was taken.

Manufactures relate chiefly to the utilization of soil products. The 1920 census gave 2,844 as number of establishments, employing 40,076, and $593,041,000 as the value of the entire products, of which meat packing led with $303,849,000. Manufactures centre in Omaha, which also is one of the greatest rail traffic centres of the United States, being the true eastern terminus of the Union Pacific system.

Railroad mileage, 1921, was 6,166.

With the University of Nebraska at the head, there are 16 colleges and normal schools, liberally attended.

Percentage of illiteracy is exceedingly low at 1.4, that of native white being 4-10ths of 1 per cent., although the percentage of foreign-born whites is 14.8. More than 300,000 attend the public schools of a population of 1,300 000.

## NEVADA.

*Area, square miles.....110 690.....6th in rank*
*Population, 1920.....77.407 .....49th in rank*

Nevada, least populous of all States, less even than the District of Coumbia, is of the Mountain group in Western United States, bounded on the north by Oregon and Idaho, on the east by Utah and Arizona, on the south and west by California.

It is mountainous, and minerals yield $48 528.000 Census of 1920, against $13 980,000 as the value of all crops. Much of the land is arid or semi-arid, and irrigation is developing to large importance The Federal Government has a project to reclaim 160,000 acres, which when complete will add not less than $20,000,000 to the annual crops. Agriculture is not varied, owing hitherto to lack of water, but as irrigation advances, diversification of products proceeds. Live stock interests are relatively large.

With only 77,407 persons indicated by the Census of 1920, there are 2,357,000 acres in farm areas, with 595,000 improved.

Mineral resources are varied—gold (1921, $3,220,500); and silver, third in rank (1921, $6,908.774) leading. Copper, lead, zinc, iron, quicksilver, tungsten, sulphur, graphite, borax, gypsum and quarry stones are produced also.

The forest area is more than 5,300,000 acres, of which 4,971,335 are set aside as national forests.

Manufacturing output, Census of 1920, was about $20,000,000.

Railroad mileage, 1921, was 2,160.

Illiteracy percentage was 5.9, of which native whites showed only 4-10 of 1 per cent. Schools for popular education are well provided, with about 15,000 enrolled.

Reno is known the world over as having been for years the Mecca of persons desiring divorces: but the laws of the Commonwealth recently have been made more stringent in their requirements.

## NEW HAMPSHIRE.

*Area, square miles.....9,341.....43d in rank*
*Population, 1920.....443,083.....41st in rank*

New Hampshire, the Granite State of New England, is bounded on the north by Canada, on the east by Maine and the Atlantic Ocean, on the south by Massachusetts, and on the west by Vermont, and was one of the original Thirteen States.

Its northern parts are rugged, reaching in the White Mountains the highest elevations of the Northeastern United States (Mount Washington, 6,293 feet). Toward the sea, it is more level and agricultural and industrial by utilization of river water power.

With less than half a million people, census of 1920, value of all crops was $23,509,000, while the value of all industrial products was $407,205,000,—cotton goods, $85,986,000; boots and shoes, $73,871,000; paper and wood pulp, $41,826,000; woolens, $31,245,000; with twenty other industries exceeding $1,000,000 in annual output, lumber having $14,992,000, worsteds, $14.699,000.

The industrial production is highly diverse and employs all kinds of workers, from machine tenders to the most skilled.

Railroad mileage, 1921, was 1,252.

New Hampshire has in all 5,779,000 acres, of which in farm lands there are 1,441,111 cultivated. Hay is the chief crop, followed by corn, potatoes, oats, and apples, with relatively large dairy output, milk being shipped to the New York market

The State has 4.4 per cent. of illiterates; native white having 7-10 per cent., and foreign-born, 15.4. Public school enrolment was 70,000. Dartmouth College at Hanover is the leading educational institution, from which many eminent men have come, among them Daniel Webster. There are four other higher institutions.

The White Mountains are par excellence a summer resort for persons from all parts of the United States. A modern system of automobile highways is maintained, ribbing the mountains.

## NEW JERSEY.

*Area, square miles.....8,224.....45th in rank*
*Population, 1920.....3,155,900.....10th in rank*

New Jersey was of the Original Thirteen States, and is in the Middle Atlantic region, bounded on

the north by New York and Pennsylvania, on the east by the Atlantic Ocean and New York, on the south by the Atlantic and Delaware Bay and on the western side by Pennsylvania. It is mostly low and flat, having hilly development in the northern end, where an extensive State park has been set aside.

New Jersey has extensive water navigation facilities, with Delaware Bay, and the Delaware River along most of its western side, the Atlantic on the east, and the valuable facilities of New York City's harbor and branches on the northeast.

Railroad mileage, 1921, was 2,352.

The State grades sixth in industrial strength, production being exceedingly varied, and, although the greater part is in Newark, it is well diffused in all parts. As a consequence, railway facilities are highly developed, and especially in the northern parts the electric railway lines are unusually extensive.

Economically and to a degree politically, New Jersey and New York City have common interests. Very many New Jerseyites work or transact business in the greater city, transit facilities being arranged so that access to New York is as facile as to any other part of the city by means of the Hudson and Manhattan tubes.

The output, Census of 1920, of the industries was valued at $2,990,939,000. The 306 silk mills employed 25,046 persons, and output $120,075,000. Oil refining leads all industries, with $328,120,000, followed by explosives, $197,074,000, chemicals, $189,117,000; machinery, $140,119,000; shipbuilding, $123,884,000; woolens and worsteds, $118,635,000; rubber goods, $98,410,000; wire and wire cloth, $93,350,000; with large productions of pig iron, steel and iron, $66,425,000; cigars and tobaccos, $55,470,000; leather, $44,552,000, and numberless others which employ most varied operators, skilled and unskilled.

Its agriculture is affected most vitally by the proximity of the immense markets of the greater city and the fact that 78.7 per cent. of the population is urban. Market gardening has advanced to large magnitude, very many foreigners, especially Italians, having gone out to work in that line. The 1920 census gave $87,484,000 as the value of all crops. The total land area of the State is 5,779,840 acres, with 1,441,000 cultivated. Corn, wheat, oats, potatoes of both kinds, rye, buckwheat, and hay are the chief crops. Fruits are extensively grown, the cranberry marshes supplying about one quart for each of the population of New York City, and the same of strawberries. The peach and apple crops are always important. The dairy output was reported at $19,198,000.

New Jersey produces minerals abundantly—iron ore, and about one-fourth of the Nation's supply of the important magnetite, zinc and much clay products.

The educational institutions are important; Princeton University at Princeton is one of the country's foremost colleges, of which former President Wilson was President. Rutgers College, New Brunswick, is well known, and there are five other colleges of prominence. More than 700,000 are enrolled in the schools, the percentage of illiteracy being, Census of 1920, 5.1; native white, 6-10 of 1 per cent.; foreign-born, 15.3. In Passaic, Bergen, Union and Middlesex Counties the percentage of foreign-born is from 25 to 35 per cent.

Atlantic City, three-fourths of the way down the eastern coast, is one of the great seashore resorts in the country, and Cape May, the southernmost tip, another. Summer homes are maintained by city folk in many parts.

## NEW MEXICO.

*Area, square miles.....122,634.....4th in rank*
*Population, 1920.....360,350.....44th in rank*

New Mexico, of the Mountain (southeast) group is bounded on the north by Colorado, on the east by Texas, on the south by Texas and Mexico, and on the west by Arizona. The Rocky Mountain range marks the north and centre; the eastern parts are of the flatter tableland of which Texas forms also a part, and in the south are bare, sterile, desolate peaks surrounded by arid and semi-arid plains and deserts, of which the mirage is an interesting phenomenon. The central western portion has drainage by the Rio Grande River, and the Pecos River flows through the eastern districts, both toward the south.

The climate is dry, stimulating, with mean annual rainfall of from 12 to 16 inches in different localities, and with 100 degrees of heat infrequent in summer, the mean for the year being about 50.

The population of 360,000 produces agriculturally. Census of 1920, $40,619,000; from mineral industries, about $45,000,000; about $20,000,000 of manufactures, and heavily of live stock products.

A unique feature of tillage is the production from dry farming, a modern scientific process, causing otherwise dry, almost arid lands to yield. There are more than 945,000 acres included in irrigation projects, with 550,000 actually under water. The 29,845 farms averaged 840 acres, and the chief crops are hay, corn, wheat, oats, barley, rye, kaffir, milo, all the vegetables, potatoes, cotton with 5,000 bales production, broom corn, sugar beets, the fruit industry being extensive.

Railroad mileage, 1921, was 2,972.

New Mexico partakes of the oldtime life of the West so far as does any other State, but is practically of the new day, with all civilized agencies at hand, even the cowboy passing rapidly away as modern devices multiply.

The population is 21,181 Indian on Government reservations (4,697,224 acres in 1920 with a valuation of $21,916,965, and income of $2,196,417), 13,414 of Mexican parentage, of a total of 360,350.

Many go to the State for wintering, and artists have lately resorted there for the painting of Indian and old Spanish types, and the things that remain from the aged Aztec civilization. Albuquerque, Santa Fe, Las Vegas and other cities are popularly sought by the tourists and artists and writers, who are provided with excellent travel facilities by the several standard rail lines.

Students find deep interest in the history of the areas which once were the bed of a great inland salt sea, in which were deposited all the basic salts found in the ocean waters, and which are expected to yield later rich mineral wealth for fertilization of lands and chemical uses.

## NEW YORK.

*Area, square miles.....49,204.....29th in rank*
*Population, 1920.....10,385,227.....1st in rank*

New York, the Empire State, since 1820 the most populous in the Union, is bounded on the north and west by Lake Erie, Ontario, Canada, Lake Ontario and Quebec, Canada; on the east by Vermont, Massachusetts and Connecticut; and on the south by the Atlantic Ocean, New Jersey and Pennsylvania. Its sea front consists of the southern shores of Long Island, Staten Island, and the entrance into New York Harbor, one of the greatest in the world, and the chief port of the United States, into and out from which moves the greater part of the national commerce, foreign and domestic, passenger and freight. Long Island Sound, a wide arm of the Atlantic, which separates Long Island from Connecticut on the north, is navigable for deep sea craft. The Hudson River carries heavy ship tonnage northward from New York Harbor 150 miles to Albany, the capital, and Troy. Large steamers and sailing craft also ply the two Great Lakes, and the St. Lawrence River, which forms part of the northwestern boundary. On the northern part of the eastern boundary line is Lake Champlain, 100 miles long, a historic waterway bearing much commerce and making into the St. Lawrence River at Sorel. New York Harbor also includes the shores of New Jersey, enabling traffic intercourse between the two States.

New York has about 800 miles of navigable ocean, lake and river waterways, the State being penetrated by the New York State Barge Canal (Erie), through which there is capacity for the passage annually of 20,000,000 tons of freight. The canal also connects with Lake Champlain, so that inland tonnage may move between New York City, Buffalo, about 500 miles northwestward on Lake Erie; Oswego, on Lake Ontario, the ports on Lake Champlain northward so far as Rouse's Point at the Canadian border, and on into the St. Lawrence River; besides to several interior New York State points on other minor canal routes.

The Adirondack Mountains (first land to appear in the western world) occupy the northeast part of the State, and are dotted with beautiful lakes and rivers. In the east the Catskill Mountains, made famous by Washington Irving's story of "Rip van Winkle," line the western bank of the Hudson. Just above New York City the topography of the Hudson's banks takes the form of lofty rock Palisades, beautifully conformed and colored, and on the edge of which is a spacious Interstate Park set aside by the States of New York and New Jersey. All of New York is marked with scores of lakes and smaller rivers navigable for pleasure craft. The drainage from the crest west from Utica is in three directions—southeastward into the Atlantic Ocean; northward into Lake Ontario at Oswego, and south-

ward into the rivers that make through Pennsylvania. The east slopes of the Adirondacks drain into Lake Champlain.

The 49,204 square miles of area, equivalent to 27,490,560 acres, contains 1,550 square miles, or 992,000 acres, of inland waterways, leaving a net land surface of 47,654 square miles, or 26,498,560 acres. The chief economic interests are the national and international financial community of New York City, the foreign commerce in New York Harbor, now the heaviest in the world; the large manufacturing, and the rich agricultural resources.

The 1920 census gave $417,046,864 as the value of all farm crops, to which the greater part of the 17.3 per cent. of rural population gave direct or contributory attention. Only California exceeded New York in production of hay and grapes, New York's grapes being from 30,677,555 vines, and the hay weighing 928,874 tons, Kansas coming next.

Literally everything characteristic of the temperate zone is produced in fruits, vegetables, grains and forage crops. New York led all States with 2,778,761 pear trees of bearing age, Michigan being next. In apple trees of bearing age, New York led the country, although Washington, with less trees, harvested more bushels. In acreage of small fruits, New York was second only to Michigan; and only California had larger acreage devoted to vegetables produced for sale. The State was second to Vermont in output of maple sugar, and led all the States excepting Maine in production of potatoes, Minnesota coming third.

Only Pennsylvania led New York in quantity of buckwheat grown; in wool New York with Pennsylvania led all Northeastern States. In the value of dairy products, New York was easily second in the country, with $756,045,942, Wisconsin leading, with $858,258,521; while in value of livestock products of farms, New York led the United States, with $225,465,739, Wisconsin following with $213,022,023. In pure-bred sheep on farms, New York was surpassed by only seven States, while in pure-bred cattle New York was second only to Iowa.

In the number of domestic animals of all kinds on farms, New York led the United States, was far down the list in poultry, and was fifth in amount expended for farm labor. The State was sixth in number of farms mortgaged, and in total amount for which mortgages were given, and these things were developed on a total farmland area which classes the State as nineteenth in the county.

It was at Binghamton the first Farm Bureau was organized, which has grown into the American Farm Bureau Federation, a national organization with more than 1,000,000 members.

Mineral resources are considerable, but in rank the State is below many others. Some iron ore (1919, $5,264,443) is mined in the Lake Champlain region; petroleum (1919, $9,900,894) is produced near the Pennsylvania border, also natural gas. Graphite is produced, also the baser minerals for building and manufacturing purposes. The output of salt in Onondaga County, fringing Lake Ontario (annually 10,000,000 barrels) is a large industry.

In manufacturing, commerce and finance, the figures are very large. More than one-half the export and import shipments of the United States pass through the Port of New York, to organize which into an economic and non-wasteful commercial agency the sovereign State of New York has created the Port of New York Authority, to work co-ordinately with a similar body created by the sovereign State of New Jersey, to the end that commerce flow be more facile.

The number of vessels entering New York port in the fiscal year ending June 30, 1922, was 5,201, of a tonnage of 18,450,608; clearing for other ports 5,280 vessels, tonnage 19,470,642.

Railroad mileage, 1921, was 8,390.

The commerce flowing through the New York State Barge Canals, and through the ports of Buffalo and Oswego, runs into the millions of tons, and includes very heavy haulage of grains grown in the Middle West, destined for European ports.

The value of the total manufactured products in the State according to the Census of 1919 was $8,867,004,906, and comprehends almost everything fabricated in modern industry.

Total resources of all financial and banking institutions, State and national, those subject to supervision by State and Federal authorities, exceed $13,000,000,000. Especially since the World War, New York financial lines criss-cross the earth. The Federal Reserve Bank of New York City transacts about one-third of the total business done by the Federal Reserve System of the United States.

Population figures of the 1920 census of New York State show the presence of large representation of every civilized people on the globe, divided: 65.8 per cent. of native parentage; 13.9 of foreign parentage; 8.1 of mixed parentage, and 11.2 of foreign-born. About fifteen times as many Jews as are in Palestine live in the State, and almost as many Italians as in Rome. Germans numbered 295,650, and Irish 284,747, with 135,305 English.

The percentage of illiteracy was reported at 5.1; native white, ½ of 1 per cent.; foreign-born, 14.2; Negroes, who have increased rapidly since the late war, 2.9 per cent.

Nearly 2,000,000 attend the educational institutions, primary and higher, under control of the Board of Regents of the University of the State of New York (which see), and some of the most famous colleges and universities in the country are in New York State, among them Columbia University, which matriculates more than 20,000; the New York University, the College of the City of New York, Cornell University, Syracuse University, the University of Rochester, Hamilton College, Union University, Colgate University, Buffalo University, St. Lawrence University, Hobart College, College of St. Francis, Fordham University, Rensselaer Polytechnic Institute, and scores of special schools which are suited to every requirement in letters, science, engineering, finance, economics, sociology and art. Of the latter there are many of acknowledged merit, New York City being one of the art centres of the world.

At West Point, on the Hudson above New York, is the Military Academy of the United States Army, in a location famed for beauty.

The interests of the Empire State are so varied along other lines that no listing is attempted here. More than 200,000 transient travellers enter the greater city daily, so it is estimated; and to Niagara Falls, near Buffalo, many more than 1,000,000 go each year. The Adirondacks and the Catskills have each summer hundreds of thousands of tourists and campers, the other lakes their tens of thousands. Safe waters on Long Island Sound are used by many yacht clubs, and the ocean beaches daily have large throngs.

Were the population of the City of New York subtracted from that of the entire State, as shown in the 1920 census, there would remain a total "up-State" population greater than the entire population of any other State except Pennsylvania, Ohio and Illinois, with their large cities included in their total. New York City, within its political boundaries, ranks next to London in population; but the metropolitan district of New York City had in 1920 about 165,000 more persons than the London district of the same character as to population grouping. (See pages 452 et seq. for detailed statistics.)

## NORTH CAROLINA.

*Area, square miles.....52,426.....27th in rank*
*Population, 1920.....2,559,123.....14th in rank*

North Carolina, a South Atlantic State, of the Old South group, is bounded on the north by Virginia, on the east by the Atlantic Ocean, on the south by the Atlantic and South Carolina, and on the west by Tennessee. Physically, it is divisible into three distinct parts—a sloping sandy coastal plain from the low-lying 300-mile sea line on the east, a tableland in the central portion, and a mountainous western one-third running into the Appalachian range, Mt. Mitchell, 6,711 ft., the maximum.

The climate grades from sub-tropical in the east, to milder on the tableland, and relatively cool and stimulating in the mountains.

There are many islands off the northern half of the coastline, with Pamlico Sound and its tortuous shores affording many inlets and potential harbors, a favorite resort for hunters. Cape Hatteras, the easternmost point, is feared by mariners as especially stormy and dangerous.

The Census of 1920 gave $943,808,000 as the value of manufactures, cotton goods leading with $318,368,000, (exceeded only by Massachusetts and South Carolina,) others being tobacco, cigars and cigarettes, $226,636,000; lumber and timber products, $54,928,000; cottonseed oil cake, $46,995,000; chewing and smoking tobacco, $33,188,000; knit goods, $29,834,000; furniture, $29,725,000; fertilizers, $27,551,000 and 30 others from $24,000,000 down to slightly more than $1,000,000, including in part flour, car building, machinery, vehicles, medicines, clay products, silk goods, in a total of 5,999 establishments employing 175,423 persons, capitalized at $669,000,000, and using materials valued at $526,906,000.

Agriculture's principal crops, Census of 1920, were valued at $503,229,000, cotton at 875,000 bales, ranking the State sixth.

North Carolina is the second tobacco State, producing 310,240,000 pounds, corn, wheat, rye, potatoes and peanuts, 4,756,000 pounds, are large crops.

with all others raised suitable to the zone, fruits as well, grapes being especially plentiful.

In minerals, the State is rich, ranking first in production of mica, there being much magnetic iron ore, and some lead, zinc, copper, gold, silver, corundum, tin, feldspar, talc and graphite. A valuable contribution is monazite and zircon, used in making incandescent lamp mantles.

Of the 35,000,000 acres in the State, originally about 11,000,000 were forested, chiefly with yellow pine, of which it is estimated that 15,000,000,000 feet remain on about half a million acres. The annual lumber cut is about 1,200,000,000 feet, the market being largely in the North, considerable coming to New York coastwise in vessels.

Railroad mileage, 1921, was 5,522.

The Negro constitutes 31.6 per cent. of the population, Census of 1920, and the State percentage of illiteracy is 13.1, having been 18.5 in 1910. Illiteracy of native whites is 6.8. Public school enrolment is 725,000, with compulsory instruction. The chief higher institutions are the State University, Chapel Hill, and the Agricultural College, West Raleigh. Much effort is expended by the latter to improve tillage methods, with increase of the per acre production as one result.

A striking feature has been the very large migration of residents of the mountains to the cotton mill towns, where they remain as operatives, whole families accepting employment, including children. The rapid increase of cotton mills has been in the past 20 years especially, causing large tonnage for rail and steamer, in addition to the export cotton, which leaves mostly from Wilmington.

Asheville is the chief resort, being popular in the winter, its golf course one of the most famous in the country. Country homes in the delightful mountain regions are also becoming more numerous, northerners going there.

## NORTH DAKOTA.

*Area, square miles.....70,837.....16th in rank*
*Population, 1920.....646,872.....36th in rank*

North Dakota, in the West North Central group, formed of part of the original territory of Dakota, is bounded on the north by Canada, on the east by Minnesota, on the south by South Dakota, and on the west by Montana. It is drained in the southeastern one-third by the Missouri River, and in the northeast by the Red River, which stream is the line between North Dakota and Minnesota, and the valley of which, an old lake bed, is exceedingly fertile. "Number One Northern Hard" wheat originated there, and is a premium grade of that cereal. The surface in the eastern two-thirds is a vast rolling plain, once with scant rainfall, but now, since cultivation advanced westward, having precipitation enough for the large crops produced.

Agriculture is easily the chief interest, with the value of all crops reported in the 1920 census at $301,782,000, against $57,374,000 for all manufactured products, and that mostly of flour and other grain products consumed locally.

Every cereal and other crop known to the north temperate zone is produced, wheat being the principal crop, 61,540,000 bushels reported in the 1920 census, grown on about 9,000,000 acres, worth $147,696,000; rye, barley and corn being also extensively produced, and the total value of all cereals given at $215,764,000. Hay is raised heavily, more than 4,000,000 tons, worth $56,000,000. On 650,000 acres, 2,972,000 bushels of flaxseed were raised, highest production in the country, value being $13,000,000.

Much of the grain and practically all of the forage crops are for local feeding to livestock, that industry being very important. More than 2,300,000 domestic animals were reported by the 1920 census, with more than 40,000,000 acres of land for grazing in the State.

A vast proportion of the western part is underlain by brown or low-grade coal, which is produced not extensively and only for local domestic consumption, the State depending on the mines of other States for supply.

Railroad mileage, 1921, was 5,311.

North Dakota, with total population of 646,872, Census of 1920, had 131,590 or 27.1 per cent. of foreign-born whites. The percentage of illiteracy is very low at 2.1, native white, 4-10ths of 1 per cent., foreign-born white, 5.6. Foreign-born whites in order of numbers were Norwegian, Canadian, Russian and German.

North Dakota has been the theatre of several advanced social and economic experiments, the State, under the leadership of the Non-Partisan League, entering basic business enterprises including banking, against which some court decisions have militated.

The recreation for outsiders is the big hunting in the west and on the prairies for game birds, the prairie chicken predominant, and the lakes and rivers abounding in geese and ducks.

## OHIO.

*Area, square miles.....41,040.....35th in rank*
*Population, 1920.....5,759,394.....4th in rank*

Ohio, an East North Central State, is bounded on the north by Michigan and Lake Erie, on the east by Pennsylvania and West Virginia, on the south by West Virginia and Kentucky, and on the west by Indiana. It has no considerable elevations, being highest in the centre, and sloping in each direction to the lake on the north and to the Ohio River, a great traffic route, on the southern boundary line. Its climate is characteristic of the north temperate zone, with abundant rainfall.

Ohio has navigable waterways for the 430 miles of the Ohio, the 230 miles of lake frontage, and 100 miles up the Muskingum River in the southeast. It sends much tonnage down the Ohio. Rail transport is very heavy in all directions. Railroad mileage, 1921, was 9,001.

Manufacturing, mining and oil are the chief interests. The value of all products exceeds $2,250,000,000, from 16,000 establishments, employing more than 1,000,000 persons, and representing investment of about $2,000,000,000. The iron and steel ore and reduction and machinery industries lead all others, with 29,649,245 tons of ore received at the Lake Erie port of Cleveland, heaviest handler of ore in the world. Cleveland, Youngstown, Canton, Steubenville and Middletown are the principal iron and steel working points. Manufacturing is very extensive in other lines. Of the 264 industries classified by the Federal Census, Ohio has considerable production in all but 46, ranking first in 18 of them.

Akron is the world's rubber centre, turning out in 1920 tires worth $545,812,000. Fourteen rubber companies there employ 72,397 persons, 1920 census, and pay salaries totalling $142,330 000. The product goes to every country on the globe, as does the machinery made in the State.

The State ranks fourth in mineral wealth extracted, 45,000,000 tons of bituminous having been lifted in 1920 by 50,000 miners who received more than $48,000,000 in wages. Cleveland alone shipped also 22,900,000 tons of coal in 1920.

Oil production is very great, especially in the Lima district, the total value in 1919 being $45,483,525.

The pottery interest used 1,811,000 tons of clay, and has developed large factory production.

The output of automobiles in the Toledo and Cleveland districts is second only to that of Detroit, mostly of medium or higher grades.

But the agricultural wealth also is great, value of all crops and livestock sold being as reported in the 1920 census $904,400,000, which was exceeded by only four other States. Principal crops are cereals, hay, potatoes, tobacco, vegetables, sugar beets, and all products of the zone. Corn totalled 149,844,000 bushels, oats, 46,000,000; hay, 7,600,000 tons; tobacco, 64,420,000 pounds; and canning of fruits and vegetables was extensive, the fruits being those of the north temperate zone, the 1920 report showing the value of the output more than $19,000,000.

Much high-bred livestock is raised, and the meat packing industry is highly developed.

Its mineral wealth includes coal, iron, glass sand, clays, salt, petroleum, natural gas, limestone, sandstone, gypsum, mineral waters, some potash and pyrite.

Standard railway and electric lines total 13,364 miles and include all companies operating in the Middle West.

Illiteracy is low at 2.8 per cent.; native white, 9-10ths of 1 per cent., foreign-born, 12.6, and Negro, 8.1. Foreign-born number 12.5 per cent. of the population, and are in the industrial centres chiefly, although throughout the agricultural districts the German native-born element is numerous, having come when the revolutionary movement broke in Germany in the last century.

The State has very many institutions of higher education, the Ohio State University at Columbus, the capital, leading with 5,165 students, others being Cincinnati University, 3,006; Western Reserve University at Cleveland, 1,990; Ohio Wesleyan University at Delaware, 1,258, Oberlin at Oberlin, 1,178; and eight others with about 4,000 attendance. Public school enrolment is more than 1,000,000.

Ohio is distinguished among the States for the tenseness of its political life. It is regarded as a

politically pivotal State, and is the home of President Harding, whose newspaper is at Marion. It has given the United States five Presidents, all native born, while two others elected as residents of other States, were born in Ohio.

## OKLAHOMA.

*Area, square miles.....70,057.....17th in rank*
*Population, 1920.....2,028,283.....21st in rank*

Oklahoma, in the West South Central group originally set apart for Indian reservations, and formerly known as Indian Territory, is bounded on the north by Kansas, on the east by Arkansas and Missouri, on the south by Texas, and on the west by Texas, a small panhandle strip to the northwest also touching New Mexico. It was the home of these Indian tribes—Cherokees, Creeks, Choctaws, Chickasaws and Seminoles, whose descendants remain as a large part of the present population, numbering 119,255 in 1920, holding 19,551,890 acres with a valuation of $320,496,333 and an income of $39,393,608.

Oklahoma is mostly a vast plain of rolling, fertile prairies, rising in the west to maximum elevations of 4,000 feet, one being 4,700 feet, with mountains in the south central and southwestern portions. It has a fair share of forested area, yellow pine predominating, with about 200,000,000 feet the normal annual cut, and 4,800,000,000 feet of timber standing. It has a healthful climate, rather warm in summer, with good precipitation for watering the large areas of agricultural lands, that with livestock and immense oil production being the main interests.

The 1920 census gave $522,565,000 as the value of all crops, cotton, 1,006,242 bales ranking the State fourth; corn, 74,000,000 bushels; wheat 52,640,000; oats, 49,500,000; and heavy production of other cereals and the basic vegetables with all fruits of the temperate zone abounding.

Dry farming is practised extensively in the western portions, and production of cotton is close to half a bale to the acre, much higher than the average.

Including the refining of oil, Oklahoma's industrial output, Census of 1920, was valued at $401,363,000. Refining led with $150,673,000, flours coming next with $40,844,000. Industry comprehends smelting and refining zinc the product being $19,518,000, oil cake making, $18,907,000; foundry and machine shop output, $13,510,000; and 25 other lines with more than $500,000 annual output.

The number of establishments was 2,445, employing 38,314 persons, with more than $250,000 000 capital.

It is only 18 years since oil was discovered in Oklahoma, yet it has risen to the first rank as a producer. The 1920 figures on production were 105,725,000 barrels. Much of the oil land is owned by persons formerly in moderate circumstances, Indians among them, suddenly made rich by royalties on oil lifted on their lands leased to operating companies. The oil measures are of a kind with those of Texas, as to geological character and abundance, there being considerable litigation between the two States as to title to certain very valuable oil territory.

Railroad mileage, 1921, was 6,572.

The percentage of illiteracy is 3.8; native whites 2.3; Negroes, 12.4; and foreign-born whites, 14; Negroes being about 10 per cent. of the whole.

The public school enrolment is about 600,000 with several promising higher institutions with large attendance.

Apart from the romance of the Indian days and the "cowboy," Oklahoma went into history as the theatre of the most exciting "Sooner" rush for new lands ever staged in the United States, when more than 25 years ago, the Federal Government, after taking large areas from the Indians by treaty, threw them open for settlement, and thousands camped on the boundary line for weeks, rushing across the border when the moment came for admission. The settlement and development into an organized community were remarkably rapid, until now the State has all that appertains to modern life.

## OREGON.

*Area, square miles.....96,699.....9th in rank*
*Population, 1920.....783,389.....34th in rank*

Oregon, of the Pacific (northwest) group, is bounded on the north by Washington, on the east by Idaho, on the south by California and Nevada and on the west by the Pacific Ocean.

It has every character of climate and soil and production known to the temperate zone, the lands ranging from the heavily vegetated coast areas where rainfall is abundant, to the large stretches of semi-arid lands of the southeastern parts, with a touch here and there of almost desert, although negligible in extent.

The coast climate is salutary, never very cold, and seldom very hot. That of the eastern portion, east from the Cascade Mountains, is drier and often colder.

It has very important navigation facilities—the Columbia River flowing into the Pacific with a width at the mouth of up to 14 miles, the river carrying tonnage along the whole of the 400 miles of its seaward course from the Idaho line; and the Snake, running along the northern half of the eastern boundary, already conveying much traffic and being susceptible of greater development.

Into Oregon pour the products of "The Inland Empire," a region comprising 250,000 square miles in Eastern Oregon, Eastern Washington, and Northern Idaho, the Columbia being the waterway outlet, and the railways following the water grades from the Empire through the Columbia River Gorge to Portland, the "Rose City," which is actually on the Willamette River, ten miles from the Columbia, but economically on the Columbia. Portland has very heavy foreign commerce.

The products of that Inland Empire are most varied, as are those of Oregon which are very large fruit production, immense salmon fisheries, most extensive cereal production, and timber from forests that are the most extensive of any American State, it being estimated that the standing timber is 500,000,000,000 board feet.

The part of Oregon west from the Cascade Mountain range, which has peak elevations up to 12,000 feet, is slashed north and south by the Coast Range, a very aged ridge now eroded to lower levels. The whole of the western one-third of the State has abundant rainfall, although not so much nor so constantly as many believe, the average precipitation at Portland being about that of Chicago or New York. There are such forests as may be found in few parts of the world, immense numbers of trees attaining 20 feet in diameter, while there are vast stretches in which the lumbermen have taken only trees not less than eight feet in diameter, and regarded it as cut-over land. The chief varieties are Douglas and white fir, spruce, hemlock, cedar, and larch, west of the Cascades, with yellow pine in the eastern Blue Mountains, another range. Oregon has almost one-half the more than one trillion feet of timber standing in the three Coast States, Oregon, Washington, and California. Some of the trees are more than 300 feet high. In the southwest are found forests of the redwoods, with at least 20 other varieties of timber in abundance, some of it excellent for furniture manufacture, which is a considerable industry. The cut of timber is the third in the United States, Washington and Louisiana exceeding. The lumber is shipped to all foreign lumber-buying lands, more than a billion feet comes by the Panama Canal to the Atlantic Coast, and much is distributed by rail to the Middle West.

The fruit industry is among the most important in the country. Especially in apples the world calls for Oregon products, and the varieties of fruit grown include also peaches, pears, prunes—ranked the best known—apricots, plums, and all the small kinds. Hood River, Medford, The Dalles and other towns are the centres of highly developed fruit raising.

In agriculture, development has been rapid, there being about 1,000,000 acres under water, and more than 2,000,000 included in irrigation projects, Federal and private. The lands not needing irrigation, which are very extensive, produce richly. The 1920 census assigned $131,884,000 as the value of all crops; wheat, about 20,000,000 bushels; more than 2,100,000 tons of alfalfa; hops, 4,788,000 pounds; and more than 8,000,000 bushels of oats.

In livestock the State is productive. The wool clip was 16,000,000 pounds, and $17,000,000 was realized from dairy products. The Coast States are especially fine for dairying.

Although undeveloped as yet, there are all the basic minerals in Oregon. Gold, silver and copper are mined, with also stores of lead, oil, quicksilver, chromic iron ore, platinum, and all the clays.

The value of the products of manufactures in the 1920 census was $366,783,000, lumber leading with $85,348,000, flour following with $42,550,000, other industries being shipbuilding, meat packing, canning, there being 20 others with more than $1,000,000 annual output.

The salmon fisheries centring in Astoria, at the mouth of the Columbia, are among the world's third greatest, the pack in 1920 being 481,545 cases.

Railroad mileage, 1921, was 3 305.

In illiteracy Oregon ranks with Iowa and Idaho as the highest in the country the percentage being 1 5, that of native-born 4-10ths of 1 per cent. There are several colleges, the State University at Eugene, the celebrated Agricultural College at Corvallis, Reed Institute at Portland, and others.

The coast resorts are much patronized, and Portland, with mild climate, is also the summer home of many from surrounding regions.

Oregon initiated the national movement for direct primaries, the initiative and referendum, and the recall, and adopted Prohibition independently of the national amendment.

Its great Columbia Highway, unexcelled for scenic beauty running up the river from Portland: Mt. Hood and other lofty mountains, and the unique Crater Lake, are points of tourist interest.

Each October a great cowboy roundup is held at Pendleton Eastern Oregon, to which thousands of visitors go.

The mountains in all parts of the State are summer camping grounds. Klamath River in Southern Oregon is said to yield the largest trout in the world; and half a dozen Indian reservations are favorite resorts of tourists, writers and artists.

## PENNSYLVANIA.

*Area, square miles.....45,126.....32d in rank*
*Population, 1930.....8.720,017.....2d in rank*

Pennsylvania, of the Middle Atlantic group is bounded on the north by Lake Erie and New York, on the east by New York and New Jersey, on the south by Delaware, Maryland and West Virginia, and on the west by Ohio and Lake Erie.

It is of varied topography, like most Atlantic States having leveller lands to the east, and rising to higher altitudes to the westward. The Appalachian range traverses the central part from northeast to southwest a higher mountain region being in the extreme west, and another lower plane running down to the shores of Lake Erie. It has rivers important in navigation—the Ohio, the Susquehanna, the Delaware, the Allegheny and the Monongahela

Viewed by and large, Pennsylvania may be said to lead all States in mineral and industrial production Its mineral riches are very great. The 1920 census reported anthracite coal output at 86,200.000 tons· bituminous, 145,300,000 tons; worth together about $900 000,000. The coke output alone was $160 357.000 The natural wealth in iron ore, oil (value in 1919 $66,271,961), once leading the United States, and the quarries is large.

The State has built its industries largely on these basic elements. It produced nearly half the steel of the country, shipping it to all parts of the world. Its production in pig iron in 1920 was 13,983,134 gross tons Pittsburgh is the centre of the greatest metal production ever attained in one locality. Its supplies of iron ore come mostly from Minnesota, and its operations have made more millionaires than any other single industrial centre in the country. It was there that the late Andrew Carnegie built up his fortune, developing new steel making processes The perfected tonnage from Pittsburgh is the heaviest excepting at New York and Chicago. Electrical goods and equipment is made in Pittsburgh in large quantity.

The State leads all Midwest States in cotton goods, is second in silk and wool goods, ranks first in leather output, glazed kid the most important. The census reports more than 20,000 industrial establishments, employing 1 523,000; paying $1,-864.000,000 in wages $312 000,000 in salaries; using $5.075 000.000 of capital and making more than $8.500 000.000 of products

The principal port is Philadelphia, which receives and sends to all world ports. It was the capital of the United States, 1790 to 1800. The great Baldwin Locomotive Works is located there, and also extensive electrical equipment manufacturing

Scranton is the greatest hard coal centre of the country, and makes much steel.

Erie on Lake Erie is the lake port.

Railroad mileage, 1921, was 11,550.

Pennsylvania produced, Census of 1920, more than $500,000.000 of crops, the region around Reading, Lancaster and York, with English names is the seat of the famous German (Pennsylvania Dutch) agricultural development not perhaps equalled in any other section of the United States.

Production is varied in all parts of the State the cereals, forage crops, fruits, and all that the temperate zone raises. The crops are spread evenly through the whole list, with large diversification and consequent steadiness of prosperity. Tobacco raised was 57,900,000 pounds, 1920 census.

In educational facilities the State ranks high. The principal higher educational institutions are the University of Pennsylvania at Philadelphia, the Pennsylvania State College, the University of Pittsburgh, and the Carnegie Institute of Technology at Pittsburgh, Lafayette College, Lehigh University at Bethlehem, Temple University, Bucknell University, Dickinson College, Alleghany College, Duquesne College, Grove City College, Pennsylvania College, and Swarthmore College, there being three colleges for women at Bryn Mawr, Pittsburgh and Chambersburg, Bryn Mawr having been distinguished especially.

Public school enrolment exceeds 1.600,000, and the rate of illiteracy is 4.6 per cent.; native white, 8-10 of 1 per cent.; foreign-born, 18.9; Negro, 6.1. Of the total of 8,720,017 persons, the native white population is 80.8 per cent.; foreign, 18.8. In the industrial districts reside the bulk of the foreigners, the Census of 1920, showing in all 1,387,850, of which 120,194 were German, 90,666 Irish, 122,755 Austrian, 222.764 Italian, 161,124 Russian, 171,380 Hungarian, the Slavic strain being numerous. The urban population is 63.3 per cent.

In the past there have been bitter industrial conflicts, which happily have subsided to a large degree The present era sees industry, mining and agriculture the three interests, with lumbering lately reduced to unimportance, although once a leading activity.

Under Gifford Pinchot, formerly Chief Forester of the United States, serving as State Forester for several years, a great reforesting movement has begun.

The Pennsylvania State Police, serving mostly the rural districts, have become an establishment of social import.

The mountains are popular for summer resorting, with many fine country seats developed by the wealthy from old farm estates.

## RHODE ISLAND.

*Area, square miles.....1,248.....48th in rank*
*Population 1920.....604,397.....38th in rank*

Rhode Island, smallest of States, of the Original Thirteen, and in New England, is bounded on the north and east by Massachusetts, on the south by the Atlantic Ocean and on the west by Connecticut. Only 1,060 square miles of it is land. With 566.4 per square mile, it is the most densely populated State, exceeds all others in the per capita industrial output; it is 97.5 per cent. urban, and exerts influence out of all proportion to size and numbers.

The 1920 census gave these figures. Number of manufacturing establishments, 2,466, employing 156.012 persons, paying $168,509,358 in wages and salaries, using $415,989,203 of materials, and producing $747,323,000 in all, or $1,245 for each man, woman and child in the State, using $594,337,448 of capital. It ranks fifth in the making of cotton textiles, third in woolens, sixth in silk, has a large list of other industrial activities, mostly calling for rather skilled operatives.

The first cotton spinning works of this country were established in Pawtucket in the eighteenth century, and since then Rhode Island has carried on large textile industry.

Jewelry, rubber goods, electrical equipment, hosiery, knit goods, and many other lines are produced. Providence, Woonsocket, and Pawtucket are the chief centres of industry.

Although so small in all ways, yet the agricultural output by the 2.5 per cent of rural population. Census of 1920, was $5,340,378, and included about everything produced in the temperate zone.

A large traffic coastwise and foreign passes through Providence, as well as heavy passenger travel, rail and water. Railroad mileage, 1921, was 211.

Newport, on Narragansett Bay, has been for decades the most famous of America's watering places. Palatial summer homes were built by the socially prominent of the past one or two generations, embellished by every art of architect and landscape gardener. A private bathing beach for the socially elect is a feature.

On the western side of Narragansett Bay, Narragansett Pier is a popular summer resort, with large hotels and broad beach.

The State enjoys extensive educational facilities, with Brown University and the State Normal School at Providence as the best known. Public school enrolment is 95.000

The percentage of illiteracy is 6.5· native white, 7-10ths of 1 per cent.; foreign-born, 16.5. Foreign-born are 28.7 per cent. of the population, numbering 173,499—English, 25,782; Scotch, 22,253; Canadian, 36,400; Italian, 32.241.

## SOUTH CAROLINA.

*Area, square miles.....30 989.....39th in rank*
*Population, 1920.....1,683.724.....26th in rank*

South Carolina, in the South Atlantic group, of the Original Thirteen States, is bounded on the north by North Carolina, on the southeast by the Atlantic Ocean, on the southwest by Georgia. Its topography is, like that of North Carolina, mountainous, 4,000 feet the maximum, in the western part, a plateau in the central strip, and low-lying and sandy toward the 200-mile seafront.

The climate westward is comparatively cool, in the central part medium, and nearer the coast subtropical and humid.

The coast is indented with several harbors, Charleston having the most important one, and being a prominent coastwise and foreign shipping port, cotton a principal outgo to Europe.

Agriculture easily leads in production, with $437,121,000 as the value of all crops, Census of 1920; cotton with 2,631,718 bales ranking the State fifth. Of the 193,000 farms, Negroes cultivated more than half, and owned very many. The sea island cotton grown there is the finest grade produced in the country.

All of the cereals, peanuts, tobacco, in which it ranks fifth, sugar cane and all the vegetables are produced in profusion. Fruits are abundant, of temperate zone and sub-tropical varieties.

Livestock of higher breeds is an increasingly valuable adjunct.

Naturally, about half the area was forested, yellow pine predominating with much hardwood, but the lumbering has been so extensive that the forested area is reduced to about 1,000,000 acres, and the cut is diminishing rapidly. About 14,000,000,000 feet of pine remains standing.

In cotton mill spindles, 4,974,460, the State is second only to Massachusetts. Much of the labor in these mills is supplied by mountain families who were induced to migrate to the lower levels by the higher incomes offered, the industrial development having been peculiar to the Southern cotton-mill States in the building of towns owned entirely by the companies. Much child labor is employed.

Railroad mileage, 1921, was 3,814.

About 400,000 are enrolled in the public schools, 200,000 being colored, who form 55.2 per cent. of the population, the State percentage of illiteracy being 18.1, against 25.7 in 1910. That of native whites is 6.5, of foreign-born white, 6.2, and of Negro, 29.3.

The University of South Carolina at Columbia is the leading higher educational institution, Clemson Agricultural College being next. Clemson in 1898 opened the first textile school in the United States, which has achieved much in training technical mill workers and foremen.

## SOUTH DAKOTA.

*Area, square miles.....77,615.....14th in rank*
*Population, 1920.....636,547.....37th in rank*

South Dakota, West North Central, lower portion of the former Territory of Dakota, is bounded on the north by North Dakota, on the east by Minnesota and Iowa, on the south by Nebraska, and on the west by Wyoming and Montana. Its climate is that of the temperate zone northern latitudes, cold in winter and pleasant in summer. Before cultivation of the soil was extensive, it lacked rainfall; but precipitation swept westward as tillage advanced, until it now has normally abundant watering.

Its highest elevations are in the Black Hills in the southwest, the remainder of the State being a vast rolling prairie, falling off to lower levels in the northeast, which drains into the Mississippi River and into the Red River of the North. The major part of the State is drained by the Missouri River, which cleaves the State through the centre north and south. There are several minor drainage basins, feeding the larger rivers, with a succession of fertile valleys highly productive, and a fair area of forests, yellow pine, spruce, and others, 1,100,000 acres being under forest cover.

About 120,000 acres are irrigated, with about 200,000 acres normally in the irrigable sections.

It is claimed that more than 90 per cent. of the total area is arable. Of the 50,000,000 total acreage, 34,500,000 is in farmlands, with about 19,000,000 improved, farms numbering, Census of 1920, 74,564, crops being valued at $321,202,000.

Corn leads with 91,200,000 bushels; wheat, 30,175,000; oats, 53,650,000; barley, 19,250,000, and all the other cereals. Only the hardier fruits are grown.

The Census of 1920 shows livestock shipped valued at $154,631,000; dairy, fruit, poultry and other things, $50,000,000; the total revenues from all sources of wealth produced being $400,000,000, or about $600 per capita.

Mineral wealth is practically all in the Black Hills, where gold mined ranks the State fourth (value in 1921, $6,523,000). Silver, lead, and basic minerals also abound. There is coal in the northwestern parts, not yet accessible to transport.

Railroad mileage, 1921, was 4,276.

The 1920 census reports manufactures to be mostly of soil products, valued at $62,420,000, and population 84 per cent. rural, 100,628 foreign-born of the total of 636,547, of which 16,000 were Norwegian, and 15,000 German.

Illiteracy is 1.7 per cent.; native white, 4-10ths of 1 per cent. About 100,000 attend the schools.

A feature is the large area in Indian reservations—the Rosebud, Cheyenne River, Pine Ridge, and the Lower Brule. The Indians numbered in 1920, 23,010; they engage in agriculture and livestock husbandry, occupy 6,685,734 acres, valued at $63,265,900, and have an income of $4,331,940.

## TENNESSEE.

*Area, square miles.....42,022.....34th in rank*
*Population, 1920.....2,337,885.....19th in rank*

Tennessee, in the East South Central group, is bounded on the north by Kentucky and Virginia, on the east by North Carolina, on the south by Mississippi, Alabama, Georgia and North Carolina, and on the west by Arkansas and Missouri.

The eastern parts are in the Great Smoky Mountains, the surface sloping toward the west, first to an elevated tableland, then to the bottoms of the Mississippi River, which skirts the western border. It has the Tennessee River, which sweeps into Alabama from the northeast and returns to Tennessee at the northwest corner.

The forests cover about 30,000 square miles, and yield half a billion feet of lumber—oak, yellow pine, gum, yellow poplar, hemlock and chestnut.

The 1920 census showed $318,285,000 as the value of all crops, which include all things grown in the temperate zone, shading off to the almost subtropical in the south. Eight other States exceed its 264,562 bales of cotton produced; its tobacco crop was 112,367,000 pounds, and all cereals and vegetables were grown.

Coal production was given at 6,026,000 tons; and there are stores of iron ore, 450,000 tons, with 380,000 tons of pig iron; copper, 15,629,454 pounds; zinc, oil, and manganese.

The census figures on industry show 4,589 manufacturing establishments, employing 113,360 persons, engaging $410,203,000 of capital, and producing $556,253,162 in all. The census analysis indicates a rather broad basis laid for future development of industry, the list revealing 56 lines with more than $1,000,000 annual product. Flour leads with $51,913,000, and cottonseed and lumber have their usually large proportions as in all Southern States; but considerable beginnings have been made in the manufacture of dyestuffs, leather tanning, iron and steel furnaces, woolen goods, vehicles, bedding, implements, and cotton goods, product of which was $22,461,000.

Railroad mileage, 1921, was 4,078.

Tennessee is almost wholly American in population—foreign-born whites being 7-10ths of 1 per cent. Negroes are 19.3, and the percentage of illiteracy is 10.3 for the State; native white, 7.3; Negro, 22.4.

Attending school were 630,000 persons. The main higher educational institutions are the University of Chattanooga, University of Tennessee at Knoxville, Fisk University at Nashville, Vanderbilt University at Nashville, Cumberland University at Lebanon and the University of the South at Sewanee.

The Tennessee Mountains, like those of Kentucky, are beautiful, delightful summer resorts. Lookout Mountain, scene of a celebrated battle in the Civil War, is the object of chief interest in Nashville.

## TEXAS.

*Area, square miles.....265,896.....1st in rank*
*Population, 1920.....4,663,228.....6th in rank*

Texas, of the West South Central group, up to 1836 part of Mexico, then an independent republic, becoming one of the United States on Dec. 29, 1845, is bounded on the north by New Mexico and Oklahoma, on the east by Oklahoma, Louisiana and the Gulf of Mexico, on the south by the Gulf

and Mexico, and on the west by Mexico and New Mexico. It is the largest State, embracing nearly 8 per cent. of the area of the whole country, and is about 800 miles long by about the same wide.

In the western part it is mountainous, the "Staked Plains" lying in the northwest, a great prairie in the central portion, and a lower lying region nearer to the Gulf. Western Texas is mostly without forestation, but in the east naturally there was a large wooded area, nearly 8,000,000 acres, materially reduced by extensive lumbering, the normal annual cut being more than 1,250,000,000 feet, mostly yellow pine.

In all lines Texas produces heavily. It is easily the first cotton State, the 1920 census returning 11,522,537 acres devoted to its culture, 2,971,757 bales the output. Rice was grown on 164,481 acres, yielding 5,306,369 bushels; 122,170 tons of sorghum came from 35,589 acres; 49,093 acres of vegetables were raised, 6,139 acres of small fruits, sugar cane, tobacco, most of the cereals, potatoes, the forage foods, and a large variety of other soil products.

The census reports Texas the only State in which the total of all crops exceeds a billion dollars—$1,071 542,103,—the total return from crops, fruits, livestock lumber and oil and other minerals being more than $1,500,000,000.

The farmland area was 113,580,000 acres, in 436,033 separate farms, of which 33,700,000 were improved acres, the value of all farm property being more than $4,400,000,000. There are about 2,000,000 acres irrigable, and nearly 600,000 acres actually irrigated.

The corn crop was 156,920,000 bushels, and there was large production of wheat, oats, etc. Potatoes, white and sweet, yielded 11,500,000 bushels, and so on through the whole list.

The fruit production ranges from the varieties which are grown in the temperate zone to the semi-tropical kinds, and the pecan nut is a large crop.

The 12,000,000 domestic animals bring immense sums annually, the wool clip alone being from 15,000,000 to 20,000,000 pounds, with very heavy returns from cattle, horses, pigs and sheep, which range on the vast mid-western prairies, some of the ranches being of several hundred thousand acres. It leads the country in the cattle breeding industry.

The mineral resources of Texas are not yet defined. Development has wrought to yields of about 40,000,000 barrels of petroleum, according to the market demands (value of product in 1919 $143,337,362). and refining has become an important interest. Oil is found all the way from the northwest to the southeast on the Gulf the field there being somewhat concurrent with that of Mexico. In the north and northwest, the formation runs with that of Oklahoma and Kansas, in all sections the content being rich.

More than 2,000,000 tons of coal were mined, and asphalt and pottery clay were important products, as also all the base minerals, silver, lead, quicksilver and copper being naturally present and somewhat developed as to production.

In the northwest the bed of a former inland salt sea contains the salts that appear in all sea waters, and the Univeristy of Texas at Austin and the United States Geological Survey have announced the discovery of potash the work of proving the extent thereof being now in progress. The announcement in 1921 caused the usual rush of prospectors and speculators with boom times resultant.

The 1920 census gave $999 995,796 as the total value of all industrial products, there being 5,724 establishments, employing 130,911 persons, paying $145,907,000 in wages and salaries, and using $701,170,000 of materials, with $585,776.000 of capital invested.

The three principal manufacturing industries were petroleum refining, $241,757,000; meat packing, $125 192,000; cottonseed oil and cake, $102 122,000 Flouring mills brought in $73,064,000, lumbering, $47,884,000 with 60 other industries which totalled each more than $500 000 of annual products. Cotton goods manufacture is not proportioned to the immensity of the cotton growing, the amount reported being $13,920 000.

Texas leads in railroad mileage, having 16,125 miles in 1921, Houston being the most important railway centre, claiming 17 different lines. Transport is heavy to Galveston, the largest seaport of Texas, on the Gulf 50 miles from Houston, and to New Orleans with large tourist travel to and from the Pacific Coast.

Public school enrolment is about 1,125,000 for a population of 4,663,228 reported in the 1920 census. The University of Texas at Austin is well known and has authority in many lines of research, especially in geology. There are a dozen other well established higher institutions.

The percentage of illiteracy was reported at 8.3; native white, 3 Negro, 17.8, foreign-born white, 33.8. The 249,652 Mexicans are the largest body of foreigners, communication across the international boundary line being in peace time constant and extensive.

Texas is a strange mixture of the old West and the progressive new South, the cowboy remaining in the western parts, and the eastern cities taking on modernities, with steady tendency toward the upbuilding of industry.

In the recent troubles with Mexico, there has been much disturbance on the border, but normally now Mexico is a source of wealth and prosperity to Texas. Galveston, the chief port, is expected to develop much vaster commerce than its already large tonnage. Galveston has a wonderful concrete seawall as protection against the fearful tidal wave and hurricane which swept it more than 20 years ago, practically destroying the city.

In late years, an automobile route has been popularized through Texas to the Pacific Coast, and eiforts are making to improve the roads, not yet very facile for motor car passage.

In San Antonio, close to the border, the Alamo, a fortress defended to the death by the Texas patriots, is the chief point of interest to tourists, and in various places the visitor is shown battlefields on which the Lone Star State won freedom from Mexico.

## UTAH.

*Area, square miles.....84,990.....10th in rank*
*Population, 1920.....449,396.....40th in rank*

Utah, of the Mountain group of the Far West, is bounded on the north by Idaho and Wyoming, on the east by Colorado, on the south by Arizona, and on the west by Nevada. It has several mountain ranges, which attain up to 12,000 feet elevation (the highest peak, Kings Mountain, 13,498 feet), the greater part of the State being a plateau 6,000 feet above sea level. The rivers are useful only for irrigation, more than 1,300,000 acres being under water. The Great Salt Lake, salt being 20 per cent. of the fluid content, is in the northwest part, altitude 4,218 feet, and has no known outlet. The climate is dry, stimulating and wholesome, warm in summer, rather cold in winter, and the sky so clear that no cloud specks it on 300 days a year.

The value of all crops in the Census of 1920 was $87,890,000, of which hay and forage led, with $24,583,000, mostly alfalfa. All the temperate zone cereals are produced. Emphasis is placed on forage crops.

The fruit production ranges from temperate to sub-tropical zone varieties, which latter grow in the southern tier of counties.

The wool clip in the 1920 census was 11,690,239 pounds.

Mineral resources are most varied, including gold, silver, lead, manganese, copper, gypsum, petroleum, sulphur, zinc, salt and coal, the State ranking third in copper. The total value of mineral output given in 1920 was $45,169,328. Coal was mined, 5,800,000 tons.

Production of uranium and vanadium, especially valuable, is the second in the Union.

Semi-precious stones are taken in large quantities, and a high grade of marble and onyx for building is quarried.

The manufactures consist mostly of smelting and refining of lead and copper, and the making of beet sugar, sugar beets being raised worth $10,048,611, for 930,427 tons. Manufactures are mostly in Salt Lake City and Ogden. The number of establishments was given as 1,159, capital, $143,366,000, wages paid $21,396,000, and value of all products, $156,804,000, for a population of 449,396, of which 48 per cent. was urban.

Railroad mileage, 1921, was 2,161.

Illiteracy is low, at 1.9 per cent.; native white three-tenths of 1 per cent., foreign-born 6.3, there being 56,455 of foreign birth, English most numerous. About 100,000 attend the schools, and higher educational institutions are becoming numerous and well established.

The distinguishing feature is the Mormon Church, the Latter Day Saints, as they call themselves, numbering three-fourths of all church membership. The Mormons came originally to Utah from the Midwest, being driven out by persecution, and journeyed to the territory when it was almost completely a wilderness, subduing it and building a social formation based on the domination of the Mormon Apostles and Bishops, with close interrelationship between church and government, the tithing system being adopted.

Salt Lake City, the capital, has several celebrated structures built by the church, among them the great Tabernacle and the Temple.

The "Great American Desert" lies in the northwestern corner of Utah, reaching over into Nevada.

## VERMONT.

*Area, square miles.....9,564.....42d in rank*
*Population, 1920.....352,428.....45th in rank*

Vermont, a New England State, is bounded on the north by Canada, on the east by New Hampshire, on the south by Massachusetts, and on the west by New York. Lake Champlain, more than 100 miles long, marks the western boundary line. The Green and Latonic Mountains cross the State. The climate like its topography is rugged and characteristic of the north.

The 1920 census gives $47,999,600 as the value of all crops, and $168,159,000 as the value of all manufactures. Vermont has the largest value of dairy products per capita in the Union, the value being returned as $27,152,954, and it leads all States in the production of maple sugar. Agricultural production takes a wide range, including even tobacco, and covers all the cereals suitable to the zone, with considerable fruits, apples predominating.

Known as "The Green Mountain State," its chief mineral wealth is in its quarries, leading all States in output of granite (value, 1919, $3,563,734), marble (value, 1919, $2,108,872), asbestos and talc, its granites and marbles having gained Nation-wide markets, some of the most celebrated buildings having been erected with them.

Railroad mileage, 1921, was 1,076.

Vermont is a popular resort in the summertime for persons from all Eastern cities, the mountain scenery being beautiful, and a system of roads being now in process of building up to modern standards. The shores of Lake Champlain, for 100 miles, afford excellent boating, and the area of the State teems with historic interest, having been the theatre of many battles in the former wars.

The illiteracy percentage is 3; native white 1.5, and foreign-born 11.3. Of the total population of 352,428 reported in the 1920 census, foreign-born numbered 44,526; Canadians, 24,868.

The University of Vermont and Middlebury College are the leading institutions of learning.

Vermont was the first State admitted after the adoption of the Federal Constitution.

## VIRGINIA.

*Area, square miles.....42,627.....33d in rank*
*Population, 1920.....2,309,187.....20th in rank*

Virginia, one of the South Atlantic, and one of the Thirteen Original States, is bounded on the north by West Virginia and Maryland, on the east by Maryland and the Atlantic Ocean, on the south by North Carolina, and on the west by West Virginia and Kentucky. Part of its original territory was taken in 1863, during the Civil War, to form West Virginia. On its eastern side, the great waterway, Chesapeake Bay, cleaves the State, cutting off a small portion between which and the main portion is the entrance past the Capes to the bay, and there are many rivers which flow into the bay, with navigation up the James, the York, the Rappahannock and the Potomac.

The topography is varied, beginning with the low lying lands along the coast, known as Tidewater Virginia, rising to an extensive tableland in the central part, and finding mountain elevations up to 5,700 feet in the west. In the northwestern corner is the rich Shenandoah Valley. The Potomac River bounds the State on the north, making off from the bay. The mountains are the Alleghanies, the Shenandoahs and the Blue Ridge. The climate is as varied as the topography, characteristic in each portion, cool in the higher elevations and rather warm in the lower.

Fundamentally, Virginia is agricultural, its manufacturing being based on utilization of the soil products and some of the minerals, with which the State is well endowed.

Railroad mileage in 1921 was 4,703.

The 1920 census gives $292,824,260 as the value of all crops, Virginia being the third State in tobacco production, with 102,391,226 pounds, the culture of the plant having been first done by whites at Jamestown 300 years ago. The temperate zone grains, vegetables and fruits are grown in profusion. The corn crop was reported as 44,800,000 bushels, with peanuts, 5,282,000 bushels, the third largest in the Union.

Livestock husbandry has been in late years emphasized especially, effort being exerted to bring in pure blood strains. Much of the progress in this line is due to the incoming of many Northerners, who have taken over rural estates to obtain the social advantage of the delightful country life of the Old Dominion State, which was of the flower of the old time era of the cavaliers.

The manufactures have an ouput running at more than $300,000,000, and are growing in importance. Cotton goods especially are becoming great in volume, the mills having about 600,000 spindles, Virginia using much more raw cotton than it produces. The lumber cut averages about 800,000,000 feet, and is unusually varied, including yellow pine, oak, gum, hemlock, cypress, chestnut, yellow poplar, cedar, tupelo, basswood, hickory, and walnut.

The tobacco and cigarette factories send their finished product across the earth, besides which large quantities of tobacco are sent to England and other European countries for manufacture there into cigarettes, cigars and smoking tobacco.

Manufacturing also comprehends extensive canning of fruits and vegetables, leather, coke, sawmill machinery, woodenware, pig iron, clothing, implements, silk and knit goods.

Mineral output includes coal, the State ranking ninth, with 9,500,000 tons; iron ore output, these figures from the 1920 census, being 320,000 tons, with all the basic crude minerals also produced, including large supplies of building minerals, and with salt, copper, lead and zinc produced. The mineral output averages about $50,000,000 for 35 kinds mined.

In Hampton Roads the United States maintains a great navy yard, as the principal rendezvous of the navy, utilizing the James River as a chief anchorage.

In Newport News, on the James River, an extensive shipbuilding plant constructs vessels of many types, including warships of heaviest tonnage.

Norfolk has large shipping interests, and is one of the principal centres for the manufacture and distribution of land fertilizers.

Fortress Monroe, on the peninsula between the James River and Chesapeake Bay, has strong, modern fortifications, commanding all adjacent waters.

Near the fortress, large hotels, maintained for many years on Government-owned lands, have been mined for instant blowing up in the event of war, to remove obstruction to the range of the big guns.

The illiteracy percentage is 11.2, Census of 1920; native white, 5.9; foreign-born, 7.1; and Negro 23.5. The Negro constitutes 29.9 per cent. of the population, having fallen from 32.6 per cent. in 1910. As to illiteracy, no State offers a wider range of gradations, the older families showing very low percentage, and the mountain regions very high.

In higher educational institutions, Virginia ranks among the foremost States, having such well-known establishments as the University of Virginia, founded by Thomas Jefferson, at Charlottesville, from which many men famous in history have been graduated; Washington and Lee University at Lexington; William and Mary College, the oldest in the United States, at Williamsburg; Virginia Polytechnic at Blacksburg; Virginia Military Institute at Lexington; Hampden-Sidney College at Hampden-Sidney, and Hampton Normal School at Hampton, the first well developed school for Negroes established in the South. More than 500,000 attend the public schools.

The "Old Dominion," first in population of the States until 1820, prides itself on its Revolutionary heroes, its five Federal Presidents, and its social prestige. It was the theatre of the decisive campaign in which the Civil War ended with the surrender at Appomattox of General Lee, head of the Confederate armies.

## WASHINGTON.

*Area, square miles.....69,127.....19th in rank*
*Population, 1920.....1,356,621.....30th in rank*

Washington, of the Pacific (Northwest) group, is bounded on the north by British Columbia, on the east by Idaho, on the south by Oregon, and on the west by the Pacific Ocean. It has the Columbia River as southern boundary line for 300 miles from the west, and many streams of importance, mostly for irrigation uses, with the Snake River in its eastern reaches. In the northwestern third of the State the great Puget Sound, with tortuous shores and innumerable harbors, on which Seattle, Tacoma, Everett, Olympia and other important cities are situate, is not excelled as a commercial terminus for rail and water.

The Cascade Mountains cut the western third from the State's area, with the usual lower mountain range nearer to the ocean shores. A dozen peaks, snowcapped, rise in the west. Mt. Rainier or Mt. Tacoma (according to which city you may be in

at the moment) is a beautiful attraction with its 14,408 feet of height, now a national park, and the Olympic range in the northwest is surpassingly beautiful.

Standing timber is about 330,000,000,000 feet; Douglas fir, yellow pine, white pine, spruce, larch, cedar and other trees abound. Normally, the State cuts more than 4,000,000,000 feet, leading all the States, and shipping the product all over the world, much coming to the North Atlantic States via the Panama Canal, and going by rail to the Central West, while Washington shingles are used throughout the whole northern half of the country.

The trees are magnificent, like those of Oregon, and with that State Washington leads all others in amount of timber remaining.

Agriculture is developing rapidly. All crops reported in the 1920 census were valued at $227,-212,000, and included all the cereals, vegetables, forage crops, and the fruit production is famous, the irrigated sections all the way from the south to the very border of Canada being prolific and yielding products demanded in all Eastern fruit markets Every variety known to the temperate zone is produced; the fruit and nut crop, 1920 census, was worth $51,662,000, apples alone being worth $38,-823,000.

The geology is the same as that of Oregon—arid and semi-arid lands in the east, interspersed with fertile portions, and in the west much rainfall with resultant profusion of vegetation.

East of the Cascades most of the wheat is grown, the crop being 41,837,000 bushels, with many sheep, cattle and horses. "Horse Heaven" is located on the banks of the Columbia in Eastern Washington. The wool clip runs above 5,000,000 pounds. The livestock interest is mostly in the east, where the great ranges are, with mild winters in the valleys, with winter grazing.

The 1920 figures on manufactures showed 4,918 establishments, employing 150,479 persons, with $574,235,000 of capital, outputting $809,622,000 of products, lumber and timber leading with $220,-512,000, steel shipbuilding next with $140,980,000, flour milling with $81,141,000, and meat packing with $34,398,000; wooden shipbuilding and boat building yielding $25,539,000. Forty-five other lines had more than $900,000 of annual production.

All the basic minerals are present, coal being produced in considerable quantity (value 1919, $10,737,656) and gold, silver, lead and zinc also.

Shipping is very extensive from Puget Sound ports to the Orient, and coastwise via the Panama Canal, and the bulk of the shipping to and from Alaska is handled on Puget Sound, which, in the years of the great Klondike goldfields rush, made of Seattle and Tacoma scenes of feverish activity. The salmon fisheries of the Washington sea waters are very extensive.

Railroad mileage, 1921, was 5,587.

In illiteracy, the State has a percentage of 1.7; native white, 3-10ths of 1 per cent.; foreign-born, 4.7. Foreign-born number 250,055, being 18.4 per cent. of the population, of which Japanese and Chinese are numerous.

About 300,000 attend the public schools, and the State University at Seattle, with several well established colleges, provide ample higher educational facilities.

The shores of Puget Sound are very popular as summer resorts, with many hotels and cottage colonies, while steamer tourist travel to and from Alaska is extensive.

## WEST VIRGINIA.

*Area, square miles.....24,170.....40th in rank*
*Population, 1920.....1,463,701.....27th in rank*

West Virginia, of the South Atlantic group, was set off from the original State of Virginia. It is bounded on the north by Ohio and Pennsylvania, on the east by Pennsylvania, Maryland and Virginia, on the south by Virginia and Kentucky, and on the west by Kentucky and Ohio.

It is essentially mountainous, the Appalachian range having several spurs therein. Its western parts drain into the Ohio River, and its eastern portions down the Potomac River to the Atlantic Ocean. The mountains are in the east. The climate is moderate, and between the north and south extremes.

Mining is the leading activity, the State ranking second in the production of coal, with 75,500,000 tons as the production reported in the 1920 census. Some of the finest steaming coal in the world is produced, especially the Pocahontas. It ranks first in output of natural gas, gaining about $40,-000,000 annually therefrom. In petroleum output it ranks eighth. All of the base minerals are present in abundant supply, and the total mineral output runs above $200,000,000. It is in West Virginia that for years industrial disturbances have upset production and affected political and social conditions, being now the subject of Federal inquiry that final settlement may be effected amicably to both sides.

West Virginia produces more hardwood than any other State, excepting Arkansas, and has vast timber wealth, including yellow poplar, birch, ash, oak, spruce, hemlock and walnut.

Its agriculture is not so important, total value of all crops reported in the 1920 census being $96,-537,000, the leading crops being corn, hay, tobacco, potatoes, and fruits of all kinds suitable to the zone.

Its transport by water is abundantly served with the Ohio River on the west. Railroad mileage, 1921, was 3,996.

Its illiteracy percentage is 6.4; native white, 4.6; Negro, 15.3; and foreign-born, 24. Negroes are 5.9 per cent. of the population, and foreign-born 4.2. Public school enrolment was reported at 360,000, and there are many colleges, church denominational schools being numerous; industrial schools also.

In recent years many Northerners have gone to the State to take country homes in the mountains. White Sulphur Springs in the eastern part is one of the most celebrated pleasure resorts, popular socially, and with a famous golf course on which some of the greatest golfers have played.

## WISCONSIN.

*Area, square miles.....56,066.....25th in rank*
*Population, 1920.....2,632,067.....13th in rank*

Wisconsin, of the East North Central group, is bounded on the north by Lakes Superior and Michigan, on the east by Michigan and Lake Michigan, on the south by Illinois and Iowa, and on the west by Iowa and Minnesota. The Mississippi River forms the southern half of the western boundary line. It has the characteristic climate of the northern tier of States, cold in winter and pleasant in summer, dry and stimulating.

The value of the total manufactured product at about $1,000,000,000 exceeds that of all crops reported in the 1920 census at $445,347,868, although its agricultural activities are vitally important and thorough, a large proportion of foreigners from thrifty countries having attained high grade tillage. The mineral production also is large.

Railroad mileage, 1921, was 7,554.

Everything grown in the north temperate zone is produced, in grains, vegetables and fruits, agriculture being especially well diversified—corn, wheat, rye, barley, hay, flaxseed, potatoes, sugar beets, with considerable quantities of tobacco for cigar wrappers, hops, peas, sorghum and maple syrup. More peas are canned than in any other State, and more hemp raised. The grape production is very large, and the output also of cranberries, apples, cherries and plums.

Manufactures include the most lumber cut in the Great Lakes region. The State has the most creameries of any State, refines much beet sugar, makes much woodwork and implement products, considerable pig iron output, ranks fifth in zinc production, fourth in iron ore output, the valuable hematite kind chiefly, and the fisheries on the lakes are highly productive, the whitefish being highly valued.

The story of Wisconsin forests, as of all of the Lake States, is tragic. Naturally, almost the entire State was covered with pine, hemlock, and the invaluable hardwoods. Lumbering proceeded without regard to conservation, until more than 8,000-000,000 feet were cut annually; production on account of the exhaustion of the supply then falling off, until the 1920 census reported the cut as 1,275,-000,000 feet, with an estimated stand remaining of about 2,500,000,000 feet. There are therefore enormous areas of now useless cut-over forest lands, with comparatively scattered timber tracts left.

Superior, at the head of Lake Superior, opposite Duluth, is the main terminus of the Great Northern Railway, and has great ore, lumber, wheat and coal dockage, with considerable manufacturing of iron products.

Of the 2,632,067 population shown by the 1920 census, the number of foreign-born was 460,128, or 17.5 per cent., Germans numbering 151,250.

The percentage of illiteracy was 2.4, against 3.2 in 1910. The native white illiteracy in 1920 was 7-10ths of 1 per cent.; foreign-born, 8.4; Negro, 4.1.

The University of Wisconsin at Madison is especially far advanced in sociologic research, domestic science and the practical arts. The 1920 matricula-

tion was 10,155, including the summer school; and a correspondence course is conducted by which 15,554 persons are instructed. There are besides many colleges and smaller schools.

Wisconsin has been and is the scene of intense political battles and advanced social experiments, of which Robert Marion La Follette has been the leader, as Governor and United States Senator. It has a large percentage of foreign-born and foreign-extracted population, with numbers of Socialists.

The Great Lake shores contain many pleasure resorts, while the smaller lakes of the State are also popular with summerers, fishing being prime, and hunting in the fall.

## WYOMING.

*Area, square miles.....97,914.....8th in rank*
*Population, 1920.....194,402.....48th in rank*

Wyoming, a Mountain Group State, is bounded on the north by Montana, on the east by North Dakota and Nebraska, on the south by Colorado and Utah, and on the west by Utah, Idaho and Montana. It is a lofty region, its mean elevation about 6,000 feet—a broad plateau traversed by the Rocky Mountains, highest point of which is Mt. Gannett, 13,785 feet. Topography is varied.

Its waters flow in all directions, drainage by the Green River to the southwest, by the Yellowstone and Snake Rivers to the northwest, by the Big Horn to the north, and by the North Platte, Sweetwater and Laramie Rivers to the southeast, none of them navigable. The river waters are however valuable for irrigation, more than 1,200,000 acres being actually under irrigation, and an area of nearly 2,700,000 acres being included in irrigation projects which are under construction.

The climate is that of the rarefied air of high elevations, and is salutary, with severe winters and pleasant summers, moisture precipitation being low at about 12 inches mean annually.

With less than 200,000 population reported in the 1920 census more than $50,000,000 was assigned as the value of all crops, hay the leader, mostly alfalfa, and corn, potatoes, oats, wheat, rye and barley also produced.

Stock raising is the most important industry, sheep husbandry being the second in rank in the United States, the wool clip reported at 33,000,000 pounds.

Mineral resources are extensive, coal production, 1920, 8,928,000 tons; copper of considerable quantity, and petroleum high with 16,500,000 barrels. Petroleum stores are known to be very great. Gold, silver, iron ore, platinum ore and all the base minerals abound, with vast development assured for the future.

Manufactures are practically all for home consumption.

Railroad mileage, 1921, was 1,931.

The 1920 census reported the percentage of illiteracy as 2.1; native white, 3-10ths of 1 per cent; foreign-born, 9. There were 25,255 foreign-born, mostly from Europe.

The 1920 school enrolment was 47,553. The University of Wyoming at Laramie had 913 students.

The Yellowstone National Park in the northwest corner is one of the world's most famous resorts for the tourist; its giant geysers, waterfalls and high coloration of the rugged gnarled rocks attract heavy travel from all parts of the country and from foreign lands.

The ranch life retains much of the old time flavor of the West, and many Easterners go there to enjoy it. The annual cowboy roundup at Cheyenne attracts many.

## ALASKA, TERRITORY OF

AREA, 590,884 square miles (including the Aleutian Islands).

POPULATION, Census of 1920, 54,899 (27,883 whites 26,421 Indians and Eskimos).

CAPITAL, Juneau, population, 1920, 3,058.

*Governor*, Scott C. Bone, 1921-24, appointed June, 1921.

*Consuls* maintained at Juneau by Norway; at Nome by Russia (Consul General) and Sweden; at Skagway by Great Britain.

Alaska occupies the northwestern part of the North American continent. It is bounded on the north by the Arctic Ocean, on the west by the Arctic and Bering Sea, on the south by the North Pacific Ocean and on the east by Canada. From the southwestern corner the Aleutian Islands stretch out westward 1,200 miles to longitude 172° E. Cape Wrangell, facing Siberia. Bering Strait, 54 miles wide, separates the mainland of Alaska from Asia. The "Panhandle" runs southeast 600 miles along the Pacific to Dixon Inlet, and includes all the islands, the boundary with Canada along the mountain crests being fixed by arbitration in 1903, international survey completed, 1913.

Alaska, then, sparsely colonized by Russian trappers and Indian traders, was bought from Russia by Secretary W. H. Seward, by the treaty of March 30, 1867, for $7,200,000. It was made a Territory by the act of Aug. 24, 1912, which gave it a Legislature elected by direct vote and a Governor, appointed for four years by the President. Congress reserves the right to legislation on certain subjects.

Alaska is mountainous with high plateaus; the coast range extends through the southern part, the chief peaks being Mt. St. Elias (alt. 18,024 ft.), Mt. Wrangell (14,005 ft.) and further inland Mt. McKinley (20,300 ft.), the highest peak on the North American continent. There are more than a dozen active volcanoes, notably Mt. Katmai now with the "valley of 10,000 smokes" a national monument. Mt. Katmai which had been dormant, suddenly blew the top of its head off June 6, 1912—one of the greatest eruptions in history. The mountains and the Sitka district are densely timbered, mainly coniferous, but the islands are treeless. The most notable glaciers are the Muir, Malaspina and Seward. The Yukon is the chief river, 2,000 miles long, navigable for about 1,800 miles. The length of the coast line is about 4,750 miles, including islands 26,364 miles. There are many excellent harbors, one Dutch Harbor, Unalaska Island, being of great naval importance.

There is great diversity in climate. In the interior a temperature of 60° below zero in winter is not unusual, with a temperature of 90° in the summer, but on the coast owing to the Japanese current the thermometer rarely falls below zero in the winter with a maximum of about 80° in the summer. Rain there is abundant. All the hardier vegetables and the cereals, except corn, thrive during the short summer with its long hours of sunlight. Of the 378,165,760 acres the census of 1920 reported 90,652 in 364 farms, 5,836 acres only being under cultivation.

Reindeer were introduced from Lapland and from Siberia to insure the support of the Eskimos by the Government, which brought in 1,200 head between 1892 and 1902. These increased under careful handling to 22,107 in 1910, 92,933 in 1920 (valued at $2,238,562) and (estimated) 216,000 in 1922. Some reindeer meat has been successfully exported. Fur farming also is on the increase, especially of foxes, the export of fox skins in 1919 being about $800,000. The killing of seals on the Pribilof Islands having been brought under control in 1910 and pelagic sealing prohibited by treaty in 1911, the seal herds have increased from 215,000 to 524,000 in 1919; 1919-20, 30,198 dressed sealskins, valued at $1,509,600, were shipped to the United States. The shipment for 1920-21 was 24,859, valued at $995,660, and for 1921-22, 26,293, valued at $1,005,175.

Fishing is an important industry; in 1920, 788 vessels were engaged in it; 27,482 persons were employed, $70,986,221 capital was invested and the value of the products was $41,492,124. The salmon pack weighed 211,004,976 pounds, valued at $37,050,212.

Since the discovery of gold at Juneau in 1880 (the great Klondike rush through Skagway into Canadian territory and the Upper Yukon began in 1896) up to January, 1921, Alaska has produced $320,000,000 of gold, nearly two-thirds of it from placer mines. Copper ($127,000,000) and other metals produced bring the total yield up to $460,000,000. The U. S. Geological Survey estimates the value of the placer gold reserve to be at least $360,000,000, this in addition to gold in veins that could not be estimated. There are large coal deposits, which are not yet fully developed. The coal by U. S. Navy has been found equal in steaming value to Pocahontas coal.

Congress in 1914 authorized the building of a railroad not to exceed 1,000 miles in length. The line is in operation from Seward to Fairbanks, 467 miles; with spurs to coal mines that brings the total up to 521 miles. The cost at wartime prices exceeded $52,000,000. The rest of the system it is expected will be finished in 1923.

Merchandise passing through the port of Juneau to and from foreign countries was:

| Fiscal Year. | Exports. | Imports. |
|---|---|---|
| 1920-21 | $1,627,579 | $1,099,161 |
| 1921-22 | 1,441,310 | 1,202,535 |

Alaska's commerce with the United States for the last three fiscal years, ending June 30, was:

| Fiscal Year. | Exports to U. S. | Imports from U. S. | Gold Shipments. |
|---|---|---|---|
| 1919-20.... | $66.498,871 | $33,998,462 | $8,793.085 |
| 1920-21.... | 54,126,718 | 27.333,972 | 7,072,114 |
| 1921-22.... | 36,775 810 | 23,625,161 | 6.881.020 |

## HAWAII, TERRITORY OF

AREA, 6 449 square miles (Hawaii, 4,016 square miles: Oahu, 598: Maui, 728; Kauai, 547; Molokai: 261: Lanai. 140; Niihau. 73; Kahoolawe, 44, Molokini, 2.7).

POPULATION. Census of 1920, 255 912.

CAPITAL, Honolulu, population, 83,327; other city, Hilo 10,431.

*Governor*, Wallace R. Farrington (1921-24) assumed office, July 5, 1921.

*Consuls* are maintained at Honolulu by Belgium, Brazil, Chili, China, Denmark, France, Great Britain Italy, Japan (Consul General), Mexico (vacant), The Netherlands, Norway, Panama, Peru, Portugal, Russia, Spain (vacant), and Sweden (vacant).

The Hawaiian Islands—the crossroads of the Pacific—are twenty in number of which nine are inhabited, lying in the North Pacific Ocean in longitude 154° 40′—160° 130′ west, latitude 12° 16′—18° 55′ north, and more than 2,000 miles from the nearest mainland. The group extends for 390 miles from northwest to southeast. San Francisco is distant 2,089 miles: Panama, 4,640; Auckland, N. Z., 3,800; Manila, 4,350; Hongkong, 4,950; and Yokohama, 3,440.

The islands are mountainous and volcanic in origin, filled with extinct craters, Haleakala on Maui being the largest in the world. On the island of Hawaii is Mauna Kea (altitude 13,823 feet) quiescent, and Mauna Loa (altitude 13,765 feet) active. Sixteen miles east of the latter is the largest active volcano in the world, Kilauea (altitude 4,400 feet) with its "pit of eternal fire." The last eruption was in March, 1921, and the island is scarred with many vast lava flows.

The islands are clothed with luxuriant tropical vegetation; with abundant rainfall and cooled by the prevailing northeast trade winds the climate is perpetual summer without enervating heat. The higher elevations of the mountains are covered with forests. and 820,000 acres are set apart as a forest reserve. The soil is very fertile and all tropical and sub-tropical fruits and vegetables are grown. The farms number (1920) 5,284, valued at $151,-129,085, with 2,702,245 acres, of which 435.242 were improved and 599,531 in woodlands. Of the 5,284 farmers 892 were white (627 owners) 679 Hawaiian (546 owners), 3,098 Japanese (188 owners, 11 managers, and 2,899 tenants), and 560 Chinese (56 owners, 7 managers, and 497 tenants). In 1919 29,571,845 pounds of rice were produced and 19,-883,650 pounds of coffee; 86 farms reported (1920) 1,407 breadfruit trees that produced a crop of 101,268 breadfruit. Banana cultivation has been pushed, 160,953 bunches being produced in 1919.

The largest industry of the islands is the growing of sugar cane and the production of raw sugar. The value of the sugar produced in 1919 was $80,-236,000, from 123.165 acres. The yield per acre is larger than any other country; about five tons of sugar per acre on an average; irrigated land yielding 70 per cent. more than unirrigated. The employees on the sugar plantations, about 45,000 in number, of many nationalities, receive house fuel, water and medical attendance free and are paid a basic monthly wage and a bonus, which varies with the price of sugar. In 1920 the minimum basic wage was $20 and the bonus. extraordinarily large, was 276 per cent. of the wage. For 1921 the bonus was $30. Much welfare work is done.

The second largest industry is the growing and canning of pineapples. The product increased 1,094 per cent. in the 1909-1919 decade and in 1920 143,473,536 two-pound cans valued at approximately $31,000,000 were produced. About 46,000 acres are under cultivation.

Hawaii exported to the United States in 1921 raw sugar valued at $46,693,305 and canned pineapple, $19 905,416. Imports from the United States were chiefly iron and steel manufactures, mineral oil, breadstuffs, meat and dairy products, lumber, textiles, etc., fertilizers, automobiles, rubber goods, leather and paper.

Honolulu, on the island of Oahu, is the capital and chief commercial city and port of the islands. It has a fine natural harbor which needs improvement and development. Its needs have been neglected by Congress which alone can appropriate the money for them. The customs receipts Federal income and other taxes paid to Washington by the Territory amount to about $25 000,000 yearly. The Federal Government maintains a large army post on the islands with quarters for a division of 30,000 men at Schofield Barracks and the subsidiary forts. The Navy Department has a large base at Pearl Harbor with drydock, opened Aug. 31, 1919. There are also a large aviation field and a powerful radio station.

Hawaii has an excellent system of roads, and in Honolulu much concrete construction is used. The islands have approximately 350 miles of steam railroads besides about 625 miles on the sugar plantations. In the fiscal year 1920-21, 1 001 ships with a tonnage of 6.008,689 entered the ports of the islands.

The native population of Hawaii at the time of the discovery has been estimated at about 200,000. With civilization it has dwindled and the race seems destined to disappear through intermarriage with other stocks rather than by deaths. Of the total population of 255,912 reported by the Census of 1920, there were, Hawaiians, 23,723; part-Hawaiian, 18,027; Portuguese, 27,002; Porto Rican, 5,602: Spanish, 2 430 other Caucasian, mostly American, 19 708: Japanese, 109,274; Chinese, 23,507; Filipino, 21 031; Korean, 4.950; Negro. 308.

Hawaii came under the influence of American missionaries in 1820, and a large proportion of the natives embraced the Christian faith. The impetus given to education was great, and elementary education has always been free. The language in general use in the schools is English. The Japanese have many so-called Buddhist schools. which their children attend in addition to the American schools. The school plants, both public and private, are of very high order. The University of Hawaii is State supported. The Bishop Museum at Honolulu is a scientific institution of the first order devoted especially to the preservation of the life of the native Hawaiians and to the study of the ethnology of Polynesia.

Pan-Pacific conferences on vital matters have been promoted during the last three years with great success; and the islands are yearly welcoming increasing numbers of tourists, being well favored with steamship communication.

The Hawaiian Islands were discovered by Capt. Cook in 1778, and there he met his death on his second visit in 1779. King Kamehameha brought the islands under one rule in 1791. The rule of his dynasty, which became a constitutional monarchy in 1840, ended when a revolution drove Queen Liliokalani from the throne in 1893. An attempt to secure annexation to the United States failing, a republic was proclaimed, July 4, 1894. On the outbreak of the Spanish-American War Hawaii was annexed to the United States by a joint resolution of Congress, July 7, 1898, and created a Territory by the act of April 30. 1900.

The chief executive officer of the Territory of Hawaii is the Governor, who is appointed by the President with the approval of the Senate for a four-year term, and who must be a resident of the islands in order to be eligible for appointment. The Territorial Secretary is appointed in the same manner, but the heads of the Territorial departments are appointed by the Governor, with the approval of the Territorial Senate.

The Legislature of Hawaii consists of the Senate of 15 members, elected for four-year terms; and the House of Representatives, of 30 members, elected for two-year terms. The Delegate to Congress is elected every two years, and has floor privileges in the House, but no vote.

The judiciary consists of a Supreme Court, four Circuit Courts and numerous District Courts. The Justices of the Supreme Court and Circuit Courts are appointed by the President, with the approval of the United States Senate.

Hawaii's commerce with the United States is as follows:

| Fiscal Year. | Exports. to U. S. | Imports. From U. S. |
|---|---|---|
| 1919-20..... | $142,246,003 | $59,261,621 |
| 1920-21..... | 127,692,879 | 77,324,114 |
| 1921-22..... | 68,335,073 | 51,581,621 |

The revenue of the Territory is derived from real and personal taxation, etc. For the fiscal year 1920-21 the receipts were $9,553,450, expenditures, $8,338,041, with a cash surplus of $4,392,557.

| STATE. | Ent'd Union. | Ar'aSq.M. | Settled. | L'th, M. | Br'th M | Capital. | Sal. Gov. | Term |
|---|---|---|---|---|---|---|---|---|
| Alabama | 1819, Dec. 14 | 51,998 | 1702 | 330 | 200 | Montgomery | $7,500 | 4 |
| Arizona | 1912, Feb. 14 | 113,956 | 1580 | 390 | 335 | Phoenix | 6,500 | 2 |
| Arkansas | 1836, June 15 | 53,335 | 1685 | 275 | 240 | Little Rock | 4,000 | 2 |
| California | 1850, Sept. 9 | 158,297 | 1769 | 770 | 375 | Sacramento | 10,000 | 4 |
| Colorado | 1876, Aug. 1 | 103,498 | 1858 | 390 | 270 | Denver | 5,000 | 2 |
| Connecticut | 1788, Jan. 9 | 4,965 | 1635 | 90 | 75 | Hartford | 5,000 | 2 |
| Delaware | 1787, Dec. 7 | 2,370 | 1726 | 110 | 35 | Dover | 4,000 | 4 |
| District of Columbia | 1790, July 16 | 69.2 | 1790 | 10 | 10 | Washington | 5,000 | 3 |
| Florida | 1845, Mar. 3 | 58,666 | 1559 | 460 | 400 | Tallahassee | 6,000 | 4 |
| Georgia | 1788, Jan. 2 | 59,265 | 1733 | 315 | 250 | Atlanta | 7,500 | 2 |
| Idaho | 1890, July 3 | 83,888 | 1842 | 490 | 305 | Boise | 5,000 | 2 |
| Illinois | 1818, Dec. 3 | 56,665 | 1720 | 380 | 205 | Springfield | 12,000 | 4 |
| Indiana | 1816, Dec. 11 | 36,354 | 1733 | 265 | 160 | Indianapolis | 8,000 | 4 |
| Iowa | 1846, Dec. 28 | 56,147 | 1788 | 300 | 210 | Des Moines | 5,000 | 2 |
| Kansas | 1861, Jan 29 | 82,158 | 1727 | 400 | 200 | Topeka | 5,000 | 2 |
| Kentucky | 1792, June 1 | 40,598 | 1765 | 350 | 175 | Frankfort | 6,500 | 4 |
| Louisiana | 1812, Apr. 30 | 48,506 | 1699 | 280 | 275 | Baton Rouge | 7,500 | 4 |
| Maine | 1820, Mar. 15 | 33,040 | 1624 | 235 | 205 | Augusta | 5,000 | 2 |
| Maryland | 1788, Apr. 28 | 12,327 | 1634 | 200 | 120 | Annapolis | 4,500 | 4 |
| Massachusetts | 1788, Feb. 6 | 8,266 | 1620 | 190 | 110 | Boston | 10,000 | 2 |
| Michigan | 1837, Jan. 26 | 57,980 | 1650 | 400 | 310 | Lansing | 5,000 | 2 |
| Minnesota | 1858, May 11 | 84,682 | 1805 | 400 | 350 | St. Paul | 7,000 | 2 |
| Mississippi | 1817, Dec. 10 | 46,865 | 1716 | 340 | 180 | Jackson | 7,500 | 4 |
| Missouri | 1821, Aug. 10 | 69,420 | 1764 | 300 | 280 | Jefferson City | 5,000 | 4 |
| Montana | 1889, Nov. 8 | 146,997 | 1809 | 580 | 315 | Helena | 7,500 | 4 |
| Nebraska | 1867, Mar. 1 | 77,520 | 1847 | 415 | 205 | Lincoln | 7,500 | 2 |
| Nevada | 1864, Oct. 31 | 110,690 | 1850 | 485 | 315 | Carson City | 9,600 | 4 |
| New Hampshire | 1788, June 21 | 9,341 | 1623 | 185 | 90 | Concord | 3,000 | 2 |
| New Jersey | 1787, Dec. 18 | 8,224 | 1664 | 160 | 70 | Trenton | 10,000 | 3 |
| New Mexico | 1912, Jan. 6 | 122,634 | 1537 | 390 | 350 | Santa Fe | 5,000 | 2 |
| New York | 1788, July 26 | 49,204 | 1614 | 320 | 310 | Albany | 10,000 | 2 |
| North Carolina | 1789, Nov 21 | 52,426 | 1650 | 520 | 200 | Raleigh | 7,100 | 4 |
| North Dakota | 1889, Nov. 2 | 70,837 | 1780 | 360 | 210 | Bismarck | 5,000 | 2 |
| Ohio | 1803, Feb. 19 | 41,040 | 1788 | 230 | 205 | Columbus | 10,000 | 2 |
| Oklahoma | 1907, Nov 16 | 70,057 | 1889 | 585 | 210 | Oklahoma City | 4,500 | 4 |
| Oregon | 1859, Feb. 14 | 96,699 | 1838 | 375 | 290 | Salem | 7,500 | 4 |
| Pennsylvania | 1787, Dec. 12 | 45,126 | 1682 | 300 | 180 | Harrisburg | 18,000 | 4 |
| Rhode Island | 1790, May 29 | 1,248 | 1636 | 50 | 35 | Providence | 8,000 | 2 |
| South Carolina | 1788, May 23 | 30,989 | 1670 | 285 | 215 | Columbia | 5,000 | 2 |
| South Dakota | 1889, Nov. 2 | 77,615 | 1794 | 380 | 245 | Pierre | 3,000 | 2 |
| Tennessee | 1796, June 1 | 42,022 | 1757 | 430 | 120 | Nashville | 4,000 | 2 |
| Texas | 1845, Dec. 29 | 265,896 | 1686 | 760 | 620 | Austin | 4,000 | 2 |
| Utah | 1896, Jan. 4 | 84,990 | 1847 | 345 | 275 | Salt Lake City | 6,000 | 4 |
| Vermont | 1791, Mar. 4 | 9,564 | 1724 | 155 | 90 | Montpelier | 3,000 | 2 |
| Virginia | 1788, June 26 | 42,627 | 1607 | 425 | 205 | Richmond | 5,000 | 4 |
| Washington | 1889, Nov. 11 | 69,127 | 1811 | 340 | 230 | Olympia | 6,000 | 4 |
| West Virginia | 1863, June 20 | 24,170 | 1727 | 225 | 200 | Charleston | 10,000 | 4 |
| Wisconsin | 1848, May 29 | 56,066 | 1670 | 300 | 290 | Madison | 5,000 | 2 |
| Wyoming | 1890, July 11 | 97,914 | 1834 | 365 | 275 | Cheyenne | 4,000 | 4 |

(Figures in italics are of 1921.)

| STATE. | Gov.T'm Beg. | Legis. Begins. | D. Meet | Budget. | Net Debt. | Assess Val R'ty |
|---|---|---|---|---|---|---|
| Alabama | Jan. 15, 1923 | Jan. 10, 1923 | Q, 50 | $12,830,733 | $8,557,000 | $952,602,224 |
| Arizona | Jan. 1, 1923 | Jan. 8, 1923 | B, 60 | 4,300,000 | 2,968,000 | 775,000,000 |
| Arkansas | Jan. 8, 1923 | Jan. 8, 1923 | B, 60 | 5,218,133 | 2,539,062 | 388,892,075 |
| California | Jan. 1, 1927 | Jan. 8, 1923 | B, none | 44,101,142 | 75,544,500 | 4,921,786,485 |
| Colorado | Jan. 10, 1923 | Jan. 3, 1923 | B, none | 2,400,000 | 7,000,000 | 1,220,000,000 |
| Connecticut | Jan. 3, 1923 | Jan. 3, 1923 | B, 157 | 21,091,485 | 4,851,975 | 1,600,969 |
| Delaware | Jan., 1925 | Jan., 1923 | B, 60 | 1,421,968 | 3,056,785 | None for State. |
| District of Columbia | ..... | ..... | ..... | 25,000,000 | 1,000,000 | 472,874,209 |
| Florida | Jan. 4, 1925 | April 3, 1923 | B, 60 | 9,560,665 | 601,567 | 327,379,231 |
| Georgia | June, 1923 | June 27, 1923 | A, 50 | 9,274,658 | 5,620,202 | 1,102,210,966 |
| Idaho | Jan. 1, 1923 | Jan. 1, 1923 | B, 60 | 2,499,160 | 5,919,000 | 502,305,903 |
| Illinois | Jan. 8, 1925 | Jan. 3, 1923 | B, none | 85,243,055 | 11,000,000 | 2,840,365,295 |
| Indiana | Jan. 11, 1925 | Jan. 4, 1923 | B, 61 | 23,183,170 | 345,615 | 3,764,726,989 |
| Iowa | Jan. 8, 1923 | Jan., 1923 | B, none | 15,534,128 | None | 3,843,731,464 |
| Kansas | Jan., 1923 | Jan. 9, 1923 | B, none | 8,456,684 | None | 2,876,713,692 |
| Kentucky | Jan. 8, 1924 | Jan., 1924 | B, 60 | 3,963,966 | 5,082,941 | 1,173,034,879 |
| Louisiana | May, 1924 | May, 1924 | B, 60 | 18,660,292 | *10,561,300* | *1,628,562,213* |
| Maine | Jan. 3, 1923 | Jan. 3, 1923 | B, none | 8,613,874 | 12,017,399 | 637,403,433 |
| Maryland | Jan. 14, 1924 | Jan., 1924 | B, 90 | 14,327,293 | 10,353,000 | 1,698,000,000 |
| Massachusetts | Jan. 3, 1923 | Jan. 3, 1923 | A, none | 43,115,570 | 84,266,915 | 6,269,446,000 |
| Michigan | Jan. 1, 1925 | Jan. 4, 1923 | B, none | 20,441,334 | 58,550,000 | 4,294,748,819 |
| Minnesota | Jan. 3, 1923 | Jan. 2, 1923 | B, 90 | 25,903,910 | 18,145,800 | 1,759 835,740 |
| Mississippi | Jan., 1924 | Jan., 1924 | B, none | 9,500,000 | 12,587,036 | 463,883,607 |
| Missouri | Jan. 10, 1925 | Jan., 1923 | B, 70 | 12,000,000 | 20,298,839 | 3,212,035,598 |
| Montana | Jan., 1925 | Jan., 1923 | B, 60 | 3,382,382 | 3,802,565 | 1,232,863,731 |
| Nebraska | Jan. 1, 1926 | Jan. 2, 1923 | B, none | 10,199,955 | None | 1,812,028,778 |
| Nevada | Jan., 1927 | Jan. 15, 1923 | B, 60 | 2,068,006 | 1,669,000 | 169,393,104 |
| New Hampshire | Jan. 3, 1923 | Jan. 3, 1923 | B, none | 3,080,186 | 2,489,500 | 418,470,171 |
| New Jersey | Jan. 9 1923 | Jan. 9, 1923 | A, none | 16,000,000 | 20,000,000 | 3,353,000,000 |
| New Mexico | Jan. 1, 1924 | Jan. 2, 1923 | A, 60 | 4,500,000 | 5,000,000 | 300,000,000 |
| New York | Jan. 1, 1923 | Jan. 3, 1923 | A, none | 133,149,407 | 185,826,885 | 15,390,398,973 |
| North Carolina | Jan., 1925 | Jan. 3, 1923 | B, 60 | 7,600,000 | 27,000,000 | 2,500,000,000 |
| North Dakota | Jan. 2, 1923 | Jan. 2, 1923 | B, 60 | 10,629,193 | 7,048,200 | 1,060,635,804 |
| Ohio | Jan., 1923 | Jan., 1923 | B, none | 30,000,000 | 25,000,000 | 6,297,008,757 |
| Oklahoma | Jan., 1923 | Jan. 2, 1923 | B, 60 | 8,428,935 | 1,949,056 | 1,097,333,951 |
| Oregon | Jan., 3, 1923 | Jan. 8, 1923 | B, 40 | 9,376,289 | 43,929,145 | 863,627,451 |
| Pennsylvania | Jan. 16, 1923 | Jan. 2, 1923 | B, none | 54,884,477 | 50,658,320 | *7,173,242,497* |
| Rhode Island | Jan., 1923 | Jan. 2, 1923 | A, 60 | 7,100,000 | 9,162,971 | 617,240,000 |
| South Carolina | Jan., 1923 | Jan. 10, 1923 | A, none | 5,839,106 | *5,382,308* | *212,520,421* |
| South Dakota | Jan., 1923 | Jan. 1, 1923 | B, 60 | *3,833,204* | None | *1,652,582,000* |
| Tennessee | Jan. 1, 1923 | Jan. 1, 1923 | B, 75 | 9,000,000 | 15,000,000 | *1,700,781,105* |
| Texas | Jan. 18, 1923 | Jan., 1923 | B, 60 | 32,000,000 | *420,000* | 3,455,360,089 |
| Utah | Jan. 1, 1925 | Jan., 1923 | B, 60 | 2,250,000 | 9,910,000 | 688,025,286 |
| Vermont | Jan. 3, 1923 | Jan. 3, 1923 | B, none | 3,468,230 | 2,111,532 | 191,260,520 |
| Virginia | Feb. 1, 1926 | Jan. 1, 1924 | B, 60 | 25,116,219 | 21,050,896 | 1,081,750,439 |
| Washington | Jan. 11, 1925 | Jan. 9, 1923 | B, 60 | 23,629,182 | 12,337,000 | 1,177,239,240 |
| West Virginia | Mar. 4, 1925 | Jan. 10, 1923 | B, 60 | 9,032,300 | 26,000,000 | 879,085,110 |
| Wisconsin | Jan. 1, 1923 | Jan. 10, 1923 | B, none | 33,267,402 | None | 3,670,090,188 |
| Wyoming | Jan. 1, 1923 | Jan., 1923 | B, 40 | *2,437,676* | *2,482,000* | 407,617,410 |

# Dependencies of the United States.

## THE PHILIPPINE ISLANDS.

AREA, 114,400 square miles.

POPULATION, Census of 1918, 10,350,730.

CAPITAL, Manila, (Luzon), pop. 1918, 283,613 (summer capital Baguio, pop. 5,462) other cities, Cabu, pop. 65,300; Albay (Luzon), pop. 53,105; Iloilo, (Panay), pop. 47,808; Batangas (Luzon), pop. 41,182; Ormoc (Leyte), pop. 38,247; Laoag (Ilocos Norte), 38,294; Baybay (Leyte), pop. 36,934.

*Governor General*, Major Gen. Leonard Wood, appointed February, 1921; assumed office Oct. 5, 1921; resigned, to take effect Jan. 1, 1923.

*Consuls General* maintained at Manila by China, Great Britain, Japan, Mexico, The Netherlands and Spain. *Consuls* maintained at Manila by Argentina, Belgium, Brazil, Chile, Denmark, France, Italy, Liberia, Mexico (vacant), Nicaragua, Norway, Peru, Portugal, Russia, Sweden and Switzerland; at Cebu and at Iloilo by Great Britain, The Netherlands, Norway and Spain.

The Philippine Islands, the largest island group in the Malay Archipelago, were discovered by Magellan in 1521 and conquered by Spain in 1542; they were ceded to the United States by the treaty of Paris (Dec. 10 1898) following the Spanish American War. Admiral Dewey had destroyed the Spanish fleet in Manila Bay, May 1, 1898, and Major Gen. Wesley Merritt had captured the City of Manila on Aug. 13, 1898.

The land area of the islands lies between 21° 10′ and 4° 40′ north latitude and between 116° 40′ and 126° 34′ east longitude. There are 7,083 islands extending 1,152 statute miles from north to south and 682 miles from east to west. Of this number 462 have an area of 1 square mile or over; 2,441 are named and 4,642 unnamed. The largest, Luzon, contains 40,814 square miles, and Mindanao, the next, 36,906. Panay has 4,448, Cebu, 1,695; Palawan, 4,500; Mindoro, 3,794; Bohol, 1,534; Masbate, 1,255 Between and about lie the other groups including the Sulu or Jolo Islands in the south, the Babuyanes and Batanes in the north, the Catanduanes in the east, Culion in the west. Population by the Census of 1918 was 10,350,730, of which all but about 62,000 were Filipinos. There were 5,776 Americans, 43,802 Chinese, 7,806 Japanese, 3,945 Spanish, 1,148 Britons, 286 Germans, 182 French, 125 Swiss. In Manila in 1918 there were 3,124 Americans.

The archipelago has a coast line of 11,444 statute miles which exceeds that of the entire United States. There are 21 fine harbors and 8 landlocked straits, the principal being Manila, Subic, Batangas, Tayabas and Hondagua, Iligan, Iliana, Nasipit, Sibuguey, Sarangani Bays; the Gulfs of Lingayen, Ragay, Lagonoy and Davao, and the San Bernardino, San Juanico, Surigao and Basilan Straits and the Verde Passage. Manila Bay, with an area of 770 square miles, and a circumference of 120, is the finest in the entire Far East It is a roadstead in all parts of which vessels can anchor, but a breakwater has been constructed for vessels to shelter behind in bad weather. Manila, Cebu, Iloilo, Zamboanga, and Jolo are the ports of entry.

The extensive mountain system of the Philippines belongs to the succession of volcanic ranges of the Pacific system of the world's surface. There are 20 more or less active volcanoes. Mount Apo (Apo means master), 9,610 feet, in Mindanao; Mayan Volcano, 7,943 feet, in Albay; Taal, 984 feet, in Batangas; Canlaon, 7,995 feet, in Negros; Banajao, or Majayjay, 7,144 feet, are the most famous of these. Other high mountains are Pulog, 9,580 feet. Halcon 8,481 feet; Malingdang, 8,560 feet: Santo Tomas, 7,400 feet.

Nearly all the principal islands have important river systems. In Luzon are the Rio Grande de Cagayan, 220 miles long, which drains 16,000 square miles of territory, the Rio Grande de Pampanga, emptying into Manila Bay through a dozen mouths; the Agno, the Abra Bued, and the more familiar Pasig. The Rio Grande de Mindanao, 330 miles long, is the largest in the islands, and the Agusan, also in Mindanao, the third in size. Mindoro has 60 rivers and Samar 26.

November, December, January and February are the temperate months. The mean average temperature at this season is about 77° to 79° Fahrenheit. In April, May and June, the hot months, the mean average is between 83° and 84°. In the other months it is about 80°. The nights are seldom unpleasantly hot even in the hot season, and a temperature of 100° is a rarity in Manila. The mountain regions of the north are cool as September in the temperate zone. There are two seasons, the rainy and the dry. The rains are heaviest in July, August and September; lightest in February and March. The lowest average rainfall for the last twelve years for the whole archipelago was 60.73 inches in the driest region, the highest 125.68 in the wettest. Manila's average was 75.46.

The preamble of the Jones Act, passed by the United States Congress and approved Aug. 29, 1916, declared that "it has always been the purpose of the people of the United States to withdraw their sovereignty over the Philippine Islands and to recognize their independence as soon as a stable government can be established therein." On assuming office in March, 1921, President Harding sent Major Gen. Leonard Wood, and W. Cameron Forbes, (Governor General 1909-13) to the Philippines to make a complete survey of conditions. In their report they recommended among other things "that the present general status of the Philippine Islands continue until the people have had time to absorb and thoroughly master the powers already in their hands" and "that under no circumstances should the American Government permit to be established in the Philippine Islands a situation which would leave the United States in a position of responsibility without authority."

The Jones Act of 1916 abolished the Philippine Commission under which the islands had been governed under the act of July 1, 1902. It substituted as the Upper House of the Legislature a Senate composed of 24 members, and instead of the Assembly, a House of Representatives of 91 members, elected triennially. The Governor-General, who remains as the head of the Islands, is appointed by the President. All the Cabinet heads, except Education, are Filipinos. Senators are elected for six years.

The Philippine Archipelago is divided into 48 provinces, 11 special provinces and 2 chartered cities. The chief executive of a regular province is the Provincial Governor, who is an elective official. He, together with two other elective members, form the provincial board which constitutes the legislative branch of the provincial government. In the special provinces, with the exception of Mindoro, Palawan and Batanes, the Provincial Governors are appointed officials.

Of the 24 Senators only two—those from the Twelfth District, which is composed of the Mountain Province, the City of Baguio, the Province of Nueva Vizcaya and the Department of Mindanao and Sulu—are appointed by the Governor General; all the others are elected by popular vote; as are also the 91 Representatives, excepting the nine who represent the Mountain Province, the Province of Nueva Vizcaya and the Department of Mindanao and Sulu.

Filipinos have been admitted to the civil service in increasing numbers. On July 1, 1920, there were 20 Americans and 30 Filipinos acting as chiefs or assistant chiefs, and 760 Americans and 12,074 Filipinos connected with the Government.

The government of the towns is practically autonomous, the officials being elected by the qualified voters of the municipality and serving for three years. The officials consist of a President, Vice President, and Councillors, the latter varying in number according to population. Local municipal government has been instituted in about 873 municipalities and 312 municipal districts.

The administration of justice in the Philippines is intrusted to the Supreme Courts, the Court of First Instance, the Municipal Court of the City of Manila and the Courts of the Justices of the Peace.

There are 99 school districts in the islands. Among the special Government institutions are the Normal School, the School of Arts and Trades, the Nautical School, and the Central Luzon Agricultural School. There are provincial trade schools and ships. In 1919, in the public schools, there were scholars as follows: Primary, 347,839 males, 253,501 females; intermediate, 55,082 males, 27,935 females; secondary, 12,025 males, 3,942 females. There are 300 private schools with 38,500 pupils. The State supported University of the Philippines in 1921-22 had 4,718 students and the Dominican University of Santo Tomas (founded 1611) 701. The dominant religion is Roman Catholic.

The 1919 crop values of the islands were: Rice, $94,300,000; cocoanuts and products of, $37,200,000; sugar and products of, $37,200,000; abaca (hemp), $32,500,000; corn and products of, $18,800,000; tobacco leaf, $8,700,000; other and total, $230,800,000. Fruits and vegetables are not included in the above. Cocoanuts and tobacco are valuable products. In 1918 there were 603,000 cattle and

1,271,000 water buffalo (carabao). Virgin forests cover 40,000 square miles. There are 73,000,000 acres of public lands.

Under the act of 1919 any citizen of the Philippine Islands or of the United States over the age of 18 years, or the head of a family who does not own more than 59 acres of land in the Philippines may enter a homestead of not exceeding 59 acres of agricultural land of the public domain. Total homestead fee, $10. Any citizen of lawful age of the Philippine Islands or of the United States, and any corporation or association of which at least 61 per centum of the capital stock or of any interest in said capital stock belongs wholly to citizens of the Philippine Islands or of the United States, may purchase any tract of public agricultural land of not to exceed 247 acres in the case of an individual and 2,530 acres as a corporation or association.

During 1921, 871 foreign vessels with a tonnage of 2,646,455 entered the ports of the islands.

There were, in 1921, 778 miles of railroads, and 6,200 miles of public roads. The Manila Railroad Company has been taken over from the British owners by the Government and the line of the Philippine Railroad Company is about to be taken over. Silver, lead, zinc, copper, iron, coal, petroleum, asbestos and manganese are mined, as well as clay, marble, salt, etc. The islands are rich in mineral resources, but these are as yet undeveloped. The production exceeds $3,000,000 a year.

According to Dr. Merton Miller, former Chief Ethnologist, Philippine Bureau of Sciences, from the extreme northern end of the archipelago to its southernmost limits, with the exception of the few scattered Negritos, the people of the Philippines, pagan, Moro and Christian, are one racially. There is some reason for believing that they migrated into the Islands at two different times. But in all probability they came from the same general region and have a common ancestry. There are many different languages or dialects in the Philippines, but all are closely related to one another, the pronunciation and mode of speech vary but little from one section of the Philippines to another, and the majority of the words are common to two or more of the Philippine languages. These languages, whether spoken by pagan, Moro or Christian, belong to the great Malayo-Polynesian family, branches of which are found in Sumatra, the Hawaiian Islands, Madagascar and on many other islands between. The early immigrants into the Philippines were the Indonesians and the Malays and the blend of these two races characterizes the people of the Philippines to-day. This admixture of the Indonesians and the Malays has become so thorough that it is difficult to distinguish one group from another.

## PORTO RICO.

AREA, 3,453 square miles.

POPULATION, Census of 1920, 1,299,809.

CAPITAL, San Juan, population 70,707; other cities, Ponce, 41,561; Mayaguez, 19,069.

*Governor*, E. Mont Riley.

*Consuls* maintained at San Juan by Argentina, Belgium, Brazil, Chili, Colombia, Cuba, Denmark, Dominican Republic (C. G.), France, Great Britain, Guatemala, Haiti, Honduras, Italy, Mexico (vacant), The Netherlands, Norway, Panama, Peru, Portugal, Spain, Sweden, Uruguay and Venezuela.

Porto Rico is the fourth largest of the Greater Antilles, with the Atlantic Ocean on the north and the Caribbean Sea on the south. Santo Domingo is about 45 miles to the west, and St. Thomas 40 miles to the east. The island of Culebra, population 839, and Viequez, population 11,651, to the east, form part of the territory. It is 95 miles long (from east to west) and 35 miles wide, with a coast line of about 345 miles. The best harbors are at San Juan and Ponce. Through the middle of the island, from east to west, runs a range of mountains with an altitude of 1,500 to 3,750 feet, cultivable to the summits. The soil is extremely fertile and largely under cultivation. The lower lands to the north are well watered, but irrigation is needed in the south; an extensive system has been constructed by the Government. Sugar, pineapples, oranges, grapefruit, tobacco and coffee are the chief exports. Sugar production under modern methods increased from 35,000 tons in 1899 to 490,000 tons in 1921. Stock raising is an important industry. Valuable salt deposits are worked. Mineral production is under-developed. The climate is the most healthful of the Western Hemisphere in the tropics.

Porto Rico was discovered and named by Columbus in 1493. Ponce de Leon conquered it for Spain in 1509-11. It was conquered by Major Gen. Miles in the Spanish-American War and ceded to the United States by the Treaty of Paris, Dec. 10,

PORTO RICO EXPORTS—BY KINDS.

| Fiscal Year. | Sugar, Exports. | Cigars, Exports. | Coffee, Exports. | Fruit, Exports. | Fiscal Year. | Sugar, Exports. | Cigars, Exports. | Coffee, Exports. | Fruit, Exports. |
|---|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Pounds.* | *Dollars.* | | *Dollars.* | *Dollars.* | *Pounds.* | *Dollars.* |
| 1903..... | 7,470,122 | 1,753,793 | 35,127,685 | 230,821 | 1913..... | 26,618,158 | 5,800,686 | 49,774,197 | 3,120,919 |
| 1904..... | 8,690,514 | 1 460,496 | 3,767,460 | 352,646 | 1914..... | 20,240,335 | 5,597,276 | 50,211,947 | 3,400,903 |
| 1905..... | 11,925,804 | 2,152,051 | 16,849,730 | 125,422 | 1915..... | 27,278,754 | 6,016,122 | 51,125,620 | 3,441,157 |
| 1906..... | 14,184,667 | 3,074,226 | 28,290,322 | 295,653 | 1916..... | 45,809,445 | 5,531,535 | 32,144,283 | 3,355,285 |
| 1907..... | 14,770 682 | 4,241,410 | 38,756,750 | 469,312 | 1917..... | 54,015,903 | 7,843,010 | 39,615,146 | 3,459,569 |
| 1908..... | 18,690,504 | 3,414,140 | 35,256,439 | 630,720 | 1918..... | 41,362,229 | 7,134,693 | 37,618,613 | 3,628,214 |
| 1909..... | 18,432,446 | 4,383,893 | 28,489,236 | 401,912 | 1919..... | 48,132,419 | 6,657,522 | 27,897,971 | 2,140,931 |
| 1910..... | 23,545,922 | 4,480,030 | 45,209,792 | 582,716 | 1920..... | 98,023,750 | 11,613,997 | 32,776,754 | 2,782,725 |
| 1911..... | 24,479,346 | 6,355,223 | 33,936,021 | 2,073,993 | 1921..... | 71,440,924 | 8,103,601 | 26,857,720 | 3,145,259 |
| 1912..... | 31,544,063 | 5,086,711 | 40,146,365 | 2,377,762 | 1922..... | 40,820,333 | 6,279,054 | 23,402,127 | 2,857,186 |

PORTO RICO COMMERCE SINCE 1899.

| Fiscal Year. | Imports From United States. | Imports From Other C'ntries. | Total Imports. | Exports to United States | Exports to Other C'ntries. | Total Exports. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1899..... | 3,954,369 | 5,851,547 | 9,805,916 | 3,457,557 | 6,698,984 | 10,156,541 |
| 1900..... | 3 286,168 | 1,965,289 | 5,251,457 | 2,477,480 | 1,833,796 | 4,311,276 |
| 1901..... | 6,965,408 | 1,952,728 | 8,918,136 | 5,641,137 | 3,002,679 | 8,643,816 |
| 1902..... | 10,882,653 | 2,326,957 | 13,209 610 | 8,378,766 | 4,055,190 | 12,433,956 |
| 1903..... | 12 245,845 | 2,203,441 | 14,449 286 | 11,051,195 | 4,037,884 | 15,089.079 |
| 1904..... | 11,210,060 | 1,958,969 | 13,169,029 | 11,722,826 | 4,543 077 | 16,265.903 |
| 1905..... | 13,974,070 | 2,562,189 | 16,536,259 | 15 633,145 | 3,076,420 | 18,709,565 |
| 1906..... | 19,224,881 | 2,602,784 | 21,827,665 | 19,142,461 | 4,115,069 | 23,257,530 |
| 1907..... | 25,686,285 | 3,580,887 | 29,267,172 | 22,070,133 | 4,926,167 | 26,996,300 |
| 1908..... | 22,677,376 | 3,148,289 | 25,825,665 | 25,891,261 | 4,753,209 | 30,644,470 |
| 1909..... | 23,618,545 | 2,925,781 | 26,544,326 | 26,394,312 | 3,996,913 | 30,391,225 |
| 1910..... | 27,097,654 | 3,537,201 | 30,634,855 | 32,095,897 | 6,864,617 | 37,960.514 |
| 1911..... | 34,671,958 | 4,115,039 | 38,786,997 | 34,765,409 | 5,152,958 | 39,918,367 |
| 1912..... | 38,470,963 | 4,501,928 | 42,972,891 | 42,873,401 | 6 832,012 | 49,705,413 |
| 1913..... | 33,155,005 | 3,745,057 | 36,900,062 | 40,538,623 | 8,564,942 | 49,103,565 |
| 1914..... | 32,568,368 | 3,838,419 | 36,406,787 | 34,423,180 | 8,679,582 | 43,102,762 |
| 1915..... | 30,929,831 | 2,954,465 | 33,884,296 | 42,311,920 | 7,044,987 | 49,356,907 |
| 1916..... | 35,892 515 | 3,058,400 | 38,950,915 | 60,952,758 | 5,778,805 | 66,587,695 |
| 1917..... | 49,539,249 | 4,005,975 | 53,545,224 | 73,115,224 | 7,855,693 | 80,970,917 |
| 1918..... | 58,945,758 | 4,443,524 | 63,389,282 | 65,514,989 | 8,779,033 | 74,294,022 |
| 1919..... | 57,898,085 | 4,502,275 | 62,400,360 | 71,015,351 | 8,480,689 | 79,496,040 |
| 1920..... | 90,724,259 | 5,664,275 | 96,388,534 | 133,207,508 | 17,603,941 | 150,811,449 |
| 1921..... | 97,074,399 | 8,405,304 | 105,479,703 | 103,388,227 | 8 890,348 | 112 278,575 |
| 1922..... | 57,400,028 | 6,775,121 | 64,175,149 | 66,229,771 | 5,942,800 | 72,172,571 |

The years 1898 and 1899 are calendar; 1900 covers January 1 to June 30; 1901, and succeeding years are fiscal. Imports from the United States in 1899 included coin and bullion.

1898. It is administered under the Foraker Act, April 12, 1900, as amended July 15, 1909, and as extensively altered by the Jones Act, March 2, 1917, which extended American citizenship to all Porto Ricans, and granted manhood suffrage. The Governor is appointed by the President. The Legislature—a Senate of 19 members and a House of Representatives of 39—is elected for four years by direct vote. The Commissioner of Education, the Attorney General and the United States Judge are appointed by the President, and the five Supreme Court Justices and minor Judges by the Governor. The Governor appoints the executive leaders of the departments of Justice, Finance, Interior, Agriculture, Labor, and Health, subject to the approval of the insular Senate. The six heads of departments form the executive council. The island elects a resident Commissioner at Washington with a voice but no vote in the House of Representatives, for a term of four years.

The distribution of the population according to color in the Census of 1920 was: White, 948,709; black, 49,246; mulatto, 301,816; all others, 38. Education has been compulsory and free since 1899, when the percentage of illiteracy was 83; in 1920 it was 55. The Roman Catholic religion is dominant.

A commission from the Rockefeller Foundation reported that 90 per cent. of the people of the island were infected with uncinariasis (hookworm). The insular Commissioner of Health, himself a Porto Rican, wrote in 1920: "More than 70 per cent. of our population are in the country, badly housed and fed, ill in health, and ignorant of the first principles of hygiene." A great improvement, however, has been made in economic and social conditions during the last decade.

In 1920-21 there entered the ports 1,986 American and foreign vessels, tonnage 5,347,723. The island has 339 miles of railroads.

## VIRGIN ISLANDS OF THE U. S.

AREA, 132 square miles.

POPULATION, (Census 1917), 26,051.

CAPITAL, Charlotte Amalie (Isl. of St. Thomas). population, 7,747.

*Governor*, Capt. Sumner E. W. Kittelle, U. S. N.

*Secretary*, Lt. C C. Timmons, U. S. N.

*Consuls* maintained at St. Thomas by Belgium, Brazil, Colombia, Cuba, Denmark (vacant), Dominican Republic, France, Great Britain, Guatemala, Haiti (C. G.), Italy, Mexico, The Netherlands, Nicaragua, Norway (vacant), Panama, Peru, Portugal, Spain, Sweden, Uruguay and Venezuela.

The Virgin Islands of the United States, formerly the Danish West Indies, were bought for $25,000,000 by the United States from Denmark in a treaty proclaimed Jan. 25, 1917. The group consists of three islands, St. Thomas, population Census of 1917, 10,191; St. Croix, 14,901 and St. John, 959, with about 50 smaller ones, mostly unnamed, and uninhabited; and lies about 60 miles due east of Porto Rico. The language is English.

They are administered by the Navy Department under the organic act of Congress approved March 3, 1917. The Governor is appointed by the President of the United States. The Danish code of laws, dated April 6, 1906. remains in force so far as compatible. Six appointed heads of departments —Health, Judiciary, Public Works, Education, Supply, Police and Fire,—with naval aides make up the Governor's Cabinet. The islands comprise two municipalities, that of St. Thomas and St. John, with a legislative council of 11 members elected by popular vote and 4 appointed by the Governor; and that of St. Croix with a membership of 13 and 5 respectively. The municipal franchise extend to males of unblemished character, 25 years old, resident on the islands for 5 years and possessed of an income of 1,500 francs a year. The estimated revenue for the fiscal year ending June 30, 1921, was 1,409,868 francs, derived from customs. income tax and local taxes. The annual deficit in the operation of the government is made up by Congressional appropriation. Agriculture and cattle raising are the chief industries, and the islands produce the finest bay oil and bay rum in the world, exporting in 1919 about 60,000 gallons.

Charlotte Amalie has one of the finest harbors in the West Indies and is an important coaling and oil fueling station. The Naval Station St. Thomas has a powerful radio equipment. Education is compulsory.

The commerce of the Virgin Islands with the United States for the fiscal years ending June 30, 1921 and 1922 was:

| Fiscal Year. | Exports. to U. S. | Imports. from U. S. |
|---|---|---|
| 1920-21 | $3,571,787 | $4,162,949 |
| 1921-22 | 754,729 | 1,836,567 |

## AMERICAN SAMOA.

AREA, 57.9 square miles.

POPULATION, 1920, 8,324, including 266 Americans of the U. S. Naval Service.

CAPITAL, Pago Pago (Isl. of Tutuila), population, 8,056.

*Governor*, Capt. Edwin T. Pollock, U. S. N.

America Samoa, composed of the islands of Tutuila, Aunun, Ofu, Olosenga and Tau, and the uninhabited coral atoll of Rose Island, became a possession of the United States by virtue of the tripartite treaty with Great Britain and Germany in November, 1899, accepted by the United States, Feb. 13, 1900. The census of January, 1920, gives it a native population of 8,068. Pago Pago is the most valuable harbor in the South Pacific and possibly in the entire Pacific Ocean. It was ceded in 1872 by the native king to the United States for a naval and coaling station. For 1920 the exports were valued at $98,213 and the imports amounted to $235,293. American Samoa is extremely valuable in its relation to the expansion of American trade in the Pacific.

American Samoa is 4,160 miles from San Francisco, 2,263 miles from Hawaii, 1,580 miles from Auckland, 2,354 miles from Sydney and 4,200 miles from Manila. The natives can all read and write and are all Christians of different denominations. They are of the highest type of the Polynesian race and are greatly on the increase due to the laws forbidding foreigners buying their land.

Under the tripartite treaty of 1899, the United States owns Tutuila and the other islands of the Samoan group east of 171 degrees of longitude west of Greenwich. The Samoan Islands west of that meridian belonged to Germany until the World War. Under the 1919 peace treaty they were taken over by Great Britain and are administered by New Zealand.

The commandant of the United States Naval Station at Pago Pago is also the Governor of American Samoa. He is appointed by the President. There is a naval radio station on the island of Tutuila.

All of the land on the islands is privately owned. Under the American Commandant-Governor there is a native Governor in each of the three political divisions. The native Governors appoint the County Chiefs, who appoint the Village Chiefs. American Samoa has an area of 57.9 square miles. The chief product of the soil is cocoanut (the dried kernel is called copra). Other fruits are grown, but not exported.

## GUAM.

AREA, about 210 square miles.

POPULATION, 1920, 14,246, of which 13,698 were natives.

CAPITAL, Agana; population est. 9,000.

*Governor*, Capt. I. C. Wettengel, U. S. N.

The Island of Guam, the largest of the Marianas, was ceded to the United States by Spain by Article 2 of the Treaty of Paris, Dec. 10, 1898. It lies between latitudes 13° 13′ and 13° 39′ north and longitudes 144° 37′ and 144° 58′ east. It is 32 miles long and 4 to 10 miles wide. Distance from Manila, 1,506 miles; from San Francisco, 5,044 miles. The inhabitants call themselves Chamorros, but the present generation are a mixed race with the Malay strain predominating. Their language, a Polynesian tongue, is also called Chamorro. About 10 per cent. speak English. Instruction in the English language is compulsory in the public schools. The northern half of the island is a plateau from 400 to 600 feet in height and is, except where cleared for cultivation, wooded. The southern half is broken by hills from 1,200 to 1,300 feet high.

The total population, July 1, 1918, exclusive of officers and enlisted men of the navy and Marine Corps and their families was 14,344, of whom 14,124 were classed as "natives." Of the foreign-born population only 69 were Americans. Death rate per

thousand was 17.6; birth rate, 47.2. Guam is under the Navy Department, as a naval station. The Governor is a naval officer, designated by the President. A marine barracks, naval hospital and station ship are maintained. The Commercial Pacific Cable Company has a cable station in Guam, and cables from Manila, Yokohama, Midway and Yap Islands are landed here. There is a powerful Government radio station here. The port of entry is Apra, which is closed to foreign vessels, except by permit from the United States Government. Apra is commodious, but unimproved.

## WAKE AND THE MIDWAY ISLANDS.

The United States flag was hoisted over Wake Island on July 4, 1898, by Gen. F. V. Greene, commanding Second Detachment Philippine expedition. It is a small island in the direct route from Hawaii to Hongkong, about 2,000 miles from the first and 3,000 miles from the second.

The Midway Islands, owned by the United States, are a group in the North Pacific, northwest of the Hawaiian Islands. A relay cable station of the Commercial Cable Co. is established there.

## VACANT PUBLIC LANDS IN THE UNITED STATES.

(As of July 1, 1922; official data.)

THE lands in the original thirteen States, Connecticut, Delaware, Georgia, Maryland, Massachusetts, North Carolina, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, South Carolina, and Virginia, also in Texas, never formed a part of the public domain; their disposition is governed by the State laws and information concerning same should be sought from the State authorities.

There are no public lands in the States of Kentucky and Tennessee and none is known to this office remaining undisposed of in the States of Illinois, Indiana, Iowa, Missouri, and Ohio.

The unappropriated lands in Alaska are not included herein. The total area of Alaska is 378,165,760 acres, of which about 25,754,000 acres are reserved. Approximately 1,552,128 acres have been surveyed under the rectangular system. 120,708,187 acres thereof are reserved for forestry purposes.

VACANT PUBLIC LANDS, AS OF JULY 1, 1922.

| STATE. | AREA IN ACRES. | | | STATE. | AREA IN ACRES. | | |
|---|---|---|---|---|---|---|---|
| | Surveyed. | Unsurv'd. | Total. | | Surveyed. | Unsurv'd. | Total. |
| Alabama | 40,680 | ..... | 40,680 | Nebraska | 33,928 | ..... | 33,928 |
| Arizona | 6,280,000 | 7,311,840 | 13,591,840 | Nevada | 30,811,251 | 21,618,494 | 52,429,745 |
| Arkansas | 257,815 | ..... | 257,815 | New Mexico | 13,784,510 | 2,705,571 | 16,490,081 |
| California | 14,533,990 | 3,799,669 | 18,333,659 | North Dakota | 93,102 | ..... | 93,102 |
| Colorado | 6,426,720 | 1,525,243 | 7,951,963 | Oklahoma | 21.860 | ..... | 21,860 |
| Florida | 103,451 | 960 | 104,411 | Oregon | 13,323,501 | 385,601 | 13,709,102 |
| Idaho | 6,084,714 | 2,656,007 | 8,740,721 | South Dakota | 180,583 | 29,399 | 209,982 |
| Kansas | 2,944 | ..... | 2,944 | Utah | 13,113,811 | 13,677,240 | 26,791,051 |
| Louisiana | 8,616 | ..... | 8,616 | Washington | 945,191 | 249,700 | 1,194,891 |
| Michigan | 73,956 | ..... | 73,956 | Wisconsin | 4,348 | ..... | 4,348 |
| Minnesota | 254,296 | ..... | 254,296 | Wyoming | 15,353,437 | 1,506,156 | 16,859,593 |
| Mississippi | 27,847 | ..... | 27,847 | | | | |
| Montana | 4,370,848 | 1,289,395 | 5,659,879 | Grand total | 126,131,035 | 56,755,275 | 182,886,310 |

Cash receipts of the General Land Office during the fiscal year ended June 30, 1922: Disposal of public lands, $2,377,382.26; sales of Indian lands $545,711.91; power permits, $11.871.28; coal leases, $7,831.72; receipts under mineral leasing act, public lands, $6,374,143.52; receipts under mineral leasing act, naval petroleum reserve lands, $2,425,324.65; depredations on public lands, $11,998.71; miscellaneous, $30,431.59.

Area of public and Indian lands originally entered during the fiscal year 1922. 10,367,153.15 acres. Area of lands patented, 12,904.821.57 acres.

The total number of entries, acres sold and amount received therefor under the Timber and Stone Acts of June 3, 1878 and August 4, 1892, were from June 3, 1878 to June 30, 1922: Entries, 105,711; acres, 13,668,307.16; amount, $34,852,144.29.

Under the provisions of the act of March 8, 1922, entitled "An act to provide for agricultural entries on coal lands in Alaska," upon the unreserved, unwithdrawn public lands in Alaska, homestead claims may be initiated by actual settlers on public lands which are known to contain workable coal, oil or gas deposits, or which may be, in fact, valuable for the coal, oil or gas contained therein.

## UNITED STATES RECLAMATION SERVICE.

(From data furnished by the Service; as of July 1, 1921.)

DIRECTOR, Arthur P. Davis, Interior Department Building, Nineteenth and F., N. W., Washington, D. C. Employees: Washington office, 75; field, 3,000 to 5,000. Expenditure per year, about $10,000,000.

The Reclamation Service was organized as a bureau of the Interior Department, under the Reclamation Act of June 17, 1902. It is engaged in the investigation, construction, and operation of irrigation works in the 17 arid and semi-arid States of the far West. Twenty-five primary projects comprising 2,825,000 acres and three Indian projects comprising 384,000 acres are under construction or operation, and the major works aid in serving an additional 1,100,000 acres under private canals that generally get stored water from the Government reservoirs. The funds for this work have come chiefly from the sale of public lands, from repayments by the water users, and more recently from oil-leasing and other mineral operations, and the money expended is returned to the fund by graduated payments of settlers, usually in twenty annual instalments without interest, in accordance with the Reclamation Extension Act of August 13, 1914.

The Service has built about 13,600 miles of canals, ditches, and drains (including 117,000 canal structures), involving the excavation of 200,000,000 cubic yards of materials. In connection with this work there have been constructed 100 storage and diversion dams with an aggregate volume of 14,500,000 cubic yards, including Arrowrock Dam (349 feet high), Idaho, on the Boise River and the Elephant Butte Dam (306 feet high), New Mexico, on the Rio Grande. The Service has built 101 tunnels, 1,000 miles of road, 83 miles of railroad, 3,280 miles of telephone line, a dozen power plants, and 840 miles of transmission lines. It is mining coal, and has manufactured 1,676.000 barrels of cement and sand cement. The net construction cost as of June 30, 1922, was $135,000,000.

Over 450,000 persons are living on the 33,000 farms irrigated by the Service and in the project towns and cities. Of the 2,825,000 acres above referred to, water was furnished in 1921 to 1,227,500 acres, and of this area 1,157,900 acres were harvested in 1921, producing crops worth nearly $50,000,000, or an average of about $43 per acre. The additional lands using stored water yielded crops worth $45,000,000 more.

Public land farm units on the several projects are opened for settlement from time to time as canals are extended to make irrigation water available. Under present law, soldiers of the World War have a preference right to enter these farms, and at recent openings such soldiers have taken all units.

Information in regard to farms available for settlement may be obtained by addressing Director, U. S. Reclamation Service, Department of the Interior, Washington, D. C.

The Service issues the "Reclamation Record," an illustrated monthly publication, containing articles of interest to irrigation farmers and engineers. An annual report is also issued.

An engineering library of about 5,000 manuscript and printed volumes on the subject of irrigation is maintained in the Washington office of the Service. This library contains descriptions of the construction and operation of the projects, with numerous photographs and maps, plans, specifications, cost data, and results of original experimental investigations, and is available for consultation by those interested.

# New York State Statistics.

The Almanac presents, in the following pages, tables and other detailed data relating to the State of New York.

## ALTITUDES OF PLACES IN NEW YORK STATE.

| *Places.* | *Feet.* | *Places.* | *Feet.* | *Places.* | *Feet.* | *Places.* | *Feet.* |
|---|---|---|---|---|---|---|---|
| Addison | 993 | Dryden | 1,072 | Macedon | 469 | Port Jervis | 442 |
| Albion | 540 | Dunkirk | 648 | Madison Barracks | 266 | Port Leyden | 900 |
| Alfred | 1,659 | Ellenville | 341 | Mahopac | 641 | Potsdam | 397 |
| Amsterdam | 277 | Elmira | 865 | Malone | 756 | Purdys | 629 |
| Arkville | 1,344 | Fallsburg | 1,225 | Manlius | 416 | Ramapo | 312 |
| Attica Centre | 1,543 | Fonda | 299 | Marcellus | 672 | Rochester | 518 |
| Auburn | 768 | Fort Hunter | 295 | Marcy | 587 | Rome | 445 |
| Aurora | 418 | Fort Niagara | 263 | Mechanicstown | 479 | Rotterdam | 252 |
| Avon | 585 | Fort Plain | 311 | Medina | 543 | Roxbury | 1,497 |
| Bainbridge | 998 | Franklin | 1,508 | Mexico | 393 | Sacandaga Park | 813 |
| Ballston | 294 | Fulton | 355 | Middletown | 564 | Salamanca | 1,400 |
| Batavia | 897 | Genesee | 1,525 | Millbrook | 566 | Saranac | 1,488 |
| Bath | 1,105 | Geneseo | 892 | Millerton | 700 | Saratoga | 276 |
| Redford | 291 | Geneva | 453 | Mohawk | 397 | Schenectady | 246 |
| Berlin | 804 | Ghent | 393 | Moravia | 725 | Scio | 1,459 |
| Bethel | 505 | Glens Falls | 343 | Mountaindale | 1,018 | Scipio | 1,204 |
| Binghamton | 868 | Gloversville | 874 | Nanuet | 286 | Seneca Falls | 463 |
| Bloomingburg | 754 | Goshen | 433 | Newark | 430 | Shandaken | 1,068 |
| Boonville | 1,135 | Graycourt | 434 | New Berlin | 1,088 | Sharon | 1,348 |
| Boston Corners | 738 | Groton | 990 | New Lebanon | 698 | Sidney | 985 |
| Boyd Corn's Res'voir | 593 | Guilford | 1,510 | New Lisbon | 1,234 | Skaneateles | 873 |
| Brewsters | 445 | Haynes Corners | 1,920 | New Milford | 454 | Smyrna | 1,131 |
| Brookfield | 1,315 | Halcottville | 1,399 | Niagara Falls | 571 | Sodus | 679 |
| Buffalo | 624 | Hales Eddy | 981 | Niles | 1,623 | Southfield | 493 |
| Cairo | 346 | Hamburg | 634 | Nineveh | 1,027 | Spring Valley | 452 |
| Callicoon | 782 | Hamilton | 920 | North Creek | 1,002 | Stamford | 1,767 |
| Cambridge | 471 | Hammond | 345 | Northville | 764 | Sterling | 580 |
| Camillus | 469 | Hancock | 927 | Norwich | 987 | Suffern | 300 |
| Canaan | 869 | Herkimer | 398 | Nunda | 1,336 | Summitville | 548 |
| Canajoharie | 307 | Highland Mills | 482 | Ogdensburg | 348 | Syracuse | 418 |
| Canandaigua | 735 | Homer | 1,136 | Olean | 1,437 | Tanner | 755 |
| Canastota | 433 | Hoosick Falls | 425 | Oneida | 440 | Tannersville | 1,862 |
| Canisteo | 1,134 | Hornellsville | 1,161 | Oneida Castle | 424 | Ticonderoga | 277 |
| Canton | 375 | Horsehead | 914 | Oneonta | 1,083 | Tioga | 805 |
| Cape Vincent | 253 | Houghton | 1,212 | Oriskany | 423 | Trenton | 841 |
| Carmel | 519 | Hunter | 1,603 | Orleans | 721 | Unadilla | 1,015 |
| Catskill Mt. House | 2,225 | Hurleyville | 1,317 | Oswego | 252 | Utica | 587 |
| Cayuga | 421 | Ilion | 400 | Otisville | 872 | Vails Gate | 285 |
| Cazenovia | 1,404 | Ithaca | 389 | Owego | 822 | Vandalia | 1,414 |
| Chatham | 461 | Jamestown | 1,317 | Oxford | 542 | Van Ettinville | 1,013 |
| Chester | 461 | Johnstown | 659 | Palatine Bridge | 304 | Warsaw | 1,326 |
| Chittenango Falls | 1,053 | Kaaterskill | 2,145 | Palenville | 470 | Warwick | 504 |
| Clifton Springs | 567 | Keene | 857 | Palmyra | 444 | Waterloo | 463 |
| Clinton | 583 | Kinderhook | 318 | Parksville | 1,686 | Watertown | 448 |
| Cochecton | 749 | Lebanon | 1,341 | Paul Smiths | 1,729 | Watkins | 447 |
| Columbia | 1,104 | Leroy | 868 | Penn Yan | 750 | Wells | 1,012 |
| Cooperstown | 1,250 | Liberty | 1,580 | Peru | 355 | White Plains | 201 |
| Corning | 945 | Little Britain | 441 | Phoenicia | 801 | Wilmington | 1,019 |
| Cortland | 1,122 | Little Falls | 384 | Pine Island | 408 | Winterton | 598 |
| Dannemora | 1,356 | Livingston Manor | 1,432 | Portage | 1,314 | Worcester | 1,413 |
| Dansville | 1,025 | Lockport | 614 | Port Byron | 403 | Wurtsboro | 720 |
| Delhi | 1,363 | Lowville | 870 | Port Crane | 1,036 | Wyoming | 965 |
| Deposit | 1,010 | Lyons | 404 | Port Gibson | 431 | Yorktown | 439 |

## NEW YORK STATE MOUNTAIN PEAKS.

(C.—Catskills; A.—Adirondacks.)

| *Mountains.* | *Feet.* | *Mountains.* | *Feet.* | *Mountains.* | *Feet.* | *Mountains.* | *Feet.* |
|---|---|---|---|---|---|---|---|
| Acra Point (C.) | 3,085 | Dix (A.) | 4,842 | Macomb (A.) | 4,377 | Sawteeth (A.) | 4,138 |
| Allen (A.) | 4,345 | Doubletop (C.) | 3,875 | Marcy (A.) | 5,344 | Schoharie (C.) | 3,650 |
| Andrew (A.) | 3,216 | E. Jewett Range (C.) | 3,166 | Mink (C.) | 3,807 | Schoon (A.) | 3,200 |
| Armstrong (A.) | 4,455 | East Kill (C.) | 3,190 | Moose (A.) | 2,766 | Sentinel (A.) | 3,858 |
| Baldface (A.) | 3,903 | Eleventh (A.) | 3,303 | Niagara (A.) | 3,000 | Seward (A.) | 4,404 |
| Bald Peak | 3,007 | Emmons (A.) | 3,596 | Nippletop (A.) | 4,620 | Seymour (A.) | 3,928 |
| Balsam (C.) | 3,601 | Esther (A.) | 4,270 | Newmark (A.) | 3,552 | Sister Knob (C.) | 3,002 |
| Bartlett (A.) | 3,715 | Evergreen (C.) | 3,624 | North (C.) | 3,440 | Skylight (A.) | 4,920 |
| Basin (A.) | 4,825 | Giant (A.) | 4,622 | North River (A.) | 3,890 | Sleeping Beauty (A.) | 2,349 |
| Bear Den (A.) | 3,423 | Giants Valley (A.) | 4,530 | Onteora (C.) | 2,820 | Slide (A.) | 2,890 |
| Bee Line | 3,300 | Ginseng (C.) | 3,790 | Ouluska Pass (A.) | 3,086 | Slide (C.) | 4,205 |
| Bell Air | 3,394 | Gore (A.) | 3,595 | Outlook (C.) | 3,150 | South MacIntyre (A.) | 4,937 |
| Big Range (A.) | 3,310 | Gothic (A.) | 4,744 | Overlook (C.) | 3,150 | South Pond (A.) | 3,332 |
| Big Slide (A.) | 4,255 | Graham | 3,866 | Panther Kill (C.) | 2,828 | Speculator (A.) | 3,041 |
| Big Westkill | 3,896 | Gray (A.) | 4,802 | Peakamoose (C.) | 3,875 | Spotted (A.) | 3,480 |
| Black Dome (C.) | 3,990 | Halcott (C.) | 3,504 | Peak Ridge (A.) | 4,375 | Spruce Top (C.) | 3,567 |
| Black Head (C.) | 3,937 | Hayden (C.) | 2,930 | Petersburg Pass | 2,075 | Stony (C.) | 3,844 |
| Blue Hills (A.) | 2,933 | Hayden (A.) | 2,740 | Pine Island (C.) | 3,086 | Stoppel (A.) | 3,435 |
| Blue (A.) | 3,762 | Haystack (A.) | 4,918 | Pisgah (C.) | 2,885 | Sugarloaf (C.) | 3,782 |
| Boreas (A.) | 3,815 | Height of Land (A.) | 3,050 | Pitchoff (A.) | 3,450 | Table (C.) | 3,865 |
| Bullhead (A.) | 3,455 | Helsinger Noch (C.) | 2,677 | Plaaterskill (C.) | 3,135 | Tabletop (A.) | 4,440 |
| Burnt Knob (C.) | 3,160 | High Peak (C.) | 3,660 | Plateau (C.) | 3,855 | Taylor | 4,500 |
| Camels Hump (A.) | 3,548 | Hoffman | 3,727 | Porter (A.) | 4,070 | Thomas Cole (C.) | 3,935 |
| Cascade (A.) | 4,092 | Hunter (C.) | 4,025 | Puffer (A.) | 3,480 | Trypod (A.) | 3,340 |
| Cheney Cobble (A.) | 3,673 | Hurricane (A.) | 3,687 | Ragged (A.) | 4,163 | Twin (C.) | 3,647 |
| Colden (A.) | 4,713 | Indian Head (C.) | 3,585 | Redfield (A.) | 4,606 | Vanderwhacker (A.) | 3,385 |
| Colonel Chair (C.) | 3,165 | Kimball (C.) | 3,960 | Round Hill (C.) | 2,529 | Vlaye or Fly (C.) | 3,531 |
| Colvin (A.) | 4,074 | Knoblock (A.) | 3,184 | Round (A.) | 3,145 | Wallface (A.) | 3,893 |
| Cornell (C.) | 3,906 | Lewey Lake | 3,903 | Round Top (C.) | 3,470 | Wellington (A.) | 3,458 |
| County Line (A.) | 3,105 | Limekiln (A.) | 2,925 | Rush (C.) | 3,626 | West Jewett (C.) | 3,025 |
| Crane (A.) | 3,245 | Lockwood Gap (C.) | 3,446 | Saddleback (A.) | 4,530 | Whiteface (A.) | 4,872 |
| Deep Hollow (C.) | 3,500 | MacIntyre (A.) | 5,112 | Saddle (A.) | 4,536 | Windham High (C.) | 3,506 |
| Devil Ear (A.) | 3,903 | McComb (A.) | 4,425 | Sand Pond (A.) | 3,040 | Wolf Jaws (A.) | 4,225 |
| Dial (A.) | 4,023 | McMartin | 5,000 | Santanoni (A.) | 4,644 | Wolf Pond (A.) | 3,473 |

## POPULATION AND AREA OF NEW YORK STATE COUNTIES.

(In computing the increase from 1890 to 1900 for certain counties the population of Indian reservations in 1900 has been deducted from the total population of the county in order to make it comparable with the total for 1890, which does not include the population of Indian reservations. The deductions thus made for the several counties are as follows: Cattaraugus, 1,982; Chautauqua, 31; Erie, 1,305; Franklin, 1,253; Genesee, 346 Niagara, 337: Onondaga, 530.)

| COUNTY. | When Formed. | Land Area Sq. M. | Population 1920. | Pop. Per Sq. M. 1920 | Population 1910. | Population 1900. | Population 1890. | Population 1880. | Population 1870. |
|---|---|---|---|---|---|---|---|---|---|
| The State | ..... | 47,654 | 10,385,227 | 217.9 | 9,113,614 | 7,268,894 | 6,003,174 | 5,082,871 | 4,382,759 |
| Albany | 1683 | 527 | 186,106 | 353.1 | 173,666 | 165,571 | 164,555 | 154,890 | 133,052 |
| Allegany | 1806 | 1,047 | 36,842 | 35.2 | 41,412 | 41,501 | 43,240 | 41,810 | 40,814 |
| Bronx | 1914 | 41 | 732,016 | 17,854.0 | ..... | ..... | ..... | ..... | ..... |
| Broome | 1806 | 705 | 113,610 | 161.1 | 78,809 | 69,149 | 62,973 | 49,483 | 44,103 |
| Cattaraugus | 1808 | 1,343 | 71,323 | 53.1 | 65,919 | 65,643 | 60,866 | 55,806 | 43,909 |
| Cayuga | 1799 | 703 | 65,221 | 92.8 | 67,106 | 66,234 | 65,302 | 63,081 | 59,550 |
| Chautauqua | 1808 | 1,069 | 15,348 | 107.9 | 105,126 | 88,314 | 75,202 | 65,342 | 59,327 |
| Chemung | 1836 | 407 | 65,872 | 161.8 | 54,662 | 54,063 | 48,265 | 43,065 | 35,281 |
| Chenango | 1798 | 894 | 34,969 | 39.1 | 35,575 | 36,568 | 37,776 | 39,891 | 40,564 |
| Clinton | 1788 | 1,049 | 43,898 | 41.8 | 48,230 | 47,430 | 46,437 | 50,897 | 47,947 |
| Columbia | 1786 | 644 | 38,930 | 60.5 | 43,658 | 43,211 | 46,172 | 47,928 | 47,044 |
| Cortland | 1808 | 503 | 29,625 | 58.9 | 29,249 | 27,576 | 28,657 | 25,825 | 25,173 |
| Delaware | 1797 | 1,449 | 42,774 | 29.5 | 45,575 | 46,413 | 45,496 | 42,721 | 42,972 |
| Dutchess | 1683 | 806 | 91,747 | 113.8 | 87,661 | 81,670 | 77,879 | 79,184 | 74,041 |
| Erie | 1821 | 1,034 | 634,688 | 613.8 | 528,985 | 433,686 | 322,981 | 219,884 | 178,699 |
| Essex | 1799 | 1,836 | 31,871 | 17.4 | 33,458 | 30,707 | 33,052 | 34,515 | 29,042 |
| Franklin | 1808 | 1,678 | 43,541 | 25.9 | 45,717 | 42,853 | 38,110 | 32,390 | 30,271 |
| Fulton | 1838 | 516 | 44,927 | 87.1 | 44,534 | 42,842 | 37,650 | 30,985 | 27,064 |
| Genesee | 1802 | 496 | 37,976 | 76.6 | 37,615 | 34,561 | 33,265 | 32,806 | 31,606 |
| Greene | 1800 | 643 | 25,796 | 40.1 | 30,214 | 31,478 | 31,598 | 32,695 | 31,832 |
| Hamilton | 1816 | 1,750 | 3,970 | 2.3 | 4,373 | 4,947 | 4,762 | 3,923 | 2,960 |
| Herkimer | 1791 | 1,459 | 64,962 | 44.5 | 56,356 | 51,049 | 45,608 | 42,669 | 39,929 |
| Jefferson | 1805 | 1,274 | 82,250 | 64.6 | 80,382 | 76,748 | 68,806 | 66,103 | 65,415 |
| Kings | 1683 | 71 | 2,018,356 | 28,427.5 | 1,634,351 | 1,166,582 | 838,547 | 599,495 | 419,921 |
| Lewis | 1805 | 1,270 | 23,704 | 18.7 | 24,849 | 27,427 | 29,806 | 31,416 | 28,699 |
| Livingston | 1821 | 631 | 36,830 | 58.4 | 38,037 | 37,059 | 37,801 | 39,562 | 38,309 |
| Madison | 1806 | 650 | 39,535 | 60.8 | 39,289 | 40,545 | 42,892 | 44,112 | 45,522 |
| Monroe | 1821 | 663 | 352,384 | 531.0 | 293,312 | 217,854 | 189,586 | 144,903 | 117,868 |
| Montgomery | 1772 | 398 | 57,928 | 145.5 | 57,567 | 47,488 | 45,699 | 38,315 | 34,457 |
| Nassau | 1899 | 274 | 126,120 | 460.3 | 83,930 | 55,448 | ..... | ..... | ..... |
| New York | 1683 | 22 | 2,284,103 | 103,822.9 | 2,762,522 | 2,050,600 | 1,515,301 | 1,206,299 | 942,292 |
| Niagara | 1808 | 522 | 118,705 | 227.4 | 92,036 | 74,961 | 62,491 | 54,173 | 50,437 |
| Oneida | 1798 | 1,250 | 182,833 | 146.3 | 154,157 | 132,800 | 122,922 | 115,475 | 110,008 |
| Onondaga | 1794 | 781 | 241,465 | 309.2 | 200,298 | 168,735 | 146,247 | 117,893 | 104,183 |
| Ontario | 1789 | 649 | 52,652 | 81.1 | 52,286 | 49,605 | 48,453 | 49,541 | 45,108 |
| Orange | 1683 | 834 | 119,844 | 143.7 | 116,001 | 103,859 | 97,859 | 88,220 | 80,902 |
| Orleans | 1824 | 396 | 28,619 | 72.3 | 32,000 | 30,164 | 30,803 | 30,128 | 27,689 |
| Oswego | 1816 | 966 | 71,045 | 73.5 | 71,664 | 70,881 | 71,883 | 77,911 | 77,941 |
| Otsego | 1791 | 1,009 | 46,200 | 45.8 | 47,216 | 48,939 | 50,861 | 51,397 | 8,967 |
| Putnam | 1812 | 233 | 10,802 | 46.4 | 14,665 | 13,787 | 14,849 | 15,181 | 15,420 |
| Queens | 1683 | 108 | 469,042 | 4,343.0 | 284,041 | 152,999 | 128,059 | 90,574 | 73,803 |
| Rensselaer | 1791 | 663 | 113,129 | 170.6 | 122,276 | 121,697 | 124,511 | 115,328 | 99,549 |
| Richmond | 1683 | 57 | 116,531 | 2,044.4 | 85,969 | 67,021 | 51,693 | 38,991 | 33,029 |
| Rockland | 1798 | 183 | 45,548 | 248.9 | 46,873 | 38,298 | 35,162 | 27,690 | 25,213 |
| St. Lawrence | 1802 | 2,701 | 88,121 | 32.6 | 89,005 | 89,083 | 85,048 | 85,997 | 84,826 |
| Saratoga | 1791 | 823 | 60,029 | 72.9 | 61,917 | 61,089 | 57,663 | 55,156 | 51,529 |
| Schenectady | 1809 | 206 | 109,363 | 530.9 | 88,235 | 46,852 | 29,797 | 23,536 | 21,347 |
| Schoharie | 1795 | 642 | 21,303 | 33.2 | 23,855 | 26,854 | 29,164 | 32,310 | 33,340 |
| Schuyler | 1859 | 336 | 13,098 | 39.0 | 14,004 | 15,811 | 16,711 | 18,842 | 18,989 |
| Seneca | 1804 | 336 | 24,735 | 73.6 | 26,972 | 28,114 | 28,227 | 29,278 | 27,823 |
| Steuben | 1796 | 1,398 | 80,627 | 57.7 | 83,362 | 82,822 | 81,473 | 77,586 | 67,717 |
| Suffolk | 1683 | 920 | 110,246 | 119.8 | 96,138 | 77,582 | 62,491 | 53,888 | 46,924 |
| Sullivan | 1809 | 1,002 | 33,163 | 33.1 | 33,808 | 32,306 | 31,031 | 32,491 | 34,550 |
| Tioga | 1791 | 520 | 24,212 | 46.6 | 25,624 | 27,951 | 29,935 | 32,673 | 30,572 |
| Tompkins | 1817 | 476 | 35,285 | 74.1 | 33,647 | 33,830 | 32,923 | 34,445 | 33,178 |
| Ulster | 1683 | 1,137 | 74,970 | 65.9 | 91,769 | 88,422 | 87,062 | 85,838 | 84,075 |
| Warren | 1813 | 876 | 31,673 | 36.2 | 32,223 | 29,943 | 27,866 | 25,179 | 22,592 |
| Washington | 1772 | 837 | 44,888 | 53.6 | 47,778 | 45,624 | 45,690 | 47,871 | 49,568 |
| Wayne | 1823 | 599 | 48,827 | 81.5 | 50,179 | 48,660 | 49,729 | 51,700 | 47,710 |
| Westchester | 1683 | 448 | 344,436 | 768.8 | 283,055 | 184,257 | 146,772 | 108,988 | 131,348 |
| Wyoming | 1841 | 601 | 30,314 | 50.4 | 31,880 | 30,413 | 31,193 | 30,907 | 29,164 |
| Yates | 1823 | 343 | 16,641 | 48.5 | 18,642 | 20,318 | 21,001 | 21,087 | 19,595 |

Montgomery's original name was Tryon, which was formed from Albany County in 1772. Washington was originally Charlotte, formed 1772.

### COUNTY SEATS IN NEW YORK STATE.

| COUNTY. | County Seat. | COUNTY. | County Seat. | COUNTY. | County Seat. |
|---|---|---|---|---|---|
| Albany | Albany. | Herkimer | Herkimer. | Richmond | Richmond. |
| Allegany | Belmont. | Jefferson | Watertown. | Rockland | New City. |
| Bronx | Bronx Boro. | Kings | Brooklyn Boro. | St. Lawrence | Canton. |
| Broome | Binghamton. | Lewis | Lowville. | Saratoga | Ballston Spa. |
| Cattaraugus | Little Valley. | Livingston | Geneseo. | Schenectady | Schenectady. |
| Cayuga | Auburn. | Madison | Wampsville. | Schoharie | Schoharie. |
| Chautauqua | Mayville. | Monroe | Rochester. | Schuyler | Watkins. |
| Chemung | Elmira. | Montgomery | Fonda. | Seneca | Waterloo. |
| Chenango | Norwich. | Nassau | Mineola. | Steuben | Bath. |
| Clinton | Plattsburg. | New York | Manhattan Boro. | Suffolk | Riverhead. |
| Columbia | Hudson. | Niagara | Lockport. | Sullivan | Monticello. |
| Cortland | Cortland. | Oneida | Utica. | Tioga | Owego. |
| Delaware | Delhi. | Onondaga | Syracuse. | Tompkins | Ithaca. |
| Dutchess | Poughkeepsie. | Ontario | Canandaigua. | Ulster | Kingston. |
| Erie | Buffalo. | Orange | Goshen. | Warren | Lake George. |
| Essex | Elizabethtown. | Orleans | Albion. | Washington | Hudson Falls. |
| Franklin | Malone. | Oswego | Oswego. | Wayne | Lyons. |
| Fulton | Johnstown. | Otsego | Cooperstown. | Westchester | White Plains. |
| Genesee | Batavia. | Putnam | Carmel. | Wyoming | Warsaw. |
| Greene | Catskill. | Queens | Jamaica. | Yates | Penn Yan. |
| Hamilton | Lake Pleasant. | Rensselaer | Troy. | | |

## URBAN AND RURAL POPULATION OF NEW YORK STATE.

| Class of Places. | 1920. No. of Places. | 1920. Population. | 1910. No. of Places. | 1910. Population. | 1900. No. of Places. | 1900. Population. | Per Cent. of Total Popul'n. 1920. | 1910. | 1900. |
|---|---|---|---|---|---|---|---|---|---|
| Total population | ..... | 10,385,227 | ..... | 9,113,614 | ..... | 7,268,894 | 100.0 | 100.0 | 100.0 |
| Urban territory | 169 | 8,589,844 | 148 | 7,185,494 | 122 | 5,298,111 | 82.7 | 78.8 | 72.9 |
| Cities and villages of— | | | | | | | | | |
| 1,000,000 inhabitants or more. | 1 | 5,620,048 | 1 | 4,766,883 | 1 | 3,437,202 | 54.1 | 52.3 | 47.3 |
| 500,000 to 1,000,000 inhabit'ts | 1 | 506,775 | ..... | ..... | ..... | ..... | 4.9 | ..... | ..... |
| 100,000 to 500,000 inhabit'ts.. | 4 | 680,987 | 4 | 879,366 | 3 | 623,369 | 6.6 | 9.6 | 8.6 |
| 50,000 to 100,000 inhabit'ts... | 5 | 372,452 | 4 | 303,861 | 3 | 211,185 | 3.6 | 3.3 | 2.9 |
| 25,000 to 50,000 inhabit'ts.... | 11 | 382,645 | 12 | 381,461 | 5 | 185,277 | 3.7 | 4.2 | 2.5 |
| 10,000 to 25,000 inhabit'ts.... | 36 | 540,139 | 30 | 439,571 | 28 | 458,937 | 5.2 | 4.8 | 6.3 |
| 5,000 to 10,000 inhabit'ts..... | 30 | 200,606 | 25 | 162,373 | 26 | 184,029 | 1.9 | 1.8 | 2.5 |
| 2,500 to 5,000 inhabit'ts..... | 81 | 286,192 | 72 | 251,979 | 56 | 198,112 | 2.8 | 2.8 | 2.7 |
| Rural territory | ..... | 1,795,383 | ..... | 1,928,120 | ..... | 1,970,783 | 17.3 | 21.2 | 27.1 |
| Villages less than 2,500 inhabit'ts | 365 | 346,877 | 351 | 352,294 | 337 | 345,726 | 3.3 | 3.9 | 4.8 |
| Other rural territory | ..... | 1,448,506 | ..... | 1,575,826 | ..... | 1,625,057 | 13.9 | 17.3 | 22.4 |

## URBAN AND RURAL POPULATION, NEW YORK STATE, BY COUNTIES.

| County. | 1920. Urban. | 1920. Rural. | 1910. Urban. | 1910. Rural. | 1900. Urban. | 1900. Rural. | Per Cent. Urban in Total Population. 1920. | 1910. | 1900. | Rural Pop. Per Sq. Mile 1920. |
|---|---|---|---|---|---|---|---|---|---|---|
| New York | 8,589,844 | 1,795,383 | 7,185,494 | 1,928,120 | 5,298,111 | 1,970,783 | 82.7 | 78.8 | 72.9 | 37.7 |
| Albany | 156,815 | 29,291 | 144,773 | 28,893 | 137,152 | 28,419 | 84.3 | 83.4 | 82.8 | 55.6 |
| Allegany | 4,995 | 31,846 | 4,382 | 37,030 | 3,556 | 37,945 | 13.6 | 10.6 | 8.6 | 30.4 |
| Bronx | 732,016 | ..... | ..... | ..... | ..... | ..... | 100.0 | ..... | ..... | ..... |
| Broome | 88,190 | 25,420 | 52,218 | 26,591 | 42,758 | 26,391 | 77.6 | 66.3 | 61.8 | 36.1 |
| Cattaraugus | 31,615 | 39,708 | 20,535 | 45,384 | 13,713 | 51,930 | 44.3 | 31.2 | 20.9 | 29.6 |
| Cayuga | 36,192 | 29,029 | 34,603 | 32,438 | 30,345 | 35,889 | 55.5 | 51.7 | 45.8 | 41.3 |
| Chautauqua | 73,719 | 41,629 | 59,300 | 45,826 | 38,635 | 49,679 | 63.9 | 56.4 | 43.7 | 38.9 |
| Chemung | 49,581 | 16,291 | 39,908 | 14,754 | 35,672 | 18,391 | 75.3 | 73.0 | 66.0 | 40.0 |
| Chenango | 8,268 | 26,701 | 7,422 | 28,153 | 5,766 | 30,802 | 23.6 | 20.9 | 15.8 | 29.9 |
| Clinton | 13,532 | 30,366 | 11,138 | 37,092 | 8,434 | 38,996 | 30.8 | 23.1 | 17.8 | 28.9 |
| Columbia | 14,455 | 24,475 | 11,417 | 32,241 | 9,528 | 33,683 | 37.1 | 26.2 | 22.0 | 38.0 |
| Cortland | 13,294 | 16,331 | 14,199 | 15,050 | 9,014 | 18,562 | 44.9 | 48.5 | 32.7 | 32.5 |
| Delaware | 6,268 | 36,506 | 5,610 | 39,965 | 2,811 | 43,602 | 14.7 | 12.3 | 6.1 | 25.2 |
| Dutchess | 49,231 | 42,516 | 41,760 | 45,901 | 37,013 | 44,657 | 53.7 | 47.6 | 45.3 | 52.7 |
| Erie | 557,558 | 77,130 | 457,620 | 71,365 | 366,937 | 66,749 | 87.8 | 86.5 | 84.6 | 74.6 |
| Essex | 1,119 | 30,752 | 1,086 | 32,372 | 346 | 30,361 | 3.5 | 3.2 | 1.1 | 16.7 |
| Franklin | 14,119 | 29,422 | 13,431 | 32,286 | 8,183 | 34,670 | 32.4 | 29.4 | 19.1 | 17.5 |
| Fulton | 33,201 | 11,726 | 31,264 | 13,270 | 28,479 | 14,363 | 73.9 | 70.2 | 66.5 | 22.7 |
| Genesee | 17,744 | 20,232 | 15,384 | 22,231 | 12,324 | 22,237 | 46.7 | 40.9 | 35.7 | 40.8 |
| Greene | 4,728 | 21,068 | 5,296 | 24,918 | 8,219 | 23,259 | 18.3 | 17.5 | 26.1 | 32.8 |
| Herkimer | 43,998 | 20,964 | 32,194 | 24,162 | 23,738 | 27,311 | 67.7 | 57.1 | 46.5 | 14.4 |
| Jefferson | 35,605 | 46,645 | 30,293 | 50,089 | 24,591 | 52,157 | 43.3 | 37.7 | 32.0 | 36.6 |
| Kings | 2,018,356 | ..... | 1,634,351 | ..... | 1,166,582 | ..... | 100.0 | 100.0 | 100.0 | ..... |
| Lewis | 3,127 | 20,577 | 2,940 | 21,909 | ..... | 27,427 | 13.2 | 11.8 | ..... | 16.2 |
| Livingston | 10,528 | 26,302 | 6,720 | 31,317 | 3,633 | 33,426 | 28.6 | 17.7 | 9.8 | 41.7 |
| Madison | 14,533 | 24,909 | 11,564 | 27,725 | 9,394 | 31,151 | 36.8 | 29.4 | 23.2 | 38.5 |
| Monroe | 307,257 | 44,777 | 224,840 | 58,372 | 166,005 | 51,848 | 87.3 | 79.4 | 76.2 | 67.5 |
| Montgomery | 36,271 | 21,657 | 36,565 | 21,002 | 20,929 | 26,559 | 62.6 | 63.5 | 44.1 | 54.4 |
| Nassau | 42,993 | 33,127 | 13,467 | 70,463 | 6,194 | 49,254 | 34.1 | 16.0 | 11.2 | 303.4 |
| New York | 2,284,103 | ..... | 2,762,522 | ..... | 2,050,600 | ..... | 100.0 | 100.0 | 100.0 | ..... |
| Niagara | 91,363 | 27,342 | 60,370 | 31,666 | 45,107 | 29,854 | 77.0 | 65.6 | 60.2 | 52.4 |
| Oneida | 123,535 | 59,298 | 94,916 | 59,241 | 71,726 | 61,074 | 67.6 | 61.6 | 54.0 | 47.4 |
| Onondaga | 186,860 | 54,605 | 148,761 | 51,537 | 117,368 | 51,367 | 77.4 | 74.3 | 69.6 | 69.9 |
| Ontario | 22,004 | 30,648 | 19,663 | 32,623 | 16,584 | 33,021 | 41.8 | 37.6 | 33.4 | 47.2 |
| Orange | 69,881 | 49,963 | 62,425 | 53,576 | 54,823 | 49,036 | 58.3 | 53.8 | 52.8 | 59.9 |
| Orleans | 10,694 | 17,925 | 10,699 | 21,301 | 9,193 | 20,971 | 37.4 | 33.4 | 30.5 | 45.3 |
| Oswego | 36,669 | 34,376 | 33,848 | 37,816 | 30,405 | 40,476 | 51.6 | 47.2 | 42.9 | 35.6 |
| Otsego | 14,307 | 31,893 | 9,491 | 37,725 | 7,147 | 41,792 | 31.0 | 20.1 | 14.6 | 31.6 |
| Queens | 469,042 | ..... | 284,041 | ..... | 152,999 | ..... | 100.0 | 100.0 | 100.0 | ..... |
| Rensselaer | 87,732 | 25,397 | 93,056 | 29,220 | 88,887 | 32,810 | 77.6 | 76.1 | 73.0 | 38.3 |
| Richmond | 116,531 | ..... | 85,969 | ..... | 67,021 | ..... | 100.0 | 100.0 | 100.0 | ..... |
| Rockland | 16,642 | 28,906 | 12,951 | 33,922 | 10,210 | 28,088 | 36.5 | 27.6 | 26.7 | 158.0 |
| St. Lawrence | 31,415 | 56,706 | 29,749 | 59,256 | 22,922 | 66,161 | 35.6 | 33.4 | 25.7 | 21.0 |
| Saratoga | 30,663 | 29,366 | 26,710 | 35,207 | 24,173 | 36,916 | 51.1 | 43.1 | 39.6 | 35.7 |
| Schenectady | 93,081 | 16,282 | 75,783 | 12,452 | 31,682 | 15,170 | 85.1 | 85.9 | 67.6 | 79.0 |
| Schuyler | 2,785 | 10,313 | 2,817 | 11,187 | 2,943 | 12,868 | 21.3 | 20.1 | 18.6 | 30.7 |
| Seneca | 10,198 | 14,537 | 10,519 | 16,453 | 10,775 | 17,339 | 41.2 | 39.0 | 38.3 | 43.3 |
| Steuben | 35,640 | 44,987 | 31,231 | 52,131 | 27,973 | 54,849 | 44.2 | 37.5 | 33.8 | 32.2 |
| Suffolk | 18,825 | 91,421 | 17,947 | 78,191 | 2,926 | 74,656 | 17.1 | 18.7 | 3.8 | 99.4 |
| Tioga | 9,417 | 14,795 | 9,488 | 16,136 | 9,504 | 18,447 | 38.9 | 37.0 | 34.0 | 28.5 |
| Tompkins | 17,004 | 18,281 | 14,802 | 18,845 | 13,136 | 20,794 | 48.2 | 44.0 | 38.8 | 38.4 |
| Ulster | 33,817 | 41,162 | 32,951 | 58,818 | 31,111 | 57,311 | 45.1 | 35.9 | 35.2 | 36.2 |
| Warren | 16,638 | 15,035 | 15,243 | 16,980 | 12,613 | 17,330 | 52.5 | 47.3 | 42.1 | 17.2 |
| Washington | 17,914 | 26,974 | 17,788 | 29,990 | 15,071 | 30,553 | 39.9 | 37.2 | 33.0 | 32.2 |
| Wayne | 13,745 | 35,082 | 13,382 | 36,797 | 11,385 | 37,275 | 28.2 | 26.7 | 23.4 | 58.6 |
| Westchester | 297,171 | 47,265 | 229,287 | 53,768 | 129,414 | 54,843 | 86.3 | 81.0 | 70.2 | 105.5 |
| Wyoming | 8,339 | 21,975 | 7,594 | 24,286 | 5,811 | 24,602 | 27.5 | 23.8 | 19.1 | 36.6 |
| Yates | 4,517 | 12,124 | 4,597 | 14,045 | 4,650 | 15,668 | 27.1 | 24.7 | 22.9 | 35.3 |
| All other counties | ..... | 69,238 | 2,549 | 74,152 | ..... | 77,894 | ..... | 3.3 | ..... | 19.4 |

## CITIZENSHIP OF FOREIGN-BORN WHITES IN NEW YORK STATE, 1920.

| Country of Birth. | Total Foreign-Born White. | | Foreign-Born White 21 Years and Over. | | | |
|---|---|---|---|---|---|---|
| | Number. | Pct. Distribution. | Total. | Naturalized. | | Not Naturalized. |
| | | | | Number. | Pr. Cent. | |
| All countries | 2,786,112 | 100.0 | 2,528,497 | 1,153,813 | 45.6 | 1,374,684 |
| Italy | 545,173 | 19.6 | 474,994 | 139,330 | 29.3 | 335,664 |
| Russia | 529,240 | 19.0 | 458,239 | 182,139 | 39.7 | 276,100 |
| Germany | 295,650 | 10.6 | 290,287 | 203,307 | 70.0 | 86,980 |
| Ireland | 284,747 | 10.2 | 280,508 | 177,678 | 63.3 | 102,830 |
| Poland | 247,519 | 8.9 | 224,799 | 66,971 | 29.8 | 157,828 |
| Austria | 151,172 | 5.4 | 138,279 | 59,129 | 42.8 | 79,150 |
| England | 135,305 | 4.9 | 120,299 | 74,109 | 61.6 | 46,190 |
| Canada | 111,974 | 4.0 | 99,792 | 59,656 | 59.8 | 40,136 |
| Canada-French | 15,560 | 0.6 | 14,078 | 8,177 | 58.1 | 5,901 |
| Hungary | 78,374 | 2.8 | 71,413 | 28,701 | 40.2 | 42,712 |
| Sweden | 53,025 | 1.9 | 51,114 | 29,058 | 56.8 | 22,056 |
| Roumania | 40,116 | 1.4 | 36,230 | 18,226 | 50.3 | 18,004 |
| Czecho-Slovakia | 38,247 | 1.4 | 36,140 | 14,517 | 40.2 | 21,623 |
| Scotland | 37,654 | 1.4 | 34,157 | 19,997 | 58.5 | 14,160 |
| France | 32,179 | 1.2 | 29,345 | 15,370 | 52.4 | 13,975 |
| Norway | 27,573 | 1.0 | 25,445 | 11,917 | 46.8 | 13,528 |
| Greece | 26,117 | 0.9 | 22,907 | 3,993 | 17.4 | 18,914 |
| Switzerla d | 15,053 | 0.5 | 14,521 | 8,563 | 59.0 | 5,958 |
| Denmark | 14,222 | 0.5 | 13,328 | 7,764 | 58.3 | 5,564 |
| Netherlands | 13,772 | 0.5 | 12,196 | 7,120 | 58.4 | 5,076 |
| Spain | 12,548 | 0.5 | 10,774 | 1,144 | 10.6 | 9,630 |
| Finland | 12,504 | 0.4 | 11,896 | 2,901 | 24.4 | 8,995 |
| Lithuania | 12,121 | 0.4 | 11,407 | 2,105 | 18.5 | 9,302 |
| Jugo-Slavia | 8,547 | 0.3 | 7,604 | 2,014 | 26.5 | 5,590 |
| Syria | 8,127 | 0.3 | 6,986 | 1,767 | 25.3 | 5,219 |
| All other countries | 55,153 | 2.0 | 45,837 | 16,337 | 35.6 | 29,500 |

Last column comprises aliens, persons who had taken out their first citizenship papers only, and persons for whom the citizenship status was not ascertained.

## RACIAL POPULATION OF NEW YORK STATE, URBAN AND RURAL, 1920-1910.

| Class of Population. | Number. | | Per Cent. of Total. | | 1920. | | 1910. | | Males to 100 Females. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1920. | 1910. | Male. | Female. | Male. | Female. | 1920. | 1910. |
| THE STATE. | | | | | | | | | | |
| Total pop'l't'n | 10,385,227 | 9,113,614 | 100.0 | 100.0 | 5,187,350 | 5,197,877 | 4,584,597 | 4,529,017 | 99.8 | 101.2 |
| White | 0,172,027 | 8,966,845 | 97.9 | 98.4 | 5,081,010 | 5,091,017 | 4,511,327 | 4,455,518 | 99.8 | 101.3 |
| Negro | 198,483 | 134,191 | 1.9 | 1.5 | 95,418 | 103,065 | 64,034 | 70,157 | 92.6 | 91.3 |
| Indian | 5,503 | 6,046 | 0.1 | 0.1 | 2,816 | 2,687 | 3,075 | 2,971 | 104 8 | 103.5 |
| Chinese | 5,793 | 5,266 | 0.1 | 0.1 | 5,240 | 553 | 5,065 | 201 | 947 6 | 2,519 9 |
| Japanese | 2,68 | 1,247 | ..... | ..... | 2,190 | 496 | 1,080 | 167 | 441.5 | 646.7 |
| All other | 735 | 19 | ..... | ..... | 676 | 59 | 16 | 3 | ..... | ..... |
| Native white, total | 7,385,915 | 6,237,573 | 71.1 | 68.4 | 3,638,435 | 3,747,480 | 3,078,904 | 3,158,669 | 97.1 | 97.5 |
| Native parent'ge | 3,668,266 | 3,230,325 | 35.3 | 35.4 | 1,821,141 | 1,847,125 | 1,606,624 | 1,623,701 | 98.6 | 98.9 |
| For. parentage | 2,844,083 | 2,241,837 | 27.4 | 24.6 | 1,395,548 | 1,448,535 | 1,100,490 | 1,141,347 | 96.3 | 96.4 |
| Mixed parent'ge. | 873,566 | 765,411 | 8.4 | 8.4 | 421,746 | 451,820 | 371,790 | 393,621 | 93.3 | 94.5 |
| Foreign-born white | 2,786,112 | 2,729,272 | 26.8 | 29.9 | 1,442,575 | 1,343,537 | 1,432,423 | 1,296,849 | 107.4 | 110.5 |
| URBAN POPULAT'N. | | | | | | | | | | |
| Total | 8,589,844 | 7,185,494 | 100.0 | 100.0 | 4,267,046 | 4,322,798 | 3,583,128 | 3,602,366 | 98.7 | 99.5 |
| White | 8,395,070 | 7,061,043 | 97.7 | 98.3 | 4,170,304 | 4,224,766 | 3,522,213 | 3,538,830 | 98.7 | 99.5 |
| Negro | 185,212 | 117,486 | 2.2 | 1.6 | 88,546 | 96,666 | 54,643 | 62,843 | 91.7 | 87.0 |
| Ind., Chin., Jap., & all other | 9,562 | 6,965 | 0.1 | 0.1 | 8,196 | 1,366 | 6,272 | 693 | 600.0 | 905.1 |
| Native white, total | 5,809,720 | 4,578,556 | 67.6 | 63.7 | 2,835,785 | 2,973,935 | 2,234,535 | 2,344,021 | 95.4 | 95.3 |
| Native parent'ge | 2,487,080 | 1,955,409 | 29.0 | 27.2 | 1,220,225 | 1,266,855 | 959,301 | 996,108 | 96.3 | 96.3 |
| For. parentage | 2,594,861 | 2,005,224 | 30.2 | 27.9 | 1,267,214 | 1,327,647 | 977,949 | 1,027,275 | 95.4 | 95.2 |
| Mixed parent'ge. | 727,779 | 617,923 | 8.5 | 8.6 | 348,346 | 379,433 | 297,285 | 320,638 | 91.8 | 92 7 |
| Foreign-born white | 2,585,350 | 2,482,487 | 30.1 | 34.5 | 1,334,519 | 1,250,831 | 1,287,678 | 1,194,809 | 106.7 | 107.8 |
| RURAL POPULAT'N. | | | | | | | | | | |
| Total | 1,795,383 | 1,923,120 | 100.0 | 100.0 | 920,304 | 875,079 | 1,001,469 | 926,651 | 105.2 | 108.1 |
| White | 1,776,957 | 1,905,802 | 99.0 | 98.8 | 910,706 | 866,251 | 989,114 | 916,688 | 105.1 | 107.9 |
| Negro | 13,271 | 16,705 | 0.7 | 0.9 | 6,872 | 6,399 | 9,391 | 7,314 | 107.4 | 128.4 |
| Ind., Chin., Jap. & all other | 5,155 | 5,613 | 0.3 | 0.3 | 2,726 | 2,429 | 2,964 | 2,649 | 112.2 | 111 9 |
| Native white, total | 1,576,195 | 1,659,017 | 87.8 | 86.0 | 802,650 | 773,545 | 844,369 | 814,648 | 103.8 | 103.6 |
| Native parent'ge | 1,181,186 | 1,274,916 | 65.8 | 66.1 | 600,916 | 580,270 | 647 323 | 627,593 | 103.6 | 103.1 |
| For. parentage | 249,222 | 236,613 | 13.9 | 12.3 | 128,334 | 120,888 | 122,541 | 114,072 | 106.2 | 107.4 |
| Mixed parentage | 145,787 | 147,488 | 8.1 | 7.6 | 73,400 | 72,387 | 74,505 | 72,983 | 101.4 | 102.1 |
| For.-born white | 200,762 | 246,785 | 11.2 | 12.8 | 108,056 | 92,706 | 144,745 | 102,040 | 116.6 | 141.9 |

"All other" population (1920) included 496 Filipinos, 204 Hindus, 30 Koreans, and 2 Siamese.
Percentages less than one-tenth of 1 per cent. are not shown. Ratio not shown where number of females is less than 100

## POPULATION OF NEW YORK STATE INDIAN RESERVATIONS.

| Reservat'ns. | 1875. | 1905. | 1910. | 1915. | 1920 | Reservat'ns. | 1875. | 1905. | 1910. | 1915. | 1920. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Allegany | 865 | 866 | 1,627 | 832 | 934 | Shinnecock | 185 | ... | ... | 143 | 112 |
| Cattaraugus | 1,417 | 1,472 | 1,374 | 1,313 | 1,198 | Tonawanda | 559 | 503 | 497 | 513 | 400 |
| Oneida | 139 | 104 | .... | .... | .... | Tuscarora | 404 | 384 | 417 | 394 | 319 |
| Onondaga | 401 | 525 | 565 | 536 | 475 | | | | | | |
| Poospatuck | .... | .... | .... | 18 | ... | Total | 4,707 | 5,060 | 5,729 | 4,845 | 4,458 |
| St. Regis | 737 | 1,206 | 1,249 | 1,086 | 1,016 | | | | | | |

At Oil Springs Reservation, in Allegany and Cattaraugus Counties—4.
*Indians*—Each tribe has an attorney, appointed by the Governor of the State.

## FOREIGN-BORN WHITES IN N. Y. STATE, BY COUNTRY OF BIRTH, 1920.

(Country of Birth is shown at top of columns).

| COUNTIES | Total Foreign-Born White. | Aus-tria. | Can-ada—Except French. | Eng-land. | Ger-many. | Hun-gary. | Ire-land. | Italy. | Po-land. | Russia. |
|---|---|---|---|---|---|---|---|---|---|---|
| The State.. | 2.786,112 | 151,172 | 96,414 | 135.305 | 295,650 | 78,374 | 284,747 | 545,173 | 247,519 | 529,240 |
| Albany | 29,322 | 583 | 895 | 2.103 | 3,984 | 132 | 4,712 | 5,026 | 3.356 | 2,645 |
| Allegany | 1,465 | 27 | 204 | 189 | 321 | 12 | 312 | 131 | 21 | 27 |
| Bronx | 266,971 | 23,638 | 2,083 | 8,624 | 29,719 | 10,644 | 18,679 | 39,519 | 19,008 | 87,345 |
| Broome | 14,601 | 670 | 359 | 867 | 773 | 208 | 1,662 | 2.340 | 1,350 | 864 |
| Cattaraugus | 7,196 | 331 | 597 | 439 | 1,428 | 32 | 658 | 890 | 1,404 | 141 |
| Cayuga | 9,488 | 241 | 483 | 1.614 | 536 | 69 | 1,421 | 2,386 | 1,584 | 311 |
| Chatauqua | 23,038 | 198 | 879 | 1,818 | 1,710 | 27 | 480 | 4,813 | 2,323 | 187 |
| Chemung | 5,915 | 340 | 247 | 465 | 872 | 21 | 930 | 1,031 | 598 | 477 |
| Chenango | 1,734 | 12 | 109 | 220 | 208 | 8 | 293 | 478 | 26 | 48 |
| Clinton | 4,010 | 48 | 797 | 159 | 81 | 18 | 227 | 363 | 129 | 210 |
| Columbia | 4,307 | 475 | 122 | 326 | 804 | 228 | 485 | 439 | 383 | 579 |
| Cortland | 2,015 | 28 | 226 | 305 | 77 | 19 | 363 | 558 | 18 | 155 |
| Delaware | 2,084 | 51 | 108 | 212 | 336 | 61 | 164 | 450 | 109 | 131 |
| Dutchess | 12,465 | 555 | 318 | 937 | 1,424 | 560 | 2,223 | 2,762 | 913 | 885 |
| Erie | 147,309 | 3,957 | 17,687 | 7,918 | 26,308 | 4,905 | 8,048 | 18,893 | 38,641 | 7,150 |
| Essex | 2,571 | 71 | 298 | 147 | 63 | 169 | 271 | 366 | 302 | 147 |
| Franklin | 4,532 | 34 | 1,471 | 147 | 53 | 5 | 250 | 132 | 35 | 156 |
| Fulton | 6,364 | 286 | 273 | 995 | 790 | 63 | 521 | 1,285 | 216 | 482 |
| Genesee | 5,313 | 116 | 555 | 683 | 805 | 34 | 485 | 1,672 | 510 | 112 |
| Greene | 2,033 | 70 | 46 | 120 | 390 | 34 | 203 | 444 | 138 | 204 |
| Hamilton | 341 | ..... | 51 | 21 | 15 | 1 | 45 | 12 | 12 | 29 |
| Herkimer | 11,102 | 244 | 621 | 703 | 982 | 94 | 1,073 | 2,535 | 1,901 | 713 |
| Jefferson | 11,373 | 237 | 6,229 | 949 | 402 | 144 | 576 | 1,080 | 272 | 148 |
| Kings | 659,287 | 31,981 | 7,694 | 25,003 | 56,778 | 8,795 | 53,660 | 138,245 | 51,928 | 189,421 |
| Lewis | 1,980 | 54 | 474 | 74 | 198 | 194 | 136 | 39 | 246 | 77 |
| Livingston | 4,259 | 66 | 367 | 352 | 334 | 11 | 1,050 | 1,661 | 81 | 102 |
| Madison | 3,246 | 39 | 310 | 468 | 368 | 15 | 360 | 1,024 | 51 | 52 |
| Monroe | 79,491 | 1,634 | 10,592 | 7,159 | 12,736 | 427 | 4,947 | 20,752 | 4,882 | 7,015 |
| Montgomery | 12,357 | 257 | 231 | 958 | 1,727 | 14 | 925 | 2,488 | 3,279 | 474 |
| Nassau | 25,998 | 715 | 652 | 2,457 | 4,073 | 378 | 3,499 | 4,290 | 3,644 | 1,276 |
| New York | 922,080 | 65,603 | 11,390 | 29,817 | 70,836 | 40,644 | 116,749 | 184,546 | 64,514 | 193,775 |
| Niagara | 29,298 | 914 | 6,548 | 2,950 | 3,198 | 532 | 1,340 | 4,991 | 4,395 | 1,465 |
| Oneida | 37 185 | 554 | 1,820 | 2,871 | 3,179 | 119 | 2,286 | 11,333 | 7,073 | 1,377 |
| Onondaga | 41,517 | 1,349 | 3,985 | 3,799 | 5,874 | 285 | 4,887 | 8,563 | 5,481 | 3,070 |
| Ontario | 6,193 | 69 | 553 | 804 | 547 | 26 | 1,123 | 1,517 | 71 | 61 |
| Orange | 16,422 | 686 | 323 | 1,800 | 1,719 | 347 | 3,168 | 3,128 | 1,266 | 1,389 |
| Orleans | 4,444 | 5 | 530 | 1,350 | 564 | 6 | 270 | 955 | 504 | 57 |
| Oswego | 7,528 | 235 | 1,579 | 842 | 620 | 35 | 743 | 1,490 | 780 | 304 |
| Otsego | 2,366 | 58 | 117 | 318 | 243 | 33 | 346 | 379 | 68 | 142 |
| Putnam | 1,437 | 31 | 32 | 135 | 131 | 10 | 415 | 340 | 20 | 32 |
| Queens | 111,676 | 4,678 | 1,608 | 6,047 | 32,446 | 3,555 | 10,618 | 19,794 | 7,778 | 7,627 |
| Rensselaer | 16,002 | 390 | 577 | 1,596 | 2,001 | 70 | 4,280 | 1,746 | 1,164 | 942 |
| Richmond | 31,533 | 839 | 739 | 1,913 | 4,375 | 755 | 3,744 | 8,728 | 2,451 | 1,629 |
| Rockland | 6,961 | 382 | 162 | 529 | 1,341 | 200 | 698 | 1,320 | 320 | 581 |
| St Lawrence | 10,848 | 168 | 5,235 | 474 | 218 | 207 | 846 | 558 | 402 | 295 |
| Saratoga | 7,386 | 281 | 342 | 689 | 521 | 52 | 1,326 | 1,907 | 491 | 379 |
| Schenectady | 23,679 | 717 | 812 | 1,777 | 2,707 | 684 | 1,403 | 5,975 | 4,571 | 1,251 |
| Schoharie | 620 | 18 | 30 | 51 | 123 | 15 | 48 | 159 | 37 | 32 |
| Schuyler | 662 | 8 | 38 | 73 | 26 | 12 | 90 | 309 | 11 | 7 |
| Seneca | 2,932 | 92 | 167 | 330 | 364 | 29 | 635 | 762 | 96 | 119 |
| Steuben | 4,776 | 197 | 277 | 529 | 634 | 43 | 962 | 988 | 154 | 69 |
| Suffolk | 23,888 | 943 | 459 | 1,758 | 3,793 | 361 | 3,503 | 2,698 | 2,772 | 2,544 |
| Sullivan | 5,495 | 568 | 60 | 142 | 996 | 180 | 249 | 104 | 220 | 2,429 |
| Tioga | 1,212 | 94 | 78 | 138 | 150 | 27 | 149 | 107 | 147 | 37 |
| Tompkins | 2,660 | 110 | 254 | 373 | 129 | 287 | 402 | 316 | 53 | 82 |
| Ulster | 8,043 | 338 | 178 | 412 | 1,668 | 226 | 848 | 1,877 | 426 | 1,226 |
| Warren | 2,431 | 20 | 159 | 156 | 92 | 6 | 659 | 342 | 102 | 236 |
| Washington | 4,213 | 217 | 337 | 239 | 115 | 9 | 1,041 | 729 | 141 | 108 |
| Wayne | 6,634 | 52 | 446 | 587 | 620 | 5 | 285 | 1,034 | 57 | 83 |
| Westchester | 80,005 | 4,533 | 2,159 | 5,820 | 7,521 | 2,273 | 12,494 | 22,006 | 4,164 | 6,274 |
| Wyoming | 2,669 | 61 | 352 | 265 | 517 | 17 | 335 | 284 | 428 | 52 |
| Yates | 1,150 | 3 | 90 | 289 | 57 | 2 | 147 | 84 | 2 | 3 |

### STATE TOTALS FOR THOSE NOT IN TABLE ABOVE.

Armenia, 5,599; Belgium, 5,300; Canada, French, 15,560; Cuba, 3,136; Czecho-Slovakia, 38,247; Denmark, 14,222; Finland, 12,504; France, 32,179; Greece, 26,117; Jugo-Slavia, 8,547; Lithuania, 12,121; Netherlands, 13,772; Norway, 27,573; Roumania, 40,116; Scotland, 37,654; South America, 6,446; Spain, 12,548; Sweden, 53,025; Switzerland, 15,053; Syria, 8,127; Wales, 6,763; West Indies (exc. Cuba and Porto Rico), 6,396.

### PERCENTAGES, 1920 AND 1910.

The 1920 percentage of foreign-born whites in chief counties (1910 percentage in parentheses) is as follows: Manhattan, 40.4 (45.4); Bronx, 36.5 (0.1); Kings, 32.7 (35.0); Richmond, 27.1 (28.2); Niagara, 24.7 (26.0); Queens, 23.8 (27.9); Erie, 23.2 (27.0); Westchester, 23.2 (28.6); Monroe, 22.6 (25.1); Suffolk, 21.7 (22.9); Schenectady, 21.7 (23.8); Montgomery, 21.3 (23.8); Nassau, 20.6 (23.0); Oneida, 20.3 (21.9); Chautauqua, 20.0 (22.2); Onondaga, 17.2 (19.8); Herkimer, 17.1 (18.3); Sullivan, 16.6 (13.3); Albany, 15.8 (18.8); Orleans, 15.5 (18.1); Rockland, 15.3 (20.7); Cayuga, 14.5 (14.9); Fulton, 14.2 (14.7); Rensselaer, 14.1 (17.3); Genesee, 14.0 (17.2).

In almost every county of the State the percentage of foreign-born whites has decreased and in 40 of the 62 counties there was also a decrease in the number of foreign-born whites.

## POPULATION OF N. Y. STATE BY STATE OF BIRTH.

(U. S. Census figures as of January 1, 1920.)

Of the 10,385,227 inhabitants of New York, 6,634,469, or 63.9 per cent., were natives of that State; 925,383, or 8.9 per cent., were natives of other States or of the outlying possessions; and 2,825,375, or 27.2 per cent., were born in foreign countries.

The percentage of native Americans in the total population of the State increased from 69.8 in 1910, to 72.8 in 1920, and the percentage foreign born decreased from 30.2 to 27.2. The percentage of natives of New York increased during the same period from 62 to 63.9, and the percentage born in other States and the outlying possessions increased from 7.9 to 8.9.

| Nativity and State of Birth. | All Classes, 1920. | White, 1920. | Colored, 1920. | Nativity and State of Birth. | All Classes, 1920. | White, 1920. | Colored 1920. |
|---|---|---|---|---|---|---|---|
| Total population.. | 10,385,227 | 10,172,027 | 213,200 | Vermont..... | 23,216 | 22,929 | 287 |
| | | | | Maryland..... | 20,206 | 15,928 | 4,278 |
| Native..... | 7,559,852 | 7,385,915 | 173,937 | North Carolina.. | 17,803 | 4,475 | 13,328 |
| Born in: | | | | South Carolina.. | 17,050 | 3,943 | 13,107 |
| New York..... | 6,634,469 | 3,566,130 | 68,339 | Georgia..... | 14,583 | 5,931 | 8,652 |
| Pennsylvania... | 216,102 | 212,452 | 3,650 | Missouri..... | 12,265 | 11,870 | 395 |
| New Jersey.... | 115,901 | 112,339 | 3,562 | Indiana..... | 12,248 | 11,987 | 261 |
| Massachusetts.. | 70,911 | 69,597 | 1,314 | Maine..... | 12,231 | 12,128 | 103 |
| Connecticut.... | 48,162 | 47,028 | 1,134 | Wisconsin..... | 11,704 | 11,660 | 44 |
| Virginia..... | 44,986 | 13,548 | 31,438 | Rhode Island.... | 10,797 | 10,370 | 427 |
| Ohio..... | 43,692 | 42,725 | 967 | Other States.... | 114,171 | 98,270 | 15,901 |
| Illinois..... | 34,248 | 33,758 | 490 | Other native..... | 59,860 | 53,840 | 6,020 |
| Michigan..... | 25,247 | 25,007 | 240 | Foreign born.... | 2,825,375 | 2,786,112 | 39,263 |

"Colored" comprises persons of Negro descent, Indians, Chinese, Japanese and all other non-whites.

## BIRTHS, DEATHS, MARRIAGES IN N. Y. STATE SINCE 1900.

(For deaths by chief causes, see separate table.)

| Year. | Estimated Population. | Births. | Deaths. | Marriages. | Rates Per 1,000 Pop. | | | Deaths Under 5 Years. | Pct. of Deaths Und. 5 to Tot. Dths |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Births. | Deaths. | Persons Married. | | |
| 1900..... | 7,284,461 | 143,156 | 132,089 | 63,225 | 19.7 | 18.1 | 17.4 | 39,204 | 29.6 |
| 1901..... | 7,471,268 | 140,539 | 131,335 | 65,216 | 18.8 | 17.6 | 17.5 | 35,775 | 27.2 |
| 1902..... | 7,658,075 | 146,740 | 124,830 | 68,903 | 19.2 | 16.3 | 18.0 | 31,215 | 25.0 |
| 1903..... | 7,844,882 | 158,343 | 127,498 | 73,011 | 20.2 | 16.3 | 18.6 | 32,768 | 25.7 |
| 1904..... | 8,031,689 | 165,014 | 142,217 | 74,677 | 20.5 | 17.7 | 18.6 | 39,086 | 27.5 |
| 1905..... | 8,218,496 | 172,259 | 137,435 | 78,261 | 21.0 | 16.7 | 19.0 | 38,045 | 27.7 |
| 1906..... | 8,405,303 | 183,012 | 141,099 | 87,870 | 21.8 | 16.8 | 20.9 | 39,290 | 27.9 |
| 1907..... | 8,592,110 | 196,020 | 147,130 | 92,421 | 22.8 | 17.1 | 21.5 | 40,168 | 27.3 |
| 1908..... | 8,778,917 | 203,159 | 138,912 | 73,644 | 23.1 | 15.8 | 16.8 | 37,941 | 27.3 |
| 1909..... | 8,965,724 | 202,656 | 140,261 | 80,090 | 22.6 | 15.6 | 17.9 | 38,278 | 27.3 |
| 1910..... | 9,152,532 | 213,235 | 147,710 | 85,490 | 23.3 | 16.1 | 18.7 | 39,848 | 27.0 |
| 1911..... | 9,343,768 | 221,678 | 145,912 | 86,463 | 23.7 | 15.6 | 18.5 | 36,156 | 24.6 |
| 1912..... | 9,535,004 | 227,120 | 142,377 | 97,427 | 23.8 | 14.9 | 20.4 | 34,787 | 24.4 |
| 1913..... | 9,726,241 | 228,713 | 145,274 | 92,343 | 23.5 | 14.9 | 19.0 | 35,596 | 24.5 |
| 1914..... | 9,917,477 | 240,038 | 145,476 | 93,793 | 24.2 | 14.7 | 18.9 | 33,062 | 22.7 |
| 1915..... | 10,108,713 | 242,950 | 146,892 | 91,102 | 24.0 | 14.5 | 18.0 | 33,584 | 22.9 |
| 1916..... | 10,299,702 | 240,817 | 151,543 | 97,474 | 23.4 | 14.7 | 18.9 | 33,618 | 22.2 |
| 1917..... | 10,490,680 | 246,453 | 154,127 | 104,800 | 23.5 | 14.7 | 20.0 | 31,431 | 20.4 |
| 1918..... | 10,681,667 | 242,704 | 192,318 | 94,107 | 22.7 | 18.0 | 17.6 | 37,429 | 19.5 |
| 1919..... | 10,872,661 | 226,269 | 143,401 | 103,715 | 20.8 | 13.2 | 20.8 | 27,048 | 18.9 |
| 1920..... | 10,450,734 | 235,460 | 144,469 | 110,300 | 22.5 | 13.8 | 21.1 | 29,584 | 20.5 |
| 1921..... | 10,581,703 | 238,696 | 129,575 | 101,437 | 22.6 | 12.2 | 19.2 | 24,938 | 19.2 |

Still births, of which there were 10,147 in 1921, are not included in the above table, as to either births or deaths.

### DEATHS, CHIEF CAUSES, N. Y. STATE, SINCE 1900.

| Year. | Pulm. Tuberc. | | Pneumonia. | | Heart and Vein Troub. | | Bright's Disease. | | Cancer. | | Diphtheria. | | Suicide. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Deaths | Rate. | Deaths | Rate. | Deaths | Rate. | Deaths | Rate. | Deaths | Rate. | D'ths | Rate | D'ths | Rate |
| 1900..... | 13,590 | 186.6 | 16,596 | 227.8 | 15,857 | 217.7 | 8,628 | 118.4 | 4,871 | 66.9 | 3,306 | 45.4 | 858 | 11.8 |
| 1901..... | 13,766 | 184.3 | 14,660 | 196.2 | 16,734 | 224.0 | 9,005 | 120.5 | 5,033 | 67.4 | 3,026 | 40.5 | 806 | 10.8 |
| 1902..... | 12,582 | 164.3 | 14,085 | 183.9 | 17,581 | 229.6 | 9,035 | 118.0 | 4,990 | 65.2 | 2,859 | 37.3 | 894 | 11.7 |
| 1903..... | 13,194 | 168.2 | 14,213 | 181.2 | 18,267 | 232.8 | 9,721 | 123.9 | 5,456 | 69.5 | 3,035 | 38.7 | 938 | 12.0 |
| 1904..... | 14,159 | 176.3 | 17,402 | 216.7 | 20,804 | 259.0 | 10,674 | 132.9 | 5,697 | 70.9 | 3,041 | 37.9 | 1,031 | 12.8 |
| 1905..... | 14,061 | 171.1 | 14,581 | 177.4 | 20,774 | 252.8 | 10,413 | 126.7 | 6,056 | 73.7 | 2,296 | 27.9 | 1,219 | 14.8 |
| 1906..... | 14,027 | 166.9 | 15,519 | 184.6 | 21,394 | 254.5 | 10,926 | 130.0 | 6,168 | 73.4 | 2,691 | 32.0 | 1,188 | 14.1 |
| 1907..... | 14,431 | 168.0 | 18,104 | 210.7 | 22,397 | 260.7 | 10,575 | 123.1 | 6,420 | 74.7 | 2,603 | 30.3 | 1,207 | 14.9 |
| 1908..... | 14,347 | 163.4 | 14,852 | 169.2 | 21,940 | 249.9 | 9,883 | 112.6 | 6,554 | 74.7 | 2,473 | 28.2 | 1,511 | 17.2 |
| 1909..... | 13,996 | 156.1 | 16,597 | 185.1 | 22,402 | 249.9 | 10,720 | 119.6 | 7,060 | 78.7 | 2,313 | 25.8 | 1,494 | 16.7 |
| 1910..... | 14,287 | 156.1 | 17,115 | 187.0 | 23,299 | 254.6 | 11,217 | 122.6 | 7,522 | 82.2 | 2,433 | 26.6 | 1,479 | 16.2 |
| 1911..... | 14,491 | 155.1 | 16,460 | 176.2 | 25,290 | 270.7 | 11,003 | 117.8 | 7,970 | 85.3 | 1,963 | 21.0 | 1,436 | 15.4 |
| 1912..... | 14,007 | 146.9 | 16,537 | 173.4 | 26,052 | 273.3 | 11,897 | 124.8 | 8,250 | 86.5 | 1,624 | 17.0 | 1,340 | 14.1 |
| 1913..... | 14,096 | 144 9 | 16,530 | 179.9 | 27,261 | 280.3 | 11,739 | 120.7 | 8,536 | 87.8 | 1,853 | 19.1 | 1,476 | 15.2 |
| 1914..... | 14,586 | 147.1 | 15,510 | 156.4 | 31,354 | 316.1 | 11,308 | 114.0 | 8,906 | 89.8 | 2,015 | 20.3 | 1,516 | 15.3 |
| 1915..... | 14,512 | 143.6 | 17,209 | 170.2 | 31 453 | 311.1 | 11,582 | 114.6 | 9,301 | 92.0 | 1,770 | 17.5 | 1,680 | 16.6 |
| 1916..... | 14,069 | 136.6 | 17,314 | 168.1 | 32,774 | 318.2 | 12,801 | 124.3 | 9,419 | 91.4 | 1,524 | 14.8 | 1,492 | 14.5 |
| 1917..... | 14,795 | 141.0 | 18,673 | 178.0 | 34,247 | 326.5 | 13,136 | 125.2 | 9,736 | 92.8 | 1,755 | 16.7 | 1,441 | 13.7 |
| 1918..... | 15,052 | 140.9 | 34,513 | 323.1 | 35,091 | 328.5 | 11,315 | 105.9 | 9,876 | 92.5 | 1,776 | 16.6 | 1,302 | 13.2 |
| 1919..... | 12,814 | 117.9 | 17,016 | 157.2 | 31,967 | 294.0 | 10,540 | 96.9 | 10,166 | 93.5 | 2,056 | 18.9 | 1,294 | 11.9 |
| 1920..... | 11,034 | 105.6 | 16,479 | 157.7 | 34,403 | 329.2 | 10,475 | 100.2 | 10,533 | 100.8 | 1,904 | 18.2 | 1,185 | 11.3 |
| 1921..... | 9,303 | 87.9 | 10,605 | 100.2 | 34,701 | 328.0 | 9,442 | 89.2 | 11,608 | 104.6 | 1,701 | 16.1 | 1,423 | 13.4 |

NOTE—The death rate is per 100,000 population.

## POPULATION, WEALTH, DEBT, ETC., NEW YORK STATE.

| Year. (Fiscal.) | Population. | Asses. Val. Real and Per. Property. | Direct Tax Rate (Mills.) | Direct Taxes Levied. | Funded Debt (Gross.) | Ordinary Receipts. | Ordinary Expenditures. |
|---|---|---|---|---|---|---|---|
| 1881..... | 5,174,369 | $2,783,682,567 | 2.25 | $6,632,829 | $9,109,054 | $12,468,522 | $10,682,386 |
| 1882..... | 5,265,867 | 2,872,257,325 | 2.45 | 6,820,022 | 9,109,054 | 9,503,255 | 10,198,222 |
| 1883..... | 5,357,365 | 3,014,591,372 | 3.25 | 9,334,836 | 8,473,854 | 10,064,675 | 10,254,333 |
| 1884..... | 5,448,863 | 3,094,731,457 | 2.675 | 7,762,572 | 8,461,854 | 11,974,624 | 11,168,954 |
| 1885..... | 5,540,362 | 3,224,682,343 | 2.96 | 9,160,405 | 9,461,854 | 11,416,472 | 12,196,939 |
| 1886..... | 5,631,860 | 3,361,128,177 | 2.95 | 9,512,812 | 9,327,204 | 12,912,109 | 11,509,585 |
| 1887..... | 5,723,358 | 3,469,199,945 | 2.70 | 9,075,046 | 7,567,004 | 13,261,660 | 11,988,408 |
| 1888..... | 5,814,856 | 3,567,429,757 | 2.62 | 9,089,303 | 6,965,354 | 13,585,113 | 13,533,366 |
| 1889..... | 5,906,354 | 3,683,653,062 | 3.52 | 12,557,352 | 6,774,854 | 12,687,410 | 13,327,862 |
| 1890..... | 5,997,853 | 3,779,393,746 | 2.34 | 8,619,748 | 4,964,304 | 14,460,586 | 13,152,610 |
| 1891..... | 6,255,598 | 3,931,741,499 | 1.375 | 5,196,666 | 2,927,654 | 14,836,028 | 13,837,616 |
| 1892..... | 6,513,343 | 4,038,058,949 | 1.98 | 7,784,848 | 763,160 | 10,364,427 | 14,018,830 |
| 1893..... | 6,607,787 | 4,199,882,058 | 2.58 | 10,418,192 | 660 | 13,842,181 | 15,115,836 |
| 1894..... | 6,702,231 | 4,292,082,167 | 2.18 | 9,155,742 | 660 | 15,131,290 | 16,192,040 |
| 1895..... | 6,796,675 | 4,368,712,903 | 3.24 | 13,906,346 | 660 | 17,211,858 | 17,550,012 |
| 1896..... | 6,891,119 | 4,506,985,694 | 2.69 | 11,751,837 | 2,320,660 | 24,786,181 | 21,422,352 |
| 1897..... | 6,985,563 | 4,898,611,019 | 2.67 | 12,033,651 | 5,765,660 | 22,387,587 | 21,384,294 |
| 1898..... | 7,080,007 | 5,076,396,824 | 2.08 | 10,189,110 | 9,340,660 | 23,183,541 | 24,839,031 |
| 1899..... | 7,174,451 | 5,461,302,752 | 2.49 | 12,640,228 | 10,185,660 | 22,717,694 | 22,061,592 |
| 1900..... | 7,268,894 | 5,686,921,678 | 1.96 | 10,704,153 | 10,130,660 | 28,072,441 | 25,152,296 |
| 1901..... | 7,428,577 | 5,754,400,382 | 1.20 | 6,824,306 | 10,075,660 | 26,455,869 | 23,395,030 |
| 1902..... | 7,588,260 | 5,854,500,121 | .13 | 748,072 | 9,920,660 | 23,149,609 | 23,260,249 |
| 1903..... | 7,747,943 | 7,446,476,127 | .13 | 761,085 | 9,665,660 | 23,516,080 | 23,240,381 |
| 1904..... | 7,907,626 | 7,738,165,640 | .13 | 968,041 | 9,410,660 | 24,981,651 | 25,938,464 |
| 1905..... | 8,067,308 | 8,015,090,722 | .154 | 1,191,677 | 11,155,660 | 25,286,916 | 27,359,485 |
| 1906..... | 8,276,570 | 8,565,379,394 | None.. | ..... | 10,630,660 | 34,059,518 | 27,424,363 |
| 1907..... | 8,485,831 | 9,173,566,245 | None.. | ..... | 17,290,660 | 35,032,053 | 32,619,734 |
| 1908..... | 8,695,092 | 9,666,118,681 | None.. | ..... | 26,230,660 | 33,996,769 | 34,318,052 |
| 1909..... | 8,904,353 | 9,821,620,552 | None.. | ..... | 41,230.660 | 31,567,185 | 39,237,426 |
| 1910..... | 9,113,614 | 10,121,277,458 | None.. | ..... | 57,230,660 | 37,905,876 | 38,332,015 |
| 1911..... | 9,228,440 | 11,022,985,914 | .60 | 6,072,766 | 79,730.660 | 36,138,376 | 38,119,377 |
| 1912..... | 9,343,266 | 11,128,498,055 | 1.00 | 11,022,985 | 109,702.660 | 50,492,863 | 44,858,059 |
| 1913..... | 9,458,092 | 11,385,137,127 | .5805 | 6,460,093 | 135,355,660 | 55,521,777 | 50,011,422 |
| 1914..... | 9,572,918 | 12,070,420,887 | None.. | ..... | 159,260,660 | 50,907,945 | 53,828,583 |
| 1915..... | 9,687,744 | 11,790,628,803 | 1.70 | 20,519,715 | 186,400,660 | 42,141,009 | 57,342,600 |
| 1916..... | 9,827,024 | 12,091,437,643 | None.. | ..... | 211,404,660 | 61,437,404 | 52,725,240 |
| 1917..... | 9,966,304 | 12,520,819,811 | 1.08 | 13,058,752 | 236,309,660 | 61,593,111 | 60,881,297 |
| 1918..... | 10,105,584 | 12,758,021,954 | 1.06 | 13,272,069 | 236,214,660 | 76,034,631 | 73,392,123 |
| 1919..... | 10,244,864 | 12,989,433,733 | 1.06 | 13,523,503 | 236,119 660 | 80,458,634 | 78,941,313 |
| 1920..... | 10,384,829 | 14,850,989,607 | 2.695 | 35,006,524 | 236,024.000 | 115,678,480 | 94,100,072 |
| 1921..... | 10,524,246 | 15,390,398,973 | 1.5043 | 22,340,344 | 267,729,000 | 147,427,529 | 135,870,056 |
| 1922..... | 10,663,663 | 15,390,398,973 | 1.2915 | 19,876,700 | 266,998.000 | 128,106,772 | 129,608,264 |

Population figures in above table are estimates of the State Government except as to census years.

### APPROPRIATIONS BY NEW YORK STATE LEGISLATURES.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1908..... | $35,934,116 | 1912..... | $52,366,582 | 1916..... | $59,103,450 | 1920..... | $145,219,907 |
| 1909..... | 36,591,570 | 1913..... | 59,465,691 | 1917..... | 79,742,834 | 1921..... | 145,798,092 |
| 1910..... | 42,975,451 | 1914..... | 47,899,528 | 1918..... | 81,525,271 | 1922..... | 139,353,449 |
| 1911..... | 43,074,192 | 1915..... | 63,997,272 | 1919..... | 95,840,984 | | |

Appropriations include advances for Federal Rural Post Roads: (1920) $300,000; (1921) $7,964,748; (1922) $6,204,042.

### NEW YORK STATE REVENUES FROM EXCISE AND INHERITANCE TAXES.

| Year. | From Excise. | From Inheritance. | Year. | From Excise. | From Inheritance. | Year. | From Excise. | From Inheritance. |
|---|---|---|---|---|---|---|---|---|
| 1897..... | $12,268,341 | $1,829,942 | 1906..... | $18,719,324 | $4,713,311 | 1915..... | $17,766,783 | $8,263,894 |
| 1898..... | 12,640,708 | 1,997,210 | 1907..... | 19,057,236 | 5,435,395 | 1916..... | 21,068,145 | 5,984,018 |
| 1899..... | 12,643,594 | 2,194,612 | 1908..... | 8,044,537 | 6,605,891 | 1917..... | 20,747,509 | 15,077,631 |
| 1900..... | 12,622,958 | 4,334,803 | 1909..... | 18,005,494 | 6,962,615 | 1918..... | 22,616,443 | 11,433,400 |
| 1901..... | 12,467,674 | 4,084,607 | 1910..... | 18,102,822 | 8,213,557 | 1919..... | 5,487,449 | 13,339,583 |
| 1902..... | 12,511,369 | 3,303,555 | 1911..... | 18,319,880 | 8,157,344 | 1920..... | 2,039,613 | 21,259,641 |
| 1903..... | 17,741,257 | 4,665,736 | 1912..... | 18,210,084 | 12,153,189 | 1921..... | 233,718 | 18,135,507 |
| 1904..... | 17,879,636 | 5,428,052 | 1913..... | 18,142,558 | 12,724,237 | 1922..... | 21,452 | 15,385,042 |
| 1905..... | 18,197,906 | 4,627,051 | 1914..... | 18,109,271 | 11,162,478 | | | |

1908 figures cover only five months, because the excise year was changed so as to begin Oct. 1 instead of May 1.
Figures for 1917 and later cover years ended June 30.

### FINANCIAL SUMMARY OF NEW YORK STATE GOVERNMENT.

| Revenue Receipts. | Fiscal Year Ended— June 30, 1922 | June 30, 1921 | General Expenditures. | Fiscal Year Ended— June 30, 1922 | June 30, 1921 |
|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* |
| Gen. Property Taxes.. | 23,892,350.08 | 36,795,248.50 | Admin., Maint., Oper. | 52,850,031.75 | 58,160,186.50 |
| Special Taxes..... | 92,374,498.29 | 102,928,836.51 | Fix'd Chgs & Contribu | 61,293,279.95 | 67,397,715.22 |
| Other rev. & receipts.. | 9,114,494.55 | 7,588,697.94 | Capital Outlays..... | 12,525,860.75 | 10,050,273.18 |
| Total rev. receipts.. | 125,381,342.92 | 147,312,776,95 | Tot. General Expen. | 126,669,172.45 | 135,608,174.90 |

This statement shows the operations under the General Budget of the State and does not include transactions under sinking funds, special funds, bond moneys and trust funds.
Personal income tax collections (1921) $36,435,572; (1922) $29,669,411.

## NEW YORK STATE BANKING STATISTICS.

(The data are as of June 30, 1922.)

### CONDITION OF THE 238 STATE BANKING INSTITUTIONS.

| RESOURCES. | | LIABILITIES. | |
|---|---|---|---|
| Specie | $6,496,244 | Capital | $58,098,000 |
| Other authorized U. S. currency | 28,761,378 | Surplus (includ. all undivided profits) | 83,641,315 |
| Cash items | 173,820,315 | Preferred deposits | |
| Due from Fed. Res. Bk. less offsets | 95,061,224 | Due N. Y. State sav. banks | 32,019,641 |
| Due from res. depositaries, less offsets | 32,215,676 | Due N. Y. State sav. & loan assns. | |
| Due from other finan. instit. | 24,411,809 | credit unions & land banks | 1,105,245 |
| Stock and bond investments | 340,593,763 | Dep. by the State of N. Y. | 11,396,017 |
| Loans & dis. secured by real est. col. | 12,752,994 | Dep. by Supt. of Bks. of St. of N. Y. | 721,695 |
| Loans & dis. secured by other collat. | 251,358,767 | Other dep. sec. by pledge of assets | 4,824,965 |
| Lns, dis. & bills purch. not sec. by col. | 389,818,654 | Deposits otherwise preferred | 317,663 |
| Own acceptances purchased | 6,651,030 | Due depositors, not preferred | 1,172,435,373 |
| Overdrafts | 271,073 | Due trust companies, banks & bankers | 35,286,479 |
| Bonds and mortgages owned | 24,931,487 | Bills payable | 6,443,523 |
| Real estate | 24,364,359 | Rediscounts | 1,952,189 |
| Customers' liability on acceptances | 23,983,994 | Accept, drafts payable in future or authorized by letters credit | 26,019,097 |
| Other assets | 9,257,737 | Other liabilities | 11,087,016 |
| Add for cents | 1,055 | Add for cents | 441 |
| Total | 1,444,748,059 | Total | 1,444,748,059 |

Above table does not include National Banks in the State, but only banks now operating under a State charter. For condition of National Banks see elsewhere in the Almanac.

State banking institutions in the Borough of Manhattan (included in above table) showed the following data, as of June 30, 1922—Capital $36,500,000; total resources, $1,022,077,273; surplus, including undivided profits, $58,248,958; deposits, $889,635,555.

### CONDITION OF THE 98 TRUST COMPANIES IN THE STATE.

| RESOURCES. | | LIABILITIES. | |
|---|---|---|---|
| Specie | $6,916,560 | Capital | $159,959,500 |
| Other authorized U. S. currency | 23,115,914 | Surp. (includ. all undivid. profits) | 217,438,078 |
| Cash items | 250,291,306 | Pref. dep. due N. Y. St. sav. bks. | 53,172,513 |
| Due from Fed.Res.Bk.N.Y., less offsets | 269,600,064 | Due N. Y. St. sav. & loan assns, cr. unions & land banks | 1,267,617 |
| Due from approv. res. dep., less offsets | 65,662,598 | Due as exec., adminis., guard, receiver, trust com. or dep | 224,059,128 |
| Due from oth. bks., trust cos. & bkrs. | 75,029,329 | Deposits by the St. of N.Y. | 29,012,748 |
| Stock and bond investments | 857,445,354 | Dep. by Supt. Bks. of St. of N.Y. | 1,140,478 |
| Loans & dis. sec. by real est. collat. | 18,182,268 | Oth. dep. sec. by pledge of assets | 29,026,799 |
| Loans & dis. sec. by other collateral | 1,025,357,244 | Deposits otherwise preferred | 1,069,117 |
| Loans, dis. & bills pur. not sec. by col. | 588 366,899 | Due depositors, not preferred | 2,414,866,805 |
| Own acceptances purchased | 6,951,912 | Due trust companies, banks and bankers | 221,883,101 |
| Overdrafts | 439,935 | Bills payable | 5,922,000 |
| Bonds and mortgages owned | 93,725,867 | Rediscounts | 6,582,437 |
| Real estate | 62,010,628 | Accept. of drafts, payable in future, etc. | 90,299,866 |
| Customers' liability on acceptances (per contra, see liabilities) | 80,856,611 | Other liabilities | 59,565,662 |
| Other assets | 91,313,360 | Add for cents | 47 |
| Add for cents | 47 | | |
| Total | 3,515,265,896 | Total | 3,515,265,896 |

Data as to trust companies in the Borough of Manhattan (included in above table)—Capital, $117,500,000; resources, $2,?71,325,119; surplus, including undivided profits, $170,725,740; deposits, $2,272,408,651.

### CONDITION OF THE 144 SAVINGS BANKS IN NEW YORK STATE.

| COUNTY AND NUMBER OF INSTITUTIONS. | Due Depositors. | No. Open Accounts. | COUNTY AND NUMBER OF INSTITUTIONS. | Due Depositors. | No. Open Accounts. |
|---|---|---|---|---|---|
| Albany, 9 | $114,100,842 | 150,672 | Oneida, 3 | $25,255,663 | 54,202 |
| Bronx, 3 | 60,306,442 | 110,304 | Onondaga, 3 | 51,460,871 | 83,070 |
| Broome, 2 | 12,595,375 | 38,949 | Ontario, 1 | 1,631,932 | 6,060 |
| Cayuga, 2 | 13,150,676 | 25,007 | Orange, 6 | 26,543,075 | 42,715 |
| Chemung, 1 | 1,840,577 | 5,587 | Oswego, 3 | 12,189,754 | 21,572 |
| Columbia, 1 | 6,806,153 | 10,877 | Putnam, 1 | 2,124,280 | 3,587 |
| Cortland, 1 | 5,277,921 | 12,029 | Queens, 7 | 47,026,127 | 81,114 |
| Dutchess, 7 | 25,125,472 | 47,970 | Rensselaer, 1 | 13,643,295 | 18,146 |
| Erie, 4 | 128,866,795 | 174,479 | Richmond, 2 | 14,461,194 | 31,900 |
| Greene, 1 | 5,000,110 | 8,192 | St. Lawrence, 1 | 1,382,566 | 3,965 |
| Jefferson, 2 | 13,677,657 | 38,387 | Schenectady, 1 | 14,453,122 | 47,191 |
| Kings, 23 | 562,223,719 | 814,998 | Seneca, 1 | 1,270,641 | 3,392 |
| Madison, 1 | 4,556 559 | 9,127 | Suffolk, 4 | 21,113,046 | 30,758 |
| Monroe, 4 | 93,401,080 | 187,997 | Tompkins, 1 | 5,075,214 | 11,836 |
| Montgomery, 1 | 9.490,592 | 16.130 | Ulster, 6 | 26,380,810 | 39.093 |
| Nassau, 1 | 3,624,470 | 5,819 | Westchester, 11 | 69,635,897 | 113,341 |
| New York, 27 | 1,385,762,342 | 1,642,309 | | | |
| Niagara, 2 | 11,898,751 | 25,137 | Total, 144 | 2,791,353,022 | 3,915,912 |

Data as to Savings Banks in the City of New York (included as to deposits, in above table) (as of June 30, 1922, or covering year ending then.

| | Resources. | Surplus at Par. | No. Ac'ts Opened in Year. | No. Ac'ts Closed in Year. | Total Deposited in Year. | Total Drawn Out in Year. | Dividends. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | | | *Dollars.* | *Dollars.* | *Dollars.* |
| Bronx | 64,336,688 | 4,346,465 | 28,237 | 21,319 | 30,513,956 | 23,749,209 | 1,955,659 |
| Brooklyn | 627,076,110 | 67,423,020 | 169,763 | 130,783 | 216,716,322 | 198,790,727 | 19,935,279 |
| Manhattan | 1,533,721,742 | 178,202,261 | 266,301 | 265,972 | 413,035,705 | 387,573,503 | 49,809,666 |
| Queens | 51,790,356 | 4,604,222 | 21,609 | 10,797 | 23,334,726 | 18,984,142 | 1,596,890 |
| Richmond | 15,708,327 | 1,413,322 | 4,832 | 3,691 | 6,585,280 | 6,818,843 | 513,031 |
| Total N. Y. City | 2,292,633,223 | 255,989,290 | 490,742 | 432,562 | 690,185,989 | 635,916,424 | 73,810,525 |
| Total, whole State | 3.091.661.543 | 346.379.442 | 664,414 | 603,673 | 893,781,897 | 852,112,350 | 101,464,151 |

## CHIEF FRATERNAL ORDERS DOING BUSINESS IN NEW YORK STATE.

| ORDERS. | Assets Jan. 1, 1922. | Liabilities Jan. 1, 1922. | Income in 1921. | Disbursements in 1921. | Insurance in Force Jan 1, 1922. |
|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Aid Association for Lutherans, Wis. | 1,723,277 | 38,881 | 647,999 | 310,258 | 19,752,046 |
| American Benefit Asso. of the State of N. Y. | 21,334 | 1,026 | 8,030 | 3,328 | 237,250 |
| American Insurance Union, Ohio | 1,278,787 | 226,727 | 2,370,792 | 2,143,421 | 108,523,147 |
| American Life Society of N. Y. | 56,528 | 22,189 | 101,302 | 91,171 | 2,585,400 |
| Ancient Order of United Workmen, Conn. | 960,110 | 22,979 | 254,320 | 189,389 | 5,067,511 |
| Artisans' Order of Mutual Protection, Pa. | 1,974,346 | 31,855 | 561,546 | 317,654 | 22,984,000 |
| B'nai B'rith, Ind. Order (Dist. No. 1), N. Y. | 469,571 | 2,873 | 114,027 | 116,418 | 313,150 |
| Benefit Asso. of Railway Employees, Ill. | 657,435 | 57,918 | 1,054,362 | 860,735 | 2,883,000 |
| Benevolent Society of the United States for the Propagation of Cremation, N. Y. | 30,159 | 358 | 22,054 | 19,029 | 593,520 |
| Ben Hur, Supreme Tribe, Ind. | 3,291,865 | 119,992 | 1,869,288 | 1,270,958 | 72,740,730 |
| Brith Abra. of the U. S. of A., Ind. Or., N.Y. | 1,843,208 | 224,760 | 1,322,797 | 985,598 | 73,284,500 |
| Brith Abraham, Or. of, U. S. G. L., N. Y. | 165,376 | 85,687 | 350,526 | 336,659 | 8,642,500 |
| Brotherhood of American Yeomen, Iowa | 5,850,980 | 2,499,493 | 4,868,525 | 3,911,339 | 343,756,500 |
| Catholic Benev. Legion, Sup. Council, N. Y. | 4,043,156 | 3,947,824 | 371,549 | 258,481 | 10,791,500 |
| Catholic K. of A., Supreme Council, Mo. | 1,096,778 | 59,494 | 522,852 | 495,472 | 19,118,538 |
| Catholic Women's Benevolent Legion, N. Y. | 835,489 | 36,988 | 349,527 | 194,559 | 7,563,625 |
| Columbian Circle, Ill. | 583,877 | 183,417 | 820,929 | 892,298 | 25,930,112 |
| Der Bayerische Nat'l Verband von N.A., N.Y | 37,457 | 3,225 | 32,905 | 24,530 | 951,250 |
| Foresters, Independent Order, Canada | 43,753,327 | 43,078,283 | 5,435,909 | 6,500,609 | 169,758,075 |
| Fraternal Home Insurance Society, Pa. | 786,366 | 642,780 | 503,671 | 400,142 | 12,379,828 |
| Fraternal Order of Eagles, Grand Aerie, Mo. | 49,582 | 9,778 | 51,714 | 28,118 | 2,085,500 |
| French Canadian Artisans' Society, Canada | 5,562,411 | 4,804,054 | 1,338,816 | 683,883 | 38,900,083 |
| German Baptists Life Association N. Y. | 338,830 | 303,982 | 67,628 | 31,672 | 2,268,599 |
| Golden Cross, United Order of, Tenn. | 156,097 | 56,937 | 436,703 | 417,960 | 13,619,375 |
| Golden Seal Assurance Society, N. Y. | 897,840 | 813,098 | 325,976 | 217,346 | 12,396,140 |
| Grand Carniolian Slov'n Cath. Union, Ill. | 897,556 | 29,506 | 296,433 | 164 838 | 10,785,750 |
| Jewish Nat'l Workers' Alliance of Am., N. Y. | 152,089 | 14,522 | 81,869 | 72,481 | 1,936,700 |
| Junior Order Benefit Association, N. Y. | 150,126 | 1,000 | 63,342 | 33,888 | 4,139,500 |
| Knights of Columbus, Conn. | 14,003,313 | 229,272 | 4,469,561 | 2,056,585 | 236,613,862 |
| Knights of Pythias, Insurance Dept., Ind. | 13,895,525 | 12,436,652 | 3,522,761 | 2,366,907 | 112,148,943 |
| Ladies' Catholic Benevolent Asso., Pa. | 6,643,782 | 157,300 | 2,595,635 | 1,635,958 | 94,362,902 |
| Ladies of the Maccabees, Mich. | 2,070,962 | 97,666 | 762,423 | 514,413 | 33,760,750 |
| Lithuanian Alliance of America, Pa. | 357,255 | 13,077 | 179,748 | 122,830 | 4,432,330 |
| Loyal Association, Supreme Council, N. J. | 205,668 | 8,688 | 147,767 | 115,149 | 4,058,046 |
| Loyal Serb Society, Srbadiya, N. Y. | 15,998 | 5,585 | 20,042 | 7 047 | 3,256,400 |
| L'Union St. Jean Baptiste d'Amerique, R. I. | 1,852,119 | 22,996 | 534,121 | 283,793 | 18,837,875 |
| Maccabees, Mich. | 20,677,915 | 5,721,234 | 8,657,512 | 7,741,031 | 327,229,182 |
| Maccabees, Great Camp for New York, N.Y. | 132,268 | 5,662 | 187,616 | 167,481 | 1 205,335 |
| Masonic Mutual Life Asso. of the D. of C. | 4,532,698 | 4,296,533 | 2,807,473 | 1,604,836 | 101,222,295 |
| Modern Woodmen of America, Ill. | 28,234,936 | 2,325,515 | 25,772,244 | 19,170,543 | 1,612,347,500 |
| Mutual Beneficial Asso. of Pa. of R. R. Emp. | 253,975 | 4,213 | 105,262 | 45,863 | 4,011,500 |
| National Fraternal Society of the Deaf, Ill. | 360,509 | 5,166 | 145,362 | 73,731 | 4,029,750 |
| National Protective Legion, N. Y. | 177,301 | 70,137 | 362,234 | 347,801 | 11,770,362 |
| Nat. Slovak Soc. of the U. S. of A., Pa. | 2,144,074 | 234,074 | 600,637 | 367,785 | 29,159,500 |
| National Union Assurance Society, Ohio | 3,317,847 | 2,576,213 | 3,364,624 | 2,832,521 | 63,899,580 |
| Order of the Iroquois, N. Y. | 95,559 | 2,678 | 34,520 | 15,472 | 786,568 |
| Order Knights of Joseph, Ohio | 76,991 | ..... | 103,887 | 107,424 | 7,051,500 |
| Order of Mutual Protection, Ill. | 662,053 | 12,753 | 127,618 | 87,999 | 3,906,346 |
| Order Sons of Zion, N. Y. | 165,031 | 28,163 | 79,863 | 52,190 | 1,199,650 |
| Order of United Com. Trav. of Am., Ohio | 1,621,318 | 255,977 | 1,381,878 | 1,198,422 | 520,680,000 |
| Polish National Alliance of Brooklyn, N. Y. | 199,645 | 16,211 | 82,862 | 46,981 | 3,949,000 |
| Polish Nat. Alliance of U. S. of N A., Ill. | 6,160,149 | 287,008 | 2,019,870 | 1,130,060 | 72,167,300 |
| Polish Roman Catholic Union, Ill. | 3,877,041 | 204,240 | 1,349,456 | 739,455 | 48,694,250 |
| Polish Union of America, N. Y. | 464,076 | 67,957 | 162,085 | 91,565 | ..... |
| Protected Home Circle, Pa. | 801,785 | 228,250 | 1,574,482 | 1,584,663 | 104,264,080 |
| Royal Arcanum, Mass. | 11,632,054 | 498,090 | 6,837,023 | 5,029,777 | 211,289,834 |
| Royal Neighbors of America, Ill. | 9,693,544 | 457,777 | 6,497,560 | 3,285,538 | 394,407,250 |
| Slovenic National Benefit Society, Ill. | 1,144,403 | 63,061 | 962,624 | 586,020 | 18,793,300 |
| Sons of Norway, Independent Order, Minn. | 435,944 | 500 | 131,586 | 63,659 | 4,639,900 |
| Travelers Protective Asso. of America, Mo. | 818,896 | 150,777 | 866,440 | 775,678 | 502,020,000 |
| True Friends, Independent Order of | 35,330 | 2,094 | 26,834 | 23,612 | 501,050 |
| Ukrainian National Association, N. J. | 679,572 | 119,906 | 762,694 | 142,810 | 9,613,750 |
| Unity Protective Insurance Asso., N. Y. | 20,234 | 15,295 | 146,744 | 132,289 | 723,660 |
| Woman's Ben. Asso. of the Maccabees, Mich. | 16,174,672 | 274,093 | 3,972,393 | 2,520,594 | 184,773,884 |
| Woodmen Circle, Supreme Forest, Neb. | 10,740.519 | 320,747 | 3,259,180 | 2,056.965 | 142.850,435 |
| Woodmen of the World, Sov. Camp, Neb. | 48,964,277 | 1,744,039 | 16,959,489 | 11,237,829 | 693,071,171 |
| Workmen's B. & Benev. Asso., U.S.ofA., N.Y. | 73,719 | 180 | 15,502 | 8,755 | 595,420 |
| Workmen's Circle, N. Y. | 1,958,761 | 96,649 | 1,179,308 | 744,857 | 22,136,600 |
| Work. S. & D. B. Fund, U. S. of A., N. Y. | 1.685,662 | 53,563 | 706,313 | 505,123 | 13,378,500 |
| Total for all frat. orders in N. Y. State. | 294,721,373 | 90,429,647 | 127,720,616 | 92,594,277 | 6,617,727,489 |

Insurance in force, Jan. 1, 1921, totalled $6,752,279,068.

### $37,713,941,807 LIFE INSURANCE IN N. Y. STATE.

The amount of life insurance in force in New York State on Jan. 1, 1922, was $37,713,941,807, including group insurance; including also $7,036,275,700 of industrial insurance; but not including the insurance carried by fraternal orders and set forth in the above table.

## AGRICULTURE IN NEW YORK STATE.

| Item. | 1920 (January 1). | 1910 (April 15). | Increase. Amount. | Increase. Per Cent. |
|---|---|---|---|---|
| Number of all farms | 193,195 | 215,597 | —22,402 | —10.4 |
| Approximate land area of the state.....acres | 30,498,560 | 30,498,560 | ..... | ..... |
| All land in farms.....acres | 20,632,803 | 22,030,367 | —1,397,564 | — 6.3 |
| Improved land in farms.....acres | 13,158,781 | 14,844,039 | —1,685,258 | —11.4 |
| Woodland in farms.....acres | 4,160,567 | 4,436,145 | —275,578 | — 6.2 |
| Other unimproved land in farms.....acres | 3,313,455 | 2,750,183 | 563,272 | 20.5 |
| Per cent. of land area in farms | 67.7 | 72.2 | ..... | ..... |
| Per cent. of farm land improved | 63.8 | 67.4 | ..... | ..... |
| Average acreage per farm | 106.8 | 102.2 | 4.6 | 4.5 |
| Average improved acreage per farm | 68.1 | 68.8 | —0.7 | ..... |
| Value of all farm property | $1,908,483,201 | $1,451,481,495 | $457,001,706 | 31.5 |
| Land | 793,335,558 | 707,747,828 | 85,587,730 | 12.1 |
| Buildings | 631,726,182 | 476,998,001 | 154,728,181 | 32.4 |
| Implements and machinery | 169,866,766 | 83,644,822 | 86,221,944 | 103.1 |
| Live stock | 313,554,695 | 183,090,844 | 130,463,851 | 71.3 |
| Average value per farm: All farm property | 9,879 | 6,732 | 3 147 | 46.7 |
| Land | 4,106 | 3,283 | 823 | 25.1 |
| Buildings | 3,270 | 2,212 | 1,058 | 47.8 |
| Implements and machinery | 879 | 388 | 491 | 126.5 |
| Live stock | 1,623 | 849 | 774 | 91.2 |

A minus sign (—) denotes decrease. Per cent. not snown when base is less than 100.

NUMBER OF FARMS AND FARM ACREAGE, 1850 TO 1920.

| Census Year. | Farms. Number. | Farms. Per Cent. of Increase. | Land in Farms. All Land. Acres. | All Land. Per Cent. of Increase. | Land in Farms. Improved Land. Acres. | Improved Land. Per Cent. of Increase. | Per Cent. of Land Area in Farms. | Per Cent. of Farm Land Improved |
|---|---|---|---|---|---|---|---|---|
| 1920 | 193,195 | —10.4 | 20,632,803 | —6.3 | 13,158,781 | —11.4 | 67.7 | 63.8 |
| 1910 | 215,597 | —4.9 | 22,030,367 | —2.7 | 14,844,039 | —4.8 | 72.2 | 67.4 |
| 1900 | 226,720 | 0.2 | 22,648,109 | 3.1 | 15,599,986 | —4.8 | 74.3 | 68.9 |
| 1890 | 226,223 | —6.2 | 21,961,562 | —7.6 | 16,389,380 | —7.5 | 72.0 | 74.6 |
| 1880 | 241,058 | 11.5 | 23,780,754 | 7.2 | 17,717,862 | 13.4 | 78.0 | 74.5 |
| 1870 | 216,253 | 9.8 | 22,190,810 | 5.8 | 15,627,206 | 8.8 | 72.8 | 70.4 |
| 1860 | 196,990 | 15.5 | 20,974,958 | 9.7 | 14,358,403 | 15.7 | 68.8 | 68.5 |
| 1850 | 170,621 | ..... | 19,119,084 | ..... | 12,408,964 | ..... | 62.7 | 64.9 |

A minus sign (—) denotes decrease.

VALUE OF FARM PROPERTY, 1850 TO 1920.

| Census Year. | All Farm Property. Value. | All Farm Property. Per Cent. of Increase. | Land and Buildings. Value. | Land and Buildings. Per Cent. of Increase. | Implements and Machinery. Value. | Implements and Machinery. Per Cent. of Increase. | Live Stock. Value. | Live Stock. Per Cent. of Increase. |
|---|---|---|---|---|---|---|---|---|
| 1920 | $1,908,483,201 | 31.5 | $1,425,061,740 | 20.3 | $169,866,766 | 103.1 | $313,554,695 | 71.3 |
| 1910 | 1,451,481,495 | 35.7 | 1,184,745,829 | 33.4 | 83,644,822 | 49.3 | 183,090,844 | 45.8 |
| 1900 | 1,069,723,895 | —6.1 | 888,134,180 | —8.3 | 56,006,000 | 20.0 | 125,583,715 | 0.9 |
| 1890 | 1,139,310,716 | —6.4 | 968,127,286 | —8.3 | 46,659,465 | 9.5 | 124,523,965 | 5.6 |
| 1880 | 1,216,637,765 | 1.7 | 1,056,176,741 | 3.7 | 42,592,741 | 15.7 | 117,868,283 | —16.2 |
| 1870 | 1,195,790,552 | 27.7 | 1,018,286,213 | 26.8 | 36,798,170 | 26.2 | 140,706,169 | 35.5 |
| 1860 | 936,366,584 | 44.0 | 803,343,593 | 44.9 | 29,166,695 | 32.1 | 103,856,296 | 41.2 |
| 1850 | 650,202,067 | ..... | 554,546,642 | ..... | 22,084,926 | ..... | 73,570,499 | ..... |

A minus sign (—) denotes decrease.
1870 values are computed gold values, being 80 per cent. of the currency values reported.

NUMBER OF FARMS, BY SIZE, 1880 TO 1920.

| Size Group. | 1920. | 1910. | 1900. | 1890. | 1880. |
|---|---|---|---|---|---|
| Total number of farms | 193,195 | 215,597 | 226,720 | 226,223 | 241,058 |
| Under 10 acres | 13,720 | 18,655 | 16,760 | 13,166 | 14,913 |
| 10 to 19 acres | 12,820 | 15,533 | 15,782 | 15,779 | 17,229 |
| 20 to 49 acres | 27,267 | 31,047 | 35,123 | 36,955 | 40,386 |
| 50 to 99 acres | 50,784 | 56,821 | 63,789 | 67,835 | 70,661 |
| 100 to 499 acres | 87,390 | 92,194 | 93,909 | 91,323 | 96,273 |
| 500 to 999 acres | 999 | 1,104 | 1,109 | 972 | 1,315 |
| 1,000 acres and over | 215 | 243 | 248 | 193 | 281 |

In New York the number of "dairy cows," including heifers 1 year old and over, reported for January 1, 1920, was 1,730,082, as compared with 1,509,594 "cows kept for milk" reported for April 15, 1910. This represents an increase of 220,488, or 14.6 per cent. The number of "beef cows" reported for January 1, 1920. was 26,664, as compared with 138,461 "cows not kept for milk" reported for April 15, 1910, representing a decrease of 111,797, or 80.7 per cent.

FARM ACREAGE AND VALUE, BY SIZE OF FARM, 1920 AND 1910.

| Size Group (Acres). | All Land in Farms (Acres). 1920. | All Land in Farms (Acres). 1910. | Improved Land in Farms (Acres). 1920. | Improved Land in Farms (Acres). 1910. | Value of Land and Buildings. 1920. | Value of Land and Buildings. 1910. |
|---|---|---|---|---|---|---|
| Total | 20,632,803 | 22,030,367 | 13,158,781 | 14,844,039 | $1,425,061,740 | $1,184,745,829 |
| Under 20 | 248,049 | 307,362 | 209,843 | 267,909 | 107,997,044 | 108,633,214 |
| 20 to 49 | 914,599 | 1,028,991 | 694,860 | 801,480 | 148,987,988 | 129,618,019 |
| 50 to 99 | 3,661,658 | 4,068,580 | 2,651,613 | 3,053,725 | 317,697,839 | 264,212,934 |
| 100 to 174 | 7,317,041 | 7,804,307 | 4,911,933 | 5,540,335 | 445,882,444 | 360,162,667 |
| 175 to 499 | 7,416,504 | 7,550,324 | 4,325,013 | 4,746,402 | 353,816,726 | 277,308,685 |
| 500 to 999 | 616,743 | 685,906 | 269,368 | 316,532 | 31,179,064 | 27,143,232 |
| 1,000 and over | 458,209 | 584,897 | 96,151 | 117,656 | 19,500,635 | 17,667,078 |

MORTGAGED FARMS, 1920 AND 1910.

(Owned farms only; includes all farms owned in whole or in part by the operator.)

| Class. | No. of Owned Farms. | | Increase. | | Class. | No. of Owned Farms. | | Increase. | |
|---|---|---|---|---|---|---|---|---|---|
| | 1920. | 1910. | No. | Per Cent. | | 1920. | 1910. | No. | Per Cent. |
| Total | 151,717 | 166,674 | —14,957 | — 9.0 | Mortgaged | 66,633 | 72,311 | —5,678 | —7.9 |
| Free from mortgage | 75,522 | 93,118 | —17,596 | —18.9 | Unknown | 9,562 | 1,245 | 8,317 | 668.0 |

A minus sign (—) denotes decrease. The marked difference in figures for farms free from mortgage and mortgaged is due to the fact more farms were tabulated "unknown" in 1920 than in 1910.

MORTGAGED FARMS (OR FARM HOMES), 1890 TO 1920.

| Class. | Owned Farms. | | Owned Farm Homes. | | Per Cent. of Total. | | | |
|---|---|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1900. | 1890. | 1920. | 1910. | 1900. | 1890. |
| Total | 151,717 | 166,674 | 170,503 | 174,652 | 100.0 | 100.0 | 100.0 | 100.0 |
| Free from mortgage | 75,522 | 93,118 | 89,655 | 97,509 | 53.1 | 56.3 | 53.7 | 55.8 |
| Mortgaged | 66,633 | 72,311 | 77,164 | 77,143 | 46.9 | 43.7 | 46.3 | 44.2 |
| Unknown | 9,562 | 1,245 | 3,784 | | | | | |

*Total* includes "free from mortgage" and "mortgaged."

MORTGAGE DEBT, 1920 AND 1910.

| Item. | Owned Farms Mortgaged. | | Item. | Owned Farms Mortgaged. | |
|---|---|---|---|---|---|
| | 1920. | 1910. | | 1920. | 1910. |
| No. farms reporting amt. of debt | 59,735 | 62,555 | Aver. int. paid, per cent. | 5.4 | |
| Value of land and bldgs. | $388,114,245 | $284,659,163 | Average value per farm | $6,497 | $4,551 |
| Amt. of mortgage debt | $145,533,268 | $97,309,848 | Average debt per farm | $2,436 | $1,556 |
| Ratio of debt to value | 37.5% | 34.2% | Aver. equity per farm | $4,061 | $2,995 |

Includes only farms consisting wholly of owned land and reporting amount of debt. In considering the comparative figures it should be borne in mind that the mortgage debt may have been more completely reported at one census than at the other.

NUMBER, ACREAGE, AND VALUE OF FARMS, BY NATIVITY AND RACE. 1920 AND 1910.

| Color and Nativity or Race. | Number of Farms. | | Land in Farms, 1920 (Acres). | | Value of Land and Buildings, 1920. |
|---|---|---|---|---|---|
| | 1920. | 1910. | Total. | Improved. | |
| All farmers | 193,195 | 215,597 | 20,632,803 | 13,158,781 | $1,425,061,740 |
| White farmers | 192,645 | 214,658 | 20,589,928 | 13,131,646 | 1,422,362,205 |
| Native | 166,869 | 187,629 | 18,344,237 | 11,702,092 | 1,195,858,216 |
| Foreign-born | 25,776 | 27,029 | 2,245,691 | 1,429,554 | 226,503,989 |
| Country of birth: Austria | 1,182 | 585 | 101,300 | 61,073 | 7,869,721 |
| Canada | 3,188 | 3,414 | 358,344 | 211,821 | 23,982,370 |
| Denmark | 468 | 308 | 48,085 | 33,427 | 3,443,700 |
| England | 2,728 | 3,710 | 230,919 | 157,197 | 25,785,526 |
| France | 442 | 291 | 27,468 | 17,141 | 4,380,340 |
| Germany | 5,838 | 8,551 | 455,302 | 305,203 | 46,839,504 |
| Holland | 1,068 | 978 | 69,123 | 53,449 | 8,433,040 |
| Hungary | 407 | 135 | 38,631 | 21,495 | 2,777,490 |
| Ireland | 2,354 | 4,770 | 232,910 | 153,631 | 24,148,236 |
| Italy | 1,782 | 825 | 103,142 | 63,808 | 14,380,528 |
| Poland | 1,655 | 171 | 138,805 | 87,347 | 16,876,384 |
| Russia | 1,346 | 917 | 128,725 | 71,506 | 11,352,755 |
| Scotland | 413 | 491 | 48,335 | 27,966 | 14,170,975 |
| Sweden | 919 | 785 | 79,488 | 47,118 | 6,263,675 |
| Switzerland | 444 | 424 | 44,332 | 26,612 | 3,198,540 |
| Other countries | 1,542 | 674 | 140,782 | 90,760 | 12,601,205 |
| Colored farmers | 550 | 939 | 42,875 | 27,135 | 2,699,535 |
| Negro | 245 | 295 | 19,995 | 13,282 | 1,558,950 |
| Indian | 299 | 635 | 22,747 | 13,761 | 964,485 |
| Japanese | 5 | 5 | 121 | 80 | 173,100 |
| Chinese | 1 | 4 | 12 | 12 | 3,000 |

*Native* includes farmers with country of birth not reported, as follows: For 1920, 2,892; for 1910, 681.

The figures above show that Canadian, English, German, Irish, Scotch, colored, and Indian farmers are decreasing in New York State, while Austrian, Danish, French, Dutch, Hungarian, Italian, Polish, Russian, Swedish, and Swiss farmers are increasing in number, particularly as to Poles, Slavs, Italians and Hungarians.

NUMBER OF FARMERS, BY TENURE, COLOR, AND NATIVITY, 1920 AND 1910.

| Tenure. | All Farmers. | | Native White. | | Foreign-Born White. | | Colored. | |
|---|---|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1920. | 1910. | 1920. | 1910. | 1920. | 1910. |
| Total | 193,195 | 215,597 | 166,869 | 187,629 | 25,776 | 27,029 | 550 | 939 |
| Owners | 151,717 | 166,674 | 130,404 | 144,850 | 20,884 | 21,016 | 429 | 808 |
| Managers | 4,376 | 4,051 | 3,586 | 3,390 | 765 | 647 | 25 | 14 |
| Tenants | 37,102 | 44,872 | 32,879 | 39,389 | 4,127 | 5,366 | 96 | 117 |

*Native white* includes farmers whose country of birth was not reported.

NUMBER, ACREAGE, AND VALUE OF FARMS, BY SEX AND TENURE, 1920.

| Sex and Tenure. | Number of Farms. | All Land in Farms (Acres). | Improved Land in Farms (Acres). | Value of Land and Buildings. | Average Per Farm. | | |
|---|---|---|---|---|---|---|---|
| | | | | | All Land (Acres). | Improved Land (Acres). | Value of Land and Buildings. |
| Total | 193,195 | 20,632,803 | 13,158,781 | $1,425,061,740 | 106.8 | 68.1 | $7,376 |
| Male | 185,718 | 20,014,764 | 12,784,721 | 1,378,170,515 | 107.8 | 68.8 | 7,421 |
| Female | 7,477 | 618,039 | 374,060 | 46,891,225 | 82.7 | 50.0 | 6,271 |
| Owners | 151,717 | 15,084,383 | 9,600,996 | 966,593,359 | 99.4 | 63.3 | 6,371 |
| Male | 144,653 | 14,507,074 | 9,252,256 | 923,539,439 | 100.3 | 64.0 | 6,385 |
| Female | 7,064 | 577,309 | 348,740 | 43,053,920 | 81.7 | 49.4 | 6,095 |
| Managers | 4,376 | 932,355 | 462,387 | 125,574,461 | 213.1 | 105.7 | 28,696 |
| Male | 4,332 | 925,730 | 459,054 | 124,531,511 | 213.7 | 106.0 | 28,747 |
| Female | 44 | 6,625 | 3,333 | 1,042,950 | 150.6 | 75.8 | 23,703 |
| Tenants | 37,102 | 4,616,065 | 3,095,398 | 332,893,920 | 124.4 | 83.4 | 8,972 |
| Male | 36,733 | 4,581,960 | 3,073,411 | 330,099,565 | 124.7 | 83.7 | 8,986 |
| Female | 369 | 34,105 | 21,987 | 2,794,355 | 92.4 | 59.6 | 7,573 |

NEW YORK STATE AGRICULTURE, BY COUNTIES.
(U. S. Census, Jan. 1, 1920. Production covers year 1919.)

| County. | Land Area. | All Land in Farms. | Woodland in Farms. | No. of Farms. | Value of All Farm Property. | Value of All Crops in 1919. | Mortgage Debt on Farms. |
|---|---|---|---|---|---|---|---|
| | *Acres.* | *Acres.* | *Acres.* | | *Dollars.* | *Dollars.* | *Dollars.* |
| Albany | 337,280 | 278,231 | 43,177 | 2,946 | 22,348,966 | 5,045,790 | 1,303,723 |
| Allegany | 670,080 | 566,280 | 116,205 | 4,405 | 33,858,077 | 8,737,142 | 2,863,458 |
| Bronx | 26,240 | 1,252 | 184 | 55 | 752,164 | 73,501 | ..... |
| Broome | 451,200 | 384,832 | 90,741 | 3,594 | 25,960,500 | 5,025,768 | 2,323,151 |
| Cattaraugus | 859,520 | 645,088 | 161,760 | 5,305 | 45,327,838 | 8,308,872 | 4,685,963 |
| Cayuga | 449,920 | 396,264 | 45,499 | 4,297 | 39,790,601 | 11,295,089 | 3,399,927 |
| Chautauqua | 684,160 | 593,606 | 118,623 | 7,100 | 61,260,927 | 14,983,214 | 5,603,973 |
| Chemung | 260,480 | 208,813 | 45,586 | 1,945 | 13,253,361 | 3,193,016 | 443,067 |
| Chenango | 572,160 | 512,586 | 100,832 | 3,838 | 31,462,669 | 7,228,248 | 2,630,491 |
| Clinton | 671,360 | 445,629 | 116,175 | 3,402 | 27,251,036 | 6,514,771 | 1,891,959 |
| Columbia | 412,160 | 340,387 | 56,699 | 2,580 | 24,771,328 | 7,025,246 | 1,831,201 |
| Cortland | 321,920 | 282,382 | 57,096 | 2,315 | 20,907,526 | 5,531,965 | 1,781,657 |
| Delaware | 927,360 | 745,026 | 220,683 | 4,613 | 41,395,377 | 7,972,256 | 6,198,552 |
| Dutchess | 515,840 | 436,730 | 80,544 | 3,114 | 40,359,813 | 7,672,351 | 2,347,525 |
| Erie | 661,760 | 538,052 | 76,325 | 7,486 | 76,454,757 | 14,443,343 | 5,533,051 |
| Essex | 1,175,040 | 310,596 | 135,412 | 1,978 | 12,485,761 | 2,887,266 | 569,839 |
| Franklin | 1,073,920 | 408,135 | 85,713 | 3,299 | 25,124,819 | 6,183,954 | 2,523,726 |
| Fulton | 330,240 | 196,260 | 67,032 | 1,773 | 8,169,173 | 2,003,265 | 702,061 |
| Genesee | 317,440 | 276,617 | 30,847 | 2,885 | 34,935,513 | 8,673,472 | 3,342,952 |
| Greene | 411,520 | 282,749 | 88,128 | 2,248 | 16,135,931 | 4,091,105 | 1,165,790 |
| Hamilton | 1,088,000 | 36,441 | 19,918 | 255 | 1,502,498 | 256,640 | 70,947 |
| Herkimer | 933,760 | 334,277 | 51,012 | 2,849 | 26,965,939 | 5,073,254 | 1,777,828 |
| Jefferson | 815,360 | 696,145 | 81,244 | 5,151 | 55,165,475 | 10,694,423 | 3,766,015 |
| Kings | 45,440 | 1,080 | ..... | 54 | 3,394,743 | 264,692 | 47,150 |
| Lewis | 812,800 | 437,208 | 100,680 | 2,952 | 25,563,852 | 5,405,997 | 2,625,860 |
| Livingston | 403,840 | 353,170 | 51,978 | 2,899 | 38,431,615 | 9,019,989 | 2,488,061 |
| Madison | 416,000 | 362,459 | 53,413 | 3,397 | 32,102,829 | 8,232,807 | 2,371,460 |
| Monroe | 424,320 | 359,877 | 31,247 | 5,174 | 72,359,346 | 16,234,914 | 6,651,096 |
| Montgomery | 254,720 | 227,035 | 24,120 | 2,015 | 19,067,537 | 4,712,742 | 1,146,414 |
| Nassau | 175,360 | 59,353 | 11,814 | 935 | 61,845,951 | 6,355,062 | 807,347 |
| New York | 14,080 | 138 | 23 | 5 | 249,003 | 9,295 | ..... |
| Niagara | 334,080 | 289,691 | 16,459 | 4,068 | 51,160,342 | 11,695,797 | 3,684,480 |
| Oneida | 800,000 | 611,634 | 97,524 | 6,233 | 51,402,377 | 10,520,340 | 4,572,094 |
| Onondaga | 499,840 | 429,881 | 47,135 | 5,652 | 35,333,050 | 14,112,780 | 4,407,906 |
| Ontario | 415,360 | 368,940 | 48,568 | 4,062 | 44,990,423 | 12,747,923 | 3,858,903 |
| Orange | 533,760 | 350,268 | 59,880 | 3,591 | 47,320,946 | 7,525,416 | 3,810,386 |
| Orleans | 253,440 | 230,877 | 16,772 | 2,579 | 35,155,435 | 9,711,602 | 2,670,491 |
| Oswego | 618,240 | 462,522 | 100,325 | 5,539 | 36,204,292 | 7,776,688 | 3,066,595 |
| Otsego | 645,760 | 573,287 | 117,134 | 4,770 | 36,384,652 | 8,571,422 | 3,107,526 |
| Putnam | 149,120 | 113,010 | 40,864 | 767 | 11,337,096 | 1,202,917 | 555,762 |
| Queens | 69,120 | 14,148 | 950 | 565 | 29,370,135 | 2,900,813 | 471,560 |
| Rensselaer | 424,320 | 307,630 | 65,800 | 3,078 | 18,767,441 | 4,986,600 | 1,162,172 |
| Richmond | 36,480 | 4,230 | 712 | 121 | 3,838,015 | 451,171 | 112,287 |
| Rockland | 117,120 | 40,140 | 13,104 | 831 | 10,793,693 | 751,549 | 848,987 |
| St. Lawrence | 1,728,640 | 1,047,151 | 188,493 | 7,652 | 74,559,121 | 13,582,476 | 5,835,490 |
| Saratoga | 526,720 | 336,846 | 76,013 | 3,178 | 19,376,885 | 4,313,242 | 1,365,950 |
| Schenectady | 131,840 | 102,542 | 14,210 | 983 | 8,652,919 | 1,682,247 | 511,830 |
| Schoharie | 410,880 | 344,841 | 66,176 | 2,791 | 19,141,641 | 4,995,796 | 1,183,097 |
| Schuyler | 215,040 | 176,002 | 28,163 | 1,639 | 11,362,119 | 3,387,547 | 670,072 |
| Seneca | 215,040 | 188,210 | 18,807 | 1,857 | 21,169,826 | 5,963,520 | 1,453,187 |
| Steuben | 894,720 | 759,364 | 158,717 | 6,132 | 43,546,523 | 14,805,641 | 3,358,798 |
| Suffolk | 588,800 | 159,249 | 52,566 | 2,476 | 51,276,046 | 12,034,242 | 2,124,257 |
| Sullivan | 641,280 | 414,841 | 178,703 | 3,543 | 29,340,952 | 3,069,336 | 3,494,807 |
| Tioga | 332,800 | 281,272 | 58,819 | 2,541 | 16,205,266 | 3,948,127 | 1,387,821 |
| Tompkins | 304,640 | 253,781 | 38,592 | 2,550 | 20,681,178 | 5,002,918 | 1,661,586 |
| Ulster | 727,680 | 408,798 | 149,604 | 4,311 | 37,156,983 | 8,422,139 | 3,107,549 |
| Warren | 560,640 | 214,215 | 107,960 | 1,564 | 7,538,481 | 1,465,894 | 269,895 |
| Washington | 535,680 | 434,167 | 92,366 | 3,334 | 24,891,849 | 6,997,123 | 1,888,881 |
| Wayne | 383,360 | 346,205 | 32,471 | 4,980 | 50,836,415 | 13,910,864 | 5,557,229 |
| Westchester | 286,720 | 104,022 | 22,627 | 1,538 | 47,713,867 | 2,281,802 | 1,614,370 |
| Wyoming | 384,640 | 349,728 | 58,262 | 3,165 | 32,413,229 | 8,835,601 | 3,042,314 |
| Yates | 219,520 | 198,613 | 30,081 | 2,041 | 21,907,279 | 6,243,882 | 1,779,742 |
| Total, State | 30,498,560 | 20,632,803 | 4,160,567 | 193,195 | 1,908,483,201 | 417,046,864 | 145,533,268 |

NOTE—The figures in the above table relating to farming in Greater New York do not cover the intensive culture carried on by Poles and Italians, chiefly the latter, on vacant lots and other small tracts in the Bronx, on Staten Island, and in the Boroughs of Queens and Brooklyn. Garden vegetables, including the Italian varieties of tomato, cauliflower, and squash, are grown in large quantities and sold to the storekeepers in those boroughs.

## NEW YORK STATE CROPS.

| Year. | Corn. | | | Wheat. | | | Oats. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Acres. | Bushels. | Dollars. | Acres. | Bushels. | Dollars. | Acres. | Bushels. | Dollars. |
| 1894 | 510,000 | 14,382,000 | 8,773,000 | 510,000 | 7,548,000 | 4,680,000 | 1,265,000 | 27,956,000 | 10,903,000 |
| 1895 | 520,000 | 18,512,000 | 8,330,000 | 510,000 | 9,231,000 | 6,277,000 | 1,370,000 | 43,429,000 | 12,160,000 |
| 1896 | 575,000 | 19,550,000 | 7,429,000 | 520,000 | 8,320,000 | 7,322,000 | 1,415,000 | 46,695,000 | 12,141,000 |
| 1897 | 590,000 | 18,290,000 | 7,316,000 | 500,000 | 10,700,000 | 9,630,000 | 1,385,000 | 42,935,000 | 11,592,000 |
| 1898 | 605,000 | 19,965,000 | 8,585,000 | 540,000 | 11,448,000 | 8,243,000 | 1,300,000 | 35,750,000 | 11,082,000 |
| 1899 | 659,000 | 20,429,000 | 9,193,000 | 558,000 | 10,323,000 | 8,258,000 | 1,330,000 | 41,230,000 | 13,606,000 |
| 1900 | 660,000 | 21,120,000 | 9,926,000 | 520,000 | 9,204,000 | 7,087,000 | 1,410,000 | 39,339,000 | 12,588,000 |
| 1901 | 610,000 | 20,130,000 | 14,494,000 | 630,000 | 8,253,000 | 6,767,000 | 1,300,000 | 28,080,000 | 13,478,000 |
| 1902 | 610,000 | 15,250,000 | 10,218,000 | 500,000 | 8,400,000 | 6,636,000 | 1,360,000 | 54,000,000 | 19,584,000 |
| 1903 | 580,000 | 14,500,000 | 8,700,000 | 545,000 | 9,701,000 | 7,858,000 | 1,360,000 | 46,240,000 | 18,958,000 |
| 1904 | 565,000 | 15,424,000 | 9,871,000 | 460,000 | 5,198,000 | 5,666,000 | 1,240,000 | 42,284,000 | 16,068,000 |
| 1905 | 560,000 | 17,640,000 | 10,760,000 | 450,000 | 9,450,000 | 8,127,000 | 1,240,000 | 42,408,000 | 15,691,000 |
| 1906 | 545,000 | 19,020,000 | 11,222,000 | 400,000 | 8,000,000 | 6,560,000 | 1,240,000 | 40,052,000 | 16,021,000 |
| 1907 | 525,000 | 14,175,000 | 10,064,000 | 320,000 | 5,536,000 | 5,481,000 | 1,200,000 | 36,840,000 | 20,000,000 |
| 1908 | 510,000 | 19,788,000 | 15,830,000 | 330,000 | 5,775,000 | 5,717,000 | 1,240,000 | 37,324,000 | 20,901,000 |
| 1909 | 512,000 | 18,432,000 | 13,640,000 | 289,000 | 6,069,000 | 6,737,000 | 1,303,000 | 36,745,000 | 18,805,000 |
| 1910 | 525,000 | 20,108,000 | 12,668,000 | 355,000 | 8,414,000 | 8,077,000 | 1,320,000 | 45,540,000 | 19,127,000 |
| 1911 | 530,000 | 20,405,000 | 15,712,000 | 345,000 | 6,728,000 | 6,392,000 | 1,310,000 | 38,645,000 | 19,709,000 |
| 1912 | 512,000 | 19,763,000 | 13,834,000 | 335,000 | 5,360,000 | 5,306,000 | 1,192,000 | 36,714,000 | 15,420,000 |
| 1913 | 527,000 | 15,020,000 | 12,166,000 | 340,000 | 6,800,000 | 6,324,000 | 1,275,000 | 42,712,000 | 20,075,000 |
| 1914 | 550,000 | 22,550,000 | 18,716,000 | 360,000 | 8,100,000 | 8,748,000 | 1,275,000 | 40,162,000 | 20,483,000 |
| 1915 | 605,000 | 24,200,000 | 18,876,000 | 475,000 | 11,875,000 | 11,994,000 | 1,340,000 | 54,270,000 | 24,422,000 |
| 1916 | 700,000 | 21,000,000 | 23,100,000 | 400,000 | 8,400,000 | 14,112,000 | 1,206,000 | 31,356,000 | 19,441,000 |
| 1917 | 820,000 | 25,420,000 | 50,332,000 | 420,000 | 8,820,000 | 18,522,000 | 1,200,000 | 42,000,000 | 31,500,000 |
| 1918 | 800,000 | 28,800,000 | 50,400,000 | 430,000 | 7,840,000 | 16,856,000 | 1,260,000 | 51,660,000 | 43,394,000 |
| 1919 | 762,000 | 32,766,000 | 54,392,000 | 464,000 | 9,753,000 | 20,969,000 | ..... | ..... | ..... |
| 1920 | 767,000 | 30,680,000 | 35,589,000 | 467,000 | 10,203,000 | 17,856,000 | ..... | ..... | ..... |
| 1921 | 798,000 | 36,708,000 | 24,594,000 | 455,000 | 8,747,000 | 9,447,000 | 1,038,000 | 24,912,000 | 11,709,000 |

| Year. | Barley. | | | Rye. | | | Buckwheat. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Acres. | Bushels. | Dollars. | Acres. | Bushels. | Dollars. | Acres. | Bushels. | Dollars. |
| 1900 | 115,000 | 2,530,000 | 1,290,000 | 165,000 | 2,492,000 | 1,396,000 | 290,000 | 3,770,000 | 2,224,000 |
| 1901 | 115,000 | 1,610,000 | 902,000 | 160,000 | 2,384,000 | 1,478,000 | 285,000 | 3,990,000 | 2,274,000 |
| 1902 | 110,000 | 3,135,000 | 1,724,000 | 155,000 | 2,712,000 | 1,573,000 | 330,000 | 6,204,000 | 3,536,000 |
| 1903 | 105,000 | 2,793,000 | 1,536,000 | 145,000 | 2,204,000 | 1,344,000 | 330,000 | 5,841,000 | 3,446,000 |
| 1904 | 95,000 | 2,546,000 | 1,451,000 | 140,000 | 2,072,000 | 1,513,000 | 340,000 | 6,222,000 | 3,671,000 |
| 1905 | 90,000 | 2,313,000 | 1,249,000 | 135,000 | 2,160,000 | 1,447,000 | 330,000 | 6,204,000 | 3,784,000 |
| 1906 | 90,000 | 2,367,000 | 1,302,000 | 130,000 | 2,288,000 | 1,487,000 | 315,000 | 5,985,000 | 3,531,000 |
| 1907 | 90,000 | 2,250,000 | 1,800,000 | 125,000 | 2,062,000 | 1,670,000 | 305,000 | 5,795,000 | 3,535,000 |
| 1908 | 80,000 | 2,080,000 | 1,456,000 | 125,000 | 2,062,000 | 1,670,000 | 300,000 | 5,250,000 | 3,675,000 |
| 1909 | 80,000 | 1,984,000 | 1,369,000 | 131,000 | 2,227,000 | 1,782,000 | 295,000 | 6,313,000 | 4,798,000 |
| 1910 | 81,000 | 2,292,000 | 1,604,000 | 140,000 | 1,896,000 | 1,896,000 | 286,000 | 6,864,000 | 4,736,000 |
| 1911 | 80,000 | 2,000,000 | 1,940,000 | 135,000 | 2,006,000 | 2,006,000 | 280,000 | 5,464,000 | 4,354,000 |
| 1912 | 82,000 | 2,132,000 | 1,450,000 | 128,000 | 1,605,000 | 1,605,000 | 277,000 | 6,593,000 | 4,220,000 |
| 1913 | 77,000 | 2,056,000 | 1,419,000 | 133,000 | 1,716,000 | 1,716,000 | 280,000 | 4,004,000 | 3,243,000 |
| 1914 | 75,000 | 2,100,000 | 1,491,000 | 129,000 | 2,032,000 | 2,032,000 | 274,000 | 6,302,000 | 4,790,000 |
| 1915 | 85,000 | 2,720,000 | 2,040,000 | 150,000 | 2,609,000 | 2,609,000 | 260,000 | 4,940,000 | 3,952,000 |
| 1916 | 90,000 | 2,097,000 | 2,118,000 | 125,000 | 2,880,000 | 2,880,000 | 275,000 | 3,300,000 | 4,026,000 |
| 1917 | 110,000 | 3,080,000 | 4,004,000 | 125,000 | 2,375,000 | 4,370,000 | 315,000 | 5,670,000 | 9,072,000 |
| 1918 | 125,000 | 3,938,000 | 4,962,000 | 112,000 | 1,848,000 | 3,179,000 | 315,000 | 4,725,000 | 8,269,000 |
| 1919 | 171,000 | 3,762,000 | 5,116,000 | 95,000 | 1,520,000 | 2,280,000 | 218,000 | 4,796,000 | 6,954,000 |
| 1920 | 170,000 | 4,930,000 | 4,881,000 | 71,000 | 1,242,000 | 1,962,000 | 215,000 | 4,300,000 | 6,020,000 |
| 1921 | 158,000 | 3,318,000 | 2,057,000 | 52,000 | 806,000 | 798,000 | 193,000 | 4,150,000 | 3,444,000 |

| Year. | Potatoes. | | | Hay (tame). | | |
|---|---|---|---|---|---|---|
| | Acres. | Bushels. | Dollars. | Acres. | Tons. | Dollars. |
| 1894 | 430,000 | 33,110,000 | 15,893,000 | 5,600,000 | 6,552,000 | 63,292,000 |
| 1895 | 480,000 | 58,560,000 | 13,469,000 | 5,030,000 | 3,686,000 | 50,498,000 |
| 1896 | 440,000 | 39,160,000 | 12,140,000 | 4,700,000 | 3,807,000 | 45,836,000 |
| 1897 | 410,000 | 25,420,000 | 17,031,000 | 4,880,000 | 6,588 000 | 54,351,000 |
| 1898 | 390,000 | 28,470,000 | 11,957,000 | 5,100,000 | 7,140,000 | 41,050,000 |
| 1899 | 396,000 | 34,848,000 | 13,939,000 | 4,939,000 | 5,137,000 | 53,682,000 |
| 1900 | 395,000 | 31,995,000 | 14,398,000 | 4,806,000 | 3 888,000 | 54,626,000 |
| 1901 | 395,000 | 30,810,000 | 21,875,000 | 5,050,000 | 6,565,000 | 69,458,000 |
| 1902 | 410,000 | 27,060,000 | 15,965,000 | 5,000,000 | 6,700,000 | 70,551,000 |
| 1903 | 400,000 | 35,600,000 | 19,936,000 | 4,800,000 | 6,048,000 | 66,286,000 |
| 1904 | 440,000 | 40,920,000 | 22,097,000 | 4,750,000 | 6,460 000 | 67,442,000 |
| 1905 | 435,000 | 30,450,000 | 21,315,000 | 4,750,000 | 6,175,000 | 64,096,000 |
| 1906 | 410,000 | 43,050,000 | 21,094,000 | 4,750,000 | 6,080,000 | 73,568,000 |
| 1907 | 405,000 | 39,690,000 | 22,623,000 | 4,750,000 | 5,938,000 | 92,039 000 |
| 1908 | 394,000 | 32,308,000 | 24,231,000 | 4,750,000 | 5,700,000 | 69,825,000 |
| 1909 | 394,000 | 47,280,000 | 23,640,000 | 4,721,000 | 4,957,000 | 70,389,000 |
| 1910 | 395,000 | 40,290,000 | 19,339,000 | 4 780,000 | 6,310,000 | 86,447,000 |
| 1911 | 375,000 | 27,750 000 | 24,975,000 | 4,720,000 | 4,814,000 | 86,171,000 |
| 1912 | 360,000 | 38,160,000 | 22,133,000 | 4,720,000 | 5,900,000 | 87,910,000 |
| 1913 | 360,000 | 26,640,000 | 21,312,000 | 4,700,000 | 5,358,000 | 81,977,000 |
| 1914 | 367,000 | 53,215,000 | 23,415,000 | 4,653,000 | 5,584,000 | 81,526,000 |
| 1915 | 355,000 | 22,010,000 | 18,048,000 | 4,225,000 | 5,492,000 | 86,224,000 |
| 1916 | 320,000 | 22,400,000 | 35,392,000 | 4,350,000 | 7,047,000 | 83,859,000 |
| 1917 | 400,000 | 38,000,000 | 49,400,000 | 4,332,000 | 6,325,000 | 95,508,000 |
| 1918 | 380,000 | 37,240,000 | 45,433,000 | 4,300,000 | 5 375,000 | 109,650,000 |
| 1919 | 310,000 | 33,790,000 | 48,996,000 | 4,922,000 | 6,891,000 | 141,266,000 |
| 1920 | 325,000 | 40,625,000 | 47,938,000 | 4,895,000 | 6,119,000 | 144,408,000 |
| 192 | 330,000 | 33,990,000 | 36,709,000 | 4,895,000 | 4,895,000 | 88,110,000 |

## COMMERCE BOTH WAYS ON N. Y. STATE CANALS.

| YEAR. | Forest Products. | | Agriculture. | | Manufactures. | | Merchandise. | | All Other and Totals. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *Tons.* | *Dollars.* | *Tons.* | *Dollars.* | *Tons.* | *Dollars.* | *Tons.* | *Dollars.* | *Tons.* | *Dollars.* |
| 1881... | 1,652,543 | 18,399,932 | 1,171,400 | 43,440,343 | 250,961 | 11,863,021 | 325,775 | 75,331,308 | 9,179,192 | 162,153,565 |
| 1882... | 1,771,743 | 20,285,512 | 1,173,257 | 42,766,687 | 187,535 | 4,673,440 | 283,174 | 61,769,417 | 5,467,423 | 147,918,907 |
| 1883... | 1,828,643 | 18,038,056 | 1,394,581 | 39,727,973 | 242,649 | 3,426,474 | 310,844 | 68,281,320 | 5,664,056 | 147,861,223 |
| 1884... | 1,671,706 | 27,588,279 | 1,264,237 | 37,335,779 | 205,013 | 3,125,433 | 300,480 | 78,864,806 | 5,009,488 | 162,097,069 |
| 1885... | 1,595,632 | 17,302,705 | 1,108,711 | 31,404,325 | 194,714 | 2,827,280 | 220,237 | 58,215,252 | 4,731,784 | 119,536,189 |
| 1886... | 1,523,496 | 16,471,406 | 1,537,331 | 41,191,562 | 165,760 | 2,310,422 | 397,249 | 103,749,354 | 5,293,982 | 180,061,846 |
| 1887... | 1,529,809 | 15,568,667 | 1,590,509 | 42,729,684 | 212,216 | 4,808,178 | 378,734 | 82,161,364 | 5,553,805 | 159,245,977 |
| 1888... | 1,389,728 | 14,899,643 | 1,177,587 | 33,546,141 | 153,905 | 3,207,881 | 206,437 | 56,913,813 | 4,942,948 | 122,524,735 |
| 1889... | 1,567,311 | 17,012,190 | 1,330,231 | 30,014,906 | 161,074 | 5,908,500 | 262,818 | 80,590,288 | 5,370,369 | 154,584,222 |
| 1890... | 1,397,862 | 21,887,680 | 1,201,916 | 31,928,371 | 139,310 | 1,879,276 | 769,672 | 73,958,275 | 5,246,102 | 145,761,086 |
| 1891... | 1,206,986 | 17,923,469 | 1,173,192 | 38,566,171 | 109,387 | 1,147,639 | 250,083 | 47,008,795 | 4,563,472 | 116,269,343 |
| 1892... | 1,249,381 | 18,571,608 | 1,038,851 | 35,127,543 | 125,781 | 1,491,611 | 292,46' | 100,701,774 | 4,281,995 | 167,596,948 |
| 1893... | 1,030,604 | 14,421,877 | 1,514,146 | 50,483,054 | 66,892 | 853,407 | 216,013 | 75,474,76' | 4,331,963 | 154,831,094 |
| 1894... | 872,601 | 12,006,519 | 1,412,142 | 35,849,109 | 87,241 | 933,886 | 352,741 | 78,405,074 | 3,882,560 | 141,179,560 |
| 1895... | 974,870 | 14,504,441 | 644,009 | 17,185,539 | 133,911 | 2,489,514 | 251,537 | 38,648,131 | 3,500,314 | 97,453,021 |
| 1896... | 852,467 | 11,838,186 | 1,136,665 | 27,268,642 | 152,322 | 2,494,727 | 270,603 | 37,512,064 | 3,714,894 | 100,089,578 |
| 1897... | 896,971 | 11,780,232 | 789,783 | 16,722,091 | 152,388 | 1,932,216 | 250,872 | 42,299,58' | 3,617,804 | 96,063,338 |
| 1898... | 820,668 | 11,489,502 | 707,855 | 15,005,458 | 175,632 | 1,369,262 | 220,107 | 36,386,337 | 3,360,063 | 88,122,354 |
| 1899... | 838,449 | 14,312,288 | 620,908 | 13,428,551 | 159,413 | 1,555,810 | 260,063 | 40,752,834 | 3,686,051 | 92,786,712 |
| 1900... | 726,984 | 9,161,366 | 511,518 | 11,051,632 | 142,784 | 2,073,468 | 250,436 | 42,819,110 | 3,345,941 | 84,123,772 |
| 1901... | 839,191 | 10,697,001 | 558,135 | 15,036,822 | 129,857 | 1,773,198 | 230,615 | 37,467,681 | 3,420,613 | 83,478,880 |
| 1902... | 805,067 | 9,546,375 | 572,676 | 15,546,609 | 131,755 | 1,637,462 | 207,972 | 34,857,640 | 3,274,610 | 81,708,453 |
| 1903... | 690,161 | 9,726,311 | 597,047 | 15,812,570 | 130,406 | 1,835,315 | 241,564 | 34,613,801 | 3,615,385 | 77,713,325 |
| 1904... | 738,793 | 9,255,116 | 427,969 | 13,791,790 | 129,665 | 1,515,638 | 200,472 | 27,205,160 | 3,138,547 | 66,381,817 |
| 1905... | 851,098 | 11,640,382 | 436,979 | 13,875,972 | 132,438 | 1,589,118 | 172,665 | 19,292,625 | 3,226,896 | 57,918,586 |
| 1906... | 854,610 | 12,639,416 | 648,715 | 17,743,782 | 170,584 | 1,903,347 | 202,285 | 23,531,901 | 3,540,907 | 66,501,417 |
| 1907... | 747,736 | 11,032,348 | 606,159 | 22,069,011 | 96,916 | 1,146,417 | 169,258 | 19,957,084 | 3,407,914 | 63,903,970 |
| 1908... | 565,443 | 7,905,428 | 449,846 | 15,641,072 | 106,371 | 1,403,612 | 166,061 | 19,415,235 | 3,051,877 | 54,511,509 |
| 1909... | 647,739 | 9,027,781 | 447,217 | 13,992,062 | 163,871 | 2,665,622 | 194,273 | 22,405,574 | 3,116,536 | 59,081,572 |
| 1910... | 654,094 | 9,373,099 | 492,536 | 15,068,375 | 145,419 | 2,161,199 | 215,446 | 25,132,370 | 3,073,412 | 59,042,178 |
| 1911... | 656,500 | 9,471,169 | 355,301 | 12,874,402 | 137,463 | 1,806,938 | 166,419 | 17,044,496 | 3,097,068 | 49,577,629 |
| 1912... | 584,964 | 8,917,887 | 196,014 | 6,491,416 | 119,512 | 1,599,552 | 152,982 | 15,007,394 | 2,606,116 | 38,444,617 |
| 1913... | 517,761 | 8,528,883 | 256,652 | 8,436,134 | 90,799 | 1,540,298 | 135,080 | 12,867,860 | 2,602,035 | 36,865,451 |
| 1914... | 377,127 | 5,931,884 | 217,397 | 7,352,586 | 83,504 | 1,056,509 | 93,095 | 9,463,737 | 2,080,850 | 28,277,991 |
| 1915... | 366,618 | 5,366,707 | 218,300 | 7,618,495 | 107,058 | 1,372,542 | 138,549 | 12,516,580 | 1,858,114 | 30,610,670 |
| 1916... | 350,047 | 5,694,704 | 142,315 | 6,702,741 | 65,949 | 1,551,673 | 104,543 | 10,418,330 | 1,625,050 | 27,513,525 |
| 1917... | 378,781 | 8,096,613 | 45,519 | 2,742,683 | 27,658 | 541,350 | 84,687 | 10,145,197 | 1,297,225 | 24,757,077 |
| 1918... | 292,720 | 7,521,959 | 109,784 | 8,457,531 | 76,386 | 7,130,947 | 47,582 | 9,442,523 | 1,159,270 | 35,212,459 |
| 1919... | 194,807 | 5,006,540 | 184,899 | 14,244,619 | 203,307 | 18,978,709 | 15,229 | 3,045,800 | 1,238,844 | 43,972,603 |
| 1920... | 248,930 | 6,397,357 | 226,291 | 17,432,665 | 325,426 | 30,377,322 | 18,912 | 3,782,274 | 1,421,434 | 60,523,658 |
| 1921... | 127,685 | ..... | 412,257 | ..... | 435,782 | ..... | ..... | ..... | 1,457,802 | ..... |

The canals were made free in 1882. Figures for 1919 and thereafter are on an officially revised system of tabulation by the State.

Values were estimated by the State in 1919 and 1920, but were not recorded in 1921.

## THE NEW YORK STATE CANAL SYSTEM.

(Communicated by Charles L. Cadle, Superintendent of Public Works.)

THE canal system of the State consists of the Erie Canal; the Champlain Canal; the Oswego Canal; the Cayuga-Seneca Canal; Cayuga Lake Inlet, at Ithaca; the Black River Canal; the Glens Falls Feeder, and the lakes, reservoirs, feeders, harbor basins and terminal docks connected therewith. The Shinnecock-Peconic Canal, located in the County of Suffolk, on Long Island, connecting the waters of Shinnecock and Peconic Bays, is officially a part of the canal system.

What is commonly known as the Barge Canal includes the improved Erie, Champlain, Oswego and Cayuga-Seneca Canals. These waterways were enlarged and constructed under bond issues approved by the people in 1903, 1909, and 1915. They took the place of the old canals which had been in existence since 1825. The bond issue for the construction of terminal docks and the providing of freight handling machinery was approved in 1911.

### THE MAIN WATERWAY.

The Erie Barge Canal is the main waterway and extends across the State from Troy to Buffalo. Officially, the route commences at Congress Street, Troy, and follows the line of the Hudson River to Waterford, where the westward turn is made. From Waterford the line of the Mohawk River, canalized, is generally followed to a point beyond Little Falls. Westerly from this point the new channel follows the route of the old canal in part, but passes the northerly outskirts of the City of Utica on a new line; thence to the south of Rome and then into and across Oneida Lake. Passing out of Oneida Lake the Oneida River is used to its junction with the Seneca River at Three River Point; thence through the Seneca River to and through the Clyde River to a point east of Lyons; thence following the old canal, deepened and enlarged, to a point beyond Pittsford. Here the channel leaves the old route, crossing the Genesee River about a mile south of Rochester on a pool created by the construction of a dam, joining the line of the old canal a few miles westerly, and continuing thence in the former channel, deepened and widened, to and through Tonawanda Creek, where the Niagara River is entered and followed to Lake Erie, at Buffalo.

The Champlain Barge Canal commences in the Hudson River, at Waterford, where the improved Erie Canal starts westward, and follows generally the channel of the Hudson River, canalized, as far northward as Fort Edward, where a new route has been established to Whitehall on the inlet of Lake Champlain.

The Oswego Barge Canal branches northerly from the Erie Barge Canal at Three River Point and follows generally the line of the Oswego River, canalized, to Lake Ontario, at Oswego.

The Cayuga-Seneca Barge Canal extends in a southerly direction from the Erie Barge Canal at a point near Montezuma. The Cayuga branch follows the valley of the Seneca River to Cayuga Lake; thence through Cayuga Lake to the Cayuga Lake Inlet at Ithaca. The Seneca branch follows the Seneca River in a westerly direction from the Cayuga branch near the foot of Cayuga Lake, and connects with Seneca Lake near Geneva; thence through Seneca Lake to Watkins, with an extension to Montour Falls.

### WIDTH VARIES.

The width of the Barge Canal channel varies according to the section traversed. Through canalized rivers and lakes, the channel is at least 200 feet wide. Through rock cuts and land lines, a minimum bottom width of 94 feet has been provided and through earth sections the minimum width of the bottom of the channel is 75 feet. The locks of the Barge Canal are uniform in size. The inside dimensions of the lock chambers are 310 feet in length and 45 feet in width and are capable of passing a barge 300 feet long and, say, 43 feet wide. A depth of water of 12 feet over the miter sills has been provided. Clearance under fixed bridges spanning the channel is 15½ feet at high water.

### LENGTH IN MILES.

Erie Barge Canal (Waterford to Tonawanda), 339; Oswego Barge Canal (from Lake Ontario to Three River Point), 24; Cayuga-Seneca Barge Canal (from junction with the Erie Barge Canal to

Ithaca and Watkins, including Cayuga and Seneca Lakes), 92; Champlain Barge Canal, 60; canal harbors at Utica, Syracuse and Rochester, 10. Total canal mileage, 525.

NATURAL WATER COURSES CANALIZED USED AS PART OF THE SYSTEM.

Hudson River (between Troy and Fort Edward), 37; Mohawk River, 112; Oswego, Oneida and Seneca Rivers for their entire length, 99; Oneida Lake, 21; Cayuga Lake, 38; Seneca Lake, 35; Clyde River, 19; Tonawanda River, 11; Syracuse Harbor, Onondaga Lake outlet, 7; Rochester Harbor, Genesee River, 2; Utica Harbor and a short section of the Mohawk River, 1. Total mileage in canalized rivers and lakes, 382.

Practically all the municipalities along the line of the Barge Canal system have been provided with docks and warehouse equipment. In the city of New York, there are eight terminals equipped with modern warehouses and freight handling machinery situated as follows:

At Piers 5 and 6, East River, and at the foot of West 53rd Street, on the Hudson River, in the Borough of Manhattan; at Motthaven (138th Street, East River) in the Borough of the Bronx; on the East River at the foot of North Jane Street, Long Island City, at Flushing and at the foot of Broadway, Hallett's Cove, in the Borough of Queens and at the foot of Columbia Street, Gowanus Bay, at Dupont Street, Greenpoint, in the Borough of Brooklyn.

GRAIN ELEVATORS.

A grain elevator of 2,000,000 bushel capacity, providing every modern facility for the handling of grain transported by canal, is being erected by the, State at the Gowanus Bay Terminal, in the Borough of Brooklyn. Its completion is expected in June, 1922. It will be operated under the direction of the State Superintendent of Public Works.

The building of a similar structure was begun by the State at Oswego on Lake Ontario and the foundation work has been completed. The erection of the superstructure has not as yet been authorized.

COST OF BARGE CANAL IMPROVEMENT UP TO OCTOBER, 1921.

Bond issue of 1903 for improvement of Erie, Oswego and Champlain Canals, $101,000,000; Supplemental bond issue of 1915, $27,000,000; Miscellaneous appropriations, $5,338,794; Bond issue of 1909 for improvement of Cayuga and Seneca Canal, $7,000,000; Additional appropriations in 1918, $350,000; Miscellaneous appropriations, $1,071,858; Bond issue of 1911 for constructing terminals and providing freight handling facilities, $19,800,000; Miscellaneous appropriations, $2,838,122; Appropriations for grain elevators at Brooklyn and Oswego, $2,725,000. Total, $167,123,774.

The portions of the former canal system which have been retained in connection with the operation of the Barge Canal include the following:

The Glens Falls feeder, extending west and north to Glens Falls, a distance of 12 miles, and connecting with the Champlain Barge Canal at Fort Edward; and the Black River Canal, running northerly from its junction with the Erie Barge Canal at Rome to Carthage, although it is not navigable beyond Lyons Falls. The use of these two channels is limited to small type barges only.

OWNED BY THE STATE.

The canals above described are owned by the State of New York and are under the jurisdiction of the Superintendent of Public Works for management, maintenance, repair and operation. Navigation is free, no tolls whatever being charged. The main office of The Superintendent of Public Works is in the Capitol at Albany. Branch offices are maintained by the department at Pier 6, East River, New York City, and in the cities of Schenectady, Syracuse, Rochester and Buffalo.

## LAKES IN NEW YORK STATE.

THE great northern lakes, viz.: Ontario, Erie and Champlain, are partly in this State. Lake George, south of Lake Champlain, communicates with it by a short outlet. It is 37 miles long, and from one to three broad, and embosoms more than 200 islets. Its waters are so clear and transparent that the bottom is visible at almost any depth; and on each side it is skirted with mountains, abounding in romantic scenery. The Adirondacks contain more than 100 scenic lakes. There are numerous small lakes in the western part of the State which discharge their waters into Lake Ontario, either directly or indirectly through the Genesee, Seneca and Oswego Rivers, and being connected by canals and railroads, afford facilities to transportation. Three of the lakes have southern drainage; Otsego and Canaderaga into Susquehanna and Chautauqua though only seven miles from Lake Erie, eventually into the Gulf of Mexico. These, with their extent, &c., are as follows:

| LAKE. | Length Miles. | Breadth Miles. | LAKE. | Length Miles. | Breadth Miles. | LAKE. | Length Miles. | Breadth Miles. |
|---|---|---|---|---|---|---|---|---|
| Oneida..... | 22 | 4 to 6 | Skaneateles... | 15 | ½ to 1 | Crooked..... | 22 | 1½ |
| Cazenovia.... | 4 | 1 | Owasco..... | 12 | 1 | Canandaigua.. | 14 | 1 to 1½ |
| Otsego..... | 9 | 1 to 2 | Cross..... | 4 | ½ | Hemlock..... | 6 | 1 |
| Canaderaga... | 5 | 1½ | Cayuga..... | 40 | 1½ to 3½ | Conesus..... | 9 | 1 |
| Otisco..... | 5 | 2 | Seneca..... | 40 | 2 to 4 | Chautauqua... | 13 | 1 to 3 |

## HUDSON RIVER ICE HARVEST SINCE 1901.

(Compiled by the Natural Ice Association of America, New York.)

| YEARS. | Tons. | YEARS. | Tons. | YEARS | Tons. | YEARS. | Tons. | YEARS. | Tons. |
|---|---|---|---|---|---|---|---|---|---|
| 1901-02.. | 4,606,800 | 1905-06.. | 3,572,371 | 1909-10.. | 1,876,502 | 1913-14.. | 1,202,166 | 1917-18.. | 2,537,482 |
| 1902-03.. | 3,934,300 | 1906-07.. | 1,672,188 | 1910-11.. | 2,206,984 | 1914-15.. | 1,938,149 | 1918-19.. | 82,283 |
| 1903-04.. | 2,595,110 | 1907-08.. | 3,549,354 | 1911-12.. | 2,262,593 | 1915-16.. | 1,398,591 | 1919-20.. | 1,237,400 |
| 1904-05.. | 3,661,800 | 1908-09.. | 2,539,941 | 1912-13.. | 2,853,120 | 1916-17.. | 2,001,150 | 1921-22.. | 190,823 |

According to the Ice Trade Journal, about 24,000,000 tons of natural ice and 29,000,000 tons of artificial ice are cut, made, and used each year in the United States.

**Daily Capacity of Artificial Ice Plants in New York City.** Manhattan, 5,800 tons; Bronx, 2,300 tons; Brooklyn, 5,700 tons; Queens, 1,900 tons; Richmond, 300 tons; total for city, 15,900 tons.

## THE ALLEGANY STATE PARK.

(By the N. Y. State College of Forestry, Syracuse.)

THE Allegany State Park, which was authorized by the 1921 Legislature, and will cover 65,000 acres, is located in Cattaraugus County. It occupies practically all the land inclosed within the semicircle described by the bend of the Alleghany River as it reaches into New York State. This tract is to be forever reserved for the use of all the people, but is not to constitute part of the Forest Preserve. Thus the free use of the park is permitted for betterment purposes and recreational management by the park commissioners. This is in accordance with scientific park management and in keeping with the plan of the New York State College of Forestry for the management of all State parks.

The park will be patrolled by protectors, who will exercise all the powers of constables of towns in the enforcement of laws and regulations.

The commission will have power to beautify the reserve, improve its accessibility and provide means for the general enjoyment of visitors and campers who come into the region. Under the law the commissioners will possess the authority to dam up streams and create lakes if such action is thought advantageous. They would have the right to plant trees and apply utilization measures wherever there were opportunities for such profitable and beneficial employment of the forests. They may propagate fish and game and trees and set aside tracts for that purpose.

Plenty of wild game, such as ruffed grouse, squirrels, rabbits, (and frequently black bear), is found in the section. Along the river bottoms woodcock are plentiful in season. The country is well supplied with trout brooks. The fish life of this region has suffered less than that of the wild game, due to the fact that the State has kept the streams well stocked.

## THE NEW YORK STATE FOREST PRESERVE.

(Specially prepared for THE ALMANAC by the State Conservation Commission.)

NEW YORK STATE'S great Forest Preserve was established by act of the Legislature in 1885. It includes large areas in the two great forested sections of the State, the Adirondack and Catskill Mountains. Article 7, Section 7, of the State Constitution, adopted in 1894, assured its integrity for all time. It provided that "The lands of the State, now owned or hereafter acquired, constituting the Forest Preserve as now fixed by law, shall be forever kept as wild forest land. They shall not be leased, sold or exchanged, or be taken by any corporation, public or private, nor shall the timber thereon be sold, removed or destroyed. But the Legislature may by general laws provide for the use of not exceeding three per centum of such lands for the construction and maintenance of reservoirs for municipal water supply, for the canals of the State, and to regulate a flow of streams. Such reservoirs shall be constructed, owned and controlled by the State; but such work shall not be undertaken until after the boundaries and high flow lines thereof shall have been accurately surveyed and fixed, and after public notice, hearing and determination that such lands are required for such public use. The expense of any such improvements shall be apportioned on the public and private property and municipalities benefited to the extent of the benefits received."

Since the establishment of the Forest Preserve, the State of New York has spent $5,530,800 in the acquisition of land for its extension. In addition large areas of other land have been acquired by tax sales, with the result that January 1, 1922, the area of the Forest Preserve in both the Adirondack and Catskill Mountains aggregated 1,992,516 acres.

Jurisdiction over the Forest Preserve is exercised by the Conservation Commission, which has charge, besides, of the State Reservation at Saratoga Springs, the St. Lawrence Reservation, the Cuba Reservation, the State owned islands in Lake George, and the John Brown Farm in the Town of North Elba, Essex County. Besides administrative control over this property, the commission also has entire charge of the fighting of forest fires upon both public and privately owned land in the large forested regions.

For the prompt detection of forest fires, fifty-five observation stations are maintained upon mountain tops throughout the Adirondacks and Catskills and in the forested regions of Long Island. All of these stations are connected by telephone lines with the ranger headquarters. Observers are on duty at these stations throughout the entire dry season from spring until fall. A force of sixty-five forest rangers and five district rangers is also maintained.

The work of reforestation of State land and the raising of trees for the reforestation of private land is also conducted by the commission. For this purpose six nurseries are maintained, having a total capacity of 30,000,000 trees and an annual production of 10,000,000. Approximately 5,000 acres of State land are reforested each year. Trees are sold to private landowners at the cost of production, to municipalities at 50 cents per thousand, and are furnished to State institutions without charge.

The sections of the Adirondack and Catskill Mountains upon which it is most important for the State to insure the maintenance of a continuous forest cover have been defined by law and are known as the Adirondack and Catskill Parks. They are bounded by a line called the blue line. Within these parks approximately one-half of the land is still privately owned. Part of the land of the Forest Preserve lies outside of the park lines, and thus the park lines, which run through both State and private land, are simply lines to designate the most vital sections of the mountain regions. Extensive lumbering operations upon much of the land within the park lines are endangering the water sheds, and this led to a referendum vote in 1916 for the authorization of a bond issue of $7,500,000 for purchase of additional land to be added to the Forest Preserve. The proposition passed by a large majority, and the Conservation Commission is now engaged upon the expenditure of this sum.

It is conservatively estimated that the Forest Preserve is now worth, if it should be placed on the market, more than $40,000,000, showing an increase in value of 800 per cent. over its cost to the State.

Investigations made by the Conservation Commission indicate that investment in hotels, boarding houses and other facilities for the care of summer visitors in the Forest Preserve regions, the amount of money annually expended in caring for these people, the money spent by vacationists, and the number of persons actually engaged in the business of caring for summer visitors, far exceed in amount similar figures for the lumber industry, thus indicating that the chief business in the Forest Preserve regions has now come to be that of caring for vacationists.

Under a careful system of game protection the fauna native to the woods is preserved, and in many respects is increasing. Chief among the large animals are deer and bears. Beaver, which had become extinct, were reintroduced to the Adirondacks in 1905, and have since spread over every section of the woods. They have also been introduced in the Catskills and are becoming more abundant there. In 1915, through co-operation with the Benevolent and Protective Order of Elks, a carload of elk from Yellowstone Park was liberated in the Adirondacks. Among other common animals, many of which furnish a large amount of fur, should be mentioned the fox, mink, otter, marten, weasel, fisher, coon, and muskrat.

The lakes and streams which are annually stocked by the Conservation Commission, contain brook trout, lake trout, rainbow trout, brown trout, large-mouth and smallmouth black bass, great northern pike, pickerel, perch, bullheads, and many of the coarser fishes.

## THE PALISADES INTERSTATE PARK.

THE Palisades Interstate Park comprises 36,000 acres (1,000 acres in the State of New Jersey and 35,000 acres in New York State). The park embraces the Palisades cliffs and runs for twelve miles on the west bank of the Hudson River from Fort Lee, N. J., to Palisades, N. Y. The Harriman Park, which is the highlands region of the Palisades system, runs from Bear Mountain, N. Y., five miles south of West Point, for fifteen miles to Tuxedo, N. Y. The Commission also owns the State Rifle Range at Blauvelt, N. Y., and the Hook Mountain quarries. In the creation of the Palisades Park, the State of New York has appropriated in money and lands $5,963,525. New Jersey has appropriated $727,984, including $500,000 for the Henry Hudson Drive. In addition, the Commission has received private contributions of $4,735,144 in cash, and lands valued at $1,692,765. All these contributions and appropriations, together with value of land donations, aggregate $13,119,419.

In the Palisades section of the park the Commission maintains pavilions for picnic parties, bath houses and beaches; motor boat basin for small pleasure craft; week-end camps for working boys; hundreds of individual camps are established here under permit. In the Harriman Park and Bear Mountain section of the Palisades system there is maintained by the Commission the Bear Mountain Inn, which is a restaurant, built by private funds and operated by the Commissioners for the sale of food at reasonable prices; a lawn plateau for baseball, tennis, running meets, and other organized athletic sports; a large grove on the side of Hessian Lake for picnic parties, benches and tables being scattered though this area, and swings for the children; the free use of rowboats is permitted for a limited period on Hessian Lake; sightseeing automobiles take visitors in to the park which plunges into the woodland for fifteen miles; parking places for automobiles have been developed, seven lakes have been either entirely made or artificially enlarged.

The Commission maintains the largest civil encampment in the world. In 1921 over 52,000 individuals, mostly tenement children and mothers, averaged eight consecutive days' vacation each. Camps for working girls are maintained at cost. During the summer over 1,780,000 visitors were at Bear Mountain, nearly 1,000,000 of whom came by automobile. Nearly 260,000 people were carried in the Commission automobiles. Over 1,300,000 people visited the Palisades section of the park. No concessions are let in the Palisades Park. This park is under the jurisdiction of a Joint Commission, appointed by the Governors of New York and New Jersey.

George W. Perkins was the President of the New York Commission for nearly twenty years until his death in 1920. The officers of the Commission are: New York State—J. Du Pratt White, President; Franklin W. Hopkins, Vice President; Geo. W. Perkins, Jr., Secretary; Edward L. Partridge, Treasurer; New Jersey—Richard V. Lindabury, President; Edward L. Partridge, Vice-President; Geo. W. Perkins, Jr., Secretary; Frederick C. Sutro, Treasurer.

The first five-mile section of the Henry Hudson Drive, paid for by the State of New Jersey at a cost of $443,107, was opened Oct. 29, 1921. It extends from Englewood to the top of the Hudson cliffs, overlooking Alpine.

## WOODS USED IN NEW YORK STATE.

(By the U. S. Forest Service, and the N. Y. State College of Forestry.)

| Kind of Wood (Common Name). | Quantity Used. 1919. Board Feet. | 1919. Average Value per M Ft | 1912. Board Feet. | 1912. Average Value per M Ft. | Grown in New York. Quantity in Board Feet. 1919. | 1912. |
|---|---|---|---|---|---|---|
| Total | 1,279,795,750 | $60.78 | 1,754,519,217 | $30.76 | 189,109,000 | 548,236,159 |
| White pine | 329,485,000 | $53.54 | 422,686,634 | $27.70 | 23,569,000 | 158,109,000 |
| Spruce | 149,373 000 | 51.63 | 169,107,607 | 21.31 | 20,155 000 | 76,162,900 |
| Loblolly pine | 112,007,000 | 48.86 | 70,596,671 | 20.77 | ..... | ..... |
| Southern yellow pine | 106,688,000 | 59.35 | 194,503,215 | 28.98 | ..... | ..... |
| Hard maple | 74,481,000 | 54.01 | 90,194,650 | 27.07 | 47,693,000 | 56,905,700 |
| White oak | 68,879,000 | 93.81 | 130,421,577 | 46.25 | 5,786,000 | 30,335,677 |
| Hemlock | 53,330,000 | 39.96 | 83,028,900 | 19.82 | 11,578,000 | 49,080,400 |
| Birch | 49,249,000 | 54.46 | 44,136,326 | 30.07 | 27,405,000 | 30,508,032 |
| Chestnut | 49,079,000 | 58.40 | 71,054,190 | 28.56 | 1,955,000 | 13,627,550 |
| Yellow poplar | 41,375,000 | 81.17 | 57,016,880 | 40.47 | 293,000 | 5,250,900 |
| Red gum | 37,254,000 | 76.64 | 41,940,175 | 29.16 | ..... | 75,000 |
| Cypress | 32,416,000 | 71.08 | 60,314,370 | 39.97 | ..... | ..... |
| Basswood | 29,897,000 | 54.85 | 56,977,220 | 27.36 | 11,347,000 | 32,621,350 |
| Beech | 28,955,000 | 36.07 | 42,546,814 | 20.54 | 22,947,000 | 31,492,600 |
| Ash | 21,017,000 | 98.47 | 17,556,225 | 38.49 | 7,870,000 | 8,369,225 |
| Western white pine | 14,362,000 | 65.69 | 3,935,000 | 40.65 | ..... | ..... |
| Douglas fir | 13,340 000 | 53.76 | 1,508,600 | 50.95 | ..... | ..... |
| Mahogany | 11,901,000 | 208.94 | 11,208,720 | 138.84 | ..... | ..... |
| Tupelo | 7,318,000 | 68.37 | 1,598,616 | 39.24 | ..... | ..... |
| Elm | 7,103,000 | 42.58 | 17,310,500 | 28.37 | 4,340,000 | 8,300,600 |
| Red oak | 6,291,000 | 87.80 | 59,868,300 | 38.49 | 1,050,000 | 17,282,050 |
| Black walnut | 3,451,000 | 199.45 | 2,629,128 | 117.15 | 6,000 | 570,675 |
| Soft maple | 3,328,000 | 59.33 | 8,960,650 | 25.71 | 1,368,000 | 4,587,400 |
| Red cedar (southern) | 3,210,000 | 139.72 | 16,766,575 | 37.98 | ..... | 2,500 |
| Cottonwood | 3,090,000 | 48.34 | 22,778,000 | 21.00 | 171,000 | 14,508,000 |
| Sugar pine | 2,774,000 | 61.10 | 1,647,100 | 46.83 | ..... | ..... |
| Red pine | 2,650,000 | 42.91 | 12,420,300 | 22.99 | 20,000 | 140,000 |
| Balsa | 2,500,000 | 110.00 | 20,000 | 40.00 | ..... | ..... |
| Hickory | 2,370,000 | 97.85 | 8,755,100 | 43.03 | 314,000 | 2,551,150 |
| Western red cedar | 2,120,000 | 53.48 | 1,245,200 | 30.85 | ..... | ..... |
| Spanish cedar | 1,849,000 | 179.19 | 8,582,500 | 113.11 | ..... | ..... |
| Cherry | 1,830,000 | 71.55 | 3,242,750 | 46.22 | 1,068,000 | 748,050 |
| Sitka Spruce | 1,766,000 | 187.57 | 27,000 | 49.07 | ..... | ..... |
| Redwood | 1,174,000 | 80.07 | 767,700 | 41.74 | ..... | ..... |
| Sycamore | 768,000 | 67.50 | 182,712 | 37.06 | ..... | 2,700 |
| Arborvitae | 582,000 | 90.42 | 1,623,600 | 24.61 | 25,000 | 929,700 |
| All other kinds | 2,533,750 | ..... | 17,359,712 | ..... | 149,000 | 6,075,000 |

## WOOD USED IN NEW YORK STATE, BY INDUSTRIES, 1919.

| Industry. | Quantity Used Annually. Feet B. M. | Pct. | Av'ge Cost per 1,000 Feet. | Total Cost F. O. B. Factory. | Quantity Grown in New York (Feet B.M.) | Quantity Grown out of New York (Feet B. M.) |
|---|---|---|---|---|---|---|
| Total | 1,279,795,750 | 100.00 | $60.78 | $77,786,690 | 189,109 000 | 1,090,686,750 |
| Boxes and crates | 324,219,000 | 25.33 | $47.48 | $15,394,009 | 16,492,000 | 307,727,000 |
| Planing-mill products | 230,259,000 | 17.99 | 54.33 | 12,509,017 | 31,241,000 | 199,018,000 |
| Sash, doors, blinds, and general millwork | 200,504,000 | 15.67 | 67.49 | 13,532,772 | 13,273,000 | 187,231,000 |
| Furniture | 76,963,000 | 6.01 | 80.52 | 6,197,300 | 15,828,000 | 61,135,000 |
| Ship and boat building | 62,815,000 | 4.91 | 65.52 | 4,115,727 | 979,000 | 61,836,000 |
| Musical instruments | 53,569,000 | 4.18 | 89.03 | 4,769,358 | 16,533,000 | 37,036,000 |
| Car construction | 34,476,000 | 2.69 | 59.32 | 2,045,035 | 1.335,000 | 33,141,000 |
| Shade and map rollers | 29,946 000 | 2.34 | 44.23 | 1,324,434 | 2,523,000 | 27,423,000 |
| Caskets and coffins | 29,230,000 | 2.28 | 65.41 | 1,911,838 | 360,000 | 28,870,000 |
| Chairs | 22,318,000 | 1.74 | 58.35 | 1,302,410 | 13,073,000 | 9,245,000 |
| Motor vehicles | 20,813,000 | 1.63 | 101.08 | 2,103,699 | 5,592,000 | 15.221,000 |
| Agricultural implements | 19,064,000 | 1.49 | 62.83 | 1,197,890 | 6,551,000 | 12,513,000 |
| Boot and shoe findings | 14,705,000 | 1.15 | 65.44 | 962,280 | 12,465,000 | 2,240,000 |
| Matches | 14,250,000 | 1.11 | 52.32 | 745,500 | 300,000 | 13,950,000 |
| Woodenware and novelties | 13,745,000 | 1.07 | 39.94 | 548,981 | 9,270,000 | 4,475,000 |
| Handles | 11,986,250 | .94 | 37.95 | 454.814 | 11,293,000 | 693.250 |
| Refrigerators and kitchen cabinets | 11,562,000 | .90 | 71.59 | 827,767 | 145,000 | 11,417,000 |
| Fixtures | 10,739,000 | .84 | 85 44 | 917,587 | 1,929,000 | 8,810,000 |
| Professional and scientific instruments | 9.754.000 | .76 | 82.47 | 807,358 | 534,000 | 9,220,000 |
| Baskets and fruit packages | 8,527,000 | .67 | 35.85 | 305,746 | 7,499,000 | 1,028,000 |
| Vehicles and vehicle parts | 7,660,000 | .60 | 89.20 | 683,270 | 3,690,000 | 3,970,000 |
| Dairymen's, poulterers' & apiarists' sup. | 7,556,000 | .59 | 37.79 | 285,578 | 4,683,000 | 2,873,000 |
| Tanks and silos | 7,471,000 | .58 | 66.65 | 497,950 | 632,000 | 6,839,000 |
| Toys | 6,864,000 | .54 | 45.79 | 314,313 | 3,195,000 | 3,669,000 |
| Picture frames and mouldings | 6,647,000 | .52 | 83.57 | 555,474 | 186,000 | 6,461,000 |

## GEOLOGICAL HISTORY OF NEW YORK STATE.

(By John M. Clarke, Director of the State Museum.)

THE geological history of New York can be traced back to the Precambrian era, the oldest recognizable in the rocks of the earth. These earliest rocks, the Grenville metamorphosed sediments (gneisses, marble, etc.) are, however, not the oldest which ever existed in the State. The Grenville rocks are exposed in the Adirondacks and the Hudson Highlands. They prove that in Grenville time, Northern, Eastern, and probably Southwestern New York was under the sea. After the deposition of the Grenville sediments igneous activity took place on a large scale and huge masses of molten rock (granite, anorthosite, babbrosynite) were pushed into the sediments from below. Some time after the whole Adirondack region was subjected to enormous pressure and intensely folded, and then the great mass of Grenville sediments was upraised well above the sea.

### IN CAMBRIAN TIMES.

At the beginning of Cambrian time, when organic life becomes first recognizable in the State, only the eastern margin was submerged, but toward the end (Potsdam time) the sea covered the whole region except the central and northwestern Adirondacks. At the close of Cambrian time Northern New York was, however, above sea level. In the long Ordovician period, during which the Beekmantown, Chazy, Black River limestones, and the Utica, Frankfort and Lorraine shales and sandstones were deposited, the State was most of the time submerged under the Ordovician sea, except for the Adirondack island. Toward the end of that period, however, the Green and Taconic Mountains arose along the eastern border of the State and practically all of Northern, Central, Eastern and Northeastern New York became dry land. In the following Silurian period were deposited the Medina and Oneida sandstone and conglomerate, the Clinton shale, sandstone, limestone and iron ore, the Rochester shale, the Lockport and Guelph dolomites, the Salina shales, salt and waterline, etc. During the early part of this period the sea had spread over only Central and Western New York, while during the late Silurian it had extended over practically all the State west and east of the Adirondack region. The strata of the next, or Devonian era, comprise the whole Catskill and southwestern plateau provinces and cover more than a third of the State. These rocks abound in fossils and show that the sea continued to cover at least the southern half of the State. The sea of the Carboniferous period hardly came over the boundary of the State from Pennsylvania. At the end of Palaeozoic time New York, except for a small area at the mouth of the Hudson, was raised during the Appalachian revolution well above the sea, never to be invaded again until the end of the glacial period. During the long Mesozoic period New York was dry land; in Triassic time considerable volcanic activity prevailed in Southeastern New York, when sheets of lava (the trap of the Palisades) were forced into nonmarine Triassic beds. During the next or Jurassic period the State was above the sea and actively eroded, but in the following Cretaceous period Staten and Long Islands disappeared under the sea. At the end of this period the State, which had been eroded nearly to a plain, was uplifted 2,000-3,000 feet. After this time in the Tertiary period the present drainage and relief of the State were developed in its major features. Finally came the glacial period, which enriched the State with thousands of lakes and waterfalls. It ended with the Champlain subsidence, during which the sea came for the last time into New York, namely, into the Champlain Basin and the Hudson Valley. A recent elevation has again drained these regions.

### THE HUDSON AN ANCIENT RIVER.

The Hudson River is one of the most ancient rivers of the continent and flows over rocks which have been frequently and heavily faulted. The fault blocks seem to have reached their equilibrium but, if subjected to new strains, may settle down to new adjustments and cause earthquake disturbances.

## NEW YORK STATE MUSEUM.

(Prepared by the Museum for THE ALMANAC.)

THE title, New York State Museum, is the statutory name of a scientific research organization. Historically it is the outcome of the great Natural History Survey of the State of New York organized in 1836. The nucleus of these now extensive collections are the scientific materials brought together during the existence of that survey. Under the present statute the "New York State Museum" includes the work of the State Geologist and his associates, who together form the Geological Survey of the State of New York; that of the State Botanist and his staff; of the State Entomologist and his staff; the Zoologist and the Archaeologist. The museum collections, as such, originate partly from the materials acquired for the researches of these officials and partly from special additions made to exemplify the resources of the State of New York. The State Museum is likewise known as the Department of Science of the University of the State of New York, and as such, is under the administrative control of that university. The collections of the museum are arranged on a floor space of about 100,000 square feet on the upper floors of the State Education Building at Albany. These collections form what has been planned and worked out as an essentially State or provincial museum exhibiting the natural resources of animal and plant life, the mineral wealth, geological history, and aboriginal culture of New York State. It has not planned to receive, nor does it especially welcome, material from outside the State, unless this is adapted to illuminate the scientific problems of the State itself. The collections are open free on every week day, 9 A. M. to 5 P. M., and on Sundays, October 1 to May 1, 2 to 5 P. M. The Legislature grants $55,000 a year for maintenance.

### MINERAL AND FOSSIL COLLECTIONS.

**Hall of Minerals**—The general collection of about 5,000 specimens is supplemented by a very extensive and complete collection of minerals from New York State, probably the best in existence. There are probably in this hall about 14,000 specimens on exhibition.

**Hall of Geology**—The collections here illustrate the rock structure and the mineral wealth of the State, especially the application of minerals, ores and rocks to commerce and the industrial arts.

**Hall of Fossils**—This hall includes vertebrates and invertebrates and the long continued researches of the Geological Survey have made the collection of invertebrate fossils, and the corresponding classification of the rocks of New York the standard of comparison for the world. The use of restorations of extinct animal life, with relief maps, reconstructions, &c., has helped to visualize the appearance of these.

**Hall of Zoology**—The animal life of New York is exhibited in this hall, the larger mammals in habitat groups and the smaller mammals, birds, fishes, reptiles and mollusks in extensive series of well-mounted specimens. The collection of birds' eggs is one of the largest in America. This section also contains a representative gathering of insects, arranged to illustrate their economic relations to agriculture and forestry. The section of Botany maintains an herbarium of upward of 100,000 specimens of New York plants.

**Halls of Archaeology and Ethnology**—These contain six large groups representing the customs and habits of the Iroquois Indians in their natural state, before the advent of the white man. These figures have been cast from the best available representatives among the surviving Iroquois and mounted amid actual accessories and against painted backgrounds. Tney depict the hunt, warfare, council ceremony, industries and agriculture of the New York aborigines. The collections of relics of Indian life in New York are the most extensive in existence, and these collections, with the groups referred to, fill the mezzanine floors.

### GENERAL ACTIVITIES.

**Publications**—The museum issues general and special publications on the natural resources of the State, in the form of bulletins, memoirs and annual reports. These now number 350 and each can be obtained on payment of a small fee.

The museum owns three parcels of real estate, presented by citizens for preserving their geological interest: 1—The Clark Reservation near Syracuse, a tract of 104 acres characterized by its extraordinary display of abandoned cataracts and gorges produced by the flow of the post-glacial waters; 2—Stark's Knob Reservation, or Volcano, near Schuylerville; 3—The Lester Park, or Cryptozoon Ledge in the town of Greenfield, west of Saratoga Springs.

## UNIVERSITY OF THE STATE OF NEW YORK.

*AND STATE DEPARTMENT OF EDUCATION.*

(Contributed by the Department.)

The list of Regents is on page 484. They elect the *President of the University and State Commissioner of Education*—Frank P. Graves; *Assistant Commissioner for Higher Education and Director of Professional Education*—Augustus S. Downing; *Assistant Commissioner for Secondary Education*—Charles F. Wheelock; *Assistant Commissioner for Elementary Education*—George M. Wiley; *Director State Library*—James I. Wyer, jr.; *Director of Science and State Museum*—John M. Clarke; *Chiefs and Directors of Divisions*: *Administration*—Hiram C. Case; *Vocational and Extension Education*—Lewis A. Wilson; *Archives and History*—James Sullivan; *Attendance*—James D. Sullivan; *Library Extension*—William R. Watson; *Examinations and Inspection*—Avery W. Skinner; *School Buildings and Grounds*—Frank H. Wood; *Law*—Frank B. Gilbert; *Library School*—Edna M. Sanderson; *School Libraries*—Sherman Williams; *Visual Instruction*—Alfred W. Abrams; *Finance*—Clark W. Halliday; and *Secretary to the President of the University*—Mrs. N. Frances Steers.

The educational system of the State of New York is under the control of the Board of Regents, consisting of twelve members, one from each of the nine judicial districts of the State and three others at large, each member being elected for a term of twelve years at a joint session of the two Houses of the Legislature held in the second week of February of each year.

In its origin and history it is unique. By a law of 1784, following ideas enunciated by Diderot, a French encyclopaedist, a corporation entitled the University of the State of New York, governed by a Board of Regents, was established to supervise and control collegiate and academic instruction, with the power to grant charters to institutions engaged in such work. Under the impetus given by the members of the Board of Regents a State superintendency for common schools, subsequently known as the State Department of Education, with control over education below collegiate and academic grades, was established by law in 1812. These two agencies for educational control continued as separate institutions until 1904 when they were combined and continued under the control of the Board of Regents which had become a constitutional body under the name of the University of the State of New York in accordance with Article 9, Section 2 of the Constitution of 1894.

The powers exercised by the Board of Regents may be increased, modified or diminished by the Legislature, but the number of its members may not be reduced below nine nor may the Legislature fail to provide for the maintenance and support of the system of free schools wherein all of the children of the State may be educated (Article 9, Section 1). Under legislative enactment the Board of Regents is the embodiment of the educational agencies of the commonwealth. Its province is the entire range of education. It embraces the membership and the work of the public schools, academies, colleges, professional, technical and normal schools, universities, libraries, museums and learned societies. It provides opportunity for co-operation and understanding among its members while diminishing or adjudicating occasions of friction and conflict, adapts educational policy to varying needs, and indicates and provides a continuity of training. It accumulates books and manuscripts, supervises the public archives, collects valuable natural objects, and may carry on educational historical and scientific research work directly on behalf of the State; grants all educational charters in the State, confers honorary degrees, conducts examinations, and awards certificates, diplomas and degrees; admits to certain professions and occupations, and regulates the certification of public accountants and nurses. It apportions State educational funds. It fosters all forms of cultural work, such as is rendered by libraries and local associations of an educational and historical character, distributes printed matter, circulates library books and lantern slides, encourages civic improvement work; in fact, does everything it can to stimulate the intellectual life of the people. It meets monthly and has an annual convocation for the consideration of important educational matters.

Though it does not exercise a complete monopoly of education, for private institutions exist subject to no public authority, which do good work, it is the policy of the State to bring all chartered educational institutions into the university and, while allowing them virtually complete self-government in internal administration, to hold them accountable for the proper performance of their duties. These chartered institutions are subject to the inspection of the Regents, who may require annual reports of them.

## SCHOOL ATTENDANCE IN NEW YORK STATE, 1920.

| Age Period. | All Classes. | | | Native White, Native Parentage. | | |
|---|---|---|---|---|---|---|
| | Total Number. | Attending School. | | Total Number. | Attending School. | |
| | | Number. | Per Cent. | | Number. | Per Cent. |
| THE STATE: 1920. | | | | | | |
| 5 to 20 years, inclusive | 2,860,256 | 1,856,260 | 64.9 | 1,109,095 | 742,490 | 66.9 |
| Male | 1,420,818 | 932,351 | 65.6 | 554,543 | 309,820 | 66.7 |
| Female | 1,439,438 | 923,909 | 64.2 | 554,552 | 372,670 | 67.2 |
| 5 and 6 years | 398,950 | 199,355 | 50.0 | 154,275 | 76,520 | 49.6 |
| 7 to 13 years | 1,307,158 | 1,226,918 | 93.9 | 504,722 | 473,682 | 93.9 |
| 14 and 15 years | 325,678 | 265,353 | 81.5 | 129,852 | 110,959 | 85.5 |
| 16 and 17 years | 330,102 | 107,688 | 32.6 | 129,276 | 52,076 | 40.3 |
| 18 to 20 years | 498,368 | 56,946 | 11.4 | 190,970 | 29,253 | 15.3 |

| Age Period. | Native White, Foreign or Mixed Parentage. | | | Foreign-Born White. | | | Negro. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Number. | At'ding School. | | Total Number. | At'ding School. | | Total Number. | At'ding School. | |
| | | Number. | Per Ct. | | Number. | Per Ct. | | Number. | Per Ct. |
| THE STATE: 1920. | | | | | | | | | |
| 5 to 20 years, incl. | 1,455,470 | 978,605 | 67.2 | 251,529 | 109,734 | 43.6 | 41,213 | 23,621 | 57.3 |
| Male | 725,124 | 493,688 | 68.1 | 120,608 | 56,830 | 47.1 | 18,942 | 11,087 | 58.5 |
| Female | 730,346 | 484,917 | 66.4 | 130,921 | 52,904 | 40.4 | 22,271 | 12,534 | 56.3 |
| 5 and 6 years | 232,745 | 117,125 | 50.3 | 6,439 | 3,182 | 49.4 | 5,101 | 2,354 | 46.1 |
| 7 to 13 years | 713,937 | 673,873 | 94.4 | 70,571 | 62,690 | 88.8 | 16,683 | 15,534 | 93.1 |
| 14 and 15 years | 156,018 | 124,679 | 79.9 | 35,162 | 25,841 | 73.5 | 4,310 | 3,613 | 83.8 |
| 16 and 17 years | 148,026 | 42,755 | 28.9 | 47,332 | 11,239 | 23.5 | 4,038 | 1,479 | 31.9 |
| 18 to 20 years | 204,744 | 20,173 | 9.9 | 91,525 | 6,782 | 7.4 | 10,481 | 641 | 6.1 |

## CHILDREN IN N. Y. CITY (SCHOOL ATTENDANCE IN PARENTHESES), JAN. 1, 1920.

| Children. | Bronx. | Brooklyn. | Manhattan. | Queens. | Richmond. |
|---|---|---|---|---|---|
| 7 to 13 years | 99,429 (92,616) | 277,514 (259,505) | 263,742 (247,853) | 67,662 (63,700) | 16,548 (15,366) |
| 14 and 15 years | 24,320 (19,818) | 67,193 (51,812) | 65,549 (51,568) | 15,792 (11,842) | 3,874 (3,062) |
| 16 and 17 years | 24,396 (7,547) | 69,815 (17,423) | 68,597 (19,533) | 15,663 (3,725) | 3,602 (878) |
| 18 to 21 years | 37,040 (3,407) | 105,875 (8,411) | 112,667 (11,054) | 22,693 (1,631) | 5,622 (432) |

## ILLITERACY, NEW YORK STATE.

ACCORDING to the census of 1920 there were, then, 425,022 *illiterate persons* 10 years of age and over in the State of New York, "illiterate" meaning unable to write. Of this number 16,150 were *native whites* of native parentage, 12,256 were of *foreign or mixed parentage*, and 389,603 were of *foreign birth*. The number of illiterate *Negroes* was 5,032. In the total population 10 years of age and over the *percentage of illiteracy* was 5.1, which showed a diminution since 1910, when it was 5.5.

There is less illiteracy in the rural districts of the State than in the cities, the percentage being 2.9 for the rural population and 5.5 for the urban.

By counties the percentage of illiteracy ranges from 8.4 in Clinton County to 0.7 in Allegany County.

ILLITERACY IN NEW YORK STATE CITIES OF 25,000 OR OVER POPULATION, 1920.

| CITY. | Total Illiterate. | Per Cent. | Foreign-Born Illiterate. | CITY. | Total Illiterate. | Per Cent. | Foreign-Born Illiterate. |
|---|---|---|---|---|---|---|---|
| Albany | 2,918 | 3.0 | 2,582 | Queens | 12,383 | 3.3 | 11,597 |
| Amsterdam | 2,011 | 7.6 | 1,929 | Richmond | 3,688 | 4.0 | 3,476 |
| Auburn | 1,401 | 4.7 | 1,327 | Newburgh | 1,109 | 4.4 | 935 |
| Binghamton | 1,703 | 3.1 | 1,511 | Niagara Falls | 2,935 | 7.5 | 2,869 |
| Buffalo | 17,095 | 4.2 | 16,180 | Poughkeepsie | 1,059 | 3.7 | 907 |
| Elmira | 822 | 2.2 | 726 | Rochester | 10,871 | 4.5 | 10,531 |
| Jamestown | 1,581 | 4.9 | 1,523 | Rome | 1,881 | 9.0 | 1,301 |
| Kingston | ..... | 2.1 | ..... | Schenectady | 3,549 | 5.0 | 3,350 |
| Mount Vernon | 1,564 | 4.5 | 1,488 | Syracuse | 5,607 | 4.0 | 5,158 |
| New Rochelle | 1,171 | 4.0 | 1,016 | Troy | 1,611 | 2.6 | 1,413 |
| New York | 281,121 | 6.2 | 270,788 | Utica | 4,832 | 6.4 | 4,627 |
| Bronx | 26,202 | 4.5 | 25,620 | Watertown | 756 | 2.9 | 568 |
| Brooklyn | 98,038 | 6.1 | 94,737 | Yonkers | 4,309 | 5.5 | 4,162 |
| Manhattan | 140,810 | 7.5 | 135,358 | | | | |

The percentage of illiteracy in the total population of New York City 10 years of age and over is 6.2, which shows a slight decrease since 1910, when it was 6.7. For the native white the percentage is 0.3, for the foreign-born white, 13.8, and for the Negro, 2.1.

That the younger generation in the City of New York is much less illiterate than the older is indicated by the fact that while 6.5 per cent. of the males and 9.4 per cent. of the females 21 years of age and over are illiterate, the percentage of illiteracy in the population 16 to 20 years of age is but 1.0.

## NEW YORK STATE PRISON CENSUS, 1922-1917.

According to returns received by the U. S. Bureau of the Census, the number of persons confined in prisons, jails, and police stations in the State of New York on July 1, 1922, was 15,451, as compared with 17,494 on July 1, 1917. These figures include persons awaiting hearing or trial and those held as witnesses, as well as prisoners serving sentence. Of the total for 1922, 7,956 were reported for 11 State institutions, 1,870 for 64 county jails, 5,077 for 162 cities, and 548 for 9 other institutions.

The returns were obtained in response to a circular of inquiry which the Bureau of the Census mailed to the various institutions, as a preliminary to the complete decennial census of prisoners, which will be taken in 1923.

NEW YORK STATE PRISON CENSUS.

| CLASS OF INSTITUTIONS. | JULY 1, 1922. | | | | JULY 1, 1917. | |
|---|---|---|---|---|---|---|
| | | Prisoners. | | | | |
| | Institutions. | Both Sexes. | Male. | Female. | Institutions. | Prisoners (Both Sexes). |
| Total | 246 | 15,451 | 13,636 | 1,815 | 252 | 17,494 |
| State | 11 | 7,956 | 7,268 | 688 | 11 | 7,239 |
| County | 64 | 1,870 | 1,763 | 107 | 64 | 3,358 |
| City or village (including police stations) | 162 | 5,077 | 4,605 | 472 | 177 | 6,897 |
| Other | 9 | 548 | .... | 548 | ... | ... |

The 1922 total number of institutions is, exclusive of 4 county and 100 city institutions reporting no prisoners, and 9 city institutions for which no reports were received.

"Other" in the above table includes the House of the Good Shepherd at Albany, Asylum of Our Lady of Refuge and Ingleside Home at Buffalo, House of the Good Shepherd at Brooklyn, House of the Good Shepherd, the Salvation Army Rescue Home, House of Mercy, and House of the Holy Family at New York, and Mount Magdalen School of Industry at Troy.

INMATES IN N. Y. STATE ASYLUMS AND REFORMATORIES.

| NAME. | 1917. | 1918. | 1919. | 1920. | 1921. |
|---|---|---|---|---|---|
| Western House of Refuge for Women, Albion | 210 | 206 | 184 | 180 | 192 |
| State School for the Blind, Batavia | 166 | 126 | 152 | 167 | 164 |
| State Soldiers and Sailors' Home, Bath | 1,148 | 1,005 | 1,002 | 815 | 713 |
| State Reformatory, Elmira | 741 | 726 | 775 | 777 | 987 |
| Eastern Reformatory, Napanoch | 193 | 206 | 233 | 205 | 299 |
| State Training School for Girls, Hudson | 371 | 366 | 375 | 357 | 368 |
| State Custod. Asyl for Feeble-Minded Women, Newark | 856 | 891 | 988 | 978 | 1,062 |
| House of Refuge, Randall's Island | 640 | 645 | 674 | 550 | 545 |
| State School for Mental Defectives, Rome | 1,623 | 1,724 | 1,939 | 1,969 | 2,304 |
| State Agric. and Indust. School, Industry | 786 | 837 | 715 | 728 | 635 |
| State Institution for Mental Defectives, Syracuse | 631 | 582 | 638 | 648 | 634 |
| Thomas Indian School, Iroquois | 204 | 177 | 178 | 187 | 204 |
| Craig Colony for Epileptics, Sonyea | 1,466 | 1,477 | 1,348 | 1,403 | 1,508 |
| State Woman's Relief Corps Home, Oxford | 192 | 181 | 163 | 141 | 170 |
| State Reformatory for Women, Bedford Hills | 405 | 390 | 371 | 248 | 183 |
| State Hosp. Care Crippl. and Def. Child., West Haverstraw | 118 | 134 | 174 | 165 | 171 |
| State Hosp. Treat. of Incip. Tuberc., Ray Brook | 332 | 302 | 284 | 317 | 303 |
| Letchworth Village, Thiells | 351 | 351 | 360 | 811 | 1,229 |
| Total | 9,499 | 10,326 | 9,545 | 10,646 | 11,671 |

## CRIME STATISTICS OF NEW YORK STATE.

(Showing the number of Convictions in Courts of Record. Compiled by the Secretary of State.)

| YEAR. | Offences ag. the person. | Offen. ag. property with violence. | Offen. ag. property without violence. | Offences ag. the Currency | Felonies | Misdemeanors. | Total number Convictions. | Pardons. | Commutations. | Respites from death. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1840.... | 463 | 120 | 437 | 49 | 471 | 857 | 1,343 | ..... | ..... | ..... |
| 1841.... | 458 | 121 | 460 | 49 | 488 | 1,006 | 1,515 | ..... | ..... | ..... |
| 1842.... | 484 | 175 | 504 | 63 | 551 | 1,057 | 1,062 | ..... | ..... | ..... |
| 1843.... | 498 | 244 | 504 | 78 | 640 | 928 | 1,570 | ..... | ..... | ..... |
| 1844.... | 394 | 172 | 489 | 60 | 547 | 876 | 1,427 | ..... | ..... | ..... |
| 1845.... | 471 | 177 | 467 | 54 | 624 | 1,058 | 1,689 | ..... | ..... | ..... |
| 1846.... | 384 | 133 | 471 | 38 | 509 | 1,062 | 1,571 | ..... | ..... | ..... |
| 1847.... | 395 | 132 | 396 | 24 | 422 | 873 | 1,294 | 129 | 2 | ..... |
| 1848.... | 443 | 120 | 512 | 33 | 517 | 1,018 | 1,527 | 139 | 3 | ..... |
| 1849.... | 383 | 150 | 545 | 43 | 583 | 1,033 | 1,531 | 35 | 1 | 5 |
| 1850.... | 391 | 199 | 521 | 36 | 613 | 938 | 1,552 | 62 | 1 | ..... |
| 1851.... | 409 | 148 | 475 | 49 | 617 | 865 | 1 482 | 160 | 5 | 11 |
| 1852.... | 411 | 228 | 480 | 50 | 724 | 882 | 1,602 | 186 | 4 | 8 |
| 1853.... | 482 | 185 | 573 | 52 | 718 | 1,115 | 1,844 | 207 | 3 | 13 |
| 1854.... | 420 | 189 | 580 | 75 | 736 | 1,383 | 2,117 | 249 | 44 | 3 |
| 1855.... | 395 | 268 | 574 | 37 | 734 | 1,088 | 1,830 | 253 | 91 | 9 |
| 1856.... | 425 | 248 | 573 | 49 | 722 | 722 | 1,507 | 277 | 104 | ..... |
| 1857.... | 375 | 340 | 607 | 63 | 956 | 607 | 1,554 | 193 | 3 | ..... |
| 1858.... | 434 | 329 | 577 | 90 | 948 | 689 | 1,712 | 233 | 7 | 2 |
| 1859.... | 425 | 341 | 439 | 89 | 926 | 853 | 2,091 | 91 | 8 | 4 |
| 1860.... | 599 | 381 | 566 | 121 | 1,049 | 1,242 | 1,601 | 92 | 14 | 1 |
| 1861.... | 562 | 340 | 619 | 150 | 1,057 | 1,218 | 1,672 | 66 | 15 | ..... |
| 1862.... | 377 | 215 | 449 | 75 | 690 | 925 | 1,616 | 87 | 19 | ..... |
| 1863.... | 428 | 240 | 505 | 68 | 766 | 933 | 1,644 | 71 | 5 | 1 |
| 1864.... | 420 | 109 | 436 | 60 | 659 | 789 | 1,430 | 116 | 86 | 1 |
| 1865.... | 417 | 239 | 907 | 52 | 1,176 | 850 | 2,036 | 131 | 19 | 3 |
| 1866.... | 555 | 467 | 1,119 | 59 | 1,513 | 1,123 | 2,655 | 168 | 24 | 1 |
| 1867.... | 453 | 391 | 1,063 | 49 | 1,356 | 1,205 | 2,559 | 130 | 12 | ..... |
| 1868.... | 555 | 417 | 936 | 41 | 1,441 | 1,021 | 2,380 | 112 | 37 | 6 |
| 1869.... | 564 | 465 | 914 | 48 | 1,270 | 1,140 | 2,463 | 86 | 20 | 2 |
| 1870.... | 510 | 442 | 841 | 32 | 1,251 | 899 | 2,151 | 85 | 34 | 1 |
| 1871.... | 554 | 419 | 864 | 54 | 1,369 | 990 | 2,340 | 82 | 29 | 5 |
| 1872.... | 591 | 497 | 792 | 39 | 1,231 | 1,077 | 2,298 | 98 | 57 | 1 |
| 1873.... | 722 | 525 | 1,160 | 50 | 1,617 | 1,297 | 2,919 | 44 | 18 | 3 |
| 1874.... | 651 | 716 | 1,422 | 59 | 2,051 | 1,317 | 3,368 | 68 | 22 | 13 |
| 1875.... | 840 | 917 | 1,056 | 87 | 2,106 | 1,324 | 3,420 | 65 | 24 | 1 |
| 1876.... | 801 | 832 | 1,187 | 86 | 2,040 | 1,408 | 3,451 | 99 | 54 | 8 |
| 1877.... | 647 | 1,205 | 1,304 | 103 | 2,106 | 1,765 | 3,827 | 90 | 21 | ..... |
| 1878.... | 835 | 1,013 | 1,223 | 203 | 2,436 | 1,475 | 3,829 | 107 | 96 | 1 |
| 1879.... | 655 | 731 | 876 | 74 | 1,679 | 1,588 | 3,216 | 103 | 107 | 2 |
| 1880.... | 422 | 788 | 968 | 56 | 1,379 | 1,583 | 2,847 | 32 | 18 | 3 |
| 1881.... | 643 | 617 | 1,025 | 57 | 1,416 | 1,301 | 2,923 | ..... | 17 | 2 |
| 1882.... | 631 | 630 | 1,069 | 53 | 1,609 | 1,245 | 2,887 | 1 | 11 | ..... |
| 1883.... | 386 | 569 | 1,063 | 43 | 1,424 | 1,056 | 2,474 | 39 | 17 | ..... |
| 1884.... | 383 | 535 | 2,000 | 41 | 1,656 | 636 | 2,315 | 37 | 27 | ..... |
| 1885.... | 409 | 602 | 1,121 | 56 | 1,840 | 647 | 2,491 | 28 | 7 | ..... |
| 1886.... | 537 | 654 | 1,438 | 57 | 2,071 | 762 | 2,860 | 29 | 19 | 1 |
| 1887.... | 505 | 698 | 1,312 | 56 | 2,165 | 1,111 | 3,301 | 12 | 5 | ..... |
| 1888.... | 506 | 803 | 1,410 | 72 | 2,249 | 981 | 3,243 | 5 | 34 | 3 |
| 1889.... | 508 | 844 | 1,154 | 86 | 2,191 | 962 | 3,156 | 4 | 49 | 3 |
| 1890.... | 550 | 894 | 1,352 | 81 | 2,492 | 862 | 3,364 | 9 | 40 | ..... |
| 1891.... | 617 | 959 | 1,540 | 92 | 2,709 | 881 | 3,607 | 1 | ..... | ..... |
| 1892.... | ..... | ..... | ..... | 92 | 2,347 | 839 | 3,202 | 1 | 51 | 1 |
| 1893.... | 501 | 833 | 1,504 | 88 | 2,464 | 811 | 3,283 | 16 | 98 | ..... |
| 1894.... | 437 | 905 | 1,132 | 87 | 2,074 | 768 | 2,940 | 19 | 115 | 5 |
| 1895.... | 1,086 | 826 | 1,913 | ..... | 2,834 | 1,591 | 4,468 | 41 | 99 | 3 |
| 1896.... | 765 | 788 | 1,718 | 1 | 2,504 | 1,268 | 3,768 | 29 | 93 | 2 |
| 1897.... | 669 | 1,130 | 2,066 | ..... | 2,925 | 1,586 | 4,523 | 29 | 67 | 3 |
| 1898.... | 613 | 935 | 1,615 | ..... | 2,282 | 1,274 | 3,567 | 41 | 36 | 1 |
| 1899.... | 751 | 832 | 1,715 | 1 | 2,451 | 1,410 | 3,861 | 37 | 9 | 1 |
| | | | | | | | | | 38 | ..... |
| 1900.... | 731 | 883 | 1,967 | 2 | 2,599 | 1,553 | 4,116 | 8 | | 3 |
| 1901.... | 697 | 1,154 | 1,112 | ..... | 2,690 | 1,710 | 4,431 | 15 | 29 | ..... |
| 1902.... | 847 | 990 | 1,991 | ..... | 2,867 | 1,568 | 4,516 | 16 | 36 | 5 |
| 1903.... | 793 | 865 | 1,783 | 2 | 2,537 | 1,281 | 3,931 | 10 | 25 | 7 |
| 1904.... | 935 | 1,021 | 2,196 | ..... | 3,054 | 1,627 | 4,685 | 12 | 34 | 2 |
| 1905.... | 1,000 | 1,106 | 2,247 | ..... | 3,276 | 1,664 | 4,942 | 31 | 27 | 1 |
| 1906.... | 872 | 1,114 | 1,508 | ..... | 3,559 | 1,584 | 5,143 | 22 | 43 | 5 |
| 1907.... | 863 | 1,188 | 1,694 | ..... | 3,776 | 1,753 | 5,529 | 7 | 45 | ..... |
| 1908.... | 1,118 | 1,833 | 2,087 | ..... | 5,588 | 1,763 | 7,351 | ..... | 19 | ..... |
| 1909.... | 1,180 | 1,558 | 1,954 | ..... | 5,180 | 1,677 | 6,857 | 7 | 13 | 1 |
| | | | | | | | | | 8 | |
| 1910.... | 1,151 | 1,194 | 1,755 | ..... | 4,588 | 1,453 | 6,046 | 1 | | 8 |
| 1911.... | 1,216 | 1,301 | 1,884 | ..... | 4,971 | 1,686 | 6,657 | 13 | 10 | 3 |
| 1912.... | 1,243 | 1,427 | 1,932 | ..... | 5,583 | 1,753 | 7,336 | 11 | 38 | 5 |
| 1913.... | 1,402 | 1,390 | 1,665 | ..... | 5,486 | 2,279 | 7,765 | 11 | 47 | 4 |
| 1914.... | 1,627 | 1,664 | 1,900 | ..... | 6,266 | 2,822 | 9,088 | 3 | 31 | 8 |
| 1915.... | 1,830 | 1,858 | 2,000 | ..... | 6,723 | 3,435 | 10,158 | 8 | 19 | 10 |
| 1916.... | 1,514 | 1,167 | 1,553 | ..... | 4,760 | 2,458 | 7,218 | 6 | 47 | 11 |
| 1917.... | 1,617 | 1,100 | 1,554 | ..... | 4,850 | 3,080 | 7,930 | 21 | 46 | 5 |
| 1918.... | 1,409 | 961 | 1,595 | ..... | 4,574 | 2,670 | 7,244 | 12 | 121 | 11 |
| 1919.... | 1,463 | 1,127 | 1,860 | ..... | 5,276 | 2,771 | 8,047 | 25 | 119 | 11 |
| | | | | | | | | | 116 | |
| 1920.... | 1,352 | 963 | 1,703 | ..... | 4,499 | 2,357 | 6,856 | 22 | 157 | 34 |
| 1921.... | 1,697 | 1,302 | 2,071 | ..... | 6,183 | 2,708 | 8,891 | 11 | 53 | 7 |

## INSANE IN N. Y. STATE, WITH RATIOS.

(Data by Horatio M. Pollock, statistician, N. Y. State Hospital Commission.)

| October 1. | Total. | | State Hospitals. | | Private Institutions. | | Criminal Insane. | | Patient to Each 100,000 of Pop. |
|---|---|---|---|---|---|---|---|---|---|
| | Males. | Females. | Males. | Females. | Males. | Females. | Males. | Females. | |
| 1890 | 7,509 | 8,497 | 6,961 | 7,991 | 330 | 488 | 218 | 18 | 266.6 |
| 1900 | 11,493 | 12,285 | 10,422 | 11,666 | 373 | 565 | 698 | 54 | 327.1 |
| 1910 | 15,654 | 17,004 | 14,252 | 16,193 | 380 | 672 | 1,022 | 139 | 358.3 |
| 1911 | 16,010 | 17,301 | 14,569 | 16,482 | 377 | 684 | 1,064 | 135 | 361.0 |
| 1912 | 16,271 | 17,702 | 14,744 | 16,880 | 398 | 679 | 1,129 | 143 | 363.6 |
| 1913 | 16,716 | 18,317 | 15,089 | 17,510 | 375 | 656 | 1,252 | 151 | 370.4 |
| 1914 | 16,899 | 18,825 | 15,318 | 18,039 | 365 | 658 | 1,216 | 128 | 373.2 |
| 1915 | 17,382 | 19,281 | 15,796 | 18,512 | 368 | 636 | 1,218 | 133 | 378.4 |
| 1916 | 17,863 | 19,718 | 16,252 | 18,961 | 345 | 621 | 1,266 | 136 | 382.4 |
| 1917 | 18,422 | 20,342 | 16,801 | 19,556 | 336 | 638 | 1,285 | 148 | 388.9 |
| 1918 | 18,810 | 20,891 | 17,219 | 20,133 | 318 | 611 | 1,273 | 147 | 392.8 |
| 1919 | 19,016 | 20,929 | 17,407 | 20,200 | 321 | 595 | 1,288 | 134 | 389.9 |
| 1920 | 19,515 | 21,265 | 17,752 | 20,542 | 505 | 601 | 1,258 | 122 | 392.7 |
| 1921 | 20,182 | 21,922 | 18,543 | 21,193 | 313 | 606 | 1,326 | 123 | 400.0 |

State hospital column includes almshouses to 1894 and county asylums to 1896.

## PATIENTS IN NEW YORK STATE HOSPITALS FOR THE INSANE.

| Hospitals. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. | 1921. |
|---|---|---|---|---|---|---|---|---|---|---|
| Utica | 1,573 | 1,593 | 1,492 | 1,691 | 1,686 | 1,775 | 1,801 | 1,769 | 1,829 | 1,867 |
| Willard | 2,380 | 2,378 | 2,391 | 2,455 | 2,445 | 2,397 | 2,502 | 2,535 | 2,584 | 2,499 |
| Hudson River | 3,087 | 3,133 | 3,131 | 3,361 | 2,434 | 3,499 | 3,524 | 3,494 | 3,562 | 3,685 |
| Middletown | 2,020 | 2,015 | 2,033 | 2,167 | 2,192 | 2,307 | 2,297 | 2,184 | 2,177 | 2,185 |
| Buffalo | 1,997 | 2,063 | 2,095 | 2,142 | 2,199 | 2,262 | 2,352 | 2,392 | 2,344 | 2,417 |
| Binghamton | 2,328 | 2,347 | 2,410 | 2,409 | 2,455 | 2,815 | 2,782 | 2,794 | 2,738 | 2,771 |
| St. Lawrence | 1,988 | 2,027 | 2,048 | 2,132 | 2,251 | 2,303 | 2,354 | 2,260 | 2,282 | 2,338 |
| Gowanda | 1,107 | 1,115 | 1,170 | 1,222 | 1,278 | 1,312 | 1,311 | 1,291 | 1,274 | 1,221 |
| Rochester | 1,498 | 1,505 | 1,560 | 1,573 | 1,687 | 1,731 | 1,714 | 1,708 | 1,772 | 1,825 |
| Mohansic | ..... | 51 | 67 | 64 | ..... | ..... | ..... | ..... | ..... | ..... |
| Kings Park | 3,815 | 4,101 | 4,262 | 4,445 | 4,602 | 4,638 | 4,767 | 4,775 | 4,797 | 5,182 |
| Long Island | 747 | 808 | 817 | 820 | 844 | 890 | 902 | 1,090 | 1,313 | 1,491 |
| Manhattan | 4 570 | 4,747 | 5,004 | 4 951 | 5,152 | 5,329 | 5,756 | 5,874 | 6,045 | 6,564 |
| Central Islip | 4,438 | 4,700 | 4,880 | 4,876 | 4,988 | 5,099 | 5,290 | 5,441 | 5,577 | 5,691 |
| Total | 31,599 | 32,599 | 33,357 | 34,308 | 35,213 | 36,357 | 37,352 | 37,607 | 38,294 | 39,736 |

## CENSUS OF THE INSANE IN NEW YORK STATE—JULY 1, 1921.

| Psychoses. | Males. | Females. | Psychoses. | Males. | Females. |
|---|---|---|---|---|---|
| Traumatic | 41 | 14 | Manic-depressive | 1,286 | 2,578 |
| Senile | 426 | 881 | Involution melancholia | 256 | 679 |
| With cerebral arteriosclerosis | 387 | 322 | Dementia præcox | 11,072 | 12,346 |
| General paralysis | 1,052 | 362 | Paranoia or paranoic conditions | 576 | 973 |
| With cerebral syphilis | 84 | 49 | Epileptic psychoses | 568 | 601 |
| With Huntington's chorea | 18 | 21 | Psychoneuroses and neuroses | 87 | 171 |
| With brain tumor | 3 | 3 | With psychopathic personality | 319 | 389 |
| With other brain or nervous diseases | 84 | 62 | With mental deficiency | 695 | 698 |
| Alcoholic | 1,007 | 450 | Undiagnosed psychoses | 515 | 454 |
| Due to drugs & oth. exogenous toxins | 19 | 29 | Without psychoses | 6 | 6 |
| With pellagra | ..... | 2 | | | |
| With other somatic diseases | 42 | 103 | Total | 18,543 | 21,193 |

## NATIONALITY OF MENTAL PATIENTS FIRST ADMITTED TO N. Y. STATE HOSPITALS IN 1919 (FISCAL YEAR).

| Country of Birth. | Number. | Per Cent. | Country of Birth. | Number. | Per Cent. | Country of Birth. | Number. | Per Cent. |
|---|---|---|---|---|---|---|---|---|
| United States | 3,667 | 52.9 | Greece | 53 | 0.8 | Scotland | 37 | 0.5 |
| Austria | 306 | 4.4 | Holland | 12 | 0.2 | Spain | 24 | 0.3 |
| Belgium | 6 | 0.1 | Hungary | 121 | 1.7 | Sweden | 64 | 0.9 |
| Bohemia | 25 | 0.4 | Ireland | 494 | 7.1 | Switzerland | 20 | 0.3 |
| Canada | 113 | 1.6 | Italy | 511 | 7.4 | Turkey | 39 | 0.6 |
| China | 5 | 0.1 | Mexico | 6 | 0.1 | West Indies | 60 | 0.9 |
| Denmark | 20 | 0.3 | Norway | 30 | 0.4 | Other countries | 50 | 0.7 |
| England | 147 | 2.1 | Poland | 107 | 1.5 | Unascertained | 15 | 0.2 |
| Finland | 26 | 0.4 | Portugal | 6 | 0.1 | | | |
| France | 26 | 0.4 | Roumania | 34 | 0.5 | Total | 6,929 | 100.0 |
| Germany | 400 | 5.8 | Russia | 505 | 7.3 | | | |

## ALIENS IN NEW YORK STATE HOSPITALS FOR THE INSANE.

| Year. | Number. | Per Cent. | Year. | Number. | Per Cent. | Year. | Number. | Per Cent. |
|---|---|---|---|---|---|---|---|---|
| 1912 | 9,241 | 29.2 | 1916 | 9,492 | 27.0 | 1919 | 10,131 | 26.9 |
| 1913 | 9,029 | 27.7 | 1917 | 9,843 | 27.1 | 1920 | 10,095 | 26.4 |
| 1914 | 8,976 | 26.9 | 1918 | 10,064 | 26.9 | 1921 | 10,233 | 25.8 |
| 1915 | 9,208 | 26.8 | | | | | | |

## ALIEN AND NON-RESIDENT INSANE REMOVED FROM NEW YORK STATE.

| Year. | Aliens | Non-Residents. | Year. | Aliens | Non-Residents. | Year. | Aliens | Non-Residents. | Year. | Aliens | Non-Residents. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900 | 48 | 55 | 1906 | 307 | 98 | 1912 | 1,171 | 582 | 1917 | 52 | 258 |
| 1901 | 103 | 65 | 1907 | 352 | 170 | 1913 | 865 | 487 | 1918 | 53 | 326 |
| 1902 | 94 | 32 | 1908 | 424 | 174 | 1914 | 825 | 399 | 1919 | 142 | 346 |
| 1903 | 147 | 104 | 1909 | 489 | 86 | 1915 | 490 | 304 | 1920 | 337 | 475 |
| 1904 | 176 | 86 | 1910 | 613 | 251 | 1916 (6 mo.) | 208 | 284 | 1921 | 496 | 449 |
| 1905 | 299 | 118 | 1911 | 784 | 3,432 | | | | | | |

ADMISSIONS TO INSTITUTIONS FOR INSANE IN N. Y. STATE, EXCL. TRANSFERS.

| Oct. 1. | Total Number. | | Total Per 1,000,000 Pop. | | State Hospitals. | | Criminal Insane. | | Oct. 1. | Total Number. | | Total Per 1,000,000 Pop. | | State Hospitals. | | Criminal Insane. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *M.* | *F.* | *M.* | *F.* | *M.* | *F.* | *M.* | *F.* | | *M.* | *F.* | *M.* | *F.* | *M.* | *F.* | *M.* | *F.* |
| 1900 | 2,616 | 2,575 | 724 | 705 | 2,224 | 2,284 | 152 | 16 | 1916 | 3,469 | 3,215 | 702 | 658 | 3,207 | 3,016 | 140 | 18 |
| 1910 | 4,024 | 3,618 | 878 | 799 | 3,708 | 3,358 | 119 | 18 | 1917 | 4,909 | 4,498 | 979 | 908 | 4,563 | 4,242 | 175 | 29 |
| 1911 | 4,114 | 3,753 | 886 | 818 | 3,771 | 3,489 | 155 | 10 | 1918 | 4,731 | 4,542 | 931 | 904 | 4,400 | 4,300 | 161 | 22 |
| 1912 | 4,187 | 3,818 | 891 | 822 | 3,796 | 3,540 | 189 | 21 | 1919 | 4,690 | 4,593 | 910 | 902 | 4,370 | 4,304 | 156 | 17 |
| 1913 | 4,367 | 4,001 | 918 | 851 | 3,954 | 3,710 | 247 | 25 | 1920 | 4,858 | 4,464 | 930 | 865 | 4,317 | 4,194 | 117 | 12 |
| 1914 | 4,512 | 4,091 | 937 | 860 | 4,151 | 3,805 | 197 | 34 | 1921 | 5,032 | 4,574 | 958 | 868 | 4,688 | 4,340 | 192 | 13 |
| 1915 | 4,471 | 4,072 | 917 | 846 | 4,115 | 3,819 | 189 | 33 | | | | | | | | | |

Figures for 1916 cover 9 months.

The figures of criminal insane 1900 cover Matteawan only; and in 1908 include transfers.

RECOVERIES AND DEATHS, NEW YORK STATE HOSPITALS FOR THE INSANE.

| October 1. | Recoveries. | | Deaths. | | October 1. | Recoveries. | | Deaths. | |
|---|---|---|---|---|---|---|---|---|---|
| | *Males.* | *Females* | *Males.* | *Females* | | *Males.* | *Females* | *Males.* | *Females* |
| 1900 | 522 | 507 | 980 | 841 | 1916 (9 months) | 584 | 602 | 1,368 | 1,154 |
| 1910 | 815 | 773 | 1,367 | 1,169 | 1917 | 835 | 871 | 2,070 | 1,842 |
| 1911 | 837 | 861 | 1,511 | 1,375 | 1918 | 799 | 888 | 2,103 | 1,755 |
| 1912 | 780 | 830 | 1,485 | 1,205 | 1919 | 712 | 848 | 2,269 | 2,243 |
| 1913 | 795 | 802 | 1,608 | 1,282 | 1920 | 707 | 971 | 1,941 | 1,738 |
| 1914 | 907 | 796 | 1,586 | 1,422 | 1921 | 664 | 837 | 1,830 | 1,651 |
| 1915 | 731 | 846 | 1,652 | 1,384 | | | | | |

EXPENDITURES FOR NEW YORK STATE HOSPITALS FOR THE INSANE.

| Year. | Maintenance. | Additions and Improvements | Year. | Maintenance. | Additions and Improvements |
|---|---|---|---|---|---|
| 1900 | $3,993,198 | $662,948 | 1920 | $11,561,468 | $1,489,557 |
| 1910 | 6,068,261 | 1,412,508 | 1921 | 13,693,887 | 2,648,563 |
| 1917 | 7,508,910 | 711,362 | | | |
| 1918 | 9,480,808 | 846,939 | Totals since 1837 | $159,101,493 | 39,040,533 |
| 1919 | 10,774,525 | 1,033,381 | | | |

NEW YORK STATE INSTITUTIONS FOR THE DEAF AND DUMB.

The several institutions for the deaf and dumb receive $325 a year per capita from the State for such pupils, between the ages of twelve and twenty-five years, as may receive appointments from the Commissioner of Education. Pupils between five and twelve years of age are received as county pupils at the annual charge to counties of $300, upon the order of an overseer of the poor or a county supervisor. As a rule the grounds and buildings of these institutions belong exclusively to private corporations, who appoint the superintendent or principal.

N. Y. Instit. for the Instruct. of the Deaf and Dumb (opened May 20, 1818), New York.

Le Couteulx St. Mary's Instit. for the Improv. Instr. of Deaf Mutes (opened November, 1862), Buffalo.

Instit. for the Improv. Instr. of Deaf Mutes (opened March 1, 1867), New York.

St. Joseph's Instit. for Improv. Instr. of Deaf Mutes: Fem. Dept. (opened 1870). Westchester; fem. branch (opened 1874), Brooklyn; male dept. (opened 1875), Westchester.

Central N. Y. Instit. for Deaf Mutes (opened March 22, 1875), Rome.

Western N. Y. Instit. for Deaf Mutes (opened October 4, 1876), Rochester.

Northern N. Y. Instit. for Deaf Mutes (opened Sept. 10, 1884), Malone.

Albany Home School for the Oral Instr. of the Deaf (opened Sept. 17, 1889), Albany.

NEW YORK STATE MILEAGE TABLE.

| | Albany. | Binghamton | Buffalo. | Elmira. | Jamestown. | Kingston. | New York. | Plattsburg. | Rochester. | Syracuse. | Utica. | Watertown. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Albany | ... | 147 | 299 | 206 | 391 | 57 | 120 | 189 | 245 | 145 | 95 | 176 |
| Binghamton | 147 | ... | 205 | 59 | 244 | 162 | 194 | 306 | 151 | 78 | 100 | 147 |
| Buffalo | 299 | 205 | ... | 164 | 72 | 356 | 399 | 388 | 76 | 154 | 204 | 206 |
| Elmira | 206 | 59 | 164 | ... | 183 | 221 | 253 | 340 | 114 | 89 | 139 | 158 |
| Geneva | 196 | 102 | 103 | 65 | 218 | 253 | 296 | 302 | 49 | 51 | 101 | 120 |
| Hornell | 270 | 123 | 111 | 64 | 121 | 285 | 317 | 391 | 69 | 140 | 190 | 209 |
| Ithaca | 200 | 51 | 154 | 34 | 208 | 213 | 245 | 306 | 100 | 55 | 98 | 124 |
| Jamestown | 391 | 244 | 72 | 183 | ... | 406 | 438 | 460 | 148 | 226 | 276 | 278 |
| Kingston | 57 | 162 | 356 | 221 | 406 | ... | 99 | 246 | 302 | 202 | 152 | 233 |
| Malone | 250 | 268 | 327 | 279 | 399 | 307 | 370 | 61 | 251 | 190 | 202 | 121 |
| New York | 120 | 194 | 399 | 253 | 438 | 99 | ... | 309 | 345 | 265 | 215 | 296 |
| Ogdensburg | 242 | 213 | 272 | 224 | 344 | 299 | 362 | 130 | 196 | 135 | 147 | 166 |
| Plattsburg | 189 | 306 | 388 | 340 | 460 | 246 | 309 | ... | 312 | 251 | 254 | 182 |
| Rochester | 245 | 151 | 76 | 114 | 148 | 302 | 345 | 312 | ... | 100 | 150 | 130 |
| Saranac Lake | 182 | 299 | 344 | 296 | 416 | 239 | 302 | 60 | 268 | 207 | 247 | 138 |
| Saratoga Springs | 38 | 155 | 307 | 214 | 379 | 95 | 158 | 151 | 253 | 153 | 103 | 184 |
| Syracuse | 145 | 78 | 154 | 89 | 226 | 202 | 265 | 251 | 100 | ... | 50 | 69 |
| Utica | 95 | 100 | 204 | 139 | 276 | 152 | 215 | 254 | 150 | 50 | ... | 81 |
| Watertown | 176 | 147 | 206 | 158 | 278 | 233 | 296 | 182 | 130 | 69 | 81 | ... |

## MANUFACTURES IN NEW YORK STATE.

(Data are revised and are by the U. S. Census Bureau.)

COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

| | Manufacturing Industries. | | | | | Per Cent. Increase. | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1919. | 1914. | 1909. | 1904. | 1899. | 1914-1919. | 1909-1914. | 1904-1909. | 1899-1904. |
| No. of estab. | 49,330 | 48,203 | 44,935 | 37,194 | 35,957 | 2.3 | 7.3 | 20.8 | 3.4 |
| Persons eng.. | 1,524,761 | 1,289,098 | 1,203,241 | 996,725 | ..... | 18.3 | 7.1 | 20.7 | ..... |
| Proprietors. | 49,484 | 48,636 | 47,569 | 41,766 | ..... | 1.7 | 2.2 | 13.9 | ..... |
| Sal. emp.... | 247,147 | 182,605 | 151,691 | 98,012 | 68,030 | 35.3 | 20.4 | 54.8 | 44.1 |
| Wage earn's (avg. No.). | 1,228,130 | 1,057,857 | 1,003,981 | 856,947 | 726,909 | 16.1 | 5.4 | 17.2 | 17.9 |
| Prim. H. P... | 2,936,530 | 2,356,655 | 1,997,662 | 1,516,592 | 1,099,931 | 24.6 | 18.0 | 31.7 | 37.9 |
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | | | | |
| Capital..... | 6,012,082,567 | 3,334,277,526 | 2,779,496,814 | 2,031,459,515 | 1,523,502,651 | 80.3 | 20.0 | 36.8 | 33.3 |
| Sal. & wages. | 1,971,754,707 | 873,770,946 | 743,262,909 | 541,160,026 | 414,063,700 | 125.7 | 17.6 | 37.3 | 30.7 |
| Salaries.... | 513,547,903 | 242,728,935 | 186,032,070 | 111,145,175 | 76,740,115 | 111.6 | 30.5 | 67.4 | 44.8 |
| Wages..... | 1,458,206,804 | 631,042,011 | 557,230,839 | 430,014,851 | 337,323,585 | 131.1 | 13.2 | 29.6 | 27.5 |
| Contract w'k | 211,490,532 | 71,968,120 | 69,562,602 | 52,784,741 | ..... | 193.9 | 3.5 | 31.8 | ..... |
| Rent, taxes.. | 316,487,814 | 103,560,699 | 75,518,760 | 32,318,897 | ..... | 205.6 | 37.1 | ..... | ..... |
| Material cost | 4,943,213,919 | 2,108,607,361 | 1,856,904,342 | 1,348,603,286 | 1,018,377,186 | 134.4 | 13.6 | 37.7 | 32.4 |
| Product val.. | 8,867,004,906 | 3,814,661,114 | 3,369,490,192 | 2,488,345,579 | 1,871,830,872 | 132.4 | 13.2 | 35.4 | 32.9 |

Rent and taxes, 1904, are exclusive of internal revenue.

PRINCIPAL OCCUPATIONS, NEW YORK STATE, 1920.

| Occupation. | Male. | Female. | Occupation. | Male. | Female. |
|---|---|---|---|---|---|
| All occupations..... | 3,367,907 | 1,135,246 | Lawyers, judges, justices..... | 18,129 | 344 |
| | | | Longshoremen, stevedores..... | 37,526 | 223 |
| Actors, showmen..... | 8,180 | 5,635 | Machinists, millwrights, tool-makers..... | 112,132 | 1 |
| Agents, canvassers, collectors.... | 22,205 | 2,242 | Managers and superintendents, manufacturing..... | 27,933 | 1,151 |
| Artists, sculptors, teachers of art. | 6,248 | 3,843 | Manufacturers and officials..... | 51,179 | 1,698 |
| Bakers..... | 20,507 | 516 | Messenger, bundle, office boys and girls..... | 19,683 | 1,993 |
| Bankers, brokers, money lenders. | 20,894 | 399 | Midwives, nurses (not trained).. | 3,819 | 20,811 |
| Barbers, hairdressers, manicurists | 23,890 | 5,080 | Milliners, millinery dealers..... | 1,658 | 15,090 |
| Blacksmiths, forgemen, hammer-men..... | 17,749 | ..... | Molders, founders, casters, metal. | 12,817 | 1 |
| Bookkeepers, cashiers, account-ants..... | 61,239 | 60,424 | Musicians, teachers of music.... | 13,344 | 9,547 |
| Brick and stone masons..... | 19,676 | ..... | Officials and inspectors, State and U. S..... | 7,756 | 696 |
| Carpenters..... | 92,300 | 4 | Painters, glaziers, varnishers, building..... | 41,395 | 4 |
| Chauffeurs..... | 70,505 | 338 | Physicians, surgeons..... | 15,972 | 924 |
| Civil engineers, surveyors..... | 8,842 | ..... | Plumbers, gas and steam fitters.. | 33,382 | 2 |
| Clergymen..... | 10,303 | 64 | Policemen..... | 16,621 | 41 |
| Clerks, except clerks in stores... | 190,228 | 95,208 | Porters, except in stores..... | 21,307 | 6 |
| Clerks in stores..... | 36,995 | 21,050 | Real estate agents, officials.... | 17,276 | 940 |
| Commercial travellers..... | 18,543 | 271 | Restaurant, cafe, lunch-room keepers..... | 11,309 | 1,606 |
| Compositors, linotypers, typeset-ters..... | 27,894 | 1,305 | Retail dealers..... | 179,614 | 11,689 |
| Dairy farmers..... | 32,943 | 908 | Salesmen, saleswomen..... | 125,564 | 44,273 |
| Deliverymen..... | 20,071 | 5 | Semi-skilled operatives, cigar and tobacco factories..... | 10,048 | 9,036 |
| Designers, draftsmen, inventors.. | 11,781 | 3,161 | Semi-skilled operatives, knitting mills..... | 8,416 | 14,828 |
| Draymen, teamsters, expressmen. | 45,972 | 87 | Semi-skilled operatives, printing and publishing..... | 10,894 | 8,991 |
| Dressmakers and seamstresses, not in factories..... | 167 | 37,849 | Semi-skilled operatives, shirt, collar, and cuff factories..... | 5,519 | 17,919 |
| Electricians and electrical engineers..... | 37,078 | 11 | Semi-skilled operatives, shoe factories..... | 21,040 | 8,734 |
| Engineers, stationary..... | 29,687 | ..... | Semi-skilled operatives, suit, coat, cloak, and overall factories.... | 48,946 | 17,089 |
| Farmers, general farms..... | 130,939 | 4,693 | Servants and waiters..... | 69,869 | 151,456 |
| Farm laborers (home farm or working out)..... | 87,085 | 1,720 | Shoemakers and cobblers, not in factories..... | 12,102 | 5 |
| Firemen, except locomotive and fire department..... | 20,226 | ..... | Soldiers, sailors, and marines.. | 21,177 | ..... |
| Foremen and overseers, manufacturing..... | 33,186 | 7,060 | Stenographers and typewriters... | 9,823 | 103,721 |
| Gardeners, florists, fruit growers, nurserymen..... | 10,054 | 462 | Tailors and tailoresses..... | 55,121 | 7,611 |
| Guards, watchmen, doorkeepers. | 17,804 | 35 | Teachers, school..... | 10,558 | 63,637 |
| Housekeepers, stewards..... | 4,508 | 23,799 | Telephone operators..... | 1,863 | 39,004 |
| Insurance agents, officials..... | 18,580 | 686 | Trained nurses..... | 1,020 | 21,915 |
| Janitors, sextons..... | 17,599 | 10,460 | Wholesale dealers, importers and exporters..... | 19,446 | 158 |
| Laborers, building, general, and not specified..... | 50,521 | 789 | | | |
| Laborers, porters, helpers in stores..... | 15,751 | 1,198 | | | |
| Laborers, steam railroad..... | 26,756 | 414 | | | |
| Launderers and laundresses, not in laundries..... | 1,016 | 20,574 | | | |

WAGE EARNERS, BY MONTHS, 1919, 1914, AND 1909.

| Mo. | Number. | | | Per Cent. of Maximum. | | | Mo. | Number. | | | Per Cent. of Maximum. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1919. | 1914. | 1909. | 1919. | 1914. | 1909. | | 1919. | 1914. | 1909. | 1919. | 1914. | 1909. |
| Jan... | *1,179,216* | 1,055,575 | *945,356* | 89.9 | 96.4 | 88.9 | July... | 1,228,077 | 1,033,953 | 977,203 | 93.7 | 94.4 | 91.9 |
| Feb... | 1,182,279 | 1,078,354 | 971,236 | 90.2 | 98.5 | 91.4 | Aug... | 1,260,592 | 1,037,475 | 988,896 | 96.1 | 94.8 | 94.0 |
| March | 1,187,865 | **1,094,773** | 991,633 | 90.6 | 100.0 | 93.3 | Sept.. | 1,272,811 | 1,067,384 | 1,041,333 | 97.1 | 97.5 | 97.9 |
| April.. | 1,194,824 | 1,084,215 | 989,498 | 91.1 | 99.0 | 93.1 | Oct... | 1,260,413 | 1,072,512 | **1,063,162** | 96.1 | 98.0 | 100.0 |
| May... | 1,186,957 | 1,067,030 | 983,987 | 90.5 | 97.5 | 92.6 | Nov... | 1,281,760 | 1,034,649 | 1,059,852 | 97.8 | 94.5 | 99.7 |
| June.. | 1,191,679 | 1,053,471 | 980,503 | 90.9 | 96.2 | 92.2 | Dec... | **1,311,087** | *1,014,893* | 1,045,110 | 100.0 | 92.7 | 98.3 |

The figures represent the number employed on the 15th of each month or the nearest representative day. Maximum number indicated by **bold-faced** figures, minimum by *italic* figures.

## MANUFACTURES, N. Y. STATE, BY COUNTIES, 1919.

| County. | No. of Establishments. | Wage Earners. Average Number. | Wage Earners. Wages. | Rents and Taxes. | Cost of Materials. | Value of Products. | Primary Horse-Power. |
|---|---|---|---|---|---|---|---|
| The State | 49,330 | 1,228,130 | $1,458,206,804 | $316,487,814 | $4,943,213,919 | $8,867,004,906 | 2,936,530 |
| Albany | 577 | 22,667 | 22,865,486 | 4,558,365 | 45,121,768 | 92,535,173 | 54,504 |
| Allegany | 150 | 1,462 | 1,498,596 | 176,097 | 6,703,526 | 10,258,750 | 5,461 |
| Bronx | 1,370 | 20,036 | 23,658,433 | 5,925,092 | 56,801,805 | 114,975,501 | 41,796 |
| Broome | 316 | 20,027 | 23,497,802 | 4,726,394 | 88,194,616 | 134,906,153 | 25,897 |
| Cattaraugus | 278 | 8,383 | 9,432,580 | 1,131,644 | 47,056,581 | 65,935,774 | 23,599 |
| Cayuga | 245 | 7,520 | 7,182,084 | 1,608,887 | 25,155,012 | 42,417,600 | 22,098 |
| Chautauqua | 463 | 17,000 | 18,416,174 | 3,945,270 | 50,740,273 | 95,340,353 | 44,714 |
| Chemung | 177 | 9,793 | 10,898,229 | 1,022,051 | 18,873,863 | 42,877,330 | 23,383 |
| Chenango | 226 | 2,593 | 2,116,556 | 363,733 | 12,785,285 | 18,937,294 | 8,748 |
| Clinton | 100 | 2,093 | 2,083,920 | 551,214 | 7,510,039 | 12,839,580 | 26,778 |
| Columbia | 179 | 4,762 | 4,560,692 | 776,350 | 14,290,288 | 25,208,572 | 25,439 |
| Cortland | 117 | 3,961 | 3,800,287 | 898,953 | 10,697,751 | 19,196,486 | 11,810 |
| Delaware | 188 | 1,864 | 1,613,852 | 164,532 | 8,703,289 | 12,466,985 | 5,490 |
| Dutchess | 297 | 9,842 | 9,687,735 | 1,690,104 | 25,031,418 | 50,771,181 | 25,642 |
| Erie | 2,453 | 94,051 | 124,182,583 | 25,313,482 | 489,428,757 | 772,004,066 | 560,208 |
| Essex | 80 | 1,520 | 1,687,716 | 289,616 | 5,457,043 | 9,830,752 | 19,924 |
| Franklin | 93 | 2,227 | 2,298,174 | 199,731 | 7,975,439 | 12,700,483 | 16,786 |
| Fulton | 377 | 9,101 | 8,328,125 | 1,538,875 | 35,682,032 | 59,378,811 | 13,740 |
| Genesee | 107 | 3,609 | 3,557,226 | 943,121 | 12,425,599 | 23,962,265 | 13,098 |
| Greene | 132 | 1,264 | 1,198,196 | 160,224 | 2,806,115 | 5,154,860 | 18,905 |
| Hamilton | 13 | 78 | 85,754 | 1,952 | 71,654 | 244,580 | 633 |
| Herkimer | 212 | 14,603 | 15,326,459 | 2,507,416 | 37,289,981 | 69,249,236 | 34,744 |
| Jefferson | 267 | 7,860 | 8,673,200 | 1,658,438 | 29,876,469 | 50,238,995 | 81,542 |
| Kings | 6,738 | 166,724 | 201,232,510 | 55,060,955 | 670,470,696 | 1,184,973,144 | 270,998 |
| Lewis | 155 | 1,334 | 1,758,562 | 258,391 | 8,617,930 | 12,426,248 | 29,348 |
| Livingston | 117 | 2,237 | 2,055,230 | 776,449 | 6,763,179 | 13,779,090 | 7,663 |
| Madison | 138 | 3,508 | 3,523,005 | 892,786 | 9,597,457 | 18,736,449 | 10,864 |
| Monroe | 1,536 | 67,553 | 73,331,824 | 16,862,550 | 180,498,442 | 376,414,571 | 105,464 |
| Montgomery | 213 | 13,168 | 11,745,371 | 2,369,451 | 43,995,270 | 71,889,311 | 25,808 |
| Nassau | 314 | 3,100 | 3,567,496 | 284,730 | 12,230,446 | 20,762,108 | 7,338 |
| New York | 22,981 | 386,907 | 502,042,139 | 114,489,127 | 1,883,471,342 | 3,525,574,539 | 271,561 |
| Niagara | 460 | 22,582 | 27,997,816 | 5,072,564 | 90,479,954 | 154,531,866 | 113,258 |
| Oneida | 686 | 29,370 | 30,142,790 | 5,806,747 | 89,904,757 | 155,498,452 | 82,502 |
| Onondaga | 864 | 37,372 | 43,956,653 | 10,300,557 | 96,306,814 | 197,884,282 | 101,137 |
| Ontario | 162 | 4,213 | 4,462,847 | 830,756 | 11,311,362 | 21,841,715 | 11,179 |
| Orange | 344 | 16,035 | 17,676,752 | 2,121,615 | 38,404,800 | 72,756,107 | 27,451 |
| Orleans | 155 | 1,835 | 1,513,078 | 311,230 | 5,543,851 | 9,570,013 | 6,273 |
| Oswego | 245 | 9,631 | 9,567,799 | 1,302,278 | 37,140,666 | 57,597,552 | 50,007 |
| Otsego | 146 | 2,809 | 2,782,788 | 108,201 | 9,934,077 | 14,779,098 | 6,194 |
| Putnam | 24 | 211 | 227,665 | 14,406 | 392,935 | 846,681 | 484 |
| Queens | 1,249 | 47,222 | 54,282,704 | 11,256,216 | 195,230,293 | 331,285,294 | 97,211 |
| Rensselaer | 347 | 19,772 | 16,329,768 | 2,836,096 | 46,479,489 | 95,478,912 | 34,538 |
| Richmond | 252 | 17,886 | 24,606,665 | 2,651,684 | 55,501,982 | 103,899,099 | 37,011 |
| Rockland | 148 | 4,412 | 4,812,453 | 953,595 | 10,631,545 | 23,733,753 | 19,039 |
| St. Lawrence | 276 | 6,534 | 7,456,404 | 1,176,000 | 47,712,785 | 63,937,364 | 74,812 |
| Saratoga | 176 | 7,364 | 7,681,667 | 1,830,974 | 24,802,338 | 43,953,521 | 94,199 |
| Schenectady | 149 | 21,376 | 28,603,637 | 4,780,313 | 46,279,611 | 107,551,189 | 114,535 |
| Schoharie | 67 | 596 | 468,412 | 40,133 | 2,073,164 | 2,983,751 | 5,597 |
| Schuyler | 30 | 897 | 897,965 | 158,367 | 2,400,911 | 4,914,669 | 2,434 |
| Seneca | 76 | 1,970 | 2,002,783 | 338,140 | 3,716,159 | 8,463,345 | 4,584 |
| Steuben | 306 | 8,018 | 8,575,489 | 1,733,560 | 15,579,436 | 33,507,060 | 16,532 |
| Suffolk | 210 | 2,624 | 2,681,204 | 401,156 | 5,136,019 | 12,998,107 | 6,528 |
| Sullivan | 147 | 551 | 443,909 | 35,418 | 1,501,772 | 2,604,280 | 3,310 |
| Tioga | 83 | 818 | 633,659 | 86,308 | 4,689,109 | 6,183,696 | 3,306 |
| Tompkins | 114 | 3,003 | 3,139,055 | 1,032,998 | 7,416,216 | 15,731,143 | 9,033 |
| Ulster | 290 | 6,498 | 6,030,602 | 945,856 | 15,384,928 | 28,492,619 | 20,197 |
| Warren | 117 | 3,916 | 3,123,628 | 515,006 | 8,493,565 | 15,744,988 | 30,337 |
| Washington | 107 | 4,919 | 4,793,567 | 988,437 | 16,994,130 | 26,459,659 | 48,522 |
| Wayne | 483 | 3,167 | 2,895,562 | 797,918 | 11,619,860 | 19,521,145 | 8,936 |
| Westchester | 825 | 27,988 | 31,190,318 | 6,157,016 | 176,542,971 | 248,305,554 | 61,157 |
| Wyoming | 117 | 3,120 | 2,767,581 | 658,013 | 9,317,516 | 15,675,220 | 7,324 |
| Yates | 66 | 574 | 465,588 | 100,276 | 1,967,539 | 3,688,542 | 4,920 |

AVERAGE WEEKLY EARNINGS (ALL EMPLOYEES) IN N. Y. STATE FACTORIES.

| Month. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. | 1921. | 1922. |
|---|---|---|---|---|---|---|---|---|---|
| January | ..... | $12.44 | $13.53 | $15.28 | $16.81 | $23.03 | $26.52 | $27.61 | $24.43 |
| February | ..... | 12.41 | 13.77 | 15.31 | 17.66 | 22.07 | 26.47 | 26.77 | 24.17 |
| March | ..... | 12.65 | 13.96 | 15.79 | 18.71 | 22.20 | 27.87 | 26.97 | 24.57 |
| April | ..... | 12.54 | 14.15 | 15.50 | 19.25 | 22.11 | 27.80 | 26.20 | 24.15 |
| May | ..... | 12.74 | 14.24 | 16.08 | 19.91 | 22.23 | 28.45 | 25.86 | 24.59 |
| June | $12.70 | 12.81 | 14.41 | 16.20 | 20.44 | 22.51 | 28.77 | 25.71 | 24.91 |
| July | 12.54 | 12.66 | 14.11 | 16.17 | 20.78 | 23.10 | 28.49 | 25.26 | 24.77 |
| August | 12.53 | 12.89 | 14.44 | 16.44 | 21.23 | 23.85 | 28.71 | 25.43 | ..... |
| September | 12.48 | 12.86 | 14.87 | 16.97 | 22.31 | 24.83 | 28.73 | 25.07 | ..... |
| October | 12.26 | 13.30 | 14.95 | 17.33 | 22.34 | 24.41 | 28.93 | 24.53 | ..... |
| November | 12.32 | 13.45 | 15.16 | 17.69 | 21.60 | 25.37 | 28.70 | 24.32 | ..... |
| December | 12.56 | 13.49 | 15.51 | 17.71 | 23.18 | 26.32 | 28.35 | 24.91 | ..... |
| Average for year | $12.48 | $12.85 | $14.43 | $16.37 | $20.35 | $23.50 | $28.15 | $25.72 | ..... |

## WAGE EARNERS IN CITIES OF 10,000 INHABITANTS OR MORE.

| City. | Ave. No. Wage Earners—Total. | | | Total Value of Products. | | |
|---|---|---|---|---|---|---|
| | 1919. | 1914. | 1909. | 1919. | 1914. | 1909. |
| Albany | 11,216 | 9,371 | 9,861 | $45,454,955 | $25,211,390 | $22,825,702 |
| Amsterdam | 10,713 | 10,774 | 10,284 | 52,851,242 | 22,474,691 | 22,449,057 |
| Auburn | 7,272 | 5,769 | 6,497 | 40,642,435 | 16,686,249 | 15,961,022 |
| Batavia | 2,226 | 2,457 | 2,007 | 9,414,705 | 5,336,782 | 4,400,774 |
| Beacon | 2,162 | 1,806 | ..... | 9,650,394 | 3,519,574 | ..... |
| Binghamton | 7,477 | 7,248 | 6,823 | 40,637,625 | 18,359,516 | 17,114,214 |
| Buffalo | 75,899 | 54,416 | 51,412 | 634,409,733 | 247,516,476 | 218,803,994 |
| Cohoes | 5,013 | 5,781 | 8,127 | 21,551,429 | 11,706,461 | 13,517,920 |
| Corning | 3,517 | 2,203 | 2,074 | 10,774,091 | 3,954,226 | 3,050,410 |
| Cortland | 3,013 | 2,459 | 2,356 | 14,902,884 | 6,437,659 | 6,394,624 |
| Dunkirk | 4,319 | 2,989 | 2,756 | 28,028,067 | 8,366,767 | 6,575,664 |
| Elmira | 8,024 | 4,870 | 3,647 | 33,494,164 | 12,597,024 | 8,067,208 |
| Fulton | 3,627 | 3,042 | 2,799 | 23,096,499 | 9,571,962 | 7,867,114 |
| Geneva | 2,428 | 1,692 | 1,526 | 10,219,321 | 5,240,962 | 5,153,925 |
| Glens Falls | 2,784 | 2,532 | 2,774 | 11,503,066 | 6,535,019 | 4,876,786 |
| Gloversville | 5,612 | 5,335 | 5,741 | 38,913,000 | 13,384,213 | 14,170,682 |
| Herkimer | 1,370 | ..... | ..... | 3,932,645 | ..... | ..... |
| Hornell | 1 851 | 2,285 | 2,183 | 7,339,419 | 4,847,594 | 3,647,630 |
| Hudson | 1,481 | 1,423 | 1,302 | 7,514,339 | 3,736,941 | 3,506,504 |
| Ilion | 5,215 | ..... | ..... | 13,702,047 | ..... | ..... |
| Ithaca | 1,690 | 815 | 873 | 9,934,693 | 2,243,892 | 1,919,968 |
| Jamestown | 8,559 | 7,794 | 6,789 | 37,985,306 | 17,961,429 | 14,720,240 |
| Johnstown | 2,664 | 2,532 | 2,589 | 17,502,938 | 6,788,636 | 6,573,528 |
| Kingston | 3,903 | 3,076 | 3,281 | 15,857,451 | 6,445,455 | 5,985,738 |
| Little Falls | 3,688 | 3,823 | 4,211 | 24,851,536 | 9,927,246 | 8,460,408 |
| Lockport | 4,074 | 2,381 | 2 138 | 29,302,597 | 8,954,931 | 8,168,450 |
| Middletown | 2,162 | 1,989 | 1,733 | 9,803,344 | 4,442 792 | 4,658,240 |
| Mount Vernon | 2,746 | 1,346 | 1,207 | 12,003,417 | 3,167,173 | 3,376,415 |
| New Rochelle | 1,293 | 870 | 735 | 4,406,301 | 1,736,198 | 1,668,724 |
| New York City | 638,775 | 585,279 | 553,923 | 5,260,707,577 | 2,292,831,693 | 2,027,425,288 |
| Bronx borough | 20,036 | 19,387 | 14,540 | 114,975,501 | 58,708,792 | 42,900,554 |
| Brooklyn borough | 166,724 | 140,881 | 123,895 | 1,184,973,144 | 515,302,755 | 418,541,272 |
| Manhattan borough | 386,907 | 385,902 | 384,858 | 3,525,574,539 | 1,519,143,429 | 1,384,794,615 |
| Queens borough | 47,222 | 31,630 | 24,194 | 331,285,294 | 164,789,481 | 151,487,959 |
| Richmond borough | 17,886 | 7,479 | 6,436 | 103,899,099 | 34,887,236 | 29,700,888 |
| Newburgh | 5,389 | 4,318 | 4,198 | 29,872,407 | 9,986,564 | 9,650,846 |
| Niagara Falls | 12,238 | 9,390 | 6,089 | 89,247,170 | 44,816,698 | 28,651,913 |
| North Tonawanda | 4,366 | 3,574 | 2,824 | 25,430,663 | 10,040,356 | 9,599,776 |
| Ogdensburg | 757 | 898 | 1,259 | 5,154,923 | 3,401,045 | 4,947,976 |
| Olean | 4,669 | 2,633 | 2,259 | 32,121,169 | 11,577,282 | 10,005,443 |
| Oneida | 1,207 | ..... | ..... | 5,403,164 | ..... | ..... |
| Oneonta | 1,657 | 1,337 | ..... | 5,628,739 | 2,372,506 | ..... |
| Ossining | 387 | 373 | 356 | 2,301,450 | 1,120,081 | 1,328,925 |
| Oswego | 4,470 | 4,331 | 3,817 | 25,211,643 | 12,650,095 | 10,412,888 |
| Peekskill | 2,066 | 1,781 | 2,063 | 10,623,628 | 8,301,092 | 7,940,355 |
| Plattsburg | 787 | 822 | 1,049 | 4,015,151 | 1,883,867 | 3,137,523 |
| Port Chester | 2,685 | 2,278 | 2,122 | 17,139,079 | 6,741,228 | 6,243,051 |
| Port Jervis | 2,003 | ..... | ..... | 8,242,515 | ..... | ..... |
| Poughkeepsie | 5,935 | 4,729 | 3,268 | 28,908,852 | 12,791,325 | 9,037,430 |
| Rensselaer | 1,363 | 811 | 763 | 9,800,098 | 2,755,418 | 2,296,089 |
| Rochester | 63,792 | 44,113 | 39,108 | 351,416,379 | 140,696,682 | 112,676,215 |
| Rome | 4,428 | 3,937 | 3,633 | 34,868,489 | 16,730,078 | 14,423,437 |
| Saratoga Springs | 855 | 869 | 833 | 4,093,058 | 2,893,451 | 2,336,579 |
| Schenectady | 21,062 | 17,707 | 14,931 | 106,531,182 | 48,762,807 | 38,164,699 |
| Syracuse | 28,153 | 17,551 | 18,148 | 150,091,278 | 52,163,940 | 49,434,615 |
| Tonawanda | 1,833 | ..... | ..... | 16,463,877 | ..... | ..... |
| Troy | 15,929 | 17,421 | 20,102 | 74,837,435 | 39,929,850 | 39,292,788 |
| Utica | 16,423 | 12,714 | 13,153 | 77,745,720 | 30,490,235 | 31,199,261 |
| Watertown | 3,914 | 3,148 | 3,291 | 19,037,081 | 9,284,272 | 8,527,416 |
| Watervliet | 1,600 | 759 | 753 | 8,502,864 | 1,611,501 | 1,668,579 |
| White Plains | 329 | 316 | 249 | 1,753,392 | 990,166 | 815,789 |
| Yonkers | 11,932 | 12,650 | 12,711 | 140,016,561 | 67,222,673 | 59,333,865 |

## COURSE OF AVERAGE WEEKLY EARNINGS IN NEW YORK STATE FACTORIES.

(Index numbers with June, 1914, as 100.)

| Month. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. | 1921. | 1922. |
|---|---|---|---|---|---|---|---|---|---|
| January | ..... | 98 | 107 | 120 | 132 | 181 | 209 | 217 | 192 |
| February | ..... | 98 | 108 | 121 | 139 | 174 | 208 | 211 | 190 |
| March | ..... | 100 | 110 | 124 | 147 | 175 | 219 | 212 | 193 |
| April | ..... | 99 | 111 | 122 | 152 | 174 | 219 | 206 | 190 |
| May | ..... | 100 | 112 | 127 | 157 | 175 | 224 | 204 | 194 |
| June | 100 | 101 | 113 | 128 | 161 | 177 | 227 | 202 | 196 |
| July | 99 | 100 | 111 | 127 | 164 | 182 | 224 | 199 | 195 |
| August | 99 | 102 | 114 | 129 | 167 | 188 | 226 | 200 | ..... |
| September | 98 | 101 | 117 | 134 | 176 | 196 | 226 | 197 | ..... |
| October | 97 | 105 | 118 | 136 | 176 | 192 | 228 | 193 | ..... |
| November | 97 | 106 | 119 | 139 | 170 | 200 | 226 | 191 | ..... |
| December | 99 | 106 | 122 | 139 | 183 | 207 | 223 | 196 | ..... |
| Average for year | 98 | 101 | 114 | 129 | 160 | 185 | 222 | 203 | ..... |

Note.—The average weekly earning is obtained by dividing the total weekly payroll by the total number of employees on the payroll for the given week.

## EMPLOYEES BY AGE GROUPS.

| City. | 16 Years of Age and Over. | | | | | | Under 16 Years of Age. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male. | | | Female: | | | | | |
| | 1919. | 1914. | 1909. | 1919. | 1914. | 1909. | 1919. | 1914. | 1909. |
| Albany | 7,750 | 6,402 | 6,962 | 3,285 | 2,931 | 2,832 | 181 | 38 | 67 |
| Amsterdam | 5,619 | 5,713 | 5,553 | 4,978 | 4,920 | 4,587 | 116 | 141 | 144 |
| Auburn | 5,200 | 4,086 | 4,899 | 2,026 | 1,669 | 1,520 | 46 | 14 | 78 |
| Batavia | 1,840 | 2,123 | 1,710 | 384 | 327 | 283 | 2 | 7 | 14 |
| Beacon | 1,483 | 1,144 | ..... | 671 | 635 | ..... | 8 | 27 | ..... |
| Binghamton | 4,320 | 4,160 | 3,923 | 3,097 | 2,983 | 2,859 | 60 | 105 | 41 |
| Buffalo | 64,403 | 45,957 | 43,385 | 11,068 | 7,769 | 7,445 | 428 | 690 | 582 |
| Cohoes | 2,775 | 3,271 | 3,852 | 2,205 | 2,488 | 4,071 | 35 | 22 | 204 |
| Corning | 3,001 | 1,831 | 1,821 | 508 | 370 | 249 | 8 | 2 | 4 |
| Cortland | 2,390 | 2,069 | 2,070 | 594 | 390 | 285 | 29 | ..... | 1 |
| Dunkirk | 3,684 | 2,564 | 2,547 | 614 | 408 | 183 | 21 | 17 | 26 |
| Elmira | 6,638 | 3,969 | 2,790 | 1,363 | 887 | 835 | 23 | 14 | 22 |
| Fulton | 2,705 | 2,008 | 1,839 | 922 | 985 | 932 | ..... | 49 | 28 |
| Geneva | 1,830 | 1,218 | 1,193 | 595 | 463 | 319 | 3 | 11 | 14 |
| Glens Falls | 1,371 | 1,318 | 1,326 | 1,411 | 1,209 | 1,445 | 2 | 5 | 3 |
| Gloversville | 3,735 | 3,124 | 3,571 | 1,807 | 2,181 | 2,095 | 70 | 30 | 75 |
| Herkimer | 1,254 | ..... | ..... | 115 | ..... | ..... | 1 | ..... | ..... |
| Hornell | 1,245 | 1,511 | 1,694 | 606 | 580 | 482 | ..... | 194 | 7 |
| Hudson | 1,052 | 890 | 806 | 426 | 526 | 470 | 3 | 7 | 26 |
| Ilion | 4,187 | ..... | ..... | 1,028 | ..... | ..... | ..... | ..... | ..... |
| Ithaca | 1,394 | 746 | 772 | 263 | 65 | 98 | 33 | 4 | 3 |
| Jamestown | 6,437 | 6,182 | 5,513 | 2,049 | 1,529 | 1,181 | 73 | 83 | 95 |
| Johnstown | 1,663 | 1,676 | 1,719 | 966 | 844 | 821 | 35 | 12 | 49 |
| Kingston | 2,140 | 1,609 | 1,896 | 1,723 | 1,383 | 1,270 | 40 | 84 | 115 |
| Little Falls | 2,635 | 2,548 | 2,493 | 1,040 | 1,266 | 1,693 | 13 | 9 | 25 |
| Lockport | 3,434 | 1,856 | 1,740 | 638 | 512 | 394 | 2 | 13 | 4 |
| Middletown | 1,488 | 1,391 | 1,269 | 666 | 573 | 459 | 8 | 25 | 5 |
| Mount Vernon | 1,607 | 1,004 | 985 | 1,138 | 336 | 218 | 1 | 6 | 4 |
| New Rochelle | 944 | 687 | 625 | 332 | 182 | 95 | 17 | 1 | 15 |
| New York City | 424,558 | 384,861 | 366,255 | 211,377 | 196,144 | 183,922 | 2,840 | 4,274 | 3,746 |
| Bronx | 14,003 | 14,707 | 9,210 | 5,952 | 4,360 | 5,246 | 81 | 320 | 84 |
| Brooklyn | 119,876 | 98,331 | 87,964 | 46,024 | 41,267 | 34,849 | 824 | 1,283 | 1,082 |
| Manhattan | 238,203 | 239,437 | 243,631 | 147,116 | 144,111 | 139,005 | 1,588 | 2,354 | 2,222 |
| Queens | 35,812 | 25,810 | 19,810 | 11,083 | 5,526 | 4,063 | 327 | 294 | 321 |
| Richmond | 16,664 | 6,612 | 5,640 | 1,202 | 840 | 759 | 20 | 27 | 37 |
| Newburgh | 3,748 | 2,829 | 2,688 | 1,619 | 1,478 | 1,493 | 22 | 11 | 17 |
| Niagara Falls | 10,738 | 8,205 | 5,212 | 1,436 | 1,160 | 853 | 64 | 25 | 24 |
| No. Tonawanda | 3,613 | 2,955 | 2,423 | 719 | 583 | 373 | 34 | 36 | 28 |
| Ogdensburg | 422 | 524 | 811 | 330 | 367 | 405 | 5 | 7 | 43 |
| Olean | 4,192 | 2,548 | 2,092 | 471 | 74 | 135 | 6 | 11 | 32 |
| Oneida | 1,046 | ..... | ..... | 161 | ..... | ..... | ..... | ..... | ..... |
| Oneonta | 1,218 | 1,123 | ..... | 434 | 214 | ..... | 5 | ..... | ..... |
| Ossining | 260 | 268 | 262 | 116 | 101 | 92 | 11 | 4 | 2 |
| Oswego | 3,179 | 3,062 | 2,649 | 1,216 | 1,203 | 1,141 | 75 | 66 | 27 |
| Peekskill | 1,542 | 1,395 | 1,596 | 519 | 382 | 460 | 5 | 4 | 7 |
| Plattsburg | 575 | 728 | 713 | 212 | 88 | 336 | ..... | 6 | ..... |
| Port Chester | 1,811 | 1,507 | 1,483 | 867 | 760 | 611 | 7 | 11 | 28 |
| Port Jervis | 1,566 | ..... | ..... | 434 | ..... | ..... | 3 | ..... | ..... |
| Poughkeepsie | 4,158 | 3,052 | 2,155 | 1,755 | 1,615 | 1,088 | 22 | 62 | 25 |
| Rensselaer | 990 | 609 | 481 | 371 | 200 | 278 | 2 | 2 | 4 |
| Rochester | 44,348 | 30,136 | 26,717 | 18,838 | 13,240 | 11,977 | 606 | 737 | 414 |
| Rome | 3,780 | 3,305 | 3,113 | 640 | 621 | 487 | 8 | 11 | 33 |
| Saratoga Spr'gs | 449 | 529 | 490 | 385 | 325 | 322 | 21 | 15 | 21 |
| Schenectady | 18,336 | 16,064 | 13,159 | 2,628 | 1,600 | 1,737 | 98 | 43 | 35 |
| Syracuse | 23,187 | 13,891 | 14,565 | 4,810 | 3,469 | 3,373 | 156 | 191 | 210 |
| Tonawanda | 1,672 | ..... | ..... | 161 | ..... | ..... | ..... | ..... | ..... |
| Troy | 6,477 | 8,297 | 8,642 | 9,213 | 9,031 | 11,391 | 239 | 93 | 69 |
| Utica | 10,011 | 7,484 | 7,716 | 6,276 | 4,993 | 5,200 | 136 | 237 | 237 |
| Watertown | 3,220 | 2,616 | 2,834 | 688 | 529 | 421 | 6 | 3 | 36 |
| Watervliet | 1,131 | 443 | 455 | 454 | 310 | 272 | 15 | 6 | 26 |
| White Plains | 243 | 271 | 246 | 85 | 44 | 3 | 1 | 1 | ..... |
| Yonkers | 8,129 | 8,266 | 8,304 | 3,626 | 4,381 | 4,364 | 177 | 3 | 43 |

## MINING, OIL, AND QUARRYING IN NEW YORK STATE.

| | 1919. | 1909. | | 1919. | 1909. |
|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* |
| No. of enterprises | 700 | 1,351 | Capital | 95,446,438 | 45,171,232 |
| No. of mines and quarries | 147 | 752 | | | |
| No. petroleum & nat.-gas wells | 14,186 | 11,342 | Principal expenses: | | |
| No. of nat.-gas gasoline plants | 6 | ..... | Salaries | 1,431,601 | 707,865 |
| Persons engaged | 7,913 | 12,232 | Wages | 7,496,781 | 4,717,595 |
| Propr't'rs, firm memb'rs, tot. | 896 | 2,294 | Contract work | 789,360 | 513,042 |
| No. doing manual labor in or about mines, quarries, wells | 202 | 663 | Supplies and materials | 7,416,586 | 1,952,593 |
| Salaried employees | 815 | 633 | Fuel and power | 1,402,245 | 585,161 |
| Wage earners (ave. number.) | 6,202 | 9,305 | Royalties and rents | 649,472 | 465,454 |
| Power used (horsepower) | 91,339 | 101,759 | Taxes | 804,416 | 173,989 |
| | | | Value of products | 25,131,093 | 13,334,975 |

Includes cost of natural gas purchased as material and for resale.

## MANUFACTURES, BY POPULATION GROUPS, IN BIC N. Y. STATE CITIES.

| | Census Yr. | Aggregate. | Cities Having a Population of 10,000 or Over. Total. | 10,000 to 25,000. | 25,000 to 100,000. | 100,000 and Over. | State Outside Cities Having a Pop. of 10,000 or Over. |
|---|---|---|---|---|---|---|---|
| | | | Number or Amount. | Number or Amount. | Number or Amount. | Number or Amount. | Number or Amount. |
| No. of places. | 1919 | ..... | 57 | 35 | 16 | 6 | ..... |
| | 1914 | ..... | 52 | 30 | 17 | 5 | ..... |
| | 1909 | ..... | 50 | 29 | 16 | 5 | ..... |
| Population... | 1920 | 10,385,227 | 8,085,128 | 522,221 | 755,097 | 6,807,810 | 2,300,099 |
| | 1915 | 9,899,761 | 7,523,465 | 453,687 | 784,736 | 6,285,042 | 2,376,296 |
| | 1910 | 9,113,614 | 6,756,593 | 425,022 | 685,322 | 5,646,249 | 2,357,021 |
| No. of establishments.. | 1919 | 49,330 | 41,825 | 2,039 | 2,493 | 37,293 | 7,505 |
| | 1914 | 48,203 | 39,066 | 1,956 | 2,802 | 34,308 | 9,137 |
| | 1909 | 44,935 | 34,429 | 1,913 | 2,494 | 30,022 | 10,506 |
| Average no. of wage earners | 1919 | 1,228,130 | 1,055,002 | 89,930 | 135,305 | 829,767 | 173,128 |
| | 1914 | 1,057,857 | 904,817 | 64,482 | 129,605 | 710,730 | 153,040 |
| | 1909 | 1,003,981 | 856,627 | 67,169 | 117,006 | 672,452 | 147,354 |
| Val. of prod.. | 1919 | $8,867,004,906 | $7,764,845,187 | $483,822,427 | $698,926,277 | $6,582,096,483 | $1,102,159,719 |
| | 1914 | 3,814,661,114 | 3,319,199,163 | 186,360,362 | 374,418,620 | 2,758,420,181 | 495,461,951 |
| | 1909 | 3,369,490,192 | 2,922,465,687 | 178,099,037 | 313,200,836 | 2,431,165,814 | 447,024,505 |
| Val. added by manufacture | 1919 | 9,923,790,987 | 3,505,323,895 | 215,102,699 | 337,120,709 | 2,953,100,487 | 418,467,092 |
| | 1914 | 1,706,053,753 | 1,516,875,170 | 75,742,725 | 163,543,725 | 1,277,588,720 | 189,178,583 |
| | 1909 | 1,512,585,850 | 1,337,039,122 | 74,588,376 | 141,577,365 | 1,120,873,381 | 175,546,728 |

Last column includes Lackawanna to avoid disclosure of individual operations.

Population of 1920, as of Jan. 1, 1920; 1915, estimated population as of July 1, 1914 (per reports census of manufactures, 1914); 1910, as of April 15, 1910.

## PRINCIPAL INDUSTRIES IN CITIES HAVING 50,000 INHABITANTS OR MORE, WITH PER CENT. OF TOTAL FOR STATE, 1919.

| City and Industry. | Value of Products. Amount, 1919. | Pct. Tot for Sta te. | Inc. Over 1914. Amount. | Pct. |
|---|---|---|---|---|
| | *Dollars.* | | *Dollars.* | |
| ALBANY. | | | | |
| Print'g & pub., book & job... | 3,221,850 | 2.2 | 2,429,820 | 306.8 |
| Bread and other bakery prod.. | 2,925,607 | 1.3 | 1,486,410 | 103.3 |
| Liquors, mal't... | 2,712,340 | 2.7 | —468,676 | —14.7 |
| Newsp.& period. | 1,640,431 | 0.7 | —691,492 | —29.7 |
| BINGHAMTON. | | | | |
| Tobacco & prod. | 4,665,752 | 2.9 | 1,633,785 | 53.9 |
| Foundry&mach. shop products | 2,571,549 | 1.0 | 2,157,611 | 521.2 |
| Silk goods..... | 2,258,311 | 2.8 | 1,502,015 | 198.6 |
| Furniture..... | 2,050,635 | 2.0 | 1,070,941 | 109.3 |
| Pat.med.&Comp | 1,574,920 | 2.7 | 828,803 | 111.1 |
| Bread&bak.prod | 1,379,692 | 0.6 | 811,326 | 142.7 |
| Clothing, men's. | 1,204,131 | 0.2 | ..... | ..... |
| BUFFALO. | | | | |
| Flour, grist.prod | 66,388,076 | 42.8 | 38,319,280 | 136.5 |
| Slaught'r'g, pkg. | 63,177,876 | 24.7 | 33,787,676 | 115.0 |
| Foundry&mach. shop products | 32,253,954 | 12.5 | 20,878,314 | 183.5 |
| Iron&steel, blast | 21,365,260 | 41.4 | ..... | ..... |
| Bread&bak.prod | 14,428,273 | 6.2 | 7,913,896 | 121.5 |
| Food prep.,n.e.s. | 12,603,784 | 16.3 | 8,486,597 | 206.1 |
| Soap..... | 12,106,907 | 23.8 | 3,272,045 | 37.0 |
| Cars & repairs.. | 11,963,636 | 14.5 | 6,456,374 | 117.2 |
| Liquors, malt... | 11,256,470 | 11.3 | 3,294,185 | 41.4 |
| Rubber tires,&c. n. e. s..... | 10,972,755 | 33.2 | ..... | ..... |
| Auto. bodies,&c. | 9,070,112 | 12.9 | 7,305,900 | 414.1 |
| Engines,stm.&c. | 8,264,942 | 27.7 | ..... | ..... |
| Leath'r,tan'd&c. | 8,104,766 | 8.3 | 4,274,190 | 111.6 |
| Furniture..... | 7,501,573 | 7.4 | 3,773,507 | 101.2 |
| NIAGARA FALLS. | | | | |
| Chemicals..... | 30,831,880 | 35.0 | ..... | ..... |
| Electrical mach. | 8,375,075 | 4.7 | ..... | ..... |
| Paper,wood pulp | 2,674,955 | 2.1 | ..... | ..... |
| Fdry,mach.prod | 1,006,275 | 0.4 | ..... | ..... |
| ROCHESTER. | | | | |
| Clothing, men's. | 40,391,863 | 7.4 | 20,631,610 | 104.4 |
| Boots & shoes, not rubber... | 35,912,227 | 18.9 | 22,392,472 | 165.6 |
| ROCH'STER—*Con't* | | | | |
| Fdry,mach.prod | 23,937,288 | 9.3 | 17,351,021 | 263.4 |
| Electrical mach. | 15,502,865 | 8.6 | 13,043,929 | 530.5 |
| Optical goods... | 12,316,481 | 61.3 | ..... | ..... |
| Furniture..... | 9,794,899 | 9.7 | 6,335,914 | 183.2 |
| Flour, grist.prod | 8,079,806 | 5.2 | 3,728,264 | 85.7 |
| SCHENECTADY. | | | | |
| Bread&bak.prod | 1,469,717 | 0.6 | 879,462 | 149.0 |
| Newsp.& period. | 673,377 | 0.3 | 297,042 | 78.9 |
| Lumber prod., not sawmills.. | 549,322 | 1.1 | 313,776 | 133.2 |
| SYRACUSE. | | | | |
| Auto. bodies,&c. | 21,834,834 | 31.0 | 19,967,393 | 1,069.2 |
| Fdry,mach.prod | 11,469,696 | 4.4 | 8,640,468 | 305.4 |
| Bread&bak.prod | 4,823,066 | 2.1 | 2,470,518 | 105.0 |
| Clothing, men's. | 4,373,485 | 0.8 | 1,875,457 | 75.1 |
| Liquors, malt... | 4,110,190 | 4.1 | 576,935 | 16.3 |
| Newsp.& period. | 2,972,512 | 1.2 | 1,537,175 | 107.1 |
| Candles..... | 2,537,227 | 80.9 | 1,250,441 | 97.2 |
| Conf'y&ice crm. | 2,158,263 | 2.0 | ..... | ..... |
| Knit goods..... | 1,775,426 | 0.9 | 929,054 | 109.8 |
| Furniture, wood. | 1,503,570 | 1.5 | 829,178 | 123.0 |
| Lumber, prod., not pl'n'gmills | 1,349,363 | 2.8 | 699,571 | 107.7 |
| Pr't'g&pub.,job. | 1,247,743 | 0.8 | 515,031 | 70.3 |
| Tobacco, cigars. | 1,000,791 | 0.6 | 562,916 | 128.6 |
| TROY. | | | | |
| Collars & cuffs.. | 42,906,452 | 92.3 | 26,203,679 | 156.9 |
| Fdry,mach.prod | 3,323,042 | 1.3 | 1,644,147 | 97.9 |
| Bread&bak.prod | 1,800,123 | 0.8 | 656,380 | 57.4 |
| Liquors, malt... | 1,559,757 | 1.6 | —1,204,677 | —43.6 |
| Brushes..... | 1,521,775 | 16.9 | 718,245 | 89.4 |
| Cloth'g,women's | 1,479,670 | 0.2 | ..... | ..... |
| UTICA. | | | | |
| Knit goods..... | 22,008,428 | 11.3 | 12,532,887 | 132.3 |
| Cotton goods.... | 17,221,118 | 35.1 | ..... | ..... |
| Clothing, men's. | 4,239,592 | 0.8 | 1,583,790 | 59.6 |
| Bread&bak.prod | 2,007,708 | 0.9 | 1,363,534 | 211.7 |
| Fdry,mach.prod | 1,825,493 | 0.7 | 1,325,985 | 265.5 |
| YONKERS. | | | | |
| Fdry,mach.prod | 6,328,555 | 2.5 | ..... | ..... |
| Druggists' prep. | 1,416,930 | 7.9 | ..... | ..... |
| Cloth'g,women's | 1,164,875 | 0.1 | ..... | ..... |

A minus sign (—) denotes decrease.

NOTE—n. e. s. means *not elsewhere specified.*

Data as to many important industries are not shown by the Census Bureau in the above table for the stated reason that "figures cannot be shown without disclosing individual operations."

## PRINCIPAL INDUSTRIES IN NEW YORK STATE: 1919.

| INDUSTRY. | Establ'm'nts | Wage Earners. | Value of Products |
|---|---|---|---|
| | *Number.* | *Average Number.* | *Thous'nd Dollars.* |
| All industries | 49,330 | 1,228,130 | 8,867,005 |
| Clothing, women's | 5,288 | 102,652 | 886,984 |
| Clothing, men's | 2,537 | 62,008 | 544,054 |
| Sugar, refining, not beet | 5 | 6,289 | 268,318 |
| Slaughtering & meat pkg | 130 | 6,646 | 256,038 |
| Newspapers & periodicals | 1,582 | 23,164 | 252,109 |
| Foundry & mach. prod'ts | 1,325 | 56,609 | 251,688 |
| Bread & oth. bakery prod | 3,897 | 28,541 | 233,207 |
| Knit goods | 682 | 41,372 | 195,377 |
| Boots & shoes, not rubber | 340 | 34,710 | 190,476 |
| Electrical machinery, etc. | 255 | 37,598 | 179,973 |
| Millinery, lace goods, n.e.s. | 1,890 | 28,096 | 165,718 |
| Tobacco, cigars, cigarettes | 2,163 | 21,095 | 163,105 |
| Flour & grist-mill prod | 716 | 3,012 | 155,272 |
| Printing & pub., bk.& job | 2,536 | 26,096 | 149,124 |
| Automobiles | 28 | 14,794 | 140,722 |
| Fur goods | 1,218 | 8,890 | 134,219 |
| Paper & wood pulp | 156 | 17,571 | 129,381 |
| Confectionery & ice cream | 930 | 15,615 | 110,069 |
| Shipbuilding, steel | 28 | 25,987 | 103,461 |
| Furniture | 685 | 22,062 | 100,785 |
| Iron&steel, wks., roll.mills | 30 | 17,901 | 100,593 |
| Liquors, malt | 101 | 6,814 | 99,497 |
| Leather, tan'd, cur'd, fin'd | 94 | 7,056 | 98,095 |
| Shirts | 334 | 12,136 | 97,852 |
| Condensed milk | 100 | 3,730 | 91,910 |
| Photographic materials | 47 | 11,616 | 89,664 |
| Chemicals | 88 | 9,687 | 88,102 |
| Cars & cons., repairs, &c. | 136 | 30,427 | 82,791 |
| Silk goods | 181 | 13,342 | 81,683 |
| Food preparations, n. e. s. | 372 | 4,546 | 77,336 |
| Automobile bodies &parts | 316 | 15,689 | 70,415 |
| Gas, illuminating&heat'g. | 96 | 8,409 | 69,339 |
| Jewelry | 717 | 5,511 | 67,401 |
| Brass, bronze & cop.prod. | 213 | 10,752 | 66,562 |
| Patent medicines & com. | 403 | 4,546 | 57,958 |
| Coffee, spice, roast'g, grind. | 111 | 1,959 | 57,123 |
| Furnishing goods, men's. | 256 | 5,961 | 53,261 |
| Boxes, paper & oth.,n.e.s. | 387 | 14,509 | 53,164 |
| Iron & steel, blast furn. | 9 | 2,210 | 51,602 |
| Soap | 56 | 4,159 | 50,844 |
| Lumber, plan'g-mill prod. | 515 | 8,455 | 49,441 |
| Cotton goods | 37 | 9,222 | 49,076 |
| Carpets & rugs, not rag | 10 | 9,073 | 48,718 |
| Collars & cuffs, men's | 31 | 10,920 | 46,489 |
| Coal-tar products | 46 | 3,758 | 45,792 |
| Dyeing &finishing textiles (Not done in text.mills) | 133 | 6,076 | 44,694 |
| Paints | 97 | 2,835 | 44,130 |
| Tinware, not elswh. spec. | 75 | 6,889 | 43,313 |
| Musical instrum'ts, pianos | 79 | 6,908 | 37,979 |
| Oil, linseed | 6 | 582 | 35,951 |
| Stamp'd&enam. ware, n.e.s | 74 | 8,059 | 34,709 |
| Rubber tires, &c., n. e. s. | 40 | 5,370 | 33,033 |
| Fancy articles, n. e. s. | 345 | 5,943 | 30,949 |
| Chocolate & cocoa prod. | 14 | 2,311 | 30,863 |
| Lithographing | 136 | 6,675 | 30,544 |
| Leather goods, n. e. s. | 244 | 4,410 | 30,322 |
| Engines, steam, gas, water | 31 | 4,528 | 29,822 |
| Shipbuilding, wooden | 133 | 7,308 | 28,551 |
| Bookbinding&blank-b'k. | 397 | 8,513 | 27,893 |
| Cordage & twine | 20 | 3,918 | 27,644 |
| Cooperage | 244 | 1,428 | 9,588 |
| Dyestuffs ; extracts, nat. | 27 | 593 | 9,561 |
| Pipes, tobacco | 31 | 1,839 | 9,449 |
| Engraving, inc. plate ptg. | 119 | 2,586 | 9,384 |
| Cordials & flavor'g syrups | 37 | 497 | 9,336 |
| Belting, leather | 37 | 660 | 9,331 |
| Cement | 11 | 1,574 | 9,243 |
| Salt | 16 | 1,728 | 9,099 |
| Brushes | 120 | 1,799 | 8,984 |
| Brick, tile, fire-clay prod. | 118 | 3,246 | 8,813 |
| Malt | 10 | 336 | 8,493 |
| Signs & adv. novelties | 172 | 2,172 | 8,442 |
| Pulp goods | 9 | 756 | 8,415 |
| Awnings, tents & sails | 192 | 984 | 8,403 |
| Coffins & undertakers'gds | 39 | 1,641 | 8,291 |
| Pens, fountain & stylo | 27 | 1,538 | 8,242 |
| Firearms | 7 | 4,049 | 8,181 |
| Pumps, steam&oth. power | 20 | 1,787 | 8,097 |
| Oil, not elsewhere spec. | 37 | 314 | 8,082 |
| Glass, cutting, stain'g, &c | 175 | 1,822 | 7,952 |
| Grease & tallow, not lub. | 36 | 843 | 7,844 |
| Dental goods | 94 | 843 | 7,736 |
| Liquors, vinous | 29 | 370 | 7,679 |
| Stoves & hot-air furnaces | 20 | 1,773 | 7,423 |
| Mirrors, not elsewh. spec. | 57 | 840 | 7,393 |
| Vinegar & cider | 169 | 488 | 7,228 |
| Coke, not inc. gas-house. | 3 | 643 | 7,213 |
| Labels & tags | 42 | 1,304 | 7,165 |
| Wall paper, not pap.mills. | 14 | 1,542 | 7,038 |
| Lamps & reflectors | 57 | 1,625 | 6,886 |
| Gloves & mittens, cloth | 44 | 2,986 | 6,788 |
| Struct.ironwork, not mills | 301 | 4,872 | 27,425 |
| Lapidary work | 71 | 828 | 27,032 |
| Paper goods, n. e. s. | 95 | 4,017 | 26,877 |
| Bags, other than paper | 56 | 1,568 | 26,822 |
| Gloves & mittens, leather. | 219 | 5,510 | 26,763 |
| Cheese | 598 | 1,002 | 26,540 |
| Canning, pres., fruits, veg. | 515 | 4,835 | 26,535 |
| Perfumery & cosmetics | 179 | 2,462 | 25,499 |
| House-furn. goods, n. e. s. | 185 | 2,771 | 25,467 |
| Automobile repairing | 999 | 6,197 | 25,310 |
| Pickles, preserves&sauces. | 107 | 2,714 | 25,097 |
| Iron & steel forgings | 30 | 4,081 | 23,514 |
| Varnishes | 51 | 1,037 | 22,114 |
| Hats & caps, not felt, &c. | 349 | 3,514 | 22,028 |
| Copper, tin, sheet-iron wk | 647 | 3,847 | 21,831 |
| Instruments, prof.&scien. | 132 | 5,497 | 21,165 |
| Worsted goods | 14 | 4,464 | 21,111 |
| Typewriters & supplies | 36 | 5,400 | 20,985 |
| Agricultural implements | 40 | 4,626 | 20,421 |
| Optical goods | 101 | 6,130 | 20,099 |
| Steam fittings, heat'g ap. | 36 | 5,114 | 19,931 |
| Hats, fur-felt | 42 | 4,088 | 19,888 |
| Buttons | 243 | 6,568 | 18,598 |
| Lumber & timber prod | 849 | 5,494 | 18,415 |
| Druggists' preparations | 98 | 2,210 | 18,000 |
| Woolen goods | 25 | 3,348 | 17,546 |
| Hat & cap materials | 86 | 1,731 | 16,731 |
| Corsets | 74 | 3,882 | 16,604 |
| Phonographs& grapho'nes | 32 | 1,876 | 16,552 |
| Hardware | 100 | 3,977 | 15,648 |
| Plated ware | 21 | 3,048 | 15,077 |
| Smelting&refin'g, not ore. | 11 | 186 | 14,762 |
| Dairymen's, &c., supplies. | 34 | 2,450 | 14,700 |
| Toys & games | 192 | 3,625 | 14,685 |
| Boxes, wooden packing | 162 | 2,772 | 14,652 |
| Chewing gum | 15 | 1,007 | 14,497 |
| Cars& repairs by elec.co's | 53 | 5,656 | 14,369 |
| Feathers & plumes | 191 | 3,200 | 14,311 |
| Bags, paper, not pap.mills | 23 | 1,289 | 14,272 |
| Cutlery & edge tools | 69 | 4,467 | 14,052 |
| Trunks & valises | 158 | 1,950 | 13,977 |
| Hats, straw | 79 | 2,593 | 13,912 |
| Musical instruments,mat. | 36 | 4,141 | 13,569 |
| Marble & stone work | 436 | 2,640 | 13,509 |
| Mattresses, &c., n. e. s. | 224 | 1,636 | 13,473 |
| Ice, manufactured | 132 | 2,138 | 13,309 |
| Glass | 19 | 3,929 | 12,996 |
| Stationery goods, n. e. s. | 77 | 2,354 | 12,948 |
| Artificial flowers | 157 | 3,031 | 12,386 |
| Furs, dressed | 83 | 2,521 | 11,888 |
| Mineral & soda waters | 430 | 1,707 | 11,881 |
| Gas & electric fixtures | 105 | 2,977 | 11,785 |
| Pocketbooks | 93 | 1,842 | 11,106 |
| Umbrellas & canes | 125 | 927 | 11,096 |
| Ink, printing | 38 | 687 | 11,076 |
| Tools, not elsewhere spec. | 181 | 3,004 | 10,818 |
| Felt goods | 10 | 1,401 | 10,695 |
| Suspenders, garters, &c. | 80 | 1,238 | 10,618 |
| Butter | 123 | 350 | 10,558 |
| Airplanes, &c., and parts | 10 | 2,073 | 10,314 |
| Surgical appliances | 74 | 1,652 | 10,219 |
| Babbitt metal & solder | 34 | 687 | 10,212 |
| Photo-engraving | 97 | 2,405 | 10,194 |
| Blacking, stains, dressings | 41 | 926 | 10,189 |
| Wirework, cable, &c., n.e.s. | 116 | 1,854 | 9,992 |
| Printing & pub'g music | 61 | 457 | 9,844 |
| Sausage, not in pkg.estab. | 157 | 513 | 9,688 |
| Steam packing | 33 | 770 | 6,659 |
| Flavoring extracts | 120 | 502 | 6,494 |
| Gas machines & meters | 12 | 1,594 | 6,469 |
| Watchcases | 18 | 834 | 5,947 |
| Wall plaster&comp. floor'g | 35 | 1,205 | 5,855 |
| Photographic apparatus | 23 | 1,695 | 5,798 |
| Minerals & earths, treated | 33 | 1,142 | 5,646 |
| Paving materials | 61 | 1,864 | 5,619 |
| Cork, cutting | 35 | 1,208 | 5,590 |
| Gold & silver, reduc'g, &c. | 15 | 58 | 5,512 |
| Envelopes | 21 | 1,144 | 5,288 |
| Models&patterns, not pap. | 146 | 1,209 | 5,138 |
| Hair work | 94 | 629 | 5,100 |
| Window shades & fixtures | 75 | 1,029 | 5,097 |
| Roofing materials | 18 | 483 | 5,079 |
| Machine tools | 29 | 1,590 | 5,028 |
| Jewelry&instrument cases | 84 | 1,475 | 5,010 |
| Stereotyping & electro | 47 | 1,048 | 4,922 |
| Waste | 10 | 474 | 4,896 |
| Plumbers' supplies, n.e.s. | 34 | 878 | 4,894 |
| Pottery | 14 | 1,858 | 4,726 |
| Brooms | 67 | 980 | 4,680 |
| Iron&steel, doors, shutters | 31 | 999 | 4,629 |
| Cleansing, polishing prep. | 57 | 381 | 4,538 |
| Silversmithing&silv. ware. | 35 | 873 | 4,514 |
| Boot & shoe findings | 77 | 675 | 4,464 |
| Fire extinguishers, chem. | 12 | 583 | 4,362 |
| Looking-glass, pict. frames. | 109 | 1,033 | 4,346 |
| Glue, oth. than fish, n.e.s. | 9 | 369 | 4,185 |
| All other industries | 2,799 | 65,618 | 473,689 |

NOTE—n. e. s., indicates *not elsewhere specified.*

## NEW YORK STATE WORKMEN'S COMPENSATION INSURANCE FUND.

Condition of the fund on Jan. 1, 1922—Assets, $7,929,483 (investments, $6,530,166; cash on hand, $469,658; accrued interest, $68,457; policyholders' accounts, $860,202; miscellaneous, $1,000). Liabilities—$6,354,035 (reserve for losses, $5,058,795; reserve for deferred claim expense, $374,952; reserve for unearned premium, $365,308; other reserves, $554,980). Surplus—$1,575,448 (catastrophe reserve, $856,587; dividend reserve, $350,000; unsigned surplus, $368,861).

## NEW YORK STATE LOSSES IN THE WORLD WAR.

### ARMY.

The following table, compiled by J. Leslie Kincaid, the Adjutant General of the State, shows the number of deaths of troops from the Empire State in the World War.

| County. | Killed in Action. | Died of Wounds. | Died of Disease. | Died of Accidents. | Drowned | Died of Suicide. | Died of Other Causes. | Total Deaths. |
|---|---|---|---|---|---|---|---|---|
| Albany | 64 | 13 | 98 | 11 | ..... | ..... | 3 | 189 |
| Allegany | 18 | 8 | 20 | 1 | ..... | ..... | ..... | 47 |
| Broome | 50 | 19 | 52 | 3 | 1 | ..... | ..... | 125 |
| Cattaraugus | 25 | 10 | 40 | 1 | 1 | 1 | 1 | 79 |
| Cayuga | 27 | 6 | 36 | ..... | ..... | ..... | ..... | 69 |
| Chautauqua | 58 | 16 | 59 | 3 | ..... | 2 | ..... | 138 |
| Chemung | 32 | 15 | 31 | 6 | 2 | ..... | ..... | 86 |
| Chenango | 12 | 8 | 17 | 1 | ..... | 1 | ..... | 39 |
| Clinton | 15 | 11 | 28 | 3 | ..... | ..... | ..... | 57 |
| Columbia | 16 | 4 | 23 | 1 | ..... | 1 | 2 | 47 |
| Cortland | 12 | 7 | 9 | ..... | ..... | 1 | 1 | 30 |
| Delaware | 21 | 1 | 30 | 2 | 1 | ..... | ..... | 55 |
| Dutchess | 36 | 14 | 48 | 5 | 1 | ..... | 1 | 105 |
| Erie | 301 | 119 | 261 | 31 | 3 | 6 | 8 | 729 |
| Essex | 8 | 5 | 27 | 1 | 2 | 1 | ..... | 44 |
| Franklin | 24 | 11 | 26 | ..... | 1 | ..... | ..... | 62 |
| Fulton | 12 | 1 | 18 | 3 | ..... | 1 | ..... | 35 |
| Genesee | 22 | 6 | 16 | 1 | ..... | ..... | ..... | 45 |
| Greene | 8 | 4 | 28 | 1 | ..... | ..... | ..... | 41 |
| Hamilton | 3 | ..... | 3 | ..... | ..... | ..... | ..... | 6 |
| Herkimer | 35 | 18 | 32 | 3 | 1 | 1 | ..... | 90 |
| Jefferson | 49 | 17 | 41 | 1 | ..... | 2 | ..... | 110 |
| Lewis | 6 | 1 | 15 | 2 | ..... | ..... | ..... | 24 |
| Livingston | 9 | 9 | 19 | ..... | ..... | ..... | ..... | 37 |
| Madison | 13 | 5 | 26 | 1 | ..... | ..... | ..... | 45 |
| Monroe | 157 | 63 | 138 | 9 | 4 | 3 | 3 | 377 |
| Montgomery | 28 | 8 | 35 | ..... | ..... | ..... | ..... | 71 |
| Nassau | 63 | 26 | 71 | 13 | 1 | 1 | 1 | 176 |
| New York City | 2,997 | 1,036 | 2,149 | 249 | 72 | 74 | 52 | 6,629 |
| Niagara | 75 | 28 | 73 | 7 | 4 | ..... | 2 | 189 |
| Oneida | 96 | 27 | 78 | 7 | 1 | 1 | ..... | 210 |
| Ontario | 30 | 10 | 31 | 2 | ..... | 1 | ..... | 74 |
| Orange | 62 | 14 | 74 | 4 | 1 | 2 | ..... | 157 |
| Orleans | 16 | 5 | 13 | 1 | ..... | ..... | ..... | 35 |
| Oswego | 30 | 13 | 37 | 4 | 1 | 1 | ..... | 86 |
| Onondaga | 121 | 47 | 100 | 9 | 2 | 3 | 4 | 286 |
| Otsego | 26 | 9 | 33 | 1 | ..... | ..... | ..... | 69 |
| Putnam | 5 | 3 | 5 | ..... | ..... | ..... | ..... | 13 |
| Rensselaer | 79 | 39 | 54 | 3 | 1 | 3 | ..... | 179 |
| Rockland | 23 | 6 | 28 | 1 | 1 | ..... | ..... | 59 |
| St. Lawrence | 31 | 17 | 51 | 2 | ..... | 1 | ..... | 102 |
| Saratoga | 28 | 8 | 23 | 1 | 1 | ..... | 1 | 62 |
| Schenectady | 45 | 19 | 38 | 10 | 1 | ..... | 1 | 114 |
| Schoharie | 1 | 4 | 6 | ..... | ..... | ..... | ..... | 11 |
| Schuyler | 5 | 2 | 3 | 1 | ..... | ..... | ..... | 11 |
| Seneca | 6 | 4 | 20 | 1 | ..... | ..... | ..... | 31 |
| Steuben | 32 | 7 | 35 | 3 | 1 | 1 | 1 | 80 |
| Suffolk | 44 | 15 | 62 | 4 | 4 | 1 | ..... | 130 |
| Sullivan | 14 | 5 | 21 | 1 | ..... | 2 | ..... | 43 |
| Tioga | 7 | 5 | 11 | 1 | ..... | ..... | ..... | 24 |
| Tompkins | 12 | 3 | 14 | 3 | ..... | ..... | ..... | 32 |
| Ulster | 31 | 7 | 69 | ..... | 1 | ..... | 1 | 109 |
| Warren | 10 | 5 | 27 | ..... | ..... | 1 | ..... | 43 |
| Washington | 8 | 11 | 33 | 2 | ..... | 2 | ..... | 56 |
| Wayne | 20 | 9 | 20 | ..... | ..... | ..... | ..... | 49 |
| Westchester | 157 | 56 | 160 | 21 | 2 | 3 | 4 | 403 |
| Wyoming | 12 | 6 | 13 | ..... | 1 | ..... | ..... | 32 |
| Yates | 6 | 2 | 16 | ..... | ..... | ..... | ..... | 24 |
| Residence in New York State Not Shown | 19 | 7 | 22 | 6 | ..... | 1 | ..... | 55 |
| Totals | 5,172 | 1,854 | 4,566 | 447 | 113 | 117 | 86 | 12,355 |

### DEATHS OF MEN FROM NEW YORK STATE WHO SERVED IN THE U. S. NAVY, OR THE MARINE CORPS, IN THE WORLD WAR.

| County. | No. | County. | No. | County. | No. | County. | No. | County. | No. |
|---|---|---|---|---|---|---|---|---|---|
| Albany | 25 | Dutchess | 6 | Madison | 6 | Putnam | 2 | Tompkins | 3 |
| Allegany | 2 | Erie | 105 | Montgomery | 6 | Rensselaer | 26 | Ulster | 8 |
| Broome | 18 | Essex | 2 | Nassau | 12 | Rockland | 4 | Warren | 6 |
| Cattaraugus | 12 | Franklin | 4 | N. Y. City | 717 | St. Lawrence | 6 | Washington | 8 |
| Cayuga | 12 | Fulton | 7 | Niagara | 23 | Saratoga | 8 | Wayne | 7 |
| Chautauqua | 10 | Genesee | 7 | Oneida | 30 | Schenectady | 13 | Westchester | 58 |
| Chemung | 11 | Greene | 3 | Onondaga | 28 | Schoharie | 4 | Wyoming | 3 |
| Chenango | 5 | Herkimer | 7 | Ontario | 6 | Seneca | 6 | Residence in N. Y. State Not Shown | 8 |
| Clinton | 1 | Jefferson | 6 | Orange | 14 | Steuben | 17 | | |
| Columbia | 3 | Lewis | 3 | Orleans | 5 | Suffolk | 25 | | |
| Cortland | 3 | Livingston | 10 | Oswego | 6 | Sullivan | 4 | | |
| Delaware | 4 | Monroe | 63 | Otsego | 6 | Tioga | 2 | Total | 1,406 |

## RETAIL FOOD PRICES IN NEW YORK STATE CITIES.

(Data by the United States Department of Labor.)

| Article. | Unit. | Buffalo. | | | | New York. | | | | Rochester. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Aug. 15. | | July 15. | Aug. 15. | Aug. 15. | | July 15. | Aug. 15. | Aug. 15. | | July 15. | Aug. 15. |
| | | 1913. | 1921. | 1922. | 1922. | 1913. | 1921. | 1922. | 1922. | 1921. | | 1922. | 1922. |
| | | *Cents.* | *Cents.* | *Cents.* | *Cents.* | *Cents.* | *Cents.* | *Cents.* | *Cents.* | *Cents.* | | *Cents.* | *Cents.* |
| Rib roast | Pound | 17.0 | 28.3 | 27.9 | 27.9 | 21.9 | 36.3 | 35.8 | 36.0 | 29.3 | 28.1 | 28.1 | |
| Plate beef | Pound | 11.5 | 12.0 | 11.5 | 11.4 | 14.9 | 17.7 | 17.5 | 17.8 | 11.9 | 11.9 | 11.4 | |
| Pork chops | Pound | 22.0 | 39.9 | 36.9 | 38.5 | 22.2 | 40.6 | 36.6 | 37.7 | 40.6 | 36.8 | 38.1 | |
| Bacon | Pound | 24.5 | 34.2 | 34.7 | 34.7 | 26.4 | 41.0 | 38.5 | 39.1 | 35.7 | 34.1 | 35.0 | |
| Ham | Pound | 28.0 | 50.9 | 51.6 | 51.0 | 30.0 | 57.1 | 57.0 | 55.2 | 53.9 | 51.2 | 49.6 | |
| Lamb | Pound | 15.5 | 28.7 | 32.1 | 31.7 | 15.8 | 33.7 | 36.2 | 34.9 | 36.4 | 38.7 | 36.3 | |
| Hens | Pound | 21.8 | 37.1 | 35.9 | 35.6 | 22.0 | 43.2 | 37.5 | 36.5 | 42.8 | 39.8 | 38.9 | |
| Milk, fresh | Quart | 8.0 | 14.0 | 13.0 | 14.0 | 9.0 | 15.0 | 14.0 | 15.0 | 13.0 | 12.0 | 13.0 | |
| Milk, evap | 15-16-oz. can | .... | 12.6 | 10.1 | 10.2 | .... | 12.2 | 10.1 | 10.0 | 14.1 | 10.9 | 10.9 | |
| Butter | Pound | 32.9 | 51.6 | 45.4 | 43.3 | 34.3 | 53.3 | 45.0 | 42.5 | 51.8 | 45.6 | 43.4 | |
| Cheese | Pound | 20.0 | 30.8 | 30.4 | 30.4 | 19.4 | 33.8 | 32.7 | 32.5 | 32.1 | 31.8 | 32.5 | |
| Lard | Pound | 14.5 | 17.6 | 16.0 | 16.0 | 16.2 | 18.8 | 17.6 | 17.5 | 17.6 | 16.9 | 17.1 | |
| Eggs, fresh | Dozen | 29.8 | 50.7 | 37.4 | 37.4 | 28.6 | 59.4 | 45.0 | 45.0 | 49.0 | 36.9 | 37.4 | |
| Bread | Pound | 5.6 | 8.8 | 8.6 | 8.6 | 6.1 | 10.2 | 9.7 | 9.7 | 8.5 | 8.1 | 8.0 | |
| Flour | Pound | 3.0 | 5.6 | 4.8 | 4.7 | 3.3 | 6.1 | 5.4 | 5.4 | 5.8 | 5.2 | 5.1 | |
| Corn meal | Pound | 2.6 | 4.2 | 3.7 | 3.4 | 3.4 | 6.3 | 5.3 | 5.4 | 5.3 | 4.9 | 4.8 | |
| Rice | Pound | 9.3 | 8.8 | 9.3 | 9.4 | 8.0 | 8.5 | 9.0 | 9.0 | 9.2 | 9.6 | 9.6 | |
| Potatoes | Pound | 2.0 | 4.5 | 3.2 | 2.1 | 2.4 | 4.3 | 3.8 | 2.5 | 4.8 | 3.5 | 2.2 | |
| Onions | Pound | .... | 4.9 | 7.6 | 5.9 | .... | 5.6 | 6.4 | 5.6 | 5.0 | 7.0 | 5.9 | |
| Cabbage | Pound | .... | 4.6 | 3.4 | 2.8 | .... | 5.4 | 3.5 | 2.9 | 5.2 | 4.4 | 3.6 | |
| Tomatoes, can | No. 2 can | .... | 12.3 | 13.4 | 13.3 | .... | 11.4 | 12.4 | 12.1 | 12.0 | 13.6 | 13.0 | |
| Sugar, gran | Pound | 5.5 | 7.0 | 7.7 | 8.0 | 5.0 | 6.9 | 7.0 | 7.6 | 7.1 | 7.6 | 7.8 | |
| Tea | Pound | 45.0 | 63.0 | 58.4 | 60.0 | 43.3 | 52.9 | 48.4 | 48.5 | 58.4 | 60.6 | 60.3 | |
| Coffee | Pound | 29.3 | 33.0 | 33.6 | 33.8 | 27.2 | 32.2 | 32.3 | 32.9 | 34.5 | 33.7 | 34.1 | |
| Prunes | Pound | .... | 17.9 | 19.4 | 19.7 | .... | 18.4 | 19.5 | 19.7 | 21.5 | 20.4 | 19.8 | |

## GOVERNORS OF NEW YORK.

### COLONIAL.

| Governors. | Terms. |
|---|---|
| Adrian Joris | 1623-1624 |
| Cornelius Jacobzen Mey | 1624-1625 |
| William Verhulst | 1625-1626 |
| Peter Minuit | 1626-1633 |
| Wouter Van Twiller | 1633-1638 |
| William Kieft | 1638-1647 |
| Petrus Stuyvesant | 1647-1664 |
| Richard Nicolls | 1664-1668 |
| Francis Lovelace | 1668-1673 |
| Anthony Colve | 1673-1674 |
| Edmond Andros | 1674-1677 |
| Anthony Brockholles, Com.-in-Chief | 1677-1678 |
| Sir Edmond Andros | 1678-1681 |
| Anthony Brockholles, Com.-in-Chief | 1681-1683 |
| Thomas Dongan | 1683-1688 |
| Sir Edmond Andros | 1688 |
| Francis Nicholson | 1688-1689 |
| Jacob Leisler | 1689-1691 |
| Henry Sloughter | 1691 |
| Richard Ingoldsby, Com.-in-Chief | 1691-1692 |
| Benjamin Fletcher | 1692-1698 |
| Earl of Bellomont | 1698-1699 |
| John Nanfan, Lt.-Gov | 1699-1700 |
| Earl of Bellomont | 1700-1701 |
| Col. William Smith | 1701 |
| Col. Abraham De Peyster | |
| Col. Peter Schuyler | |
| John Nanfan, Lt.-Gov | 1701-1702 |
| Lord Cornbury | 1702-1708 |
| Lord Lovelace | 1708-1709 |
| Peter Schuyler, Pres | 1709 |
| Richard Ingoldsby, Lt.-Gov | 1709 |
| Peter Schuyler, Pres | 1709 |
| Richard Ingoldsby, Lt.-Gov | 1709 |
| Gerardus Beekman, President | 1710 |
| Robert Hunter | 1710-1719 |
| Peter Schuyler, Pres | 1719-1720 |
| William Burnet | 1720-1728 |
| John Montgomerie | 1728-1731 |
| Rip Van Dam, President | 1731-1732 |
| William Cosby | 1732-1736 |
| George Clark, Lt.-Gov | 1736-1743 |
| George Clinton | 1743-1753 |
| Sir Danvers Osborne | 1753-1755 |
| James De Lancey, Lt.-Gov | 1755 |
| Sir Charles Hardy | 1755-1757 |
| James De Lancey, Lt.-Gov | 1757-1760 |
| Cadwallader Colden, President | 1760-1761 |
| Cadwallader Colden, Lt.-Gov | 1761 |
| Robert Monckton | 1761 |
| Cadwallader Colden, Lt.-Gov | 1761-1762 |
| Robert Monckton | 1762-1763 |
| Cadwallader Colden, Lt.-Gov | 1763-1765 |
| Sir Henry Moore | 1765-1769 |
| Cadwallader Colden, Lt.-Gov | 1769-1770 |
| Earl of Dunmore | 1770-1771 |
| William Tryon | 1771-1774 |
| Cadwallader Colden, Lt.-Gov | 1774-1775 |
| William Tryon | 1775-1780 |
| James Robertson | 1780-1783 |
| Andrew Elliott, Lt.-Gov | 1783 |

Robertson and Elliott (1780-1783) were Military Governors, during the Revolutionary War. They were not recognized by the State.

### STATE.

| | | | |
|---|---|---|---|
| 1 | George Clinton | 1777-1795 | |
| 2 | John Jay | 1795-1801 | |
| 3 | George Clinton | 1801-1804 | |
| 4 | Morgan Lewis | 1804-1807 | |
| 5 | Daniel D. Tompkins | 1807-1817 | |
| 6 | John Taylor | 1817 | |
| 7 | De Witt Clinton | 1817-1822 | |
| 8 | Joseph C. Yates | 1822-1824 | |
| 9 | De Witt Clinton | 1824-1826 | |
| 10 | Nathaniel Pitcher | 1828 | |
| 11 | Martin Van Buren | 1828-1829 | |
| 12 | Enos T. Throop | 1829-1832 | |
| 13 | William L. Marcy | 1833-1839 | |
| 14 | William H. Seward | 1839-1842 | |
| 15 | William C. Bouck | 1843-1844 | |
| 16 | Silas Wright | 1845-1846 | |
| 17 | John Young | 1847-1848 | |
| 18 | Hamilton Fish | 1849-1851 | |
| 19 | Washington Hunt | 1851-1852 | |
| 20 | Horatio Seymour | 1853-1854 | |
| 21 | Myron H. Clark | 1855-1856 | |
| 22 | John A. King | 1857-1858 | |
| 23 | Edwin D. Morgan | 1859-1862 | |
| 24 | Horatio Seymour | 1863-1864 | |
| 25 | Reuben E. Fenton | 1865-1868 | |
| 26 | John T. Hoffman | 1869-1872 | |
| 27 | John Adams Dix | 1873-1874 | |
| 28 | Samuel J. Tilden | 1875-1876 | |
| 29 | Lucius Robinson | 1877-1880 | |
| 30 | Alonzo B. Cornell | 1880-1882 | |
| 31 | Grover Cleveland | 1883-1884 | |
| 32 | David B. Hill | 1885-1891 | |
| 33 | Roswell P. Flower | 1892-1894 | |
| 34 | Levi P. Morton | 1895-1896 | |
| 35 | Frank S. Black | 1897-1898 | |
| 36 | Theodore Roosevelt | 1899-1900 | |
| 37 | Benjamin B. Odell, Jr | 1901-1904 | |
| 38 | Francis W. Higgins | 1905-1906 | |
| 39 | Charles E. Hughes | 1907-1910 | |
| 40 | Horace White | 1910 | |
| 41 | John Alden Dix | 1911-1912 | |
| 42 | William Sulzer | 1913 | |
| 43 | Martin H. Glynn | 1913-1914 | |
| 44 | Charles S. Whitman | 1915-1918 | |
| 45 | Alfred E. Smith | 1919-1921 | |
| 46 | Nathan L. Miller | 1921-1923 | |
| 47 | Alfred E. Smith | 1923-1925 | |

Gov. Sulzer (1913) was impeached and removed and was automatically succeeded by Lieut.-Gov. Glynn.

## NEW YORK STATE GOVERNMENT.

(Terms expire Dec. 31 of year named.)

**Governor**—Alfred Emanuel Smith, Dem., New York City (1924), $10,000 and Executive Mansion
**Lieutenant Governor**—George R. Lunn, Dem., Schenectady (1924), $5,000.
**Secretary of State**—James A. Hamilton, Dem., the Bronx (1924), $8,000.
**State Comptroller**—James W. Fleming, Dem., Troy (1924), $10,000.
**State Treasurer**—George K. Shuler, Dem., Lyons (1924), $8,000.
**Attorney General**—Carl Sherman, Dem., Buffalo (1924), $10,000.
**State Engineer and Surveyor**—Dwight B. La Du, Dem., Albany (1924), $10,000.

## THE STATE JUDICIARY.

(Terms of Judges end Dec. 31 of year named.)

**Court of Appeals**—*Chief Judge*, Frank H. Hiscock, Syracuse, 1926: *Associate Judges*, John W. Hogan, Syracuse, 1923: Benjamin N. Cardozo, N. Y. City, 1931; Cuthbert W. Pound, Lockport, 1930; Chester B. McLaughlin, Port Henry, 1926; Frederick E. Crane, Brooklyn, 1934; William S. Andrews, Syracuse, 1928.

**The Supreme Court**—*First District* (Manhattan and the Bronx)—Edward G. Whitaker, Manhattan, 1923; Nathan Bijur, Manhattan, 1923; Edward J. Gavegan, Manhattan, 1923; Alfred R. Page, Manhattan, 1923; Joseph E. Newburger, Manhattan, 1923; M. Warley Platzek, Manhattan, 1924; Leonard A. Giegerich, Bronx, 1925; Daniel F. Cohalan, Manhattan, 1925; Vernon M. Davis, Manhattan, 1925; Charles L. Guy, Manhattan, 1926; Thomas F. Donnelly, Manhattan, 1926; John Proctor Clarke, Manhattan, 1926; William P. Burr, Manhattan, 1926; Mitchell L. Erlanger, Manhattan, 1927; Francis B. Delahanty, Manhattan, 1929; John M. Tierney, Bronx, 1929; Edward R. Finch, Manhattan, 1929; George V. Mullan, Bronx, 1930; Richard H. Mitchell, Bronx, 1930; John B. McAvoy, Manhattan, 1931; John Ford, Manhattan, 1932; Victor J. Dowling, Manhattan, 1932; Robert F. Wagner, Manhattan, 1932; Richard P. Lydon, Manhattan, 1932; Philip J. McCook, Manhattan, 1933; Francis Martin, Bronx, 1934; James O'Malley, Manhattan, 1934; Isadore Wasservogel, Manhattan, 1934; Irving Lehman, Manhattan, 1936; Edward J. M'Goldrick, Manhattan, 1936; William H. Black, Manhattan, 1936.

*Second District* (Counties of Kings, Nassau, Queens, Richmond, and Suffolk)—Isaac M. Kapper, Brooklyn, 1923; Joseph Aspinall, Brooklyn, 1924; Charles H. Kelby, Brooklyn, 1925; Russell Benedict, Brooklyn, 1925; James C. Van Siclen, Jamaica, 1925; David F. Manning, Brooklyn, 1926; Stephen Callaghan, Brooklyn, 1929; James C. Cropsey, Brooklyn, 1930; William J. Kelly, Brooklyn, 1930; Edward Lazansky, Brooklyn, 1931; Lewis L. Fawcett, Brooklyn, 1931; Leander B. Faber, Jamaica, 1932; Norman S. Dike, Brooklyn, 1932; Walter H. Jaycox, Patchogue, 1933; Selah B. Strong, Setauket, 1934; John MacCrate, Brooklyn, 1934; Mitchell May, Brooklyn, 1935; Harry E. Lewis, Brooklyn, 1935; William D. Carswell, Brooklyn, 1936; William F. Hagarty, Brooklyn, 1936.

*Third Distrtct* (Counties of Albany, Columbia, Greene, Rensselaer, Schoharie, Sullivan, and Ulster) —Gilbert D. B. Hasbrouck, Kingston, 1926; Aaron V. S. Cochrane, Hudson, 1928; Wesley O. Howard, Troy, 1930:Charles E. Nichols, Jefferson, Schoharie Co., 1930; Harold J. Hinman, Albany, 1932; Ellis J. Staley, Albany, 1935; Joseph Rosch, Liberty, 1935.

*Fourth District* (Counties of Clinton, Essex, Franklin, Fulton, Hamilton, Montgomery, St. Lawrence, Saratoga, Schenectady, Warren, and Washington)—Edward D. Whitmyer, Schenectady, 1925; Henry V. Borst, Amsterdam, 1927; Henry T. Kellogg, Plattsburg, 1931; Charles C. Van Kirk, Greenwich, 1932; Edward M. Angell, Glens Falls, 1935; John C. Crapser, Massena, 1935.

*Fifth District* (Counties of Herkimer, Jefferson, Lewis, Oneida, Onondaga, and Oswego)—Edgar S. K. Merrell, Lowville, 1923; Irving G. Hubbs, Pulaski, 1925; Irving R. Devendorf, Herkimer, 1926; Leonard C. Crouch, Syracuse, 1927; Jerome L. Cheney, Syracuse, 1933; Louis M. Martin, Clinton; 1933; Claude B. Alverson, Dexter, 1934; Ernest I. Edgecomb, Syracuse, 1936.

*Sixth District* (Counties of Broome, Chemung, Chenango, Cortland, Delaware, Madison, Otsego, Schuyler, Tioga, and Tompkins)—Michael H. Kiley, Cazenovia, 1926; Walter Lloyd Smith, Elmira, 1926; George McCann, Elmira, 1927; Rowland L. Davis, Cortlandt, 1929; Abraham L. Kellogg, Oneonta, 1930; Theodore R. Tuthill, Binghamton, 1933.

*Seventh District* (Counties of Cayuga, Livingston, Monroe, Ontario, Seneca, Steuben, Wayne, and Yates)—John B. M. Stephens, Rochester, 1927; Adelbert P. Rich, Auburn, 1928; William W. Clark, Wayland, 1928; Samuel Nelson Sawyer, Palmyra, 1928; Robert F. Thompson, Canandaigua, 1930; Adolph J. Rodenbeck, Rochester, 1930; Benjamin B. Cunningham, Rochester, 1933.

*Eighth District* (Counties of Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, and Wyoming)—Charles A. Pooley, Buffalo, 1924; Harry L. Taylor, Buffalo, 1927; George W. Cole, Salamanca, 1926; Charles H. Brown, Belmont, 1928; Wesley C. Dudley, Buffalo, 1930; Charles B. Sears, Buffalo, 1931; Alonzo G. Hinkley, Buffalo, 1933; George E. Pierce, Buffalo, 1933; Louis W. Marcus, Buffalo, 1933; Harley N. Crosby, Falconer, 1935; Clinton T. Horton, Buffalo, 1935; Asher B. Emery, East Aurora, 1936; Edward R. O'Malley, Buffalo, 1936; James E. Norton, Warsaw, 1936.

*Ninth District* (Counties of Dutchess, Orange, Putnam, Rockland and Westchester)—William P. Platt, White Plains, 1928; J. Addison Young, New Rochelle, 1929; Albert H. F. Seeger, Newburgh, 1929; Frank L. Young, White Plains, 1930; Joseph Morschauser, Poughkeepsie, 1933; Arthur S. Tompkins, Nyack, 1934.

## NEW YORK NATIONAL GUARD.

(Officially revised as of Nov. 1, 1922.)

*Commander in Chief*, the Governor of the State.

The office of the *Adjutant General* is at No. 158 State Street, Albany. The *State Arsenal* is at No. 463 Seventh Avenue, New York City. *Secretary Armory Commission*, Brig. Gen. F. W. Ward. *Commander of the New York National Guard*, Major Gen. John F. O'Ryan, office, Municipal Building, New York City.

BRIGADE AND OTHER COMMANDERS.

**2d Infantry Brigade**, 1322 Bedford Ave., Brooklyn. Brig. Gen. James Robb.
**53d Infantry Brigade**, 176 State St., Albany. Brig. Gen. Franklin W. Ward.
**54th Infantry Brigade**, 451 Main St., Buffalo. Brig. Gen. Edgar S. Jennings
**87th Infantry Brigade**, 104 East 34th Street, New York City. Brig. Gen. George R. Dyer.
**52d Field Artillery Brigade**, 171 Clermont Ave., Brooklyn.
**51st Cavalry Brigade**, 1579 Bedford Ave., Brooklyn, N. Y. Brig. Gen. Mortimer D. Bryant.
51st Brigade Headquarters Troop, Staten Island.
27th Division Special Troops, 216 Ft. Washington Ave.. N. Y. City. Major John C. Mansfield.
27th Division Headquarters Company, 216 Ft. Washington Ave., N. Y. City.
27th Division Signal Company, 801 Dean St., Brooklyn, N. Y.
102d Ordnance Maintenance Company, 216 Ft. Washington Ave., N. Y. City.
27th Tank Company, 216 Ft. Washington Ave., N. Y. City.
27th Military Police, Yonkers.
102d Cycle Company, Yonkers.
27th Division Train, Q. M. C., 355 Marcy Ave., Brooklyn, N. Y. Major Walter E. Corwin.
27th Division Air Service, Miller Field, S. I. Major Kenneth P. Littauer.
101st Signal Battalion, 104 E. 34th St., N. Y. City. Major James C. Fox.
102d Engineers, 216 Ft. Washington Ave., N. Y. City. Col. Fredk. E. Humphreys.
101st Cavalry, 1579 Bedford Ave., Brooklyn, N. Y. Col. James R. Howlett; with one troop each at Syracuse, Rochester and Buffalo.
1st Cavalry, Troop B, Albany; Troop G, Utica; Troop M, Geneseo.
51st Machine Gun Squadron (Cavalry), 1339 Madison Ave., N. Y. C. Major Nathaniel H. Egleston.

NEW YORK NATIONAL GUARD—*Continued.*

104th Field Artillery, 1988 Broadway, N. Y. City. Col. J. T. Delaney. Battery A, Syracuse; Batteries B and C, Binghamton.
105th Field Artillery, 1122 Franklin Ave., N. Y. City. Col R. W. Marshall; 1st Battalion is at 171 Clermont Ave., Brooklyn.
106th Field Artillery, 29 Masten St., Buffalo. Col. W. F. Schohl.
258th Field Artillery, 29 W. Kingsbridge Road, N. Y. City. Col. E. F. Austin.
9th Coast Defense Command, 125 W. 14th St., N. Y. City. Col. John J. Byrne.
13th Coast Defense Command, 357 Sumner Ave., Brooklyn, N. Y. Col. Sydney Grant.
212th Anti-Aircraft Artillery, 120 W. 62d St., N. Y. City. Col. N. B. Burr.
102d Medical Regiment, 56 West 66th St., N. Y. City. Col. L. A. Salisbury. 1 Sanitary Company in Rochester, 1 Ambulance Company in Syracuse, 1 Hospital Company in Albany, 1 Hospital Company in Brooklyn.
10th Infantry, 195 Washington Ave., Albany. Col. C. E. Walsh. Companies also at Catskill, Hudson, Oneonta, Walton, Binghamton, Ithaca, Utica and Mohawk.
14th Infantry, 1402 Eighth Ave., Brooklyn. Col. F. W. Baldwin. 1 company at Flushing.
71st Infantry, 105 E. 34th St., N. Y. City. Col. J. H. Wells.
105th Infantry, Troy. Col. R. H. Gillet. Companies also at Cohoes, Schenectady, Hoosick Falls, Whitehall, Saratoga Springs, Glens Falls, Saranac Lake, Malone, Amsterdam and Gloversville.
106th Infantry. 1322 Bedford Ave., Brooklyn, N. Y. Col. Thomas Fairservis.
107th Infantry, 643 Park Ave., N. Y. City. Col. W. H. Hayes.
108th Infantry, Syracuse. Col. J. S. Thompson. Companies also at Rochester, Geneva, Oswego, Medina, Ogdensburg, Auburn, Hornell, Elmira and Watertown.
165th Infantry, 68 Lexington Ave., N. Y. City. Col. J. J. Phelan.
174th Infantry, 172 Connecticut St., Buffalo. Col. W. R. Pooley. Companies also at Jamestown, Olean, Tonawanda and Niagara Falls.
369th Infantry, 2217 Seventh Ave., N. Y. City. Col. A. W. Little.
132d Ammunition Train, Middletown. Major J. A. Korschen. Companies also at Newburgh, Kingston, Poughkeepsie and Mount Vernon.

THE NAVAL MILITIA.

*Commodore* Robert P. Forshew, Headquarters, Room 2203 Municipal Building, N. Y. City. *First Battalion*, U. S. S. Illinois, foot of 97th St., North River, N. Y. City. Capt. William B. Wait. *Second Battalion*, foot of 52d St., Bay Ridge, Brooklyn. Capt. E. T. Fitzgerald. *Third Battalion*, State Armory, 908 Main St., E. Rochester. Capt. William J. Graham. There are divisions at Rochester, Dunkirk, Buffalo, Watertown, Niagara Falls, Oswego. *Separate Divisions* attached to Headquarters, Naval Militia, N. Y., at Flushing, New Rochelle, Ossining, and Staten Island. *Total Strength*, 2,100 officers and men.

STATE DEPARTMENTS AND BUREAUS.

**Agricultural Experiment Station**—Geneva.

**Agriculture, College of**—at Cornell University, Ithaca.

**Agriculture, Institute of Applied**—Farmingdale, L. I.

**Agriculture, School of**—at Alfred University, Alfred. There are, also, State schools of agriculture at Morrisville, Canton (St. Lawrence University), Cobleskill and Delhi. Clayworking and Ceramics, School of, at Alfred University, Alfred.

**Architecture, State Dept. of**—Capitol, Albany. Branch office—25 Broadway, Manhattan.

**Armory Commission**—158 State St., Albany.

**Athletic Commission**—291 Broadway, Manhattan. Licenses and controls boxing, sparring and wrestling matches.

**Banks, Supt. of**—Journal Building, Albany. Branch office—51 Chambers St., Manhattan.

**Bill Drafting Commission**—Capitol, Albany. Assists in preparing legislative bills.

**Blind, Commission for**—Hall of Records, Manhattan. *Secretary*—Grace S. Harper.

**Bronx Parkway Commission**—280 Madison Ave., Manhattan.

**Budget Committee**—It consists of the Senate Finance Committee and Assembly Ways and Means Committee.

**Canal Board**—Albany. Fixes and changes canal boundaries, etc. Consists of the Lieutenant Governor, Secretary of State, Comptroller, Treasurer, Attorney General, State Engineer and Surveyor, and Superintendent of Public Works.

The Barge Canal terminals in New York City are at Pier 6, East River; at the foot of W. 53d St., North River; at Mott Haven; in Brooklyn, at the foot of North Jane St.; and at Corona, Queens Borough.

**Canvassers, Board of**—Albany. Consists of Secretary of State, Comptroller, Treasurer, Attorney General, State Engineer and Surveyor. Meets on or before Dec. 15, after a general election, and within 40 days after a special election, and canvasses the vote.

**Charities, Board of**—23 So. Pearl St., Albany. Branch office—287 Fourth Ave., Manhattan. *President*—William R. Stewart, of New York City; *Vice President*—D. B. Lawrence, Bronxville. The other members are: L. K. Frankel, Dr. J. B. Murphy and Victor F. Ridder, of New York City; Dr. J. R. Kevin, of Brooklyn; Mrs. Mary M. Glynn, of Albany; Mrs. Eleanor W. Higley, of Hudson Falls; C. H. Lewis, of Skaneateles; P. S. Livermore, of Ithaca; Mrs. Lillie B. Werner, of Rochester, and W. H. Gratwick, of Buffalo. *Secretary*—Charles H. Johnson.

**Child Welfare, Boards of**—These now exist in more than 45 counties of the State. They grant mothers' allowances. The Chairman of each board can be reached by communicating with the County Judge in each county outside New York City. See elsewhere in The ALMANAC for the New York City Board of Child Welfare.

**Civil Service Commission**—Capitol, Albany. *President*—John C. Clark, of New York City. *Secretary*, John C. Birdseye.

**Classification, Board of**—Capitol, Albany. Controls price of labor and of articles made in the charitable and penal institutions. *Secretary*—F. H. Duel.

**Conservation Commission**—23 South Pearl St., Albany. Branch office of Forest, Fish and Game Commission—Broadway and 42d St., Manhattan. *Commissioner*—Alexander Macdonald, of St. Regis Falls. *Secretary*—H. F. Prescott. *Chief Game Protector*—Llewellyn Legge.

**Domestic Science and Agriculture, School of**—Delhi.

**Education, Dept. of**—Education Building, Albany. *Commissioner*—Frank P. Graves. *Director of State Library*—J. I. Wyer, Jr. *Director of Science and the State Museum*—John M. Clarke. *Board of Regents*—Pliny T. Sexton, of Elmira (Chancellor Emeritus); Chester S. Lord, of Brooklyn (Chancellor); Albert Moot, of Buffalo (Vice Chancellor); Albert Vander Veer, of Albany; William Bondy and James Byrne, of New York City; C. B. Alexander, of Tuxedo; Walter G. Kellogg, of Ogdensburg; Herbert L. Bridgman, of Brooklyn; William P. Baker, of Syracuse; Thomas J. Mangan, of Binghamton, and William J. Wallin, of Yonkers.

There are State Normal Schools at Albany, Brockport, Buffalo, Cortland, Fredonia, Geneseo, New Paltz, Oneonta, Oswego, Plattsburg and Potsdam. The Bureau of Rehabilitation is at 118 E. 28th St., Manhattan.

**Embalming Examiners, Board of**—Office of the Secretary is at 299 Lark St., Albany.

**Engineers and Surveyors' Licensing Board**—Albany. Examines under license law effective May 5, 1921.

**Equalization, Board of**—Albany. Consists of State Tax Commissioners and the Commissioners of the Land Office.

**Estimate and Control, Board of**—Albany. Consists of the Governor, Comptroller, Chairman Senate Finance Committee and Chairman Assembly Ways and Means Committee. Oversees public printing, supplies, department budgets, etc.

**Farms and Markets, Dept. of**—Agricultural Hall, Albany. Branch office—90 W. Broadway, Manhattan. It consists of a Council of Farms and Markets, which acts through a Commissioner, who holds office at its pleasure.

**Fiscal Supervisor of State Charities**—Capitol, Albany.

**Forestry, State College of**—at Syracuse University.

**Geographic Names, Board of**—Education Building, Albany. *Secretary*—John M. Clarke.

STATE DEPARTMENTS AND BUREAUS—*Continued.*

**Gettysburg, Chattanooga and Antietam Battlefields Monuments Commission**—Hall of Records, Manhattan. *Secretary*—J. W. Lynch.

**Health, Dept. of**—Capitol, Albany. Branch office—25 W. 45th St., Manhattan. Laboratory—339 E. 25th St., Manhattan. *Commissioner*—Dr. Hermann M. Biggs, of Manhattan. *Secretary*—C. E. Lakeman, of Albany.

**Highways, Dept. of**—53 Lancaster St., Albany. *Commissioner*—Herbert S. Sisson. *Secretary*—J. C. Finch.

**Historic Sites and Reservations**—Senate House, Kingston; Schuyler Mansion, Albany; Washington's Headquarters, Newburgh; Fire Island State Park; Palisades Interstate Park; Newtown Battlefield, Elmira; Niagara State Reservation; Watkins Glen; Mohansic Lake Reservation.

**Hospital Commission**—Capitol, Albany. Branch office—Hall of Records, Manhattan. *Secretary*—L. M. Farrington, Albany.

**Insurance, Dept. of**—Capitol, Albany. Branch office, 165 Broadway, Manhattan.

**Labor, Dept. of**—Capitol, Albany. Branch offices—124 E. 28th St. and 125 E. 27th St., Manhattan; 310 Jay St., Brooklyn (employment office); 132 State St., Albany (employment office); 120 W. Jefferson St., Syracuse; 134 South Ave. and 40 Elm St., Rochester (employment office); Iroquois Building, and 357 Washington St., Buffalo (employment office). *Industrial Commissioner*—Henry D. Sayer, of Richmond Hill, L. I. *Chairman of the Industrial Board*—John D. Higgins, of Oswego. *Secretary of the Dept.*—C. A. Meeker, of Watertown.

**Land Office, Commissioners of**—Albany. Composed of Lieutenant Governor, Speaker of the Assembly, Secretary of State, Comptroller, Treasurer, Attorney General, State Engineer and Surveyor.

**Law Examiners, Board of**—86 State St., Albany.

**Medical Examiners, Board of**—Education Building, Albany. It is appointed by the Board of Regents. *Secretary*—W. D. Cutter.

**Mental Defectives, Commission for**—*Secretary*—Helen A. Cobb, 105 E. 22d St., Manhattan.

**Motion Picture Commission**—Capitol, Albany. Branch office—220 W. 42d St., Manhattan. *Chairman*—G. H. Cobb, of Watertown. *Secretary*—Joseph Levenson, New York City.

**Nautical School, State**—Office, Hall of Records, Manhattan.

**Parole, Board of**—Capitol, Albany. The Chairman is the State Superintendent of Prisons.

**Pharmacy, Board of**—Education Building, Albany. It is appointed by the Board of Regents.

**Prisons, Commission of**—Capitol, Albany. It visits and inspects. *Secretary*—J. F. Tremain.

**Prisons, Superintendent of**—Capitol, Albany.

**Probation Commission**—132 State St., Albany. *Secretary*—F. A. Moran.

**Public Health Council**—Albany. It makes and has charge of all State sanitary regulations. The Chairman is the State Health Commissioner.

**Public Service Commission**—91 State St., Albany. Branch office—30 Church St., Manhattan. *Chairman*—W. A. Prendergast, of Brooklyn. *Executive Officer*—H. M. Ingram. *Secretary*—F. E. Roberts.

**Public Works, Supt. of**—Capitol, Albany. The Superintendent, appointed by each Governor to hold office during his term, has charge of the canal system and the progress of public improvements.

**Racing Commission**—Manhattan. *Secretary*—J. A. Reilly.

**Roosevelt Memorial Commission**—Albany. Investigates proposed State memorials to Theodore Roosevelt.

**Sites, Buildings and Grounds, Commission on**—Capitol, Albany. Acquires or lays out sites, etc., for State institutions and additions thereto.

**State Fair Commission**—Syracuse. *Secretary*—J. D. Ackerman.

**Tax Dept.**—Capitol, Albany. Branch offices—120 and 233 Broadway, Manhattan, and 570 E. 161st St., Bronx. *President*—W. W. Law, Jr., of Rye. *Secretary*—H. G. Tennant.

The Motor Vehicle Bureau branch office is at 127 W. 65th St.

**Troopers, State**—Headquarters, 36 No. Pearl St., Albany. Consists of six troops, each with 58 members. *Superintendent*—G. F. Chandler, of Kingston. There are barracks at Batavia, Oneida, Troy, White Plains, Sidney and Malone, with semi-permanent sub-stations scattered throughout the State.

**Uniformity of Legislation, Commission for Promotion of in the United States**—Albany. Three commissioners, no salary. C. T. Terry, of New York City; C. C. Alden, of Buffalo; and G. G. Bogert, of Ithaca.

**Water Control Commission**—Albany. Consists of the Conservation Commissioner, as Chairman; the Attorney General, and the State Engineer and Surveyor.

**Water Power Commission**—23 So. Pearl St., Albany. Consists of the Conservation Commissioner, as Chairman; the State Engineer and Surveyor, the Attorney General, the Temporary President of the Senate and the Speaker of the Assembly.

## ILLITERACY AS A CAUSE OF ACCIDENTS.

(From a bulletin of the New York State Department of Education.)

Not only is there loss in production because of the low wage earning power of the illiterate foreigner, but there is a tremendous loss in accidents and casualties among the foreigners engaged in dangerous occupations.

Marian K. Clark, of the New York State Industrial Commission, estimates that one-half of the accidents in factories, with a resultant loss of $50,000 per day to industries, are due to ignorance of the language.

There are 800,000 factory workers in New York State who cannot speak English. In 1916, $11,500,000 was paid out in that State in accordance with the Workmen's Compensation Law, an amount which would be increased to $35,000,000 if to it were added loss of wages, labor turnover, doctors' bills, and administration of the law.

Statistics of the United States Bureau of Labor show that the rate of accidents in the iron and steel industry during a period of eight years was highest among the non-English-speaking workers and showed little decrease from year to year. The Ford Motor Co. officials state that accidents have fallen off 54 per cent. since their school was started in 1914.

In mining, the most hazardous occupation in this country, lack of ability to read the English language is a tremendous handicap.

In 1919 the Director of the Bureau of Mines stated that 465,000 men in the mining industry came from non-English-speaking races, and that many of them were illiterate. He states that if these men were taught to read and write English it would be a tremendous economic factor in the industry through a reduction in the casualty list. He says:

"This is a plain business proposition to prevent the death of at least 1,000 miners each year and to prevent the injury of more than 150,000 miners each year. Thousands of illiterate foreigners, many of them unable even to read or write their native language, are poured into the great American mining machine each year and with most disastrous results.

"The mines that employ numbers of foreigners generally have the precautionary rules printed in the different languages; but if the foreigner cannot even read his own language, these safety guides are of no value to him.

"The best estimates from a number of the larger mining States are to the effect that the non-English-speaking foreigners suffer twice the fatalities that the English-speaking miners do. This means an excess of 930 non-English-speaking foreigners killed each year, and I may say unnecessarily.

"If the average State compensation is $3,000, which is a fair figure, the total economic loss each year to the country through the excess of deaths of non-English-speaking miners alone amounts to $2,790,000. On the same basis it is estimated that the excess of non-English-speaking miners injured each year amounts to 69,750 men. This is a loss in wages alone of $1,743,750.

"Taking the excess of deaths and injuries together, due to non-English-speaking foreigners, the economic loss each year reaches $4,533,750. This is entirely aside from the other costs to the industry in production lost."

## CHIEF NEW YORK STATE LEGISLATION OF 1922.

**Architects**—They must pay a yearly registration fee of $2 to the State Board of Examiners.

**Automobile (Highway Law) Amendments—Fleeing an Accident**—Makes it a misdemeanor for an operator of a motor vehicle who has damaged another vehicle or injured a person to leave the place of the accident or injury without giving his name and address and license number to the person damaged or injured, as well as to a police officer if one is in the vicinity; if not, then the operator must report the facts to the nearest police station or judicial officer; also requires police officers and judicial officers who receive reports of motor vehicle accidents to make a memorandum of the facts reported, and of such additional facts as may come to their knowledge, and promptly deliver the same to a Police Justice or other Magistrate.

(Serial Numbers on Autos, Removing, etc.)—Another amendment makes it a felony, instead of a misdemeanor, for any person wilfully to remove, deface, cover, alter or destroy the manufacturers' serial number or any other distinguishing number or identification mark on any motor vehicle or on any mechanical device; or for any person knowingly to buy, sell, receive, dispose of, conceal, or have in his possession any motor vehicle or mechanical device from which any identification number or mark has been removed, altered, or destroyed.

**Bail Bondsmen**—Amends the code of criminal procedure, by requiring bondsmen in criminal cases to be licensed by the State Superintendent of Insurance. Bonding corporations must procure a separate license for each officer and employee authorized to execute such bonds. Limits the premium to 3 per cent. of the bond. Defines a professional bondsman as any person, firm or corporation executing within one month criminal bail bonds in more than two cases not arising out of the same transaction.

**Bankruptcy Discharges**—Amends the Debtor and Creditor Law in relation to discharge of bankrupt from judgment. Approved March 7, 1922; effective immediately.

Section 150 is amended by providing that at any time after the expiration of one year from the date a bankrupt is discharged from his debts under the Federal Bankruptcy Act, an application may be made by the bankrupt, his receiver, trustee or any other interested person or corporation to the court in which a judgment was rendered against him for an order directing the judgment to be cancelled and discharged of record; but such order shall not affect a judgment lien upon real property owned by the bankrupt more than four months prior to being adjudged a bankrupt.

**Bonus Act**—Creates the New York Veterans' Relief Commission, consisting of the Adjutant General, the Comptroller, and the Attorney General, and authorizes the appointment of a deputy commissioner in each Assembly district. Appropriates $1,000,000 and provides for a maximum allowance of $250 to each sick or disabled ex-service man residing in the State on April 12, 1922, whose sickness or disability was incurred in, or resulted from, his military or naval service between April 6, 1917, and November 11, 1918. Veterans without dependents are to receive $30 per month; with dependents, $45 per month. Veterans regularly receiving aid from the United States Government equal to that provided in this Act are not to receive State aid. Applications for relief are to be filed with deputy commissioners in the Assembly district where veteran resides. In addition to supplying proofs as to service, every applicant for relief must furnish proof that he has been out of regular employment for fourteen days preceding date of application.

**Budget, County and City**—N. Y. City Charter, effective February 28, 1922. Makes all county expenses a general charge upon the city as a whole, instead of upon each county separately. Permits merging tax levy of each county with that of the boroughs, thereby providing a flat rate for all the boroughs.

**Charity Frauds**—Amends the Banking Law by requiring banks, savings banks, and trust companies to furnish, upon request, to local officials charged with the administration of laws relating to the poor, information as to whether or not an applicant for relief, or the husband or wife of such applicant, has funds, securities or other personal property on deposit or in the custody of such banks or trust companies.

**Courts, Children's**—Outside of Greater New York, under the new law signed by Gov. Miller, April 10, 1922, the County Judge will act as the Judge of the newly created court in each county in which the Board of Supervisors certify that he is able to discharge the duties of the office. Otherwise a children's court Judge will be elected in each county.

**Extra Courts**—A new law provides for two extra Criminal Parts of the Supreme Court in New York City, and also two additional parts of General Sessions; also six additional assistants to the District Attorney.

**Commuters' Tickets**—They must not be loaned by the owner or purchaser, and must not be bought at less than the schedule of rates filed and published.

**Conditional Sales**—Amends Personal Property Law; defines conditions; prohibits removals or sale by buyer without notice; makes unlawful the concealment or removal of goods; requires original contract of sale or copy thereof to be filed with city clerk, and the refiling of contracts when goods are removed from the original filing district; and makes buyer liable for loss and injury after the delivery of the goods.

**Congressional Reapportionment**—Provides for new boundary lines for the 11th, 12th, 13th, and 14th Congressional Districts, in New York City. They cover all Manhattan south of 14th Street.

**Contracts, Awarding of**—Amends the New York City Charter by permitting the award of a contract in cases where an appropriation is insufficient at the time bids are opened, provided an additional appropriation sufficient to make up the amount required, to equal the amount bid, is secured before an award is made.

**Corporations**—In effect March 29, 1922. Amends the Stock Corporation Law by requiring all stock corporations organized prior to January 1, 1898, and other than those paying a franchise tax subsequent to January 1, 1919, except banking, insurance, transportation, and railroad corporations, to file with the Secretary of State before December 31, 1922, a report showing the corporation in existence. A list of corporations failing so to report is to be transmitted to the Governor before December 31, 1923, who by proclamation shall declare such corporations dissolved and their charters forfeited. The names of corporations so dissolved are to be reserved for a period of three months following publication of the Governor's proclamation, and during such period no corporation shall be formed under a name the same as any name so reserved or so nearly resembling it as to be calculated to deceive, nor shall any foreign corporation, within such period, be authorized to do business in this State under a name the same as any name so reserved or so nearly resembling it as to be calculated to deceive.

Within three months from date of publication of the Governor's proclamation, a corporation whose name appears therein may, upon payment of a $25 fee, file a certificate of continuance with the Secretary of State and secure the restoration of its corporate powers, rights, etc.

Other amendments to the Stock Corporation Law provide for issuance of stock without voting power; providing also that every stock corporation incorporated in this State shall pay an organization tax of one-twentieth of one per cent upon the amount of the par value of all the shares with a par value which it is authorized to issue and a tax of five cents on each share without par value, and a like tax upon any subsequent increase thereof.

**Divorce**—By an amendment to the Marriage Law, signed by Governor Miller and in effect March 25, 1922, absence for five years is made a ground of divorce in this State. The amendment is as follows:

"*Dissolution of Marriage on Ground of Absence*—A party to a marriage may present to the Supreme Court a duly verified petition showing that the husband or wife of such party has absented himself or herself for five successive years then last past without being known to such party to be living during that time; that such party believes such husband or wife to be dead; and that a diligent search has been made to discover evidence showing that such husband or wife is living, and no such evidence has been found. The court shall thereupon by order require notice of the presentation and object of such petition to be published in the same manner as required for the publication of a summons in an action in the Supreme Court where service of such summons is made by publication; such notice shall be directed to the husband or wife who has so absented himself or herself and shall state the time and place of the hearing upon such petition, which time shall be not less than twenty days after the completion of the publication of such notice; and if the court, after the filing of proof of the proper publication of said notice and after a hearing and proof taken, is satisfied of the truth of all the allegations contained in the petition, it may make an order dissolving such marriage."

**Draft Dodgers**—Violators of the war-time selective-draft act are prohibited from holding public office in New York State.

**Elections**—The Attorney General is given practically all of the powers of the defunct State Super-

intendent of Elections, including employing deputies to enforce the Election Law.

In New York City the functions of the former State Superintendent of Elections are exercised by the Board of Elections and the police. Throughout the rest of the State police officials and Sheriffs act.

**Farm Loan Bonds**—They are made a legal investment for savings banks and trust companies.

**Firemen, Two-Platoon**—Provides for a two-platoon system in the New York City, Buffalo, and Rochester Fire Departments.

**Food, Official Grades for**—Amends the Farms and Markets Law, effective April 1, 1922, by empowering the Commissioner of Farms and Markets to establish official grades for foods and farm products, prescribe the use of such grades, and provide for the marking, packing and shipping of foods and farm products so graded; also to inspect and determine the grade and condition of farm products both at shipping points and receiving centres, and provides for the issuance of certificates as to the grade of such products.

**Food Samples**—Whenever the Commissioner of Farms and Markets shall examine or inspect any product manufactured or offered for sale and shall take a sample of such product, he shall also take a duplicate sample thereof and shall tender, and if accepted deliver, such duplicate sample to the person having custody of such product when such sample is taken.

**Gowanus Bay District (Brooklyn) Improvement**—Authorizes the Board of Estimate to lay out upon the map or plan of the Borough of Brooklyn, and open and improve streets within the territory bounded by the northerly line of 26th Street, the easterly side of 3rd Avenue, the southerly line of 39th Street and the bulkhead line along Gowanus Bay and New York Bay, in the manner provided in the Charter, without obtaining the consent of adjacent owners.

**Harlem River**—Appropriates $1,500,000 to buy Johnson's Iron Works site and cede it to the United States, so that the latter can remove the bend in the river between the North River and Broadway.

**Housing Laws for New York City**—One amendment permits (under the Insurance Law) life insurance companies to invest 10 per cent of their assets in new housing for the public at $9 or less a month a room. This the companies may do until March 1, 1924—and so long thereafter as the emergency continues.

Another amendment extends to February 15, 1924, the application of certain acts of 1920 and 1921, relating to defenses in actions based upon unjust, unreasonable and oppressive agreements for rent of premises occupied for dwelling purposes.

Another amendment requires a landlord to give 30 days' notice of an increase in rent, and providing that the value of real property shall be presumed to be the assessed value for the purpose of determining the fair and reasonable rent or rental value.

Another extends to April 1, 1923, the time within which the construction of partially tax-exempt dwellings may be begun.

A special act forbids hoisting of lumber or timber on outside of buildings under construction.

**Ice Cream, Cream, Milk**—An amendment to the Food Law prohibits the sale of any substance in imitation or semblance of cream or milk, and the sale of any product as and for "ice cream" which does not contain at least 8 per cent. of milk fat and at least 18 per cent. of milk fat and milk solids not fat combined, except that when the ingredients of ice cream shall include eggs, fruit, fruit juices, cake, confections, cocoa, chocolate or nuts, such reduction in the percentages of milk fat and milk solids not fat as may be due to the addition of such ingredients shall be permitted or approved, provided the product shall contain at least 6½ per cent. of milk fat and at least 15 per cent. of milk fat and milk solids combined.

Also repeals Section 53, effective July 1, 1922, which requires that certified milk must be sold in conformity with regulations prescribed by, and bear the certification of, a milk commission appointed by a county medical society.

**Income Tax**—Amends the Tax Law in relation to estates and trusts by providing that if the distribution of income is in the discretion of the fiduciary, the tax is to be imposed as provided, without deduction of amount of income paid or credited to beneficiary; provides also that a trust created by an employer as a part of a stock bonus or profit-sharing plan for the exclusive benefit of some or all of his employees, to which contributions are made by such employer, or employees, or both, for the purpose of distributing to such employees the earnings and principal of the fund accumulated by the trust in accordance with such plan, shall not be taxable, but any amount actually distributed or made available to any distributee shall be taxable to him in the year in which so distributed or made available to the extent that it exceeds the amount paid in by him.

Amends the Tax Law by striking out the provisions requiring income tax returns and inventories, when used, to conform to forms and methods prescribed by the United States Internal Revenue Commissioner, and providing that inventories shall be made upon a basis to be prescribed by the Tax Commission; also that returns shall show such facts as may be deemed necessary by the commission.

**Insane, State Hospital for**—New buildings and grounds will be at Creedmoor, Queens Borough, L. I. The present plant, at Kings Park, L. I., will be set apart for World War veterans suffering from mental diseases. The new plant will be known as the Brooklyn State Hospita , Creedmoor Division.

**Insurance Companies**—Grants to mutual fire insurance companies the rights and privileges of stock insurance companies. Another amendment prohibits mutual fire insurance companies from converting themselves into stock companies.

Still another amendment gives State Superintendent of Insurance control of rate-making associations, and regulation of fire insurance rates.

**Interest Rate**—Amends the Banking Law by providing that investment companies organized under New York State law may charge 6 per cent. interest on loans or discounts. The exaction of a greater rate of interest forfeits the entire interest.

**Investment Securities**—Amends the Banking Law, permitting investment companies to purchase, invest in, hold and sell stocks of any corporation engaged in business of the same general character as such investment company, or engaged in business incidental to the business conducted by such investment company, to an amount in any one such corporation not in excess of 10 per cent. of the capital of such investment company and to an amount in all such corporations not in excess of 30 per cent. of the capital of such investment company; provided that the purchasing and holding of such stock is duly authorized by a resolution of the board of directors of such investment company.

**Knox Headquarters**—Permits New York State to accept as a gift from the Knox Headquarters Association a parcel of 50 acres of land in Orange County where stands the mansion occupied at times during the Revolutionary War by Major Gen. Nathaniel Greene, Major Gen. Henry Knox and Major Gen. Horatio Gates as their headquarters.

**Marriage**—(see Divorce.)

**Milk** (see also Ice Cream, and Cream)—Defines (Farms and Markets Law) "skimmed milk" to mean milk from which part or all of the cream has been removed but is otherwise unadulterated except as to excess of water or fluids and deficiency in milk fat or milk solids, provided it contains at least 8½ per cent. of milk solids.

Permits the sale of pure skim cheese made from milk unadulterated except by skimming.

Prohibits the manufacture and sale of any condensed, evaporated, concentrated, powdered, dried or desiccated milk, cream or skim milk to which have been added, mixed, blended or compounded any fats or oils other than milk fat; and providing that after October 1, 1922, condensed or evaporated skimmed milk must be sold in containers or packages of not less than 10 pounds each and distinctly labeled either "Condensed Skimmed Milk" or "Evaporated Skimmed Milk."

**Oleomargarine**—Defines the terms "oleomargarine" or "butterine" to mean "any oleaginous substance" manufactured for sale as a substitute for, and to take the place of, butter, not made exclusively of pure milk or cream; prohibits the sale, as a product of the dairy, of any imitation butter; requires the name and address of the manufacturer to be plainly printed on cartons or wrappers together with the word "Oleomargarine;" strikes out the provisions that packages must be sealed; and requires that where any device or brand is imprinted upon any brick or portion of the substance itself the word "Oleomargarine" must also be legibly indented thereon.

**Passenger Motor Vehicles, Indemnity Bonds**—Amends the Highway Law by requiring the owners of motor vehicles, transporting passengers for hire in cities of the first class, to file with the State Tax Commission an indemnity bond or insurance policy in the sum of $2,500 for each such vehicle operated conditioned for the payment of any judgment recovered for death or for injury to persons or property caused in the operation or the defective construction of such motor vehicles. Violation is made a misdemeanor.

**Pensions**—More than 50,000 county and city employees throughout the State, except those already receiving pensions, may join the State employees' retirement system under the Draper bill, signed by the Governor April 12, 1922. In explaining the new law, State Controller Wendell said:

"Some of the benefits are: Superannuation retirement at 60 years, with allowances proportionate to time served equal to one-seventieth of average salary for last five years for each year served; physical disability retirement at any age after fifteen years' service, allowances not less than one-fourth of average salary for the last five years, greater length of service producing increased amount; discontinued service allowance obtainable after twenty years' service where leaving public office through no fault of employee."

**Police Captains in New York City**—They are to be selected from lieutenants who have served at least one year.

**Push-Cart Pedlers**—Amends Farms and Markets Law, authorizing the Commissioner of Public Markets to appoint supervisors to supervise the sale of market produce from push carts and other vehicles in open-air markets; also requires push-cart vendors to secure permits to conduct business in open-air markets, the fee therefor not to exceed $1 per week per vehicle.

**Put-and-Take Tops**—Prohibits the sale of all gambling devices, including put-and-take tops.

**Real Estate Brokers and Salesmen's Licenses**—Amends the Real Property Law; provides that, on and after October 1, 1922, real estate brokers and salesmen in New York City and in adjoining counties must be licensed by the State Tax Commission. In cities of the first class the annual license fee for real estate brokers is $25; salesmen, $5; second-class cities, brokers, $15; salesmen, $3; in all other places, brokers, $10; salesmen, $2.

Receivers, referees, and fiduciaries are exempt from the requirements of this bill.

**Rent Laws**—(see Housing Laws).

**Resident, the Term Defined**—Amends the definition of "resident" in Section 350 of the Tax Law by including any person domiciled in the State and any other person who maintains a permanent place of abode within the State and spends in the aggregate more than seven months of the taxable year within the State; also adds new Section 367-a, providing that a taxpayer who changes his status from that of a resident to a non-resident, or vice versa, must file two returns, one as a resident and the other as a non-resident; and provides that the exemptions granted by Section 362 shall be divided ratably between the two returns so filed, according to time.

**Savings Banks**—They may make loans on pass books of depositors.

**Short Weight**—Amends Farms and Markets Law as follows: When commodities are sold or offered for sale in containers whose sizes are not otherwise provided by statute, the net quantity of the contents of each container shall be plainly and conspicuously marked, branded or otherwise indicated on the outside or top thereof or on a label or a tag attached thereto in terms of weight, measure or numerical count; provided, however, that reasonable variations shall be permitted.

**Soldiers' Bonus**—(see Bonus.)

**Spite Fences**—Amends Real Property Law by providing that whenever the owner or lessee of land shall erect or shall have erected thereon any fence or structure in the nature of a fence which shall exceed 10 feet in height, to exclude the owner or occupant of a structure adjoining land from the enjoyment of light or air, the owner or occupant who shall thereby be deprived of light or air shall be entitled to maintain an action in the Supreme Court to have such fence or structure adjudged a private nuisance. If it shall be so adjudged its continued maintenance may be enjoined. This section shall apply to all such existing fences or structures but shall not apply to any action now pending nor shall it preclude the owner or lessee of land from hereafter improving the same by the erection of any structure thereon in good faith.

**Standards, Bureau of**—The Board of Estimate and Control shall create a bureau of standards and appoint a director thereof and such assistants as may be needed to perform the duties imposed by this section. It shall be the duty of such bureau to establish standards and standard specifications for all materials, supplies and equipment purchased or contracted for by or under the jurisdiction of the superintendent of purchase. In its work it shall advise, consult, and co-operate with the head of each State department, board, commission and office and with the superintendent of purchase. All such standards and standard specifications shall be submitted to and approved by the head of each department, commission, board or office requiring such materials, supplies or equipment, except in case of disagreement, when the direction of the board shall prevail. Committees of officers and employees of the State shall be selected or appointed by the director of this bureau, to aid in formulating standards and standard specifications and to recommend them for consideration by the bureau.

**State Printing**—Transfers powers of the State Printer to the Board of Estimate and Control.

**Stock Transfer Tax**—One amendment strikes out the provisions exempting laundering and mining corporations from payment of the annual franchise tax on capital stock employed within the State, as provided in Section 182; also provides that corporations subject to the 4½ per cent. franchise tax under Article 9-a shall be exempt from the tax imposed by Section 182.

Another amendment provides that the tax of two cents on each $100 of face value shall apply to all sales, or agreements to sell, or memoranda of sales and all deliveries or transfers of shares or certificates of stock, or certificates of rights to stock, or certificates of deposit representing taxable certificates, in any domestic or foreign association, company or corporation, or certificates of interest in business conducted by a trustee.

**Tax Rate, New York City**—(see Budget, County and City).

**Temple to the Arts**—Authorizes New York City to acquire, by gift, purchase or condemnation, a site in Manhattan for a building to be used for the advancement of education in music, drama, and other arts.

**Theatre Construction**—Amends the Labor Law, effective April 1, 1922. Defines a "place of public assembly" to mean a place maintained, rented or leased for pecuniary gain where one hundred or more persons may assemble for amusement or recreation.

Adds new Article 17, providing that all such places must be constructed, equipped and maintained in conformity with rules prescribed by the Industrial Board, which rules are to constitute the "State Standard Building Code," and are to supersede any special law or local ordinance inconsistent therewith, and may be limited in their application to certain classes of buildings or to the conditions under which they are operated, and some or all of such rules may apply only to buildings or places to be constructed, maintained or conducted in the future. In New York City these rules are enforced by the Building Department.

**Ticket Speculators**—Amends the General Business Law by adding new Article 10-B, effective April 12, 1922, requiring all persons engaged in selling tickets of admission to theatres, places of amusement or other places where public exhibitions, games, contests or performances are held, to be licensed by the State Comptroller, to file a $1,000 bond, and to pay an annual license fee of $100; also prohibiting licensees from selling such tickets at a price in excess of fifty cents in advance of the price printed on the ticket; and requiring that the admission price in every case shall be printed on the face of such tickets. Violation is made a misdemeanor.

**Transit Law in New York City**—The amendments penalize a company that does not join the reorganized transit system by limiting it for all time to a 5-cent fare; give the Transit Commission jurisdiction over lines that are parties to a lease where the lease is abrogated, and allow the commission to substitute itself for the city's representatives on the Board of Control during the first year that the reorganized transit system is operated.

**Usury**—(see Interest Rate).

**Voters' Literacy Test**—The new law authorizes the Secretary of State to have a series of cards printed, each card to contain a 100-word excerpt from the State Constitution. New voters must be able to read one of these cards and to write ten words in English.

**Voting Machines**—Amends the Election Law by making the adoption of voting machines mandatory in cities of the first class, and requiring that 15 per cent of the polling places in New York City be equipped therewith for use in the general election of 1922; an additional 40 per cent. in 1923; and all polling places so equipped by 1924. If the Board of Elections fails to adopt, provide and install the requisite machines the Secretary of State is empowered to contract therefor and determine as to the polling places in which they shall be used.

**Water Power**—Embodies a plan for the power development by the State of the surplus waters of the barge canal and sale of the surplus power to the highest bidder. There is an appropriation of $1,000,000 for the initial development of Crescent Dam and Visscher's Ferry, where 10,000 horsepower is available. These two dams were finished in 1915 and 1913 respectively. The project is under the Superintendent of Public Works.

**Women in Night Work**—A 1922 amendment to the State Labor Law allows women proofreaders and machine typesetters on newspapers to work at night.

**Workmen's Compensation Amendments**—(see Workmen's Compensation Laws elsewhere in The Almanac).

## NEW YORK STATE LECISLATURE.

(Assembles every year on first Wednesday in January.)

### SENATE.

| *Dist.* | *Name.* | *Politics.* | *Residence.* |
|---|---|---|---|
| 1 | Geo. L. Thompson | R | Kings Park |
| 2 | Frank Giorgio | D | Woodhaven |
| 3 | Peter J. McGarry | D | Blissville |
| 4 | Ph. W. Kleinfield | D | Brooklyn |
| 5 | Daniel F. Farrell | D | " |
| 6 | Jas. A. Higgins | D | " |
| 7 | John A. Hastings | D | " |
| 8 | Wm. L. Love | D | " |
| 9 | Chas. E. Russell | D | " |
| 10 | Jere F. Twomey | D | " |
| 11 | Daniel J. Carroll | D | " |
| 12 | Jas. J. Walker | D | Manhattan |
| 13 | E. M. Rabenold | D | " |
| 14 | Bernard Downing | D | " |
| 15 | Nathan Straus, Jr | D | " |
| 16 | Thos. I. Sheridan | D | " |
| 17 | Meyer Levy | D | " |
| 18 | S. A. Cotillo | D | " |
| 19 | D. T. O'Brien | D | " |
| 20 | Mich. E. Relburn | D | " |
| 21 | Hy. G. Schackno | D | Bronx |
| 22 | Benj. Antin | D | " |
| 23 | John J. Dunnigan | D | " |
| 24 | Mark W. Allen | D | Staten Island |
| 25 | W. W. Westall | R | White Plains |
| 26 | S. C. Mastick | R | Pleasantville |
| 27 | Caleb H. Baumes | R | Newburgh |
| 28 | J. G. Webb | R | ClintonCorn'rs |
| 29 | A. F. Bouton | R | Roxbury |
| 30 | Wm. T. Byrne | D | Loudonville |
| 31 | John P. Ryan | D | Troy |
| 32 | F. W. Kavanaugh | R | Waterford |
| 33 | M. Y. Ferris | R | Ticonderoga |
| 34 | W. T. Thayer | R | Chateaugay |
| 35 | T. D. Robinson | R | Mohawk |
| 36 | F. M. Davenport | R | Clinton |
| 37 | W. S. Augsbury | R | Antwerp |
| 38 | Geo. R. Fearon | R | Syracuse |
| 39 | A. J. Bloomfield | R | Richfield Sprgs |
| 40 | Clayton R. Lusk | R | Cortland |
| 41 | Seymour Lowman | R | Elmira |
| 42 | Chas. J. Hewitt | R | Locke |
| 43 | Ernest E. Cole | R | Bath |
| 44 | John Knight | R | Arcade |
| 45 | Jas. L. Whitley | R | Rochester |
| 46 | H. E. A. Dick | R | " |
| 47 | W. W. Campbell | R | Lockport |
| 48 | Parton Swift | R | Buffalo |
| 49 | Robert C. Lacey | D | " |
| 50 | L. W. H. Gibbs | R | " |
| 51 | D. H. Ames | R | Franklinville |

Recapitulation—Reps., 25. Dems., 26.

### ASSEMBLY.

| *Dist.* | *County and Name.* | *Politics.* | *Residence.* |
|---|---|---|---|
| | ALBANY. | | |
| 1 | E. C. Campbell | R | Albany |
| 2 | John A. Boyle | D | " |
| 3 | Frank Wilson | D | Green Island |
| | ALLEGANY. | | |
| | William Duke, Jr | R | Wellsville |
| | BRONX. | | |
| 1 | N. J. Eberhard | D | Bronx |
| 2 | L. W. Patterson | D | " |
| 3 | Julius S. Berg | D | " |
| 4 | Louis A. Schoffel | D | " |
| 5 | William Lyman | D | " |
| 6 | T. J. McDonald | D | " |
| 7 | Jos. V. McKee | D | " |
| 8 | Edward J. Walsh | D | " |
| | BROOME. | | |
| 1 | Edm. B. Jenks | R | Whitney Point |
| 2 | F. E. Whitcomb | R.-Proh. | Union |
| | CATTARAUGUS. | | |
| | L. G. Kirkland | R | Randolph |
| | CAYUGA. | | |
| | S. G. Lyon | R | Aurora |
| | CHAUTAUQUA. | | |
| 1 | A. F. Johnson | R | Jamestown |
| 2 | J. A. McGinnies | R | Ripley |
| | CHEMUNG. | | |
| | Oscar Kahler | D | Big Flats |
| | CHENANGO. | | |
| | Chas. L. Banks | R | New Berlin |
| | CLINTON. | | |
| | Geo. W. Gilbert | R | Ellenburg |
| | COLUMBIA. | | |
| | R. R. Livingston | D | Cheviot |
| | CORTLAND. | | |
| | Irving F. Rice | R | Cortland |
| | DELAWARE. | | |
| | L. R. Long | R | New Kingston |
| | DUTCHESS. | | |
| 1 | H. N. Allen | R | Pawling |
| 2 | John M. Hackett | R | Poughkeepsie |
| | ERIE. | | |
| 1 | William J. Hickey | R | Buffalo |
| 2 | Hy. W. Hutt | R | " |
| 3 | Aug. Seelbach | R | " |
| 4 | John J. Meegan | D | " |
| 5 | John Krysinski | D | " |
| 6 | Chas. A. Freiberg | R | " |
| 7 | E. F. Cooke | R | Alden |
| 8 | N. W. Cheney | R | Eden |
| | ESSEX. | | |
| | Fred. L. Porter | R | Crown Point |
| | FRANKLIN. | | |
| | A. H. Ellsworth | R.-Proh. | Ft. Covington |
| | FULTON AND HAMILTON. | | |
| | E. Hutchinson | R | Green Lake |
| | GENESEE. | | |
| | Chas. P. Miller | R.-Proh. | So. Byron |
| | GREENE. | | |
| | E. W. Bentley | R | Windham |
| | HERKIMER. | | |
| | F. S. Cole | R | Little Falls |
| | JEFFERSON. | | |
| | H. E. Machold | R | Ellisburg |
| | KINGS. | | |
| 1 | F. J. Cronin | D | Brookiyn |
| 2 | John Lucey | D | " |
| 3 | F. J. Taylor | D | " |
| 4 | Peter A. McArdle | D | " |
| 5 | John Cashmore | D | " |
| 6 | Jos. Reich | D | " |
| 7 | John J. Howard | D | " |
| 8 | M. J. Reilly | D | " |
| 9 | R. J. Tonry | D | " |
| 10 | B. F. Gray | D | " |
| 11 | E. J. Coughlin | D | " |
| 12 | M. H. Evans | D | " |
| 13 | William Donnelly | D | " |
| 14 | Jos. R. Blake | D | " |
| 15 | G. F. Dunn | D | " |
| 16 | Jas. F. Kiernan | D | " |
| 17 | Julius Ruger | D | " |
| 18 | Irwin Steingut | D | " |
| 19 | Chas. L. Fasullo | D | " |
| 20 | Frank A. Miller | D | " |
| 21 | W. F. Clayton | R | " |
| 22 | H. C. Franklin | D | " |
| 23 | Jos. F. Ricca | R.-D | " |
| | LEWIS. | | |
| | M. B. Moran | R.-Proh. | Lowville |
| | LIVINGSTON. | | |
| | L. G. Stapley | R.-Proh. | Geneseo |
| | MADISON. | | |
| | J. A. Brooks | R.-Proh. | Cazenovia |
| | MONROE. | | |
| 1 | R. B. Griffith | R | Pittsford |
| 2 | Simon L. Adler | R | Rochester |
| 3 | V. B. Murphy | R | " |
| 4 | Gilbert L. Lewis | R | " |
| 5 | W. R. Austin | R | Spencerport |
| | MONTGOMERY. | | |
| | S. W. McCleary | R | Amsterdam |
| | NASSAU. | | |
| 1 | T. A. McWhinney | R | Lawrence |
| 2 | F. T. Davison | R | Locust Valley |
| | NEW YORK. | | |
| 1 | Peter J. Hamill | D | Manhattan |
| 2 | F. R. Galgano | D | " |
| 3 | Thos. F. Burchill | D | " |
| 4 | Samuel Mandelbaum | D | Manhattan |
| 5 | C. D. Donahue | D | " |
| 6 | Sol Ullman | R | " |
| 7 | V. R. Kaufman | D | " |
| 8 | Hy. O. Kahan | D | " |
| 9 | John H. Conroy | D | " |
| 10 | Jos. T. Flynn | D | " |
| 11 | S. I. Rosenman | D | " |
| 12 | John J. O'Connor | D | " |
| 13 | John P. Nugent | D | " |
| 14 | F. L. Hackenburg | D | " |
| 15 | Jos. Steinberg | R | " |
| 16 | Maurice Bloch | D | " |

ASSEMBLY—*Continued.*

| Dist. | County and Name. | Politics. | Residence. |
|---|---|---|---|
| | NEW YORK—*Continued.* | | |
| 17 | Meyer Alterman | D | Manhattan. |
| 18 | O. M. Kiernan | D | " |
| 19 | Jas. Male | D | " |
| 20 | L. A. Cuvillier | D | " |
| 21 | H. W. Shields | D | " |
| 22 | Jos. A. Gavegan | D | " |
| 23 | Geo. N. Jesse | R | " |
| | NIAGARA. | | |
| 1 | David E. Jeffery | R.-Proh. | Lockport |
| 2 | Frank S. Hall | R.-Proh. | Lewiston |
| | ONEIDA. | | |
| 1 | M. J. Kernan | D | Utica |
| 2 | R. G. Dunmore | R | New Hartford. |
| 3 | C. J. Williams | R.-Proh. | Remsen |
| | ONONDAGA. | | |
| 1 | Horace M. Stone | R | Marcellus |
| 2 | G. J. Chamberlin | R | Syracuse |
| 3 | Arthur Benson | R | " |
| | ONTARIO. | | |
| | Chas. C. Sackett | R.-Proh. | Canandaigua |
| | ORANGE. | | |
| 1 | Clemence C. Smith | R.-Proh-F.-L. | Meadowbrook. |
| 2 | Chas. L. Mead | R.-Proh-F.-L. | Middletown |
| | ORLEANS. | | |
| | Frank H. Lattin | R | Albion |
| | OSWEGO. | | |
| | Ezra A. Barnes | R.-Proh. | Oswego |
| | OTSEGO. | | |
| | Julian C. Smith | R.-Proh. | Oneonta |
| | PUTNAM. | | |
| | John R. Yale | R | Brewster |
| | QUEENS. | | |
| 1 | P. A. Leininger | D | Astoria |
| 2 | Owen J. Dever | D | Ridgewood |
| 3 | W. J. Kennedy | D | Whitestone |
| 4 | C. G. Sullivan | D | Bayside |
| 5 | Wm. F. Brunner | D | Rockaway Pk. |
| 6 | P. P. Gallagher | D | Ridgewood |
| | RENSSELAER. | | |
| 1 | John F. Rourke | D | Troy |
| 2 | T. J. Coleman | D | No. Greenbush |
| | RICHMOND. | | |
| 1 | T. F. Cosgrove | D | Staten Island |
| 2 | Wm. L. Vaughan | D | " |
| | ROCKLAND. | | |
| | Jas. A. Farley | D | Stony Point |
| | ST. LAWRENCE. | | |
| 1 | W. A. Laidlaw | R.-Proh. | Hammond |
| 2 | Walter L. Pratt | R | Massena |
| | SARATOGA. | | |
| | B. D. Esmond | R | Ballston Spa |
| | SCHENECTADY. | | |
| 1 | Chas. T. Male | R.-Proh. | Niskayuna |
| 2 | Wm. W. Campbell | R.-Proh. | Schenectady |
| | SCHOHARIE. | | |
| | Kenneth H. Fake | R | Cobleskill |
| | SCHUYLER. | | |
| | John W. Gurnett | D | Watkins |
| | SENECA. | | |
| | Geo. A. Dobson | R | Seneca Falls |
| | STEUBEN. | | |
| 1 | E. J. Carpenter | R | Corning |
| 2 | L. F. Wheatley | R | Hornell |
| | SUFFOLK. | | |
| 1 | John G. Peck | R | Southampton |
| 2 | Cecil W. Proctor | R | Sayville |
| | SULLIVAN. | | |
| | G. T. Cross | D | Callicoon |
| | TIOGA. | | |
| | D. P. Witter | R.-D.-Proh. | Berkshire |
| | TOMPKINS. | | |
| | J. R. Robinson | R.-Proh-F.-L. | Ithaca |
| | ULSTER. | | |
| | S. B. Van Wagenen | R | Sleightsburgh |
| | WARREN. | | |
| | M. N. Eldridge | R.-Proh. | Warrensburg |
| | WASHINGTON. | | |
| | H. A. Bartholomew | R.-Proh. | Whitehall |
| | WAYNE. | | |
| | Geo. S. Johnson | R | Palmyra |
| | WESTCHESTER. | | |
| 1 | T. C. Moore | R | Bronxville |
| 2 | H. B. Shonk | R | Scarsdale |
| 3 | M. E. Goodrich | R | Ossining |
| 4 | R. B. Livermore | R | Yonkers |
| 5 | Arthur I. Miller | D | Yonkers |
| | WYOMING. | | |
| | W. A. Joiner | R | Attica |
| | YATES. | | |
| | F. S. Sampson | R | Penn Yan |

Recapitulation—Reps., 81; Dems., 69.

## AGE GROUPS, 1920, IN NEW YORK, NEW JERSEY AND PENNSYLVANIA.

| Age Periods. | New York. | | New Jersey. | | Pennsylvania. | |
|---|---|---|---|---|---|---|
| | Male. | Female. | Male. | Female. | Male. | Female. |
| All ages | 5,187,350 | 5,197,877 | 1,590,075 | 1,563,825 | 4,429,020 | 4,290,997 |
| Under 5 years | 511,029 | 499,261 | 171,216 | 167,480 | 506,436 | 499,029 |
| Under 1 year | (98,133) | (95,730) | (32,628) | (32,036) | (98,881) | (96,936) |
| 5 to 9 years | 489,503 | 482,648 | 162,527 | 160,431 | 475,245 | 469,985 |
| 10 to 14 years | 453,990 | 448,428 | 145,945 | 145,291 | 427,052 | 424,689 |
| 15 to 19 years | 399,406 | 418,293 | 125,845 | 129,316 | 368,950 | 373,787 |
| 20 to 24 years | 434,070 | 491,029 | 130,546 | 140,496 | 356,519 | 373,326 |
| 25 to 29 years | 476,806 | 494,542 | 142,720 | 143,897 | 374,855 | 369,046 |
| 30 to 34 years | 452,985 | 438,688 | 135,386 | 128,347 | 351,094 | 326,344 |
| 35 to 39 years | 433,860 | 405,918 | 131,730 | 119,522 | 345,993 | 306,051 |
| 40 to 44 years | 356,411 | 342,983 | 106,771 | 100,351 | 282,378 | 256,611 |
| 45 to 49 years | 320,442 | 297,016 | 98,197 | 87,354 | 264,229 | 226,857 |
| 50 to 54 years | 270,271 | 260,444 | 78,546 | 73,142 | 209,250 | 190,459 |
| 55 to 59 years | 195,523 | 192,707 | 55,059 | 53,446 | 152,795 | 144,479 |
| 60 to 64 years | 156,361 | 157,551 | 42,857 | 43,440 | 122,758 | 119,874 |
| 65 to 69 years | 101,780 | 107,255 | 26,924 | 29,211 | 82,915 | 84,455 |
| 70 to 74 years | 64,620 | 74,157 | 17,546 | 20,603 | 53,946 | 58,585 |
| 75 to 79 years | 38,443 | 46,205 | 10,331 | 12,786 | 31,017 | 37,371 |
| 80 to 84 years | 16,888 | 23,362 | 4,568 | 6,385 | 13,295 | 18,111 |
| 85 to 89 years | 6,236 | 9,452 | 1,554 | 2,448 | 4,426 | 6,982 |
| 90 to 94 years | 1,376 | 2,417 | 306 | 601 | 935 | 1,681 |
| 95 to 99 years | 264 | 513 | 53 | 119 | 164 | 327 |
| 100 years and over | 33 | 96 | 13 | 33 | 31 | 62 |
| Age unknown | 7,053 | 4,912 | 1,435 | 1,126 | 4,737 | 2,886 |

# Government of the City of New York.

(As of December 2, 1922.)

**Mayor**—(City Hall) John F. Hylan ($15,000). *Secretary*—John F. Sinnott ($7,000). *Executive Secretary*—Augustin Kelly ($5,300). *Assistant Secretary*—Francis W. Rokus ($5,300). *Chief Clerk*, J. J. Glennon, ($4,500).

### Accounts—Commissioners of.

(Municipal Building, Manhattan.)

*Commissioner*—David Hirshfield ($7,500). *Deputies*—H. Klein ($5,500) and W. D. Loudoun ($5,500).

### Board of Aldermen.

(City Hall.)

*President*—Murray Hulbert, D., ($10,000). *City Clerk*—Michael J. Cruise ($7,000).

**Members ($3,000 each), by Aldermanic Districts.**

*Manhattan*—1, Martin F. Tanahey, D.; 2, Mauritz Graubard, D.; 3, Edward F. Sullivan, D.; 4, Murray W. Stand, D.; 5, Charles A. McManus, D.; 6, Frank J. Dotzler, R.; 7, Wm. F. Quinn, R.; 8, Louis J. Wronker, D.; 9, Frederick Veser, R.; 10, Louis F. Cardani, R.; 11, Thos. F. O'Reilly, D.; 12, William T. Collins, D.; 13, Patrick S. Dowd, D.; 14, Jeremiah R. O'Leary, D.; 15, Bruce M. Falconer, R.; 16, Edward Cassidy, D.; 17, Samuel R. Morris, D.; 18, Timothy J. Sullivan, D.; 19, Martin F. Healey, D.; 20, Edward F. Kelly, D.; 21, Geo. W. Harris, R.; 22, John B. Henrich, D.; 23, Jacob W. Friedman, R.; 24, Charles J. McGillick, D.; 25, Edward W. Curley, D.; 26, Albert G. Halberstadt, D.; 27, James M. Fitzpatrick, D.; 28, James R. Ferguson, D.; 29, Peter Donovan, D.; 30, Charles A. Buckley, D.; 31, Rudolph Haunoch, D.; 32, Harry J. Walters, D.; 33, Patrick H. Larney, D.; 34, Francis D. McGarry, D.; 35, Joseph W. Sullivan, D.; 36, Frank A. Cunningham, D.; 37, James J. Molin, D.; 38, Geoge J. Joyce, D.; 39, Thos. J. Cox, D.; 40, Charles W. Dunn, D.; 41, John J. Dunn, D.; 42, Fred Smith, R.; 43, Jno. J. Campbell, D.; 44, John J. Keller, R.; 45, David J. Stewart, R.; 46, Howard Fenn, D.; 47, Matthew G. Fullum, D.; 48, John Wirth, R.; 49, Joseph W. McHenry, D.; 50, Isaac Frank, D. & R.; 51, John J. McCusker, D.; 52, Peter J. McGuinness, D.; 53, George Hilkemeier, D.; 54, Stephen A. Rudd, D.; 55, Louis J. Zettler, D.; 56, James J. Morris, D.; 57, P. Joseph Farrelly, D.; 58, Geo. V. Harvey, R.; 59, Hugh A. Alwell, D.; 60, Frank J. Schmitz, D.; 61, Bernhard Schwab, D.; 62, Samuel J. Burden, D.; 63, Walter T. Warren, D.; 64, R. E. Kaltenmeier, D.; 65, Howard J. Atwell, D.

### Borough Presidents.

(City Hall, Manhattan; others, Borough Halls.)

*Manhattan*—Julius Miller, D. ($10,000). *Secretary of Borough*—James P. Dinan ($6,000).

*Bronx*—Henry Bruckner, D. ($10,000). *Secretary of Borough*—August W. Glatzmayer ($3,500).

*Brooklyn*—Edward Riegelmann, D. ($10,000). *Secretary of Borough*—Agnes Leonard Ward ($4,250).

*Queens*—Maurice E. Connolly, D. ($10,000). *Secretary of Borough*—Joseph Flanagan ($4,000).

*Richmond*—John A. Lynch, D. ($10,000). *Secretary of Borough*—George F. Egbert ($3,000).

### Child Welfare—Board of.

(145 Worth Street, Manhattan).

*President*—Sophie Irene Loeb; *Vice President*, Dr. Wm. I. Sirovich; *Other Members*—Mrs. Wm. Einstein, Mrs. Edgar Smith, Miss Mary Frasca, Mrs. Mathias Figueira, Mrs. Jas. Whitford, Jno. D. Rosenbrock, Rev. Wm. A. Courtney, Conrad Engel. The board serves without salary. *Exec. Sec.*—John T. Eagan.

### Civil Service Commission.

(Municipal Building, Manhattan.)

*President*—Abr. Kaplan. *Commissioners* ($6,000 each)—William Drennan and Ferdinand Q. Morton. *Secretary*—Charles I. Stengle. *Chief Examiner*—Thomas C. Murray. *Chief Clerk*—George H. Eberle.

### Correction—Department of.

(Municipal Building, Manhattan.)

*Commissioner*—($7,500). *Deputy*—William Dalton ($6,000). *Secretary*—R. L. Tudor ($4,000). *Secretary to Commission*—Mary C. Murtha ($3,250).

**Manhattan**—*City Prison* (Tombs) is at Centre and Franklin Sts. The *Penitentiary* and *Workhouse* are on Welfare Island, East River. The *Municipal Farm* is on Riker's Island, upper East River. The *Reformatory Prison* is on Hart's Island, upper East River.

**Brooklyn**—*City Prison* is at No. 149 Raymond St.

**Queens**—*City Prison* is in rear of the Court House, Long Island City.

*New Hampton Farms* (N. Y. C. Reformatory) is at New Hampton, Orange County, N. Y.

### Docks—Department of.

(Pier A, North River.)

*Commissioner*—John H. Delaney ($7,500). *First Deputy*—Michael Cosgrove. *Second Deputy*—H. A. Meyer. *Chief Clerk*—John McKenzie. *Auditor*—Andrew S. Corbett. *Chief Engineer*—T. F. Keller. *Supt. of Docks*—L. H. Harrison.

### Education—Department of.

(Manhattan, Park Ave. and 59th St.; Brooklyn, 131 Livingston St., Plaza 5580.)

*President*—Geo. J. Ryan, of Queens (no salary). *Vice Presidents*—Harry B. Chambers, Bronx. Other members of the Board (no salary)—Mrs. Emma L. Murray and M. S. Stern, Manhattan; Dr. J. A. Ferguson, Arthur S. Somers, Brooklyn; John E. Bowe, S. I.; *Secretary*—A. Emerson Palmer. *Chief Clerk*—Thomas A. Dillon. *Supt. of School Buildings*—C. B. J. Snyder. *Supt. of School Supplies*—Patrick Jones. *Supt. of Schools*—William L. Ettinger. *Auditor*—Henry M. Cook. *Director of Attendance*—John W. Davis. *Supt. of Plant Operation*—R. W. Rodman.

### Elections—Board of.

(Manhattan, Municipal Building; Bronx, 442 E. 149th St.; Brooklyn, 26 Court St.; Queens, 10 Anable St., L. I. City.

*President*—John R. Voorhis. *Secretary*—Charles E. Heydt. *Other Members*—James Kane, Jacob A. Livingston. Members' salary, each, $6,000.

### Finance—Department of.

*Headquarters*—Municipal Building. *Receivers of Taxes, Offices*—Manhattan, Municipal Building; Bronx, 177th St. and Arthur Ave.; Brooklyn, 503 Fulton St.; Queens, 5 Court Square, L. I. City; Richmond, Borough Hall, St. George. *Assessments and Arrears Offices*—Same as Receivers of Taxes. *Chamberlain*—Municipal Building. *City Comptroller*—Charles L. Craig ($15,000). *Deputies*—Henry Smith ($8,500), Arthur J. Philbin and Frank J. Prial ($7,500). *Secretary to the Department*—Charles F. Kerrigan ($7,000). *Chief Auditor*—David E. Kemlo ($6,500). *Chief Accountant*—Duncan MacInnis ($8,000). *Chief Clerk*—Valentine F. Keller ($3,560). *Receiver of Taxes*—Eugene F. McLaughlin ($5,500). *Collector of Assessments and Arrears*—John H. O'Brien ($5,300). *Collector of City Revenue*—Timothy J. Moynahan ($4,500).

### Fire Department.

(Manhattan, Munic. Bldg.; Brooklyn, 365 Jay St.)

*Commissioner*—Thomas J. Drennan ($7,500). *Deputies*—Manhattan, Bronx and Richmond, Joseph M. Hanon; Brooklyn, Wm. F. Thompson. *Fire Chief*—John Kenlon. *Deputy Chief*—Brooklyn and Queens, John O'Hara. *Chief Fire Marshal*—Thomas P. Brophy. *Deputy Fire Marshal*—John P. Prial ($3,600). *Secretary to the Dept.*—James A. Mackey.

### Health—Department of.

(Manhattan, 505 Pearl St. (general headquarters); Bronx, 3731 3d Ave.; Brooklyn, Willoughby and Fleet Sts.; Queens, 372 Fulton St., Jamaica; Richmond, 514 Bay St., Stapleton.)

*Commissioner*—($7,500). *Deputy*—Frank J. Monaghan, M. D. *Secretary to the Dept.*—C. L. Kohler.

### Law Department.

(Manhattan, Municipal Building; Brooklyn, 153 Pierrepont St. *Street Opening Bureau*—Manhattan, Municipal Building; Brooklyn, 153 Pierrepont St.; Queens, Municipal Bldg., L. I. City.)

*Corporation Counsel*—($15,000). *Secretary*—Joseph H. Johnson. *First Ass't*—George P. Nicholson ($8,500). *Librarian*—Jas. M. Valles. *Chief Clerk*—John H. Greener. *Brooklyn, Ass't Corp. Counsel*—Wm. B. Carswell ($10,000). *Brooklyn Chief Clerk*—F. J. Flynn. *Bureau for Recovery of Penalties*—Joseph I. Berry. *Bureau for Collection of Arrears of Personal Taxes*—Emmet J. Murphy. *Bureau of Street Opening*—Joel S. Squier. *Brooklyn*—Patrick S. MacDwyer. *In Queens*—Joseph G. Mathews ($5,000).

### Marriage License Bureau.

(Municipal Building in Manhattan and Borough Halls in other Boroughs.)

### Parole Commission.

(Municipal Building, Manhattan.)

*Chairman*—B. De N. Cruger ($7,500). *Members*—Michael Fogarty and Eli Neuman. The ex-officio members are the Commissioner of Correction and the Police Commissioner. *Secretary*—T. R. Minnick. *Chief Parole Officer*—Jas. J. Flynn.

### Parks—Department of.

(Manhattan, Municipal Building; Brooklyn, Litchfield Mansion, Prospect Park; Bronx, Zbrowski Mansion, Claremont Park; Queens, The Overlook; Forest Park, Richmond Hill.)

*President of Board* (and Commissioner for Manhattan)—F. D. Gallatin. The other Commissioners are: Brooklyn, John N. Harman; Bronx, Joseph P. Hennessy; Queens, Albert C. Benninger; Richmond, Thos. R. McGinley. *Secretary to the Board*—Willis Holly.

**Plant and Structures—Department of.**
(Offices: Manhattan, Municipal Building; Brooklyn, 179 Washington St.)
*Commissioner*—Grover A. Whalen ($7,500). *Deputies*—Wm. W. Mills, John Mara and Thos. A. Dempsey. *Chief Engineer*—Edw. A. Byrne.

**Police Department.**
(Manhattan, 240 Centre St.; Brooklyn, 70 Poplar St.; Queens, Jamaica; Bronx, Tremont and Bathgate Aves.; Richmond, Borough Hall, St. George.)
*Commissioner*—Richard E. Enright ($7,500.)
*Deputies*—First, John A. Leach; second, John Daly; third, Jos. A. Faurot; fourth, John J. Cray; fifth, William J. Gillespie. *Special Deputy Commissioners* (no pay)— Rodman Wanamaker, John A. Harriss, T. Coleman du Pont, John M. Shaw, Edmond A. Guggenheim, Carleton Simon, Douglas I. McKay, Julia M. Loft, Barron Collier. *Chief Inspector*—W. J. Lahey; *Deputy Chief Inspector*—Thomas H. Murphy; *Acting Deputy Chief Inspectors*—John O'Brien, Dominick Henry, Cornelius F. Cahalane, Samuel G. Belton. *Detective Bureau Inspector*—John D. Coughlin. *Secretary to the Commissioner*—Charles G. Young; *Secretary to the Department*—Felix P. Nicklas; *Chief Clerk*—Grant Crabtree; *Chaplains*—Lawrence H. Bracken, John J. Coogan, John A. Wade, William G. Ivie, Isidore Frank; *Honorary Chaplain*—A. H. Nesbitt.

**Public Service Commission—($15,000 Each.)**
(30 Church St., Manhattan.)
This is a part of the State and not of the City Government and is put here for convenience of reference.
*Chairman*—William A. Prendergast ($15,000); William R. Pooley, Chas. Van Voorhis, Oliver C. Semple, and Chas. G. Blakeslee. *Secretary*—Francis E. Roberts, Albany ($6,000); *Counsel*—Ledyard T. Hale ($10,000); *Chief Engineer*—C. R. Vanneman, Albany ($8,000).
**Purchase, Board of**—The Chairman is the Commissioner of the Department of Plant and Structures. The other two members are the Commissioner of the Department of Correction and the Commissioner of the Department of Licenses. *Secretary*—Andrew R. Keating; *Assistant Secretary*—A. L. Meehan.
**Transit Commission (N. Y. City—$15,000 Each.)**
(49 Lafayette St., Manhattan.)
*Chairman*—Geo. McAneny; Le Roy T. Harkness, and Major Gen. John F. O'Ryan. *Secretary*—Jas. B. Walker ($6,000). *Chief Exec. Officer*—L. C. Andrews ($10,000); *Counsel*—Geo. O. Redington ($10,000); *Chief Engineer*—Robert Ridgway ($15,000).

**Public Welfare—Department of.**
(Manhattan and Bronx, Municipal Building, Manhattan; Brooklyn and Queens, 327 Schermerhorn St., Bklyn.; Richmond, Borough Hall, St. George.)
*Commissioner*—Bird S. Coler ($7,500). *Deputies*—Edw. Perpect, M. O. Smedley and C. J. Dunn. *Secretary*—Edgar Pitska. *Assistant Engineer* (in charge)—Louis J. Ortner. *General Inspector*—Miss M. C. Tinney. *Div. Bur. Soc. Investig.*—V. S. Dodworth, *Supt.*

**Standards and Appeals—Board of.**
(Manhattan, Municipal Building.)
*Chairman*—Wm. E. Walsh ($7,500). *Secretary*—Wm. J. O'Gorman.
The Board of Standards and Appeals passes on petitions for variations of the Labor Law relating to fire protection in factories, and adopts rules regulating building construction, elevators, oil burners, fire escapes, fire-retarding construction, fire-extinguishing appliances, etc.
The Board of Appeals passes on appeals from decisions of Fire Commissioner and of Superintendent of Buildings, and on applications for variations of building zone regulations.

**Street Cleaning—Department of.**
(Manhattan, Municipal Building; Bronx, 501 E. 161st St.; Brooklyn, 50 Court St.; Queens, Borough Hall; Richmond, Borough Hall.)
*Commissioner*—Alfred A. Taylor ($7,500). *Deputies*—Manhattan, Jas. J. Nugent, Frank A. Eschmann; Bronx, Jas. W. Brown; Brooklyn, Michael Laura.

**Tenement House Department.**
(Manhattan and Richmond, Municipal Building; Bronx, 559-561 E. Tremont Ave.; Brooklyn and Queens, 503 Fulton St., Brooklyn.)
*Commissioner*—Frank Mann ($7,500). *Deputies*—Manhattan and Richmond, John P. Finnerty ($4,700); Brooklyn and Queens, George W. Lindsay ($4,000); Bronx, Superintendent, Walter C. Martin.

**Taxes and Assessments—Department of.**
(Manhattan, Municipal Building; Bronx, Tremont and Arthur Aves.; Brooklyn, 503 Fulton St.; Queens, Court Square, Long Island City; Richmond, Borough Hall.)
*The Board*—Henry M. Goldfogle, President ($8,000). *Commissioners*—Richard H. Williams, George Henry Payne, James J. Sexton, Anning S. Prall, Stephen A. Nugent and Lewis M. Swasey ($7,000) each. *Secretary*—C. R. Tyng.

**Water Supply—Board of.**
(Municipal Building, Manhattan.)
*President*—Geo. J. Gillespie ($12,000). *Other Members* ($12,000 each)—Jas. P. Sinnott, P. F. Donohue. *Secretary*—Benj. F. Einbigler. *Chief Engineer*—Thaddeus Merriman; *Consulting Engineer*, J. Waldo Smith.

**Water Supply, Gas, and Electricity—Dept. of.**
(Manhattan, Municipal Building; Bronx, Tremont and Arthur Aves.; Brooklyn, 50 Court St.; Queens and Richmond, Borough Halls.
*Commissioner*—Nicholas J. Hayes ($7,500). *Deputies*—Manhattan, John J. Dietz; Bronx, Albert H. Liebenau; Brooklyn, Cornelius M. Sheehan; Queens, Jas. C. Butler; Richmond, Jas. L. Vail.

## COUNTY OFFICES IN THE CITY OF NEW YORK.

**Sheriff.**
(Manhattan, Hall of Records; Bronx, 1932 Arthur Avenue; Brooklyn, 387 Fulton Street; Queens, Court House, Long Island City; Richmond, Court House, Richmond Village.)
**New York County**—Percival E. Nagle, D., ($12,000.)
**Bronx County**—Edw. J. Flynn, D., ($10,000.)
**Kings County**—Peter J. Seery, R., ($15,000.)
**Queens County**—John Wagner, R., ($10,000.) *Under Sheriff*—Henry Vogt. *Counsel*—R. Leslie Smith.
**Richmond County** — Harry Rudolph, D., ($6,000).

**Surrogate.**
(New York, Hall of Records, Centre and Chambers Streets; Bronx, 161st Street and 3d Avenue; Brooklyn, Hall of Records, Joralemon Street and Court Square (Boerum Place); Queens, 364 Fulton Street, Jamaica; Richmond, Court House, St. George.)
**New York County**—($15,000 each), J. P. O'Brien and Jas. A. Foley. *Chief Clerk*—W. R. De Lano ($11,000.) *Commissioner of Records*—J. F. Curry ($7,500).
**Bronx County**—G. M. S. Schulz ($10,000). *Law Assistant*—Franz Sigel ($4,200). *Chief Clerk*—H. H. Reilly ($5,000).
**Kings County**—Geo. A. Wingate ($15,000). *Chief Clerk*—J. H. McCooey ($9,000). *Probate Clerk*—J. V. Cain. *Accounting Clerk*—J. F. Regan ($6,500).
**Queens County**—Daniel Noble ($10,000). *Clerk of Court*—W. F. Hendrickson ($6,000).
**Richmond County** — J. H. Tiernan ($7,500). *Clerk of Court*—W. Finley ($4,500).

**Jurors—Commissioner of.**
(Manhattan, Hall of Records; Bronx, 1918 Arthur Avenue; Brooklyn, 186 Remsen Street; Queens, Court House, Long Island City; Richmond, County Court House, St. George.)
New York County—Frederick O'Byrne ($6,000). Bronx County—J. A. Mason ($6,500). Kings County—Chas. F. Murphy ($6,000). Queens County—T. C. McKeenee ($5,500). Richmond County—E. I. Miller ($2,500).

**Public Administrator.**
(Manhattan, Hall of Records; Bronx, 2,808 3d Avenue; Brooklyn, 44 Court Street; Queens, 362 Fulton Street, Jamaica; Richmond, Port Richmond.)
Manhattan—Thos. F. Smith ($10,000). *Assistant*—Jas. J. Frawley ($5,000). Bronx—E. E. L. Hammer ($4,500). Kings—Frank V. Kelly ($5,500). Queens—R. White ($3,500). Richmond—W. T. Holt (fees).

**County Register.**
(Manhattan, Hall of Records; Bronx, Tremont and Arthur Avenues; Brooklyn, Hall of Records.)
**New York County**—Annie Mathews, D. ($12,000). *Chief Deputy Register*—Edmund P. Holahan ($5,500). *Assistant Deputy Register*—Martin Holzman ($3,500). *Secretary*—Josephine Flynn ($3,500). *Chief Clerk*—Charles W. Schluter ($3,900). *Block Index Clerk*—W. F. Hull ($3,500). *Mortgage Tax Bureau*—Special Deputy Register, Lucas J. Donegan ($4,400). *Re-Indexing Department*—Special Deputy Register, Michael J. McCarthy ($5,500).
**Bronx County**—Edw. Polak, D., ($10,000). *Deputy Register*—Thos. A. Maher ($4,500). *Chief Clerk*—Geo. T. Brown. *Assistant Deputy Register*—J. F. Healy.
**Kings County**—Jas. A. McQuade, D., ($12,000).

## CITY COURTS.

32 Chambers Street. The Judges are elected for a term of ten years at an annual salary of $12,000.

| JUDGES. | Term Expires | JUDGES. | Term Expires |
|---|---|---|---|
| John E. McGeehan | Dec. 31, 1927 | Edward B. La Fetra | Dec. 31, 1931 |
| Peter Schmuck | Dec. 31, 1927 | Louis Wendell | Dec. 31, 1929 |
| John L. Walsh | Dec. 31, 1927 | Gustave Hartman | Dec. 31, 1929 |
| Alexander Finelite | Dec. 31, 1927 | Joseph M. Callahan | Dec. 31, 1929 |
| Abraham G. Meyer | Dec. 31, 1927 | Louis A. Valente | Dec. 31, 1931 |

*Clerk*—Frank J. Goodwin. *Deputy Clerk*—William C. Blaney.

## COUNTY COURTS.

Bronx—Judge L. D. Gibbs ($12,500).
Kings—Judges George W. Martin, J. Grattan MacMahon, Alonzo G. McLaughlin, Reuben L. Haskell and Franklin Taylor ($12,500 each).
Queens—Judge Burt Jay Humphreys ($12,500).
Richmond—Judge J. H. Tiernan (combined salary as Judge and Surrogate, $10,000).

## GENERAL SESSIONS.

| JUDGES. | Term Expires | JUDGES. | Term Expires |
|---|---|---|---|
| Thos. C. T. Crain | Dec. 31, 1934 | Alfred J. Talley | Dec. 31, 1935 |
| Jos. F. Mulqueen | Dec. 31, 1935 | Francis X. Mancuso | Dec. 31, 1935 |
| Otto A. Rosalsky | Dec. 31, 1934 | Morris Koenig | Dec. 31, 1936 |
| Chas. C. Nott, Jr. | Dec. 31, 1927 | Cornelius F. Collins | Dec. 31, 1936 |
| John F. McIntyre | Dec. 31, 1930 | | |

*Clerk*—Edward R. Carroll. Judges of General Sessions receive an annual salary of $17,500 each.

## SPECIAL SESSIONS.

| JUSTICES. | Salary. | Term Expires. | JUSTICES. | Salary. | Term Expires. |
|---|---|---|---|---|---|
| Frederic Kernochan, *Chief Justice* | $11,000 | July 1, 1926 | Joseph F. Moss | $10,000 | July 1, 1934 |
| Clarence Edwards | 10,000 | Mar. 1926 | George J. O'Keefe | 10,000 | Dec. 31, 1927 |
| Ellsworth J. Healey | 10,000 | May 1936 | Arthur C. Salmon | 10,000 | July 1, 1928 |
| Albert V. B. Voorhees | 10,000 | Dec. 31, 1929 | Moses Herrman | 10,000 | July 1, 1931 |
| James J. McInerney | 10,000 | Dec. 31, 1935 | John J. Freschi | 10,000 | July 1, 1925 |
| Daniel F. Murphy | 10,000 | Nov. 27, 1927 | Henry W. Herbert | 10,000 | July 9, 1925 |

Frank W. Smith, *Chief Clerk*; salary $6,500; office 32 Franklin Street.

PART I—Criminal Courts Building, Borough of Manhattan. PART II—171 Atlantic Avenue, Brooklyn; PART III—Town Hall, Jamaica, Queens. This court is held on Tuesdays. PART IV—Borough Hall St. George, S. I. This court is held on Wednesdays. PART V—Bronx County Court House, 161st Street and Third Avenue, Bronx. This court is held on Thursdays. PART VI—(Circuit Court)—Held in such counties and at such times as the stress of business requires and the Chief Justice shall direct.

## CHILDREN'S COURT.

| JUSTICES.* | Salary. | Term Expires. | Assignment Expires. | JUSTICES.* | Salary. | Term Expires. | Assignment Expires. |
|---|---|---|---|---|---|---|---|
| F. C. Hoyt, *Presiding Justice* | *Dols.* 10,000 | June 30, 1927 | June 30, 1936 | M. M. L. Ryan | *Dols.* 10,000 | Dec. 31, 1923 | June 30, 1923 |
| Samuel D. Levy | 10,000 | June 30, 1926 | June 30, 1926 | R. J. Wilkin | 10,000 | Apr. 15, 1923 | June 30, 1925 |
| C. F. Collins | 10,000 | June 30, 1930 | June 30, 1924 | Edw. F. Boyle | 10,000 | Jan. 19, 1932 | Jan. 19, 1927 |

* The Justices are Justices of the Court of Special Sessions assigned by the Mayor to the Children's Court. Adolphus Ragan, Chief Clerk, $6,080; Bernard J. Fagan, Chief Probation Officer, $4,100; offices 137 East Twenty-second Street.

Parts I and II (New York County)—137 East Twenty-second St., Dennis A. Lambert, Clerk, $5,000. Part III (Kings County)—111 Schermerhorn St., Wm. C. McKee, Clerk, $3,700. Part IV (Bronx County)—355 East 137th St., Bernard J. Schneider, Clerk, $3,070. Part V (Queens County)—30 Union Hall St., Jamaica, James J. Ryan, Clerk, $3,070. Part VI (Richmond County)—Borough Hall, New Brighton, Eugene E. Kenny, Clerk, $2,640.

Court is held daily in Parts I, II, and III; Monday, Thursday and Saturday of each week in Part IV; Tuesday and Friday of each week in Part V; Wednesday of each week in Part VI.

## CITY MAGISTRATES' COURT DISTRICTS.

### MANHATTAN AND BRONX.

1st District—110 White Street. 2d District—125 Sixth Avenue (Jefferson Market). 3d District—Second Avenue and 2d Street. 4th District—151 East 57th Street. 5th District—170 East 121st Street. 6th District—East 162d Street, corner Brook Avenue. 7th District—314 West 54th Street. 8th District—181st Street and Boston Road. 9th District—(Day Court for Women)—125 Sixth Avenue (Jefferson Market). 10th District—(Night Court for Men)—314 West 54th Street. 11th District—(Family Court)—151 East 57th Street. 12th District—1130 St. Nicholas Avenue. 13th District—(Family Court)—1014 East 181st Street. Municipal Term—Municipal Building. Traffic Court—301 Mott Street. Homicide Court—301 Mott Street. Deputy Chief Clerk and Chief Probation Officer, 300 Mulberry Street.

### BROOKLYN.

Office of the Chief Clerk—44 Court Street. 1st District—(Women's Night Court)—318 Adams Street. 2d District—(Municipal Term)—402 Myrtle Avenue. 5th District—Williamsburg Bridge Plaza. 6th District—495 Gates Avenue. 7th District—31 Snyder Avenue, Flatbush. 8th District—West 8th Street, Coney Island. 9th District—Fifth Avenue and 23d Street. 10th District—133 New Jersey Avenue. Family Court—327 Schermerhorn Street. Traffic Court—182 Clermont Avenue.

### QUEENS.

1st District—115 Fifth Street, Long Island City. 2d District—120 Broadway, Flushing. 3d District—Central Avenue, Far Rockaway. 4th District—Town Hall, Jamaica. 5th District—906 Fresh Pond Road, Ridgewood.

### RICHMOND.

1st District—Lafayette Avenue, New Brighton. 2d District—Canal Street, Stapleton.

## CITY MAGISTRATES.

MANHATTAN AND BRONX. ($8,000 A YEAR SALARY.)

| NAME. | Home Address. | Original Appointment. | Expiration of Present Term. |
|---|---|---|---|
| Chief, William McAdoo | 58 West 47th Street, Manhattan | July 1, 1910 | June 30, 1925 |
| Max S. Levine | 1482 Broadway, Manhattan | Aug. 15, 1919 | Aug. 15, 1929 |
| George W. Simpson | 337 Convent Avenue, Manhattan | April 3, 1918 | July 28, 1929 |
| Alexander Brough | 31 West 11th Street, Manhattan | Aug. 2, 1916 | April 30, 1927 |
| W. Bruce Cobb | 234 Central Park West, Manhattan | July 9, 1915 | July 8, 1925 |
| Bernard J. Douras | 529 Courtlandt Avenue, Bronx | Dec. 5, 1918 | May 25, 1923 |
| Joseph E. Corrigan | 3 East 10th Street, Manhattan | July 15, 1907 | July 14, 1927 |
| Edgar V. Frothingham | 27 West 44th Street, Manhattan | June 28, 1915 | April 30, 1925 |
| Frederick B. House | 464 West 153d Street, Manhattan | Feb. 1, 1907 | April 30, 1927 |
| Francis X. McQuade | 725 Riverside Drive, Manhattan | July 1, 1921 | July 1, 1931 |
| Norman J. Marsh | 400 West 153d Street, Manhattan | July 15, 1917 | July 14, 1927 |
| Thomas J. Nolan | 9 Madison Street, Manhattan | July 1, 1919 | June 30, 1929 |
| Charles E. Simms | 167 Alexander Avenue, Bronx | Jan. 30, 1914 | July 1, 1923 |
| William A. Sweetser | 80th Street and Columbus Avenue | Dec. 4, 1918 | June 30, 1929 |
| Peter A. Hatting | 340 East 140th Street, Bronx | July 3, 1921 | Aug. 15, 1923 |
| Jean H. Norris | 29 East 29th Street, Manhattan | Jan. 1, 1920 | April 30, 1927 |
| Henry Stanley Renaud | 400 Manhattan Avenue, Manhattan | May 20, 1921 | April 30, 1923 |
| Moses R. Ryttenberg | 50 East 58th Street, Manhattan | July 2, 1921 | June 30, 1922 |
| Jesse Silbermann | 426 East 140th Street, Bronx | Jan. 2, 1920 | June 30, 1922 |
| Earl A. Smith | 38 Fort Washington Avenue, Bronx | May 13, 1922 | June 30, 1932 |
| Thos. F. McAndrews | 131 West 61st Street, Manhattan | Jan. 1, 1922 | Dec. 31, 1931 |
| Chas. A. Oberwager | 3905 Broadway, Manhattan | Jan. 1, 1922 | April 30, 1927 |
| Edward Weil | 224 East 87th Street, Manhattan | June 12, 1922 | April 30, 1925 |

BROOKLYN.

| | | | |
|---|---|---|---|
| Edward J. Dooley | 232 Clermont Avenue, Brooklyn | May 1, 1911 | May 1, 1931 |
| George H. Folwell | 372 Washington Avenue, Brooklyn | April 25, 1914 | Dec. 31, 1931 |
| Alexander H. Geismar | 1210 82d Street, Brooklyn | May 1, 1921 | May 1, 1931 |
| James T. O'Neill | 315 84th Street, Brooklyn | July 1, 1920 | July 1, 1930 |
| Francis A. McCloskey | 333 East 25th Street, Brooklyn | Sept. 24, 1917 | Sept. 24, 1925 |
| Louis H. Reynolds | 575 16th Street, Brooklyn | May 1, 1921 | May 1, 1931 |
| Alfred E. Steers | 2694 Bedford Avenue, Brooklyn | July 3, 1913 | July 2, 1923 |
| Jos. V. Short, Jr | 152 North 7th Street, Brooklyn | May 1, 1918 | May 1, 1931 |
| John J. Walsh | 119 Johnson Street, Brooklyn | Feb. 4, 1913 | May 1, 1931 |
| Gasper J. Liota | 31 Starr Street, Brooklyn | May 1, 1921 | Dec. 1, 1927 |
| Mortimer S. Brown | 110 Hart Street, Brooklyn | Jan. 27, 1919 | July 1, 1929 |
| Harry Howard Dale | 296 Hooper Street, Brooklyn | Jan. 6, 1919 | Jan. 1, 1930 |
| Lawrence C. Fish | 443 Washington Avenue, Brooklyn | Dec. 30, 1919 | Dec. 31, 1929 |
| Jacob Eilperin | 825 Lafayette Avenue, Brooklyn | Jan. 1, 1922 | Dec. 31, 1931 |

QUEENS.

| | | | |
|---|---|---|---|
| J. J. Conway | 20 Pearson Street, L. I. City | Jan. 3, 1918 | Jan. 3, 1927 |
| Thomas F. Doyle | 768 Crescent Street, Astoria, L. I. | May 16, 1917 | July 18, 1927 |
| John Koehendorfer | 166 Ellsworth Avenue, Richmond Hill, L. I. | Mar. 8, 1916 | Dec. 31, 1925 |
| Harry Miller | 120 Bergen Avenue, Jamaica, L. I. | Jan. 1, 1918 | Dec. 31, 1927 |

RICHMOND.

| | | | |
|---|---|---|---|
| William T. Croak | Port Richmond, S. I. | Jan. 3, 1918 | Jan. 3, 1927 |
| William T. Fetherston | 62 Buchanan Street, New Brighton, S. I. | April 22, 1921 | Jan. 1, 1926 |

*Chief Clerk*—William F. Delaney. *Deputy Chief Clerk*—Jay Finn. *Assistant Chief Clerk*—Jesse Bernhard. *Chief Probation Officer*—Edwin J. Cooley.

## MUNICIPAL COURTS.

*Board of Justices*—Aaron J. Levy, Presiding Justice, 264 Madison Street, Manhattan. Salaries $9,000 in Manhattan, Bronx and Brooklyn; $8,000 in Queens and Richmond.

MANHATTAN.

1st District, 146 Grand Street, James A. Caffrey, William F. Moore, John Hoyer.

2d District, 264 Madison Street, Aaron J. Levy, Jacob Panken, Morris Eder, William Blau, Lester Lazarus.

3d District, 314 West 54th Street, Thomas E. Murray, Thomas F. Noonan.

4th District, 207 East 32d Street, Michael F. Blake, John G. McTigue.

5th District, 96th Street and Broadway, William Young, Frederick Spiegelberg, Abram Ellenbogen.

6th District, 155-157 East 88th Street, Jacob Marks, Timothy A. Leary.

7th District, 360 West 125th Street, John R. Davies, S. Clinton Crane, Samson Friedlander.

8th District, 170 East 121st Street, Leopold Prince, Carroll Hayes.

9th District, 59th Street and Madison Avenue, Edgar J. Lauer, Frank J. Coleman, George L. Genung, William C. Wilson.

BRONX.

1st District, 1400 Williamsbridge Road, Peter A. Sheil, Harry Robitzek.

2d District, East 162d Street and Washington Avenue, William E. Morris, Michael J. Scanlan.

BROOKLYN.

1st District, State and Court Streets, James A. Dunne.

2d District, 495 Gates Avenue, John R. Farrar, O. G. Esterbrook.

3d District, 6 and 8 Lee Avenue, Wm. J. Bogenschutz, Charles J. Carroll.

4th District, 14 Howard Avenue, Jacob S. Strahl.

5th District, 5220 Third Avenue, Cornelius Furgueson.

6th District, 236 Duffield Street, Edgar M. Doughty, William D. Niper.

7th District, 31 Pennsylvania Avenue, Charles B. Law, Harrison G. Glore.

QUEENS.

1st District, 115 Fifth Street, L. I. City, John H. Hetherington.

2d District, Broadway and Court Street, Elmhurst, John M. Cragen.

3d District, 144 Halleck Avenue, Ridgewood, Adam Christman, Jr.

4th District, Town Hall, Jamaica, Edgar F. Hazleton.

RICHMOND.

1st District, Village Hall, New Brighton, Thomas C. Brown.

2d District, Village Hall, Stapleton, Arnold J. B. Wedemeyer.

## JURY DUTY IN THE CITY OF NEW YORK.

To be qualified to serve, a person must be not less than 21 nor more than 70 years of age, and he must be a male citizen of the United States, and a resident of the County of New York; and he is a resident within the meaning of the jury law if he dwells or lodges here the greater part of the time between the first day of October and the last day of June. He must be the owner, in his own right, of real or personal property of the value of $250; or the husband of a woman who is the owner, in her own right, of real or personal property of that value. He must also be in the possession of his natural faculties, and not be infirm or decrepit; intelligent, of good character, and able to read and write the English language understandingly.

### THE FOLLOWING ARE EXEMPT FROM JURY DUTY.

A clergyman, minister of any religion officiating as such and not following any other calling. A practising physician, surgeon, surgeon-dentist, or veterinary surgeon not following any other calling, and a licensed pharmaceutist or pharmacist, or a duly licensed embalmer, while actually engaged in his profession as a means of livelihood. A duly registered optometrist actually engaged in his profession as a means of livelihood. An attorney or counsellor-at-law regularly engaged in the practice of law as a means of livelihood. A professor or teacher in a college, academy, or public school, not following any other calling. Editor, editorial writer, or reporter of a daily newspaper or press association regularly employed as such and not following any other vocation. The holder of an office under the United States, or the State, or City or County of New York, whose official duties, at the time, prevent his attendance as a juror. A consul of a foreign nation. A captain, engineer, or other officer actually employed upon a vessel making regular trips; a licensed pilot, actually following that calling. A superintendent, conductor, or engineer employed by a railroad company other than a street railroad company, or a telegraph operator employed by a press association or telegraph company who is actually doing duty in an office or along the railroad or telegraph line of the company or association by which he is employed. Honorably discharged firemen. Active and honorably discharged militiamen and active members of the Old Guard. A duly licensed engineer of steam boilers actually employed as such. Inspectors, poll clerks, and ballot clerks, or a person who is physically incapable. Grand, Sheriff's, Special, and Municipal Court Jurors.

The law of the County of the Bronx, recently created, is the same as Manhattan.

## DISTRICT LEADERS—MANHATTAN.

**Tammany**—Headquarters, Tammany Hall, 145 East 14th Street. *Chairman General Committee*—David H. Knott. *Treasurer*—Philip F. Donohue. *Secretary*—Thomas F. Smith. *Chairman Executive Committee*—Edward F. Boyle.

The figures refer to Assembly Districts.

1—Daniel E. Finn, Mrs. Margaret Fay; Thomas F. Foley, Mrs. Thomas J. Nolan.

2—Harry C. Perry, Miss Elvira E. Barra; Mrs. Barbara Porges.

3—Charles W. Culkin, Mrs. Clara E. Keenan; Frank J. Goodwin, Mrs. W. E. Murphy; William Dalton, Mrs. Ellen Downey.

4—Edward J. Ahearn, Mrs. Mary Halpin.

5—Peter J. Dooling, Mrs. Mary E. Connelly; Thomas J. McManus, Mrs. B. McCarthy; John F. Curry, Miss Martha Byrne.

6—David Lazarus, Mrs. Benjamin Hoffman.

7—James J. Hagan, Mrs. N. Taylor Phillips.

8—Solomon Goldenkranz, Mrs. Herman Bauman.

9—Thomas A. Williams, Mrs. Sadie E. Garland.

10—George W. Olvany, Mrs. Agnes P. Husch; George L. Donnellan, Miss Loretta Bonner.

11—James J. Hines, Mrs. E. F. Stewart.

12—Charles F. Murphy, Miss Elizabeth M. Barry; William P. Kennealy; Michael J. Cruise, Miss Anna Montgomery; Martin G. McCue, Mrs. Mary A. Hagerty.

13—Andrew B. Keating, Mrs. Abbey Shay Hughes.

14—Thomas M. Farley, Mrs. Elizabeth McDonald.

15—Jeremiah T. Mahoney, Mrs. Ella Hastings.

16—Stephen Ruddy, Mrs. Mary Russell; Michael Cosgrove, Mrs. Anna Naughton.

17—Nathan Burkan, Miss Rose Rothenberg; Samuel Marx, Mrs. Gustave J. Paul.

18—John J. Dietz, Mrs. Frances S. Ecker; H. Warren Hubbard, Mrs. Mary A. Quigley.

19—William Allen, Miss Annie Matthews.

20—Percival E. Nagle, Mrs. Sadita Wilson.

21—Edmund P. Holahan, Mrs. May Guttentag.

22—Joseph J. McCormick, Miss Elizabeth V. McCrystal.

23—John Mara, Mrs. Genevieve H. Walsh.

**Republican**—*Headquarters*, 105 West 40th Street. *Chairman*—Samuel S. Koenig. *Treasurer*—Odgen L. Mills. *Secretary*—John Neville Boyle. Executive Committee of the Republican County Committee. *Second Vice Presidents* and Chairman of Women's Division, Helen Varick Boswell. *Assistant Secretary*—Jessie Hoyt Higgins.

1—Joseph Levenson, Miss Ida Brisman; William G. Rose, Mrs. Mildred Rich.

2—Antonio Dalessandro, Miss Angela Cagnolati; Jacob Rosenberg, Miss Alice Ratkowsky.

3—R. M. Greenbank, Mrs. Kathryn MacNeil; Benjamin F. Fox, Mrs. Elizabeth Holmes; Michael H. Blake, Mrs. Anna C. Reed.

4—Alexander Wolf, Miss Tessie Cuttler.

5—Herman W. Beyer, Mrs. William Wilson; Anthony P. Ludden, Mrs. Mary Grout.

6—Samuel S. Koenig, Mrs. Samuel S. Koenig.

7—Albert J. Berwin, Mrs. Niles R. Becker.

8—Geo. C. Nordinger, Mrs. Frederick L. Marshall.

9—Charles E. Heydt, Mrs. Katherine T. Hammer.

10—F. R. Stoddard, Jr., Charlotte Farrar.

11—Robert P. Levis, Mrs. Wm. E. Wilkinson.

12—William Henkel, Mrs. Lillian Michel; John S. Shea, Mrs. Elizabeth J. Cudmore; Charles K. Lexow, Miss Matilde Schaefer.

13—Valentine J. Hahn, Sarah Schuyler Butler.

14—Joseph Pabian, Mrs. Ida Mallee; Charles W. Ferry, Mrs. Margaret Johnson.

15—William Chilvers, Mrs. John H. Iselin.

16—William C. Hecht, Jr.; Mrs. Helen F. Rothweller; Ambrose O. Neal, Mrs. Elizabeth Kogel.

17—Robert Oppenheim, Mrs. Edith Schachter; Miss Anna Liebowitz.

18—Charles B. Largy, Miss Bertha Hechinger; Morris Levy, Mrs. Elizabeth Peirce.

19—David B. Costuma, Mrs. Mary Cotter.

20—Frank K. Bowers, Mrs. Gertrude M. Taaffe.

21—Robert S. Conklin, Miss Harriet E. Porritt.

22—John A. Bolles, Mrs. M. L. Ogan.

23—C. H. Woodward, Mrs. Myrta M. Hanford.

## BRONX COUNTY DEMOCRATIC EXECUTIVE COMMITTEE.

Edward J. Flynn, Chairman; Dr. K. S. Kennard, Secretary; James A. McMahon, Recording Secretary; Daniel J. Carr, Treasurer.

**First**—James F. Geraghty, 475 E. 140th St.; Catherine Goodwin, 479 E. 141st St.; James W. Brown, 371 Willis Ave.; May Skiffington, 354 E. 135th St.

**Second**—Earl H. Miller, 303 E. 161st St.; Mary Clark, 833 Washington Ave.

**Third**—Geo. Brown, 593 Eagle Ave.; Clara Gompers; 878 Macy Pl.

**Fourth**—Stephen A. Nugent, 1115 Boston Road; Helen F. McRedmond, 1061 Tinton Ave.

**Fifth**—John J. Daly, 945 E. 163d St.; Sarah Friedman, 962 Whitlock Ave.

**Sixth**—Thomas H. O'Neil, 2577 Poplar St., Margaret Behan, 885 Van Nest Ave.

**Seventh**—Charles F. Griffin, 749 Oakland Place; Mary Shea, 2120 Crotona Ave.

**Eighth**—Charles A. Buckley, 7 E. 181st St.; Edna F. Standish, 2746 Decatur Ave.

**Ninth**—Albert H. Liebenau, 3492 Park Ave.; May F. Kennedy, 1253 Washington Ave.

## BRONX COUNTY REPUBLICAN ORGANIZATION.

(The women are "coadjutors"; their addresses are those of the men.)

Richard W. Lawrence, Chairman, 1257 Gerard Ave.; Miss Florence W. Newbold, Coadjutor, 2411 Butler Place.

**First**—A. D. Bunner, Executive Member, 2661 3d Ave.; Mrs. Henrietta Hahn, Coadjutor.
**Second**—Peter Wynne, Executive Member, 1257 Gerard Ave.; Mrs. Elizabeth Mack, Coadjutor.
**Third**—Alfred B. Simonds, Executive Member, East 156th St., near Westchester Ave.; Mrs. Alice E. Kinehan, Coadjutor.
**Fourth**—Ernest W. Bradbury, Executive Member, 1324 Franklin Ave.; Mrs. Sadie Bernard, Coadjutor.
**Fifth**—Harry B. Harris, Executive Member, 960 Prospect Ave.; Mrs. Mae Harris, Coadjutor.
**Sixth**—John J. Knewitz, Executive Member, 3547 Willett Ave.; Miss Florence W. Newbold, Coadjutor.
**Seventh**—Charles E. Buchner, Executive Member, Crotona Ave., near 177th St.; Mrs. Elizabeth Barnett, Coadjutor.
**Eighth**—Thomas W. Whittle, Executive Member, Grand Ave., near Fordham Road; Mrs. E. Keib, Coadjutor.
**Ninth**—Samuel J. Joseph, Executive Member, 1029 E. 163d St.; Mrs. Hannah Weiss, Coadjutor.
**Tenth**—Charles Rathfelder, Executive Member, 409 E. 156th St.; Mrs. Charles Rathfelder, Coadjutor.

## KINGS COUNTY DEMOCRATIC EXECUTIVE COMMITTEE.

*Chairman*—John H. McCooey.
**1**—James J. Browne, Mrs. Martha Guilfoyle; John F. Quayle, Mrs. Margaret Walters.
**2**—Joseph Fennelly, Miss Lillian Murphy.
**3**—James Kane, Mrs. Elizabeth R. Struck.
**4**—Thomas J. Drennan, Mary T. Harrington.
**5**—James J. Sexton, Mrs. Mary Greehy.
**6**—Charles W. Jannicky, Mrs. Carrie D'Oench.
**7**—William J. Heffernan, Mrs. Agnes Leonard Ward.
**8**—Patrick J. Diamond, Miss Kathryn McGivney.
**9**—Thomas F. Wogan, Mrs. Evelyn J. Meagher.
**10**—Peter A. Carey, Mrs. Minnie J. Harris.
**11**—Joseph A. Guider, Miss Honaur Gelson.
**12**—Timothy E. Griffin, Mrs. Ellen M. Joyce.
**13**—George W. Lindsay, Mrs. Evelyn Ward Rehm.
**14**—Daniel J. Carroll, Mrs. Catherine I. Carroll.
**15**—James A. McQuade, Miss Estella Corcoran.
**16**—Kenneth F. Sutherland, Mrs. Jennie McMahon.
**17**—Peter B. Hanson, Mrs. Minnie Abel.
**18**—John H. McCooey, Mrs. Sallie McRae Minsterer.
**19**—Henry Hasenflug, Mrs. Margaret Alt.
**20**—William F. Delaney, Mrs. Helen A. Braun.
**21**—Henry Hesterberg, Mrs. Mary F. O'Malley.
**22**—James P. Sinnott, Miss Gertrude Vaughan.
**23**—Hyman Shorenstein, Mrs. Agnes Riley.

## KINGS COUNTY REPUBLICAN COUNTY COMMITTEE.

**Executive Committee**—Jacob A. Livingston, Chairman.
**First**—D. Harry Ralston, Miss Amy Wren.
**Second**—Marcus B. Campbell, Miss Grace M. Lease.
**Third**—Anthony De Martini, Mrs. Lulu Simonson.
**Fourth**—Alfred T. Hobley, Miss Kathryn Gallagher.
**Fifth**—Charles C. Lockwood, Mrs. Annie I. Gunn.
**Sixth**—John R. Crews, Mrs. Laura Mayer.
**Seventh**—John Feitner, Mrs. Catherine Cannon.
**Eighth**—Harold L. Turk, Mrs. Katharine C. Walters.
**Ninth**—Charles Warbasse, Mrs. Beatrice V. Stevenson.
**Tenth**—Charles F. Murphy, Mrs. Charles F. Murphy.
**Eleventh**—Alfred E. Vass, Mrs. May M. Gooderson.
**Twelfth**—John T. Rafferty, Mrs. Emma Egolf.
**Thirteenth**—Jesse D. Moore, Mrs. Mabel Applebee.
**Fourteenth**—George A. Owens, Miss Lillian Eitel.
**Fifteenth**—Richard Wright, Miss Lucy Hayes.
**Sixteenth**—Frederick Oppikofer, Mrs. Isabelle Claire Schults.
**Seventeenth**—Lewis M. Swasey, Mrs. Maude Neal.
**Eighteenth**—Warren G. Price, Mrs. Katherine L. Kerr.
**Nineteenth**—Jacob Bartscherer, Mrs. Jennie Blank.
**Twentieth**—William Schnitzpan, Mrs. Faith Moore Andrews.
**Twenty-first**—F. J. H. Kracke, Mrs. Anna De Witt.
**Twenty-second**—Jacob A. Livingston, Mrs. Dorothy McKnight.
**Twenty-third**—Walter D. Ludden, Mrs. Helena M. Moll.

### REPUBLICAN COUNTY COMMITTEE.

Alfred E. Vass, Chairman.
Beatrice V. Stevenson, Vice Chairman.
William P. Rae, Treasurer.
F. H. Stevenson, Secretary.
Katharine C. Walters, Assistant Secretary.
Jesse D. Moore, Sergeant-at-Arms.

## NEW YORK CITY CHARTER REVISION COMMISSION.

*Chairman*—Henry De Forest Baldwin, Dem.; Mayor John F. Hylan, Dem.; City Comptroller Charles L. Craig, Dem.; Brooklyn Borough President Edward Riegelmann, Dem.; Alderman John J. Keller, Rep.; Edward M. Bassett, Rep.; George Cromwell, Rep.; Lewis L. Delafield, Rep.; Joseph M. Levine, Rep.; Prof. Howard L. McBain, Ind.; Herman A. Metz, Dem.; Col. William Barclay Parsons, Rep.; Frank L. Polk, Dem.; Arthur S. Somers, Dem.; H. P. Williams, Rep.

The commission, which was authorized by the Legislature and appointed by Gov. Miller, organized on Dec. 3, 1921. Prof. McBain, who is at Columbia University, was chosen *Secretary*. *Counsel*—Franklin W. McCutcheon.

## INDEX NUMBERS OF COST OF FOOD IN NEW YORK CITY.

(Derived from retail food prices published by the United States Bureau of Labor Statistics.

Base is January, 1915, as 100.)

| Month. | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 |
|---|---|---|---|---|---|---|---|---|
| January... | 100 | 103 | 126 | 160 | 183 | 199 | 172 | 145 |
| February.. | 97 | 102 | 131 | 158 | 171 | 197 | 156 | 144 |
| March.... | 95 | 103 | 129 | 144 | 173 | 194 | 153 | 139 |
| April..... | 96 | 104 | 135 | 145 | 178 | 204 | 152 | 139 |
| May..... | 97 | 105 | 147 | 153 | 176 | 206 | 145 | 139 |
| June..... | 97 | 109 | 147 | 160 | 178 | 209 | 144 | 143 |
| July..... | 97 | 106 | 140 | 163 | 183 | 211 | 147 | ... |
| August... | 97 | 108 | 143 | 166 | 184 | 199 | 155 | ... |
| Septemb'r. | 98 | 112 | 149 | 174 | 181 | 198 | 153 | ... |
| October... | 100 | 116 | 155 | 178 | 183 | 195 | 155 | ... |
| November. | 102 | 120 | 151 | 182 | 190 | 192 | 155 | ... |
| December. | 103 | 120 | 155 | 186 | 194 | 177 | 155 | ... |
| Average.. | 98 | 109 | 142 | 164 | 181 | 198 | 154 | ... |

## CHILD LABOR IN THE CITY OF NEW YORK.

| City. | Males 10 to 15 Years of Age, 1920. | | | Males 10 to 15 Years of Age, 1910. | | | Females 10 to 15 Years of Age, 1920. | | | Females 10 to 15 Years of Age, 1910. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total No. | Engaged in Gainful Occupations. | | Total No. | Engaged in Gainful Occupations. | | Total No. | Engaged in Gainful Occupations. | | Total No. | Engaged in Gainful Occupations. | |
| | | No. | Pct. | | No. | Pct. | | No. | Pct. | | No. | Pct. |
| New York City | 291,164 | 18,341 | 6.3 | 248,927 | 21,408 | 8.6 | 289,513 | 14,042 | 4.9 | 251,961 | 17,161 | 6.8 |
| Bronx | 40,509 | 2,103 | 5.2 | 25,091 | 1,805 | 7.2 | 39,555 | 1,578 | 4.0 | 23,819 | 1,203 | 5.1 |
| Brooklyn | 111,681 | 7,423 | 6.6 | 90,033 | 7,725 | 8.6 | 111,630 | 5,571 | 5.0 | 91,756 | 5,508 | 6.0 |
| Manhattan | 106,297 | 6,526 | 6.1 | 111,315 | 10,199 | 9.2 | 106,423 | 5,227 | 4.9 | 114,273 | 9,223 | 8.1 |
| Queens | 25,940 | 1,937 | 7.5 | 17,218 | 1,436 | 8.3 | 25,594 | 1,463 | 5.7 | 17,216 | 1,093 | 6.3 |
| Richmond | 6,737 | 352 | 5.2 | 5,270 | 243 | 4.6 | 6,311 | 203 | 3.2 | 4,897 | 134 | 2.7 |

## PRINCIPAL OCCUPATIONS, N. Y. CITY, 1920.

| Occupation. | Male. | Female. | Occupation. | Male. | Female. |
|---|---|---|---|---|---|
| **All occupations** | 1,839,683 | 691,729 | Laundry operatives | 4,909 | 5,032 |
| | | | Lawyers, judges, and justices | 11,246 | 253 |
| Actors | 5,053 | 5,034 | Longshoremen and stevedores | 37,050 | 221 |
| Agents, canvassers, collectors | 14,963 | 1,423 | Machinists, millwrights, toolmak's | 42,664 | 1 |
| Artists, sculptors, teachers of art | 5,095 | 3,112 | Managers and supts., mfg | 15,819 | 839 |
| Authors, editors, reporters | 4,461 | 1,553 | Manufacturers and officials | 37,755 | 1,137 |
| Bakers | 15,510 | 249 | Messengers, bundle and office | 15,975 | 1,457 |
| Bankers, brokers, money lenders | 14,615 | 246 | Midwives and nurses (not trained) | 1,806 | 10,078 |
| Barbers, hairdressers, manicurists | 15,448 | 3,691 | Milliners and millinery dealers | 1,487 | 11,479 |
| Bookkeepers, cashiers, account'ts | 42,449 | 40,234 | Musicians and teachers of music | 10,160 | 5,233 |
| Brick and stone masons | 9,985 | ..... | Officials and inspectors, State and United States | 4,373 | 183 |
| Captains, masters, mates, pilots | 6,499 | ..... | Painters, glaziers, and varnishers | 25,438 | 4 |
| Carpenters | 42,478 | 3 | Physicians and surgeons | 9,449 | 527 |
| Chauffeurs | 49,185 | 280 | Plumbers and gas and steamfitters | 19,354 | ..... |
| Civil engineers and surveyors | 4,800 | ..... | Policemen | 11,725 | 29 |
| Clergymen | 4,037 | 17 | Porters, except in stores | 19,266 | 6 |
| Clerks, except in stores | 137,283 | 68,949 | Real estate agents and officials | 12,291 | 690 |
| Clerks in stores | 26,114 | 12,190 | Restaurant and cafe keepers | 8,266 | 860 |
| Commercial travellers | 9,578 | 143 | Retail dealers | 114,671 | 7,056 |
| Compositors, linotypers, typeset'rs | 20,823 | 606 | Sailors and deck hands | 14,109 | 5 |
| Deliverymen | 11,972 | 2 | Salesmen and saleswomen | 91,625 | 27,610 |
| Designers, draftsmen, inventors | 7,251 | 2,760 | Semi-skilled operatives, tobacco | 7,463 | 6,012 |
| Draymen, teamsters, expressmen | 28,785 | 80 | Semi-skilled operatives, printing | 8,744 | 6,732 |
| Dressmakers and seamstresses, not in factories | 157 | 22,758 | Semi-skilled operatives, shipbldg | 10,809 | 52 |
| Electricians and electrical engin'rs | 21,445 | 5 | Semi-skilled operatives, shoes | 9,415 | 2,140 |
| Elevator tenders | 9,134 | 1,025 | Semi-skilled operatives, straw | 5,858 | 3,450 |
| Engineers, stationary | 17,470 | ..... | Semi-skilled operatives, clothing | 45,959 | 13,389 |
| Firemen, except locomotive and fire department | 11,709 | ..... | Servants and waiters | 54,970 | 94,658 |
| Foremen and overseers, manuf't'g | 12,143 | 4,542 | Cobblers | 8,062 | 5 |
| Guards, watchmen, doorkeepers | 11,714 | 26 | Soldiers, sailors, and marines | 11,215 | ..... |
| Housekeepers and stewards | 3,608 | 9,298 | Stenographers and typewriters | 7,146 | 72,535 |
| Insurance agents and officials | 11,465 | 462 | Tailors and tailoresses | 46,932 | 3,261 |
| Janitors and sextons | 9,123 | 9,612 | Teachers, school | 6,048 | 27,546 |
| Laborers, building, general, and not specified | 22,959 | 345 | Telephone operators | 1,351 | 20,068 |
| Laborers, porters, helpers in stores | 11,655 | 918 | Tinsmiths and coppersmiths | 6,819 | ..... |
| Launderers and laundresses, not in laundries | 573 | 10,811 | Trained nurses | 409 | 12,127 |
| | | | Wholesale dealers, importers, and exporters | 15,507 | 127 |

"Clerks in stores" probably includes salespersons incorrectly reported as clerks.

## PRINCIPAL INDUSTRIES IN NEW YORK CITY.

| Industry. | Value of Products. | | Inc. Over 1914. | | Industry. | Value of Products. | | Inc. Over 1914. | |
|---|---|---|---|---|---|---|---|---|---|
| | Amount, 1919. | Pct. Tot for State. | Amount. | Pct. | | Amount, 1919. | Pct. Tot for State. | Amount. | Pct. |
| | *Dollars.* | | *Dollars.* | | | *Dollars.* | | *Dollars.* | |
| MANHATTAN. | | | | | BROOKLYN—*Con't* | | | | |
| Cloth'g,women's | 834,787,476 | 94.1 | 507,906,400 | 155.4 | Bread&bak.prod | 39,397,797 | 16.9 | 19,886,903 | 101.9 |
| Clothing, men's | 443,362,957 | 81.5 | 293,808,731 | 196.5 | Tobacco & prod. | 35,761,932 | 21.9 | 24,827,920 | 227.1 |
| Newsp.& period. | 206,585,376 | 81.9 | 98,790,325 | 91.6 | Clothing, men's | 35,680,348 | 6.6 | 23,383,797 | 190.2 |
| Slaught'r'g, pkg. | 153,807,609 | 60.1 | 63,092,427 | 69.6 | Paints | 30,839,999 | 69.9 | 16,086,583 | 109.0 |
| Millinery & lace goods, n. e. s. | 149,524,390 | 90.2 | 86,100,671 | 135.8 | Cloth'g,women's | 26,695,969 | 3.0 | 14,571,689 | 120.2 |
| Fur goods | 126,669,590 | 94.4 | 97,887,599 | 340.1 | Conf'y&ice crm | 25,859,532 | 23.5 | ..... | ..... |
| Pr't'g&pub. job | 120,009,796 | 80.5 | 57,278,319 | 91.3 | Coffee, roasting | 25,260,831 | 44.2 | ..... | ..... |
| Tobacco & prod. | 105,251,132 | 64.5 | 43,659,843 | 70.9 | QUEENS. | | | | |
| Bread&bak.prod | 104,685,487 | 44.9 | 56,063,996 | 115.3 | Bread&bak.prod | 16,384,475 | 7.0 | 12,133,860 | 285.5 |
| Shirts | 69,397,169 | 70.9 | 48,876,033 | 238.2 | Silk goods | 12,655,415 | 15.5 | 6,862,315 | 118.5 |
| Jewelry | 58,929,512 | 87.4 | 40,621,637 | 221.9 | Stamped, enameled ware,n.e.s | 10,761,168 | 31.0 | 5,421,905 | 101.5 |
| Conf'y&ice crm | 53,578,324 | 48.7 | ..... | ..... | Fdry,mach.prod | 7,071,713 | 2.8 | 5,457,056 | 338.0 |
| Furn. g'd, Men's | 48,188,859 | 90.5 | 29,003,757 | 151.2 | Pat.med.& com. | 6,864,525 | 11.8 | ..... | ..... |
| Liquors, malt | 44,826,880 | 45.1 | 10,161,897 | 29.3 | Knit goods | 5,490,931 | 2.8 | 4,298,783 | 360.6 |
| Fdry,mach.prod | 29,533,072 | 11.3 | 17,960,565 | 155.2 | BRONX. | | | | |
| L'ther gds.,n.e.s. | 26,227,826 | 86.5 | 18,207,612 | 227.0 | Musical inst's | 11,891,041 | 31.3 | ..... | ..... |
| Silk goods | 25,673,582 | 31.4 | 20,269,938 | 375.1 | Bread&bak.prod | 11,197,988 | 4.8 | 4,221,172 | 60.5 |
| Electrical mach. | 25,590,698 | 14.2 | 15,661,172 | 157.7 | Millinery & lace goods, n. e. s. | 7,262,034 | 4.4 | 3,523,996 | 94.3 |
| BROOKLYN. | | | | | Knit goods | 5,351,837 | 2.7 | 4,653,460 | 666.3 |
| Fdry,mach.prod | 48,004,748 | 18.4 | 23,216,451 | 93.7 | RICHMOND. | | | | |
| Shipb'ld'g, steel. | 45,956,034 | 44.4 | ..... | ..... | Shipb'ld'g, steel. | 30,300,293 | 29.3 | ..... | ..... |
| Boots & shoes, not rubber | 45,158,936 | 23.7 | 28,005,134 | 163.3 | Shipb'd'g, wood. | 6,444,741 | 22.6 | 5,955,260 | 1,216.6 |
| Knit goods | 43,185,419 | 22.1 | 30,446,520 | 239.0 | Bread&bak.prod | 1,844,262 | 0.8 | 1,147,860 | 164.8 |

NOTE—n. e. s. means *not elsewhere specified.*

## PRINCIPAL CLUBS IN NEW YORK CITY

(The date of organization is in parentheses.)

Aero of America (1905), 11 E. 38th St.; Pres., Chas. J. Edwards; Sec., Maurice G. Cleary.

Aldine (1889), 200 Fifth Ave.; Pres., Dr. O. S. Marden; Sec., Walter Laidlaw.

Alpha Delta Phi (1890), 136 W. 44th St.; Pres., Walter C. Teagle; Sec., C. F. Bailey.

Arkwright of N. Y. (1893), 320 Broadway; Pres., S. H. Brice; Sec., Owen Coogan.

Army and Navy of America (1889), 112 W. 59th St.; Pres., Franklin C. Brown; Sec., Louis A. Sigaud.

Authors (1882), 881 Seventh Ave.; Pres., John Erskine; Sec., Ernest Ingersoll.

Automobile of America (1899), 247 W. 54th St.; Pres., Col. Arthur Woods; Sec., Elmer Thompson.

Automobile of N. Y. (1918), Hotel Ansonia; Sec., Paul Archibald.

Bankers of America (1915), 120 Broadway; Pres., A. N. Wiggin; Sec., Ralph Lane.

Barnard of City of N. Y. (1894), Carnegie Bldg.; Pres., W. L. Bogert; Sec., Miss Louise Tibbetts.

British War Veterans of America (1920), 125 E. 38th St.: Pres., Dr. Foster Kennedy; Sec., C. Ball.

Brooklyn Engineers' (1896), 117 Remsen St.; Pres., R. S. Allyn; Sec., Joseph Strachan.

Caledonian of N. Y. (1861), 846 Seventh Ave.; Chief, Alex. Caldwell; Sec., Hugh Clow.

Calumet (1879), 12 W. 56th St.; Pres., Wm. A. Greer; Sec., E. Pierpont Hicks.

Camera (1884), 121 W. 68th St.; Pres., J. H. McKinley; Sec., W. N. Capen.

Catholic of City of N. Y. (1871), 120 W. 59th St.; Pres., Martin Conboy; Sec., E. K. Hanlon.

Century Association (1847), 7 W. 43d St.; Pres., Elihu Root; Sec., A. D. Noyes.

Chemists' (1898), 52 E. 41st St.; Pres., Dr. J. E. Teeple; Sec., H. G. Sidebottom.

City Club of N. Y. (1892), 55 W. 44th St.; Pres., Nelson S. Spencer; Sec., R. V. Ingersoll.

City Athletic (1908), 50 W. 54th St.; Pres., S. R. Guggenheim; Sec., S. T. Stern.

Clergy (1915), 200 Fifth Ave.; Pres., Milo Hudson Gates; Sec., Walter Laidlaw.

Colony (1903), 564 Park Ave.; Pres., Ruth Morgan; Sec., Mrs. S. L. Cromwell.

Columbia University (1901), 4 W. 43d St.; Pres., Chas. H. Mapes; Sec., H. K. Masters.

Congress C. of Kings Co. (1900), 505 Bedford Ave., Brooklyn; Pres., C. W. Donovan; Sec., T. W. Christy.

Crescent Athletic (1888), 129 Pierrepont St., Brooklyn; Pres., G. B. Plaste; Sec., A. S. Hart.

Daughters of the Revolution, N. Y. State (1891), Hotel Astor; Regent, Mrs. Wm. D. Martin; Cor. Sec., Mrs. H. W. Will.

Delta Kappa Epsilon (1916), 30 W. 44th St.; Pres., Jas. T. Lee; Sec., E. S. S. Sunderland.

Delta Tau Delta (1895), 27 E. 39th St.; Pres., Geo. E. Morrissey; Sec., William Reeder.

Engineers' (1888), 32 W. 40th St.; Pres., A. W. Kiddle; Sec., Joseph Struthers.

Friars' (1904), 110 W. 48th St.; Abbot, Geo. M. Cohan; Sec., J. Frank Stevens.

Green Room (1902), 139 W. 47th St.; Prompter, Frank Gillmore; Sec., Doty Hobart.

Grolier of City of N. Y. (1884), 47 E. 60th St.; Pres., Henry W. Kent; Sec., Walter Gilliss.

Harmonie (1852), 4 E. 60th St.; Pres., Horace A. Saks; Sec., Walter J. Rose.

Hanover (1890), 563 Bedford Ave., Brooklyn; Pres., Russell J. Perrine; Sec., Chas. B. Andrews.

Harvard of N. Y. C. (1887), 27 W. 44th St.; Pres., Jas. Byrne, '77; Sec., John Elliott.

Jockey (1894), 66 W. 40th St.; Chairman, August Belmont; Sec., H. K. Knapp.

Knickerbocker (1871). 2 E. 62d St.; Pres., W. Butler Duncan; Sec., L. F. H. Betts.

Lambs (1874), 128 W. 44th St.; Shepherd, A. O. Brown; Sec., M. Arbuckle.

Lawyers' (1887), 115 Broadway; Pres., Wm. Allen Butler; Sec., R. G. Babbage.

Lotos (1870), 110 W. 57th St.; Pres., Chester S. Lord; Sec., Chas. W. Price.

Manhattan (1865), 32 E. 26th St.; Pres., P. F. Murphy; Sec., Albert Tilt.

Manhattan Single Tax (1889), 32 Union Sq.; Pres., J. R. Brown; Sec., H. Underhill.

Masonic (1894), Hotel Imperial, Broadway and 32d St.; Pres., W. H. Miller; Sec., G. W. Gale.

Metropolis (1879), 105 W. 57th St.; Pres., Benj. W. Mayer; Sec., Irving S. Dorf.

Metropolitan (1891), 1 E. 60th St.; Pres., Frank K. Sturgis; Sec., Percy R. Pyne.

Montauk (1889), Eighth Ave. and Lincoln Place, Brooklyn; Sec., B. A. Greene.

National Arts (1898), 15 Gramercy Park; Pres., John G. Agar; Sec., John C. Oswald.

National Democratic (1890), 617 Fifth Ave.; Pres., C. B. Alexander; Sec., W. G. Dunnington.

Navy, National, of N. Y. (1918), 15 E. 41st St.; Pres., F. D. Roosevelt; Sec., Mott B. Schmidt.

Newspaper (1922), 133 W. 41st St.; Pres., Chas. G. Hambidge; Sec., Ben Mellon.

New York, The (1845), 20 W. 40th St.; Pres., Anthony W. Morse; Sec., John J. Crawford.

New York Athletic (1868), 58 W. 59th St., and Travers Island, Pelham Manor, N. Y.; Pres., M. F. Loughman; Sec., Fred R. Fortmeyer.

New York Railroad (1872), 26 Cortlandt St.; Pres., F. T. Dickerson; Sec., Harry D. Vought.

New York Yacht (1844), 37 W. 44th St.; Pres., H. S. Vanderbilt; Sec., G. A. Cormack.

Nippon (1905), 161 W. 93d St.; Pres., S. Imamura; Sec., M. Kobayashi.

Phi Gamma Delta (1888), 44 W. 44th St.; Pres., Henry W. Nuckols; Sec., Wm. H. Hynard.

Players, The (1888), 16 Gramercy Park; Pres., John Drew; Sec., Louis E. Shipman.

Press, N. Y. (1872), 21 Spruce St.; Pres., Edw. Percy Howard; Sec., Caleb H. Redfern.

Princeton of N. Y. (1889), N. W. cor. Park Ave. and 39th St.; Pres., R. E. Dwight; Sec., S. G. Etherington.

Progress (1865), 1 W. 88th St.; Pres., Louis M. Hart; Sec., Louis Gans.

Racquet and Tennis (1890), 370 Park Ave.; Pres., H. K. Knapp; Sec., Sherman Day.

Reform; Pres., E. J. Shriver; Sec., H. H. Boyesen.

Republican, National (1879), 54 W. 40th St.; Pres., Nathaniel A. Elsberg; Sec., David B. Luckey.

Rotary of N. Y. (1909), Hotel McAlpin; Pres., R. L. Hatch; Sec., E. H. Rushmore.

St. Nicholas (1875), 7 W. 44th St.; Pres., Fred. P. Warfield; Sec., E. L. Carr.

Salmagundi (1871), 47 Fifth Ave.; Pres., Hobart Nichols; Rec. Sec., F. G. Wickware; Cor. Sec., W. Neumuller.

Shakespeare (1890), 15 Gramercy Park; Pres., H. Duffield; Sec., Mary S. Pavey.

Sigma Alpha Epsilon, 51 W. 48th St.; Pres., Geo. F. Usher; Sec., Fred Gunther.

Soldiers and Sailors of N. Y. (1922), 261 Madison Ave.; Pres., Mrs. Francis Rogers; Sec., Miss Martha White.

Three Arts (1906), 340 W. 85th St.; Pres., Mrs. John H. Hammond; Sec., Mrs. Russell Hoadley.

Turn Verein, N. Y. (1850), 85th St. and Lexington Ave.; Pres., B. W. Weller; Sec., S. Becker.

Union (1836), 5th Ave. and 51st St.; Pres., L. K. Wilmerding; Sec., Chas K. Beekman.

Union League of N. Y. (1863), 1 E. 39th St.; Pres., J. R. Sheffield; Sec., H. A. Cushing.

University (1865), 1 W. 54th St.; Sec., Francis S. Hutchins.

Vatel (1914), 132 W. 48th St.; Pres., Chas. G. Scott; Sec., R. Bachman.

West Side (1886), 270 W. 84th St.; Pres., E. D. Hubbard; Sec., T. B. Chrystal.

Williams (1913), 291 Madison Ave.; Pres., E. Dimon Bird; Sec., Merrill N. Gates.

Women's University (1891), 106 E. 52d St.; Pres., Mrs. Wm. L. Colt.

Yale of N. Y. C. (1897), 50 Vanderbilt Ave.; Pres., Geo. T. Adee; Sec., Livingston Platt.

## BANKRUPT'S LIABILITIES $304,840,332,912,685.

Owing more money than there is in the world, outside of Russia, George Thomas Jones, of San José, Cal., filed a bankruptcy petition at San Francisco, Sept., 29, 1922. Jones said the amount due his principal creditor was $304,840,332,912,685.16, and was a judgment against him by the Superior Court of Santa Clara County.

In 1897 he borrowed $100 from Henry B. Stuart at 10 per cent interest compounded monthly. Recently Stuart brought an action to recover. Mathematical experts finally figured it up. The court held against Jones.

## MAYORS OF THE CITY OF NEW YORK.

Before the Revolution the Mayor was appointed by the Governor of the Province; and from 1784 to 1820 by the Appointing Board of the State of New York, of which the Governor was the chief member. From 1820 to the amendment of the Charter, in 1830, the Mayor was appointed by the Common Council. In 1898 the term of the first Mayor of Greater New York (Van Wyck) began.

| | Mayors. | Terms. |
|---|---|---|
| 1 | Thomas Willett | 1665 |
| 2 | Thomas Delavall | 1666 |
| 3 | Thomas Willett | 1667 |
| 4 | Cornelius Steenwyck | 1668–1670 |
| 5 | Thomas Delavall | 1671 |
| 6 | Matthias Nicolls | 1672 |
| 7 | John Lawrence | 1673 |
| 8 | William Dervall | 1675 |
| 9 | Nicholas de Meyer | 1676 |
| 10 | S. van Cortlandt | 1677 |
| 11 | Thomas Delavall | 1678 |
| 12 | Francis Rombouts | 1679 |
| 13 | William Dyre | 1680–1681 |
| 14 | Cornelius Steenwyck | 1682–1683 |
| 15 | Gabriel Minville | 1684 |
| 16 | Nicholas Bayard | 1685 |
| 17 | S. van Cortlandt | 1686–1687 |
| 18 | Peter Delanoy | 1689–1690 |
| 19 | John Lawrence | 1691 |
| 20 | Abraham De Peyster | 1692–1695 |
| 21 | William Merritt | 1695–1698 |
| 22 | Johannes De Peyster | 1698–1699 |
| 23 | David Provost | 1699–1700 |
| 24 | Isaac de Reimer | 1700–1701 |
| 25 | Thomas Noell | 1701–1702 |
| 26 | Philip French | 1702–1703 |
| 27 | William Peartree | 1703–1707 |
| 28 | Ebenezer Wilson | 1707–1710 |
| 29 | Jacobus van Cortlandt | 1710–1711 |
| 30 | Caleb Heathcote | 1711–1714 |
| 31 | John Johnson | 1714–1719 |
| 32 | Jacobus van Cortlandt | 1719–1720 |
| 33 | Robert Walters | 1720–1725 |
| 34 | Johannes Jansen | 1725–1726 |
| 35 | Robert Lurting | 1726–1735 |
| 36 | Paul Richard | 1735–1739 |
| 37 | John Cruger, Sr., | 1739–1744 |
| 38 | Stephen Bayard | 1744–1747 |
| 39 | Edward Holland | 1747–1757 |
| 40 | John Cruger, Jr | 1757–1766 |
| 41 | Whitehead Hicks | 1766–1776 |
| 42 | David Matthews, Tory | 1776–1784 |
| 43 | James Duane | 1784–1789 |
| 44 | Richard Varick | 1789–1801 |
| 45 | Edward Livingston | 1801–1803 |
| 46 | De Witt Clinton | 1803–1807 |
| 47 | Marinus Willett | 1807–1808 |
| 48 | De Witt Clinton | 1808–1810 |
| 49 | Jacob Radcliff | 1810–1811 |
| 50 | De Witt Clinton | 1811–1815 |
| 51 | John Ferguson | 1815 |
| 52 | Jacob Radcliff | 1815–1818 |
| 53 | Cadwallader D. Colden | 1818–1821 |
| 54 | Stephen Allen | 1821–1824 |
| 55 | William Paulding | 1825–1826 |
| 56 | Philip Hone | 1826–1827 |
| 57 | William Paulding | 1827–1829 |
| 58 | Walter Bowne | 1829–1833 |
| 59 | Gideon Lee | 1833–1834 |
| 60 | Cornelius W. Lawrence | 1834–1837 |
| 61 | Aaron Clark | 1837–1839 |
| 62 | Isaac L. Varian | 1839–1841 |
| 63 | Robert H. Morris | 1841–1844 |
| 64 | James Harper | 1844–1845 |
| 65 | Wm. F. Havemeyer | 1845–1846 |
| 66 | Andrew H. Mickle | 1846–1847 |
| 67 | William V. Brady | 1847–1848 |
| 68 | Wm. F. Havemeyer | 1848–1849 |
| 69 | Caleb S. Woodhull | 1849–1851 |
| 70 | Ambrose C. Kingsland | 1851–1853 |
| 71 | Jacob A. Westervelt | 1853–1855 |
| 72 | Fernando Wood | 1855–1858 |
| 73 | Daniel F. Tiemann | 1858–1860 |
| 74 | Fernando Wood | 1860–1862 |
| 75 | George Opdyke | 1862–1864 |
| 76 | C. Godfrey Gunther | 1864–1866 |
| 77 | John T. Hoffman | 1866–1868 |
| 78 | T. Coman (Act'g Mayor) | 1868 |
| 79 | A. Oakey Hall | 1869–1872 |
| 80 | Wm. F Havemeyer | 1873–1874 |
| 81 | S. B. H. Vance (Acting) | 1874 |
| 82 | William H. Wickham | 1875–1876 |
| 83 | Smith Ely | 1877–1878 |
| 84 | Edward Cooper | 1879–1880 |
| 85 | William R. Grace | 1881–1882 |
| 86 | Franklin Edson | 1883–1884 |
| 87 | William R. Grace | 1885–1886 |
| 88 | Abram S. Hewitt | 1887–1888 |
| 89 | Hugh J. Grant | 1889–1892 |
| 90 | Thomas F. Gilroy | 1893–1894 |
| 91 | William L. Strong | 1895–1897 |
| 92 | Robert A. Van Wyck | 1898–1901 |
| 93 | Seth Low | 1902–1903 |
| 94 | George B. McClellan | 1904–1909 |
| 95 | William J. Gaynor* | 1910–1913 |
| 96 | Ardolph L. Kline† | 1913 |
| 97 | John Purroy Mitchel | 1914–1917 |
| 98 | John F. Hylan | 1918– |

## POST OFFICES IN NEW YORK CITY.

The **New York General Post Office**, with jurisdiction over Manhattan and the Bronx, covers the two city blocks, 31st Street to 33rd Street, Eighth Avenue to Ninth Avenue. The main entrance is on Eighth Avenue. *Postmaster*—Edward M. Morgan. *Assistant Postmaster*—John J. Kieley. *Secretary to the Postmaster*—A. H. Harbinson. In this building are located the Postal Inspectors, Railway Mail Service, and all the general offices.

The old General Post Office, now called the City Hall Station, covers the triangular block bounded by Broadway, Park Row and Mail Street, abutting City Hall Park.

The Grand Central Station, Lexington Avenue and 45th Street, handles the mail over the N. Y. Central and New Haven Railroads, in addition to local business in that district.

The Foreign Station, at West and Morton Streets, handles the ocean mails.

The only other large general station is on Varick St., between Beach and Laight Streets.

**Branch Offices**—Pelham Branch, Pelham, N. Y.; Pelham Manor Branch, Pelham Manor, N. Y.

The **Brooklyn General Post Office** covers the block bounded by Adams and Washington, Tillary and Johnson Streets. *Postmaster*—Walter C. Burton. *Assistant Postmaster*—Peter J. Cleary.

There were, as of Nov. 1, 1922, in Manhattan and the Bronx, 3,856 letter carriers. The New York Post Office does a business of approximately $54,000,000 a year.

### MAIL DISTANCES BETWEEN FOREIGN CITIES AND NEW YORK.

| By Postal Route to— | Statute Miles. | Days. |
|---|---|---|
| Alexandria, Egypt | 6,135 | 16 |
| Amsterdam, Holland | 4,043 | 11 |
| An werp, Belgium | 4,015 | 10 |
| Athens, Greece | 5,432 | 18 |
| Bahia, Brazil, *via* Rio de Janeiro | 4,709 | 17 |
| Bangkok, Siam, *via* England | 14,039 | 47 |
| Batavia, Java, *via* Pacific | 11,991 | 35 |
| Berlin, Germany | 4,597 | 12 |
| Bombay, India | 9,434 | 25 |
| Bremen, Germany | 4,294 | 11 |
| Buenos Ayres, Argentina | 6,914 | 19 |
| Calcutta, India | 11,324 | 28 |
| Callao, Peru (*direct*) | 3,873 | 13 |
| Cape Town, So. Africa, *via* London | 11,033 | 27 |
| Constantinople, Turkey | 5,809 | 22 |
| Florence, Italy | 4,696 | 13 |
| Glasgow, Scotland | 3,656 | 10 |
| Greytown, Nicaragua, *via* New Orl's | 2,816 | 11 |
| Guayaquil, Ecuador, *via* Panama | 3,236 | 18 |
| Halifax, Nova Scotia | 686 | 2 |
| Hamburg Germany | 4,317 | 11 |
| Havana, Cuba, *via* Key West | 1,560 | 3 |
| Hongkong, China, *via* San Fran'co | 10,453 | 23 |
| Honolulu, Hawaii, *via* San Franc'co | 5,599 | 12 |
| Liverpool, England | 3,707 | 10 |
| London, England | 3,964 | 9 |
| Manila, Philippine Is., *via* San Fran | 11,206 | 30 |
| Melbourne, Australia, *via* San Fran | 11,253 | 31 |
| Mexico City, Mexico, (*railroad*) | 3,700 | 6 |
| Panama, Panama | 2,323 | 7 |
| Paris France | 3,946 | 10 |
| Rio de Janeiro, Brazil | 5,493 | 14 |
| Rome, Italy | 4,854 | 14 |
| Rotterdam, Holland | 4,016 | 10 |
| San Juan, Porto Rico | 1,611 | 5 |
| Shanghai, China, *via* San Francisco | 9,530 | 23 |
| Stockholm, Sweden | 5,405 | 13 |
| Valparaiso, Chile, (*direct*) | 5,335 | 21 |
| Vienna, Austria | 4,795 | 14 |
| Yokohama, Japan, *via* San Fran'co | 8,717 | 18 |

## TRANSIT TIME OF LETTER MAILS FROM NEW YORK CITY.

(Official Post Office Schedule; subject to slight changes for the short runs. About 1½ hours should be allowed for handling and conveying the mails from the main post offices to the railroad stations.)

| Destination. | H'rs in Tr'nsit R. R. Time. |
|---|---|
| **ALABAMA.** | |
| Birmingham | 31 |
| Mobile | 36 |
| Montgomery | 30 |
| **ARIZONA.** | |
| Ashfork | 73 |
| Flagstaff | 71 |
| Phoenix | 83 |
| Pre cott | 78 |
| Tucson | 76 |
| **ARKANSAS.** | |
| Fort Smith | 35 |
| Hot Springs | 41 |
| Little Rock | 36 |
| Pine Bluff | 42 |
| Texarkana | 39 |
| **CALIFORNIA.** | |
| Los Angeles | 87 |
| Oakland | 87 |
| Pasadena | 90 |
| Sacramento | 84 |
| San Diego | 93 |
| San Francisco | 88 |
| San Jose | 91 |
| **COLORADO.** | |
| Colorado Springs | 58 |
| Denver | 58 |
| Leadville | 69 |
| Pueblo | 62 |
| **CONNECTICUT.** | |
| Hartford | 4 |
| New Haven | 2 |
| New London | 3 |
| Waterbury | 3 |
| Willimantic | 6 |
| **DELAWARE.** | |
| Dover | 5 |
| Wilmington | 3 |
| **DIST. OF COL.** | |
| Washington | 6 |
| **FLORIDA.** | |
| Jacksonville | 30 |
| Key West | 51 |
| M ami | 45 |
| Palm Beach | 42 |
| Pensacola | 39 |
| Tampa | 41 |
| **GEORGIA.** | |
| Atlanta | 25 |
| Augusta | 30 |
| Brunsw ck | 29 |
| Macon | 28 |
| Savannah | 26 |
| **IDAHO.** | |
| Boise | 71 |
| Pocatello | 65 |
| **ILLINOIS.** | |
| Bloomington | 28 |
| Cairo | 26 |
| Chicago | 21 |
| Danville | 23 |
| East St. Louis | 25 |
| Evanston | 26 |
| Peoria | 26 |
| Rockford | 26 |
| Rock Island | 29 |
| Springfield | 28 |
| **INDIANA.** | |
| Elkhart | 18 |
| Evansville | 25 |
| Fort Wayne | 18 |
| Indianapo is | 19 |
| Lafayette | 22 |
| New Albany | 24 |
| Sou h Bend | 19 |
| Terre Haute | 20 |
| Vincennes | 25 |
| **IOWA.** | |
| Burlington | 29 |
| Cedar Rapids | 29 |
| Council Bluffs | 36 |
| Davenport | 27 |
| **IOWA—*Cont.*** | |
| Des Moines | 33 |
| Dubuque | 26 |
| Sioux City | 36 |
| **KANSAS.** | |
| Atchison | 41 |
| Fort Scott | 37 |
| Leavenworth | 39 |
| Topeka | 42 |
| Wichita | 46 |
| **KENTUCKY.** | |
| Bowling Green | 26 |
| Covington | 18 |
| Frankfort | 24 |
| Lexington | 25 |
| Louisville | 22 |
| Paducah | 26 |
| **LOUISIANA.** | |
| Baton Rouge | 48 |
| New Orleans | 41 |
| Shreveport | 43 |
| **MAINE.** | |
| Augusta | 14 |
| Bangor | 17 |
| Bar Harbor | 19 |
| Eastport | 25 |
| Lewiston | 13 |
| Portland | 12 |
| **MARYLAND.** | |
| Annapolis | 9 |
| Baltimore | 5 |
| Cumberland | 11 |
| Hagerstown | 7 |
| **MASSACHUSETTS.** | |
| Boston | 6 |
| Fall River | 7 |
| Lawrence | 10 |
| Lowell | 8 |
| Lynn | 13 |
| New Bedford | 8 |
| Pittsfield | 8 |
| Somerville | 8 |
| Springfield | 4 |
| Taunton | 8 |
| Worcester | 5 |
| **MICHIGAN.** | |
| Battle Creek | 17 |
| Bay City | 23 |
| Detroit | 15 |
| Grand Rapids | 20 |
| Jackson | 16 |
| Kalamazoo | 18 |
| Lansing | 19 |
| Saginaw | 22 |
| Sault Ste. Marie | 38 |
| **MINNESOTA.** | |
| Duluth | 38 |
| Minneapolis | 35 |
| St. Paul | 34 |
| Winona | 33 |
| **MISSISSIPPI.** | |
| Hattiesburg | 41 |
| Jackson | 41 |
| Meridian | 37 |
| Natchez | 46 |
| Vicksburg | 43 |
| **MISSOURI.** | |
| Jefferson City | 33 |
| Kansas City | 38 |
| St. Joseph | 36 |
| St. Louis | 25 |
| Sedalia | 34 |
| **MONTANA.** | |
| Billings | 64 |
| Butte | 72 |
| Helena | 72 |
| **NEBRASKA.** | |
| Grand Island | 46 |
| Lincoln | 38 |
| Omaha | 36 |
| **NEVADA.** | |
| Carson City | 87 |
| Reno | 78 |
| **NEW HAMPSHIRE.** | |
| Concord | 12 |
| Keene | 14 |
| Manchester | 11 |
| Nashua | 12 |
| Portsmouth | 12 |
| **NEW JERSEY.** | |
| Atlantic City | 4 |
| Cape May | 8 |
| Paterson | 1 |
| Trenton | 2 |
| **NEW MEXICO.** | |
| Albuquerque | 62 |
| Las Vegas | 57 |
| Santa Fe | 60 |
| **NEW YORK.** | |
| Albany | 3 |
| Auburn | 10 |
| Binghamton | 6 |
| Buffalo | 10 |
| Elmira | 8 |
| Geneva | 10 |
| Ithaca | 10 |
| Jamestown | 12 |
| Plattsburg | 10 |
| Port Jervis | 3 |
| Rochester | 9 |
| Rome | 10 |
| Saratoga Springs | 6 |
| Schenectady | 5 |
| Syracuse | 7 |
| Troy | 5 |
| Utica | 7 |
| Watertown | 11 |
| **NORTH CAROLINA.** | |
| Asheville | 24 |
| Charlotte | 19 |
| Raleigh | 18 |
| Wilmington | 19 |
| **NORTH DAKOTA.** | |
| Bismarck | 52 |
| Fargo | 42 |
| Gra d Fo ks | 46 |
| **OHIO.** | |
| Akron | 15 |
| Canton | 13 |
| Cincinnati | 18 |
| Cleveland | 14 |
| Columbus | 14 |
| Dayton | 16 |
| Mansfield | 14 |
| Sandusky | 17 |
| Springfield | 16 |
| Steubenville | 12 |
| Toledo | 18 |
| Youngstown | 13 |
| Zanesville | 17 |
| **OKLAHOMA.** | |
| Guthrie | 49 |
| Oklahoma City | 48 |
| **OREGON.** | |
| Astoria | 98 |
| Portland | 88 |
| Salem | 92 |
| **PENNSYLVANIA.** | |
| Allentown | 3 |
| Altoona | 8 |
| Chambersburg | 9 |
| Chester | 4 |
| Easton | 2 |
| Erie | 12 |
| Harrisburg | 5 |
| Johnstown | 12 |
| Lancaster | 6 |
| McKeesport | 14 |
| Philadelphia | 2 |
| Pittsburgh | 11 |
| Reading | 4 |
| Sharon | 16 |
| Scranton | 4 |
| Wilkes-Barre | 5 |
| Williamsport | 8 |
| York | 6 |
| **RHODE ISLAND.** | |
| Newport | 8 |
| Pawtucket | 6 |
| Providence | 5 |
| Woonsocket | 6 |
| **SOUTH CAROLINA.** | |
| Charleston | 22 |
| Columbia | 22 |
| Greenville | 22 |
| Spartanburg | 21 |
| **SOUTH DAKOTA.** | |
| Aberdeen | 48 |
| Deadwood | 63 |
| Sioux Falls | 41 |
| Yankton | 42 |
| **TENNESSEE.** | |
| Bristol | 19 |
| Chattanooga | 27 |
| Knoxville | 23 |
| Memphis | 38 |
| Nashville | 31 |
| **TEXAS.** | |
| Austin | 51 |
| Beaumont | 63 |
| Dallas | 45 |
| El Paso | 68 |
| Fort Worth | 46 |
| Galveston | 60 |
| Houston | 50 |
| Laredo | 67 |
| Longview | 42 |
| San Antonio | 54 |
| **UTAH.** | |
| Ogden | 65 |
| Salt Lake City | 67 |
| **VERMONT.** | |
| Brattleboro | 10 |
| Burlington | 10 |
| Montpelier | 13 |
| Rutland | 7 |
| **VIRGINIA.** | |
| Cape Charles | 10 |
| Charlottesville | 9 |
| Danville | 14 |
| Fortress Monroe | 12 |
| Fredericksburg | 7 |
| Lynchburg | 12 |
| Newport News | 13 |
| Norfolk | 12 |
| Petersburg | 10 |
| Richmond | 9 |
| Roanoke | 14 |
| Staunton | 12 |
| **WASHINGTON** | |
| Olympia | 95 |
| Seattle | 82 |
| Spokane | 71 |
| Tacoma | 89 |
| **WEST VIRGINIA.** | |
| Bluefield | 20 |
| Charleston | 20 |
| Clarksburg | 15 |
| Grafton | 14 |
| Harpers Ferry | 8 |
| Huntington | 22 |
| Martinsburg | 9 |
| Parkersburg | 18 |
| Wheeling | 16 |
| **WISCONSIN** | |
| Green Bay | 31 |
| La Crosse | 31 |
| Madison | 29 |
| Milwaukee | 25 |
| Oshkosh | 29 |
| Racine | 25 |
| Superior | 39 |
| **WYOMING.** | |
| Chey nne | 48 |
| Green River | 57 |
| Laramie | 51 |
| Rock Springs | 56 |
| **CANADA.** | |
| Halifax | 34 |
| Hamilton | 14 |
| Kingston | 17 |
| London | 18 |
| Montreal | 12 |
| Ottawa | 16 |
| Quebec | 20 |
| St. John | 24 |
| Toronto | 17 |
| Vancouver | 107 |
| Winnipeg | 50 |

## 'L," SUBWAY, STATEN ISLAND AND BUS TRAFFIC, NEW YORK CITY.

| Year Ended June 30. | Interborough "L" Lines. | Interborough Subway Lines. | B.R.T., "L" and Subway Lines. | Hudson Tubes. | Staten Island Steam Roads. | Fifth Avenue Coach Co. |
|---|---|---|---|---|---|---|
| 1890..... | 189,974,848 | ..... | 47,931,181 | ..... | 6,539,318 | ..... |
| 1900..... | 184,164,110 | ..... | 58,400,582 | ..... | 4,439,506 | ..... |
| 1901..... | 190,045,741 | ..... | 63,300,247 | ..... | 4,212,303 | 1,979,603 |
| 1902..... | 215,259,345 | ..... | 69,330,457 | ..... | 4,238,630 | 1,749,623 |
| 1903..... | 246,587,022 | ..... | 80,337,132 | ..... | 4,302,858 | 1,742,773 |
| 1904..... | 286,634,195 | ..... | 97,009,705 | ..... | 4,586,182 | 1,386,943 |
| 1905..... | 266,381,930 | 72,722,890 | 109,140,911 | ..... | 4,724,041 | 1,337,848 |
| 1906..... | 257,796,754 | 137,919,632 | 125,221,831 | ..... | 5,161,134 | 1,315,330 |
| 1907..... | 282,924,273 | 166,363,611 | 145,943,131 | ..... | 5,944,696 | 1 214.598 |
| 1908..... | 282,845,864 | 200,439,776 | 147,290,017 | 4,363,722 | 5,649,116 | 1,753,782 |
| 1909..... | 276,250,196 | 238,430,146 | 148,161,045 | 14,192,352 | 5,237,373 | 3,609.304 |
| 1910..... | 293,826,280 | 268,962,115 | 162,493,801 | 42,839,979 | 6,014,928 | 6,305,175 |
| 1911..... | 301,449,292 | 276,704,796 | 167,371,328 | 52,756,434 | 6,218,316 | 5,997,372 |
| 1912..... | 304,270,841 | 302,973,856 | 172,195,229 | 57,934,226 | 6,461,635 | 6,339,072 |
| 1913..... | 306,845,006 | 327,471,510 | 175,246,512 | 58,870,069 | 6,636,336 | 8,884,534 |
| 1914..... | 311,473,568 | 340,413,103 | 185,060,735 | 60,051,890 | 6,979,126 | 11,276,430 |
| 1915..... | 301,792,517 | 345,585,749 | 182 535,897 | 58,966,414 | 6,943,302 | 14,050.471 |
| 1916..... | 312,246,796 | 371,505,318 | 207,098,269 | 63,293,534 | 7,563,066 | 16,223.042 |
| 1917..... | 349 380,093 | 414,193,992 | 226,515,512 | 68,556,999 | 8,378.779 | 22,080,764 |
| 1918..... | 352,660,660 | 418,337,666 | 258,167 313 | 76,548 998 | 9,269 902 | 26,113,576 |
| 1919..... | 348,188,600 | 461,147,058 | 309,563.746 | 86,050,815 | 9,918,850 | 36 488,447 |
| 1920..... | 369 034,477 | 586,098,633 | 378 962,447 | 92,314,167 | 10 805,362 | 42,552,709 |
| 1921..... | 37[illegible],293,051 | 639 385,780 | 404 970,640 | 95,607,644 | 13,011,958 | 51,091,365 |
| 1922..... | 348,517,216 | 644,975,474 | 444,747 228 | 99,104,889 | 11,181,785 | 52,840,135 |

In 1860 the Staten Island steam roads carried 63,641 passengers; in 1870, they carried 336,706; in 1880 they carried 390,151.

In 1880 the "L" lines in New York City carried 60,831,757 passengers.

## STREET SURFACE RAILWAY TRAFFIC, NEW YORK CITY.

(Official figures showing number of paying passengers.)

| Year (Fiscal). | Manhattan. | Bronx. | Brooklyn | Queens (Excl. B. R. T.) | Richmond. | Total. |
|---|---|---|---|---|---|---|
| 1860..... | 38,455,242 | ..... | 12,374,931 | ..... | ..... | 50,830,173 |
| 1870..... | 114,101,539 | 1,038,014 | 37,203,281 | ..... | 121,086 | 152 463,920 |
| 1880..... | 148,615,107 | 1,775,485 | 77,928,395 | 1,052,380 | 213.905 | 229,585,272 |
| 1890..... | 215,296,648 | 3,394,726 | 109,288,647 | 2,976,185 | 287,325 | 331,243,531 |
| 1900..... | 360,002,672 | 21,364,690 | 204,106,397 | 11,441,751 | 6,872,856 | 603,788,366 |
| 1901..... | 373,569,677 | 26,992,990 | 209,119,668 | 11,564,062 | 6,752,416 | 627,998.813 |
| 1902..... | 388,947,169 | 28,020,185 | 216,594,408 | 13,719,387 | 7,119,013 | 654,400.162 |
| 1903..... | 396,570,432 | 30,714,781 | 223,433,771 | 15,689,210 | 7,435,135 | 673,843,329 |
| 1904..... | 389,928,464 | 34,763,809 | 233,184,407 | 16,701,653 | 7,762,677 | 682,341.010 |
| 1905..... | 374,554,675 | 37,124,805 | 242,780,611 | 20,533,487 | 7,743,987 | 682,736 965 |
| 1906..... | 391,708,063 | 39,893,116 | 265,204,811 | 25,151,054 | 8,945,914 | 730,902,958 |
| 1907..... | 377,017,193 | 42,186,533 | 282,460,253 | 28,514 743 | 9,971,652 | 720 150,373 |
| 1908..... | 363,292,406 | 44 237,229 | 274,766,791 | 29,797,750 | 10 166,852 | 723,061,028 |
| 1909..... | 357,760,430 | 50,676,779 | 275,038,827 | 30,545,776 | 11,367,091 | 725,383,903 |
| 1910..... | 371,165,696 | 56,524,261 | 289,308,085 | 34,430,074 | 11,712,623 | 763,140,739 |
| 1911..... | 382 046,845 | 62.777,966 | 305,977,350 | 42,515,629 | 12,301,757 | 805,619.547 |
| 1912..... | 395,238,026 | 67,837,245 | 322,321 981 | 45,182,732 | 12,959,799 | 843,539,783 |
| 1913..... | 419,722,253 | 74,702,309 | 345,987,401 | 47,463,382 | 13,568,066 | 901,443,411 |
| 1914..... | 420,662,533 | 79,652,133 | 351,905,284 | 49,973,696 | 14,011,414 | 916,205,060 |
| 1915..... | 415,551,116 | 81,502,803 | 354,700,113 | 52,686,108 | 14,312,009 | 918,752,149 |
| 1916..... | 427,373,847 | 84,535,737 | 363,630,177 | 54,167,403 | 14,884,534 | 944,591,698 |
| 1917..... | 349,788 114 | 71,153,030 | 373,079,651 | 50,906,681 | 15,238,157 | 860,165,633 |
| 1918..... | 371,136,389 | 79,917,071 | 360.207,555 | 43,448,206 | 15,287,922 | 869,997,143 |
| 1919..... | 370,084,711 | 80,806,261 | 365,963,677 | 46,723,575 | 15,958,198 | 879,536,422 |
| 1920..... | 349,772,761 | 94,141,991 | 432,936,227 | 49 562,574 | 15,007,235 | 941,420,788 |
| 1921..... | 384,128,024 | 107,675,507 | 418,106,603 | 51,944,034 | 15,797,894 | 977,652,062 |
| 1922..... | 388,357,767 | 114,679,520 | 472,538,068 | 58,826,451 | 18,567,115 | 1,052,968,921 |

## FIRST STREET RAILWAY IN N. Y. CITY.

The first passenger street track in the world was laid in New York City—the Fourth Ave. (Harlem) street railroad, chartered in 1831. It was built on the Bowery and was opened for travel from Prince St. to the present site of Union Square in November, 1832.

The vehicles were drawn by two horses, and were after the style of the stage coach of that time. On the day of the opening, the Mayor and the City Councilmen and other invited guests made the first trip over the line.

A large number of people gathered to see the new cars make their start and even the most sceptical of the number were obliged to confess that the new horse cars were a success and designed to prove a great convenience to the public.

The road was extended to Murray Hill in 1833; and reached the Harlem River in 1839. Fares were paid in silver sixpences of the old Spanish currency then in circulation. A rapid extension of the system followed as towns in different parts of the country increased in size.

## ACCIDENTS AND DELAYS ON N. Y. CITY TRANSPORTATION LINES.

| | 1921. | 1920. | 1919. | | 1921. | 1920. | 1919. |
|---|---|---|---|---|---|---|---|
| Car Collisions..... | 999 | 1,291 | 1,355 | Electric Shocks..... | 239 | 304 | 321 |
| Persons Struck..... | 2,185 | 2,069 | 2,487 | Derailments..... | 4,362 | 3,638 | 2,982 |
| Vehicles Struck..... | 19,445 | 18,351 | 16,113 | Other Accidents..... | 23,999 | 22,508 | 23,657 |
| Boarding..... | 7,365 | 5,655 | 5,475 | | | | |
| Alighting..... | 6,961 | 5,307 | 5,877 | Total..... | 65,555 | 59.123 | 58.267 |

## SUBWAY TICKETS SOLD AT GRAND CENTRAL AND TIMES SQUARE STATIONS.

| Year. | Gr. Central | Times Sq. | Year. | Gr. Central | Times Sq. | Year. | Gr. Central | Times Sq. |
|---|---|---|---|---|---|---|---|---|
| 1905..... | 5,121,966 | 3,641,345 | 1911..... | 13,799,160 | 11,663,025 | 1917..... | 26,539,221 | 17,272,086 |
| 1906..... | 8,870,359 | 6,300,138 | 1912..... | 14,995,523 | 12,709,311 | 1918..... | 28,100,213 | 16,436,775 |
| 1907..... | 10,391,676 | 7,784,967 | 1913..... | 16,939,238 | 13,211,957 | 1919..... | 23,581,945 | 20,579,059 |
| 1908..... | 11,307,623 | 9,118,318 | 1914..... | 19,551,405 | 13,664,628 | 1920..... | 28,030,334 | 26,631,199 |
| 1909..... | 12,486,515 | 10,116,897 | 1915..... | 20,494,333 | 14,307,694 | 1921..... | 28,970,900 | 29,568,260 |
| 1910..... | 14,006,397 | 11,275,435 | 1916..... | 23,168,634 | 15,174,578 | | | |

## SUBWAY AND "L" LINES IN NEW YORK CITY.

The first elevated railway in N. Y. City opened April 30, 1878; the first subway opened Oct. 27, 1904.

The New York State Legislature in 1921 (act signed May 12) authorized the construction of a subway between Brooklyn and Staten Island, to be used for both freight and passengers.

There are three subway systems and two elevated railroad systems in the City of New York devoted to local passenger rapid transit. There is also a fourth system, that of the Penusylvania Railroad, which, by means of twin tubes extendng under Manhattan at 33d Street, connects the Pennsylvania Terminal at Seventh Avenue with Long Island City, enabling through all-rail passenger and freight traffic between New England and the South and West. This route is used by the New Haven Railroad trains between Boston and Washington. Of the three local subway systems in the city, only one, that of the Hudson and Manhattan Railway Company, is altogether under ground. The others run on elevated structures in the outlying parts.

### HUDSON TUBES.

There are two sets of these tubes under the Hudson River, one connecting Montgomery Street, Jersey City, with the Hudson Terminal Station at Fulton-Cortlandt-Church Streets, Manhattan; the other connecting the Hudson tubes in Jersey City-Hoboken with Christopher Street, Manhattan. The main trunk-line tubes of the system run from Montgomery Street, Jersey City, to Park Place, Newark, emerging to the surface on Jersey City Heights, and connecting on the meadows with the Pennsylvania Railroad, at a surface station called Manhattan Transfer. In New Jersey, one set of tubes parallels the Hudson River, linking up the Pennsylvania, Erie, and Lackawanna railroad passenger stations, so that travelers may go to or from their stations, to or from downtown or uptown Manhattan. In Manhattan, the Hudson tubes connect Christopher Street with Broadway and 33d Street by way of Sixth Avenue.

### INTERBOROUGH SUBWAYS.

There are two of these systems, the east side and the west side, with cross connections in Manhattan and also in Brooklyn, so that for one five-cent fare passengers may go to or from the eastern part of Brooklyn to the northern parts of Manhattan and the Bronx.

The west side system starts on an elevated structure at Livonia and New Lots Avenues, East New York (Brooklyn), goes on Livonia Avenue to Saratoga Avenue, then turns into the Eastern Parkway, where it becomes a subway. It runs through the Eastern Parkway to Flatbush Avenue, at Eighth Avenue, thence down Flatbush Avenue to Fulton Street, through Fulton Street to Clark Street; through Clark Street and under the East River to William Street, Manhattan; through William Street to Fulton Street; thence west to West Broadway; to Hudson Street; to Seventh Avenue; to Broadway; to St. Nicholas Avenue; to Amsterdam Avenue; to Broadway, to 242d Street, at Van Cortlandt Park. It emerges from Fort George Hill near Dyckman Street, and goes to 242d Street on an elevated structure.

Another branch of the west side system starts at Flatbush and Nostrand Avenues, Brooklyn, and runs in a subway through Nostrand Avenue to the Eastern Parkway, where it joins the other branch. Through trains run in both branches over the entire west side system. Transfers to the east side subway system are made at Nevins Street or at Atlantic Avenue, Brooklyn, and at 96th Street and Broadway, Manhattan.

At 96th Street and Broadway, the west side system has a branch (part of the original Interborough subway) that extends under the northwest corner of Central Park to Lenox Avenue, to 145th Street, thence under the Harlem River to 149th Street, where it joins the east side trunk line on Westchester Avenue and the Southern Boulevard. Just south of Bronx Park, an extension, on an elevated structure, branches off and goes along White Plains Road, to 241st Street, Mount Vernon. This extension also is used by Third Avenue "L" trains, north of Gun Hill Road.

The west side-east side systems have an elevated extension on Jerome Avenue extending north from Mott Avenue and 149th Street, up through Fordham and Bedford Park, to a point between Van Cortlandt Park and Woodlawn Cemetery, ending at about 242d Street. This extension is also used by Sixth Avenue and Ninth Avenue "L" trains, north of 162d Street.

The east side system starts at Flatbush and Atlantic Avenues (Long Island R. R. Terminal), Brooklyn, goes on Flatbush Avenue to Fulton Street; to Joraiemon Street; thence under the East River to Battery Park, Manhattan; thence under Broadway, to Park Row; to the Brooklyn Bridge; to Lafayette Street, to Fourth Avenue; to 42d Street (Grand Central Station); to Lexington Avenue; to 130th Street; thence under the Harlem River to Mott Avenue; to 149th Street; where it emerges onto an elevated structure; to Westchester Avenue; to the Southern Boulevard; to the southern part of Bronx Park (Bronx Zoo).

An extension of the east side system starts at Mott Avenue and 138th Street, and goes through 138th Street to the Southern Boulevard; to Whitlock Avenue; to Westchester Avenue, and through Old Westchester Village, to the Eastern Boulevard, at the west side of Pelham Bay Park.

The Queensboro Branch of the Interborough subway system starts at 42d Street and Lexington Avenue, and uses the Belmont tubes under the East River at 42d Street, to Long Island City, there emerging onto an elevated structure and going to the Queensboro Bridge Plaza. There it splits into two elevated branches, one going through Ravenswood, on Second Avenue, to Ditmars Avenue, Astoria; the other going on Queens Boulevard, Greenpoint Avenue and Roosevelt Avenue, to Alburtis Avenue, Corona. Both branches are used by the Second Avenue, Manhattan, "L" trains between Queensboro Bridge Plaza and the terminals of the branches.

All of the Interboro's subway lines are city-owned.

### BROOKLYN RAPID TRANSIT COMPANY'S SUBWAYS.

There are three B. R. T. subways—the Fourth Avenue line, the Broadway line, and the Queensboro line.

The Transit Commission, in October, 1922, announced plans for the tunnel under the Narrows, from the extension of the Fourth Ave. subway, Fort Hamilton, Brooklyn, to Rosebank, Staten Island.

The Fourth Avenue route starts at Fourth Avenue and 86th Street, South Brooklyn, and runs along Fourth Avenue to Flatbush Avenue, to the Manhattan Bridge, re-entering a subway at the Manhattan approach to the bridge, continuing west by way of Canal Street to Broadway, where it joins the Broadway tubes of the B. R. T. Fourth Avenue traffic usually goes by way of the Montague Street tube and Broadway.

The Fourth Avenue subway is to be extended to 95th St., Fort Hamliton.

The Broadway subway line starts at Flatbush Avenue and Malbone Street (Empire Boulevard) at the Wilinck entrance to Prospect Park; goes along Flatbush Avenue to Fourth and Atlantic Avenues, where it connects with the Fourth Avenue subway and also with the Interborough subway; thence on Flatbush Avenue to Fulton Street, to Borough Hall, to Montague Street; thence under the East River to Whitehall Street, Manhattan; thence under Trinity Place, Church Street, Broadway and Seventh Avenue; thence under 59th and 60th Streets, and by tunnel under the East River to a connection with the Queensboro lines. The Fourth Avenue route connects with the Broadway route at Flatbush and DeKalb Avenues, Brooklyn, and also at Broadway and Canal Street, Manhattan.

The Transit Commission, in October, 1922, announced plans for an extension of the Brooklyn Rapid Transit Subway System, from 59th St. and Seventh Avenue, Manhattan, up Central Park West, Seventh Avenue and St. Nicholas Avenue to Washington Heights, where it will connect with the proposed Eighth Avenue trunk line, and the existing Interborough subway at 168th Street and Broadway.

The Brighton Beach line of the B. R. T. connects with the B. R. T. subway at Malbone Street, and the B. R. T. surface and "L" Coney Island lines connect with the Fourth Avenue subway at 86th Street, so that there are through subway trains by both subways between Manhattan, Queens, Brooklyn, and the Coney Island district.

Owing to the many connecting and transfer points, the above grouping of Interborough and B. R. T. routes is arbitrary, intended for the reader's convenience, inasmuch as the trains are operated at times over other than the group routes indicated.

All of the B. R. T. subways are city-owned.

Under a contract between the city and the B. R. T., a 5-cent fare is assured by subway or "L" between Queens Plaza, Manhattan, or Brooklyn, and Coney Island. The B. R. T surface lines, by resolving themselves into their old corporate identities, are able to charge a 10-cent fare to Coney Island, and on several of their other surface routes they charge 10 cents for through rides.

The lines remaining to be completed in the Dual

System are, for the Interborough Company, the extension of the Queensboro subway from Lexington Avenue (Grand Central Terminal) to 41st Street and Eighth Avenue and, for the New York Municipal Corporation, the 14th Street-Eastern and the Nassau Street lines.

## "L" LINES—MANHATTAN AND BRONX.

There are four elevated roads in these two boroughs, all operated by the Interborough.

Second Avenue "L" starts at South Ferry, Battery Park, runs north to Pearl Street and New Bowery to the Bowery; to Division Street; to Allen Street; First Avenue to 23d Street; to Second Avenue; to 129th Street, where it merges with the Third Avenue "L."

Third Avenue "L" starts at Park Row (old Chatham Street) and the Brooklyn Bridge, and runs on Park Row to the Bowery, at Chatham Square, where it bends into the Bowery; to Third Avenue; to 129th Street, where it crosses the Harlem River, and continues north through Willis and Melrose Avenues, to Third Avenue, the Bronx; thence past Crotona and Bronx Parks to Williamsbridge, at White Plains and Gun Hill Roads. There it connects with the White Plains Road elevated Interborough subway extension to Mt. Vernon.

At 149th Street, the "L" connects with the Interborough subway elevated line that runs on Westchester Avenue, the Southern Boulevard, and White Plains Road to Mt. Vernon. The "L" trains use this extension along with the subway trains.

Ninth Avenue "L" starts at South Ferry, Battery Park, and runs north through the park to Greenwich Street; to West 14th Street and Ninth Avenue; on Ninth Avenue to 53d Street, where it merges with the Sixth Avenue "L," and the two roads jointly continue on Ninth (Columbus) Avenue, to 110th Street; to Eighth Avenue; to 155th Street, where the road crosses the Harlem River, bearing east, connecting with the Yonkers branch of the N. Y. Central R. R., at Sedgwick Avenue, and continuing east to Jerome Avenue, whence it uses the Jerome Avenue elevated extension of the Interborough subway that goes on up to Woodlawn Cemetery.

Sixth Avenue "L" starts at South Ferry, Battery Park, and runs north through the park to Church Street; to Park Place; to West Broadway; to West Third Street; to Sixth Avenue; to West 53d Street (where a shuttle train runs between 50th Street and 59th Street, on Sixth Avenue); to Ninth Avenue, where it merges with the Ninth Avenue "L."

## ELEVATED LINES IN BROOKLYN AND QUEENS.

The "L" roads in Brooklyn and Queens (except the Interborough's subway extensions) are operated by the Brooklyn Rapid Transit Company. They run trains over the Brooklyn and the Williamsburg Bridges across the East River. Thus these lines connect Manhattan with the Borough of Brooklyn and with the outlying districts, including Richmond Hill, Jamaica, Canarsie, Sheepshead Bay, Brighton Beach, and Coney Island. The East New York, Jamaica, Brownsville lines inter-connect at East New York, so that passengers may transfer via any bridge between Manhattan, Jamaica, Ridgewood, and Canarsie, and the intervening districts of Brooklyn.

### *TO CONEY ISLAND FOR FIVE CENTS.*

The only direct "L" line to Coney Island at the present time is the Culver Line operating via the Fifth Avenue line to 36th Street, and thence via a new structure, principally on Gravesend Avenue, to Coney Island.

Since the completion of the Brighton Line subway connection in 1920, no regular elevated service is operated over the Brighton route, a shuttle service only being maintained between Franklin Avenue and Fulton Street and Prospect Park. During the summer months express trains run from Fulton Street and Franklin Avenue to Brighton Beach.

The Myrtle Avenue "L" runs from the Brooklyn Bridge, and also via the Williamsburg Bridge, to Metropolitan Avenue, Ridgewood.

The Fulton Street "L" runs from the Brooklyn Bridge to East New York, and thence via Pitkin and Liberty Avenues to Lefferts Avenue, Richmond Hill.

The Lexington Avenue "L" runs from the Brooklyn Bridge to Jamaica, via Myrtle and Lexington Avenues and Broadway.

The Broadway "L" runs from Manhattan via the Williamsburg Bridge to East New York and Canarsie.

The Fifth Avenue "L" runs from the Brooklyn Bridge to Bay Ridge, at 65th Street. At 36th Street the line connects with and transfers to the Culver route.

### *SUMMARY OF RAPID TRANSIT DATA.*

There are over 600 miles of subway and "L" tracks in the city, of which 361 miles are Interborough lines, and 258 are B. R. T. lines. The Interborough subway roads total 222 miles; the Manhattan "L" system, 139 miles. The Interborough subway roads have cost over $300,000,000; the Brooklyn Rapid Transit subway roads over $193,000,000. The Interborough's share of the cost has been over $148,000,000, including $48.000,000 the company spent on the first East River tubes and the extension to Flatbush and Atlantic Avenues, Brooklyn. The city has put up the rest of the cost of the Interborough subways. Of the cost of the Brooklyn Rapid Transit subways the company has borne over $69,000,000; the city over $124,000,000.

Under the Dual System of rapid transit all of the lines operated by the Interborough and the Consolidated Railroads Co. (the latter a B. R. T. subsidiary), including the first subway and the elevated lines of the two systems are combined in two great operating units, covering four of the five boroughs. Each company has lines which operate through the so-called community centre of the city, namely, the section of Manhattan Island below 59th Street.

New York's original subway, operated by the Interborough, now denoted the First Subway, is an integral part of the Dual System. Under the operating conditions scheduled for the new lines, it lost its identity and was merged for operating purposes with other lines assigned under the dual agreements to the Interborough.

The Dual System was created when the city, through the Public Service Commission, on March 19, 1913, entered into an agreement (the dual contracts) with the Interborough and the Municipal Railway Corporation (the latter a B. R. T. subsidiary), providing for the construction and operation of new lines and extensions.

In October, 1922, the Transit Commission and Interborough security holders agreed, it was announced, on a financial reorganization, under which there are to be no dividends for 5 years; dividends never are to exceed 5 per cent. in a year; and the Manhattan "L" stock no longer gets a fixed dividend.

RESULTS OF OPERATION OF STREET RAILWAY COMPANIES, N. Y. CITY.
(Years ended June 30. 1922 figures are tentative.)

| Fiscal Year. | Operating Revenue. | Maintenance and Operation. | Taxes, Tolls, Etc. | Operating Income. | Net Corporate Income. |
|---|---|---|---|---|---|
| 1908 | $69,026,612 | $40,129,956 | $4,330,227 | $24,566,429 | $2,665,764 |
| 1909 | 72,432,715 | 41,606,428 | 4,982,677 | 25,843,609 | 6,388,037 |
| 1910 | 79,593,910 | 43,586,932 | 5,148,324 | 30,858,654 | 9,559,816 |
| 1911 | 83,751,415 | 45,993,964 | 5,495,881 | 32,261 570 | 10,171,074 |
| 1912 | 88 242,144 | 47,667,562 | 5,803,790 | 34,770,792 | 12,073,641 |
| 1913 | 92,141,605 | 48.675,647 | 6,095,520 | 37,370,438 | 12,229,271 |
| 1914 | 94,155 521 | 50,117,712 | 5,895,935 | 38,141,874 | 11,849,985 |
| 1915 | 93,644,428 | 50,324,095 | 5,811,290 | 37,509,043 | 11,501,157 |
| 1916 | 98,628,185 | 52,038,312 | 6,238,461 | 40,351,412 | 12,352,438 |
| 1917 | 100,185,796 | 55,960,722 | 7,185,113 | 37,039,961 | 9,457,886 |
| 1918 | 103,499,463 | 60,699,402 | 8,23? 851 | 34,567.210 | 5,266,496 |
| 1919 | 110,198,575 | 75,985,007 | 7,907,358 | 26,306,210 | *8,556,408* |
| 1920 | 127,880,161 | 96,059.603 | 7,353,757 | 24,466 801 | *10,725,522* |
| 1921 | 136,805,039 | 107,232.967 | 7,505,676 | 22,066,396 | *16,914,256* |
| 1922 | 141,229,757 | 104,844,922 | | 36,384,835 | *1,589,342* |

Operating income is the excess of revenue over expenses and taxes.
Net corporate income is the balance after interest, rents and other fixed charges.
Figures in italics in the above table show *deficit*.

VALUATIONS RECOMMENDED AND COMPANIES' FIGURES.

| | Net Valuation Recommended by Committee on Valuation. | Capital Stocks, Bonds, Etc. Outstanding (Exclud. Co. Holdings). | Companies' Book Value of Property. | Difference Between Book Value and Value Fixed by Commission. |
|---|---|---|---|---|
| Brooklyn Rapid Transit System— | | | | |
| Surface lines (inc. Brooklyn City Co.) | $58 511.759 | ..... | ..... | ..... |
| Elevated and subway lines | 96,096,918 | ..... | ..... | ..... |
| Total B. R. T. System | $154,608,677 | $232,175,074 | $247,991,278 | $93,382,601 |
| Interborough Rapid Transit System— | | | | |
| I. R. T. Co.—Contracts 1, 2 and 3 | $135,669,555 | ..... | ..... | ..... |
| I. R. T. Co—Elevated certificates | 38,551 501 | ..... | ..... | ..... |
| Total I. R. T. System | $174,221,056 | $235,250,400 | $206,045,378 | $31,824,322 |
| Manhattan Ry. Co. (orig. property) | $57,374,205 | $105,199,439 | $113,001,414 | $55,627 209 |
| N. Y. Railways System (inc. 8th, 9th and N. Y. & Harlem R. R. Co.) | 29,871,785 | 95,667,189 | 119,083,606 | 89,211,821 |
| Third Ave. Railway System | 33,967,430 | 68,599,961 | 74,702,231 | 40,734,801 |
| Second Ave. Railroad Co | 4,798,317 | 10,722,000 | 8,308,443 | 3,510,126 |
| Staten Island Companies | 4,215,713 | 3,855,516 | 5,702,670 | 1,486,957 |
| Queens Borough Companies | 6,125,764 | 12,974,786 | 15,857,758 | 9,731,994 |
| Miscellaneous Companies | 497,207 | 650,000 | 758,061 | 260,854 |
| Grand total, all companies | $465,680,154 | $765,094 365 | $791,450,839 | $325,770,685 |

The amount that the City of New York has invested in the subways is (Contracts 1, 2, 3 and 4) $293,493,239. Adding this to the recommended valuation of company property ($465,680,154) would give a total valuation of city and company property of $759,173,393.

## TUNNELS IN OPERATION IN AND ABOUT NEW YORK CITY.

PENNSYLVANIA RAILROAD SYSTEM—Tunnels under Hudson River extend from Pennsylvania Railroad Station, New York, to Weehawken, N. J. There is no station at Weehawken; the electric trains from the Pennsylvania Station run to Manhattan Transfer, near Newark, N. J., without a stop. Work started April 1, 1904; completed in 1910. Two tubes of cast iron rings, 23 feet outside diameter and 21 feet 2 inches inside diameter; subaqueous portion 6,118 feet long.

Manhattan crosstown tunnels from the Pennsylvania Railroad Station, mentioned above, across New York under 32d and 33d Sts. to First Ave. Started July, 1905, completed in 1910. There are two tunnels, each with two tracks. The tunnels are built of concrete with the crown about 60 feet below the surface of the street.

East River tunnels connect with the crosstown tunnels and extend under the East River to Long Island City. Started September, 1904; completed in 1910. Four separate tubes with rings 23 feet outside diameter, each tube from the Manhattan shaft to the Long Island City shaft, 3,900 feet long.

HUDSON AND MANHATTAN RAILROAD SYSTEM—North tunnels under the Hudson River from Jersey City to Morton St., New York. Started November, 1874; the first in New York, officially opened February 25, 1908. Two single track tubes, with a minimum inside diameter of 15 feet 3 inches, and approximately 5.700 feet long.

Up-town tunnels connect with north tunnels at Morton St. and extend to Christopher St. thence to Sixth Ave. and up Sixth Ave. to 33d St. Started March, 1904, completed in 1910. Section from Morton to 12th St. shield construction, remainder cut and cover.

South tunnels under Hudson River from Jersey City to the Church St. Terminal Building (Cortlandt, Church and Fulton Sts.), New York. Started May, 1905; opened for traffic July, 1909. Two tubes about 5,950 feet long, with cast iron rings, 16 feet 7 inches outside diameter and 15 feet 3 inches inside diameter.

Tunnels (consisting of two single track tubes) extend from the Hoboken terminal of the Lackawanna Railroad to Washington St., Jersey City, with connections to the north tunnels and to the Erie Railroad Station. At Washington St. a branch runs to the Pennsylvania Railroad Station at Jersey City, where connections are made with the south tunnels. West from Washington St. to a point east of Summit Ave. is a double track concrete tunnel with a centre wall dividing the tracks. Work started March, 1906; completed in July, 1911.

BELMONT TUNNEL under the East River from 42d St., New York, to Long Island City. Subaqueous portion two single track tubes with cast-iron rings 16 feet 10 inches outside diameter, and a clear inside diameter of 15 feet 6 inches. Through rock a horseshoe shaped concrete section is used and in other places a rectangular double track cross section with reinforced concrete lining. Construction started by New York and Long Island Railroad, July 12, 1905; practically completed January 1, 1908. (Commonly known as the Steinway Tunnel.)

RAPID TRANSIT TUNNEL under the East River from the Battery, New York to Joralemon St., Brooklyn, connecting the New York and Brooklyn subways. Started April, 1903; trains running January 9, 1908. Two tubes, 6,784 feet long, with a finished inside diameter of 15 feet 6 inches.

CLARK STREET TUBE—These twin-tubes underneath the East River, connecting the Interborough-Seventh Avenue subway in Mannattan with the Fulton Street-Flatbush Avenue subway of the Interborough in Brooklyn, were completed and put in operation the Summer of 1919. They are 5,047 feet long; outside diameter of 17 feet 6 inches; inside diameter 15 feet.

The B. R. T. subway tubes from Whitehall St., Manhattan, to Montague St., Brooklyn, from East 14th St., Manhattan, to North 7th St., Brooklyn, and from east 60th St., Manhattan, under Blackwell's Island to Long Island City, Queens, were in full operation in 1921.

WEST SHORE RAILROAD TUNNEL, WEEHAWKEN, NEW JERSEY—Commenced in 1881, and completed twenty-three months later, at a cost of $525,000. It is double-tracked and the original length was 3,983 feet. A steel and concrete portal, constructed in 1907 at the east increased its length to 4,273 feet. One-fourth of the tunnel is brick-lined, the remaining portion, unlined. The normal section is 27 feet in width and 19 feet high. 80,500 cubic yards of rock were removed, and five vertical shafts were utilized, giving ten working faces, and average progress of 173 linear feet per month was maintained. The average expenditure per linear foot of lined section was $200, and of unlined section, $110, and equivalent of $7.00 per cubic yard of excavation. The tunnel is a tangent, with the exception of the extended portion of the east end, previously mentioned, at which point the freight and passenger tracks divide. There is a grade of 0.30% toward the east, and 0.34% toward the west, from approximately the centre of the tunnel. It is ventilated by rotary fans, installed in 1911.

BERGEN CUT of Erie Railroad through Bergen Hill, Jersey City, parallel to the present tunnel, which is 4,700 feet long. The Bergen cut was started March, 1906, and completed July 1, 1910. It has five four-track tunnels, with open cuts between the tunnels, making a total length of 4,300 feet. Tunnel sections 58 feet wide at the bottom and 21 feet high.

LACKAWANNA RAILROAD TUNNEL, through Bergen Hill, Jersey City. Started February 28, 1906; completed February 14, 1909. Parallel to and 24 feet away from old tunnel and of the same length, viz., 4,283 feet. New tunnel is double tracked, lined with concrete, having inside dimensions 23 feet high by 30 feet wide. Bush track construction used.

## THE NEW YORK-NEW JERSEY VEHICULAR TUNNEL.

(Contributed by the N. Y. State Bridge and Tunnel Commission, Hall of Records, Oct. 17, 1922.)

*New York State Bridge and Tunnel Commission*—Commissioners: Gen. George R. Dyer, Chairman; E. W. Bloomingdale, McDougall Hawkes, A. J. Shamberg, N. Y. City Commissioner of Plant and Structures, ex-officio; N. Y. State Engineer, ex-officio; Paul Windels, Counsel; Morris M. Frohlich, Secretary.

*New Jersey Interstate Bridge and Tunnel Commission*—Commissioners: Theodore Boettger, Chairman; Weller H. Noyes, Robert S. Sinclair, John F. Boyle, Thomas J. S. Barlow, John B. Kates, Isaac Ferris, Frank L. Suplee, Emerson Richards, Counsel; James P. Dolan, Secretary.

*Chief Engineer*—Clifford M. Holland.

The States of New York and New Jersey enacted legislation providing for the construction, maintenance and operation of a tunnel, to be paid for by each State in equal parts, and directed the Commissions to enter into a treaty or contract to that end. The treaty was executed in final form on Dec. 30, 1919, and has been consented to by a resolution of Congress, approved by the President. One million dollars was made available by the Legislature of each State, and the Commissions thereby had the necessary funds to begin actual construction.

On Jan. 6, 1920, Chief Engineer Clifford M. Holland recommended the construction of twin tubes of 29 feet 6 inches external diameter of cast-iron rings lined with concrete, providing for a 20-foot roadway in each which would be capable of caring for two lines of traffic, the north tube for westbound traffic and the south tube for eastbound. The tunnels recommended provide a narrow sidewalk for pedestrians and sufficient ventilation ducts and service conduits.

The Commissions unanimously approved the recommendation of the Chief Engineer, and contract drawings and specifications were ordered prepared, and on Oct. 12, 1920, ground was broken at Canal Street Park on contract No. 1 for the construction of the ventilation shafts on Manhattan Island. These have been completed and form the working chambers for the under-river structure from the New York side. Drawings and specifications were then prepared for similar work on the New Jersey side, as well as the under-river section of the tunnel, and are known as contracts 3 and 4. Negotiations were entered into with the City of New York for the acquirement of Pier 35 and other waterfront property necessary for construction, maintenance and operation; also with the Erie Railroad Company in whose yard on the Jersey waterfront the bulk of tunnel construction operations will be carried on for a period of three years.

The difficult problems of property acqusition have been solved and contracts were signed on March 28, 1922, calling for construction work in an amount approximating $20,000,000. Preliminary operations commenced immediately, which involved contracts for material produced in different sections of the country.

Two electric power-houses have been completely erected for furnishing the compressed air and hydraulic power required in construction work. These represent an outlay of $500,000. The quarters for the compressed air workers as provided by law are in the course of construction, to be fully equipped for the accommodation of 600 men. A blanket of approximately 200,000 cubic yards of clay and riprap is being laid in the river bed for the protection of tunneling operations and the structure itself. At the New Jersey pierhead line 84 concrete steel piles 24 inches in diameter are being sunk to bedrock 260 feet below high water to form the foundation for the New Jersey river ventilation shaft.

The shields to be driven from the Manhattan side of the river were erected in the shafts at Canal and Spring Streets, and the driving of the shields out under the Hudson River was started before the end of the year. The shields on the New Jersey side for driving eastward under the river will be set up early in 1923, after the land shafts located in the Erie Railroad yard have been completed. The time for completing contracts 3 and 4 is set for April, 1925.

The actual work of boring the tunnel began on Oct. 26, 1922.

### VENTILATION OF TUNNEL.

The ventilation problem has been worked out through co-operative investigations with the U. S. Bureau of Mines, Yale University and University of Illinois, which have demonstrated the practicability of an economic system of ventilation. This will be through four shafts, two on each side of the river, one located on either side and near the pierhead line, which will provide protection to the tunnels and allow slips for the deepest draft ocean-going vessel. These piers will be built by the City of New York and the Erie Railroad Company. The other shafts are to be located nearer the portals, thus making a series of ventilation units materially reducing the cost of equipment and operation.

The ventilation of the tunnel will be accomplished by supplying the fresh air through a continuous duct in the bottom of each tunnel and withdrawing the vitiated air through another continuous duct at the top of each tunnel. The fresh air enters the roadway through two continuous slots in the curb on either side of the roadway, and the vitiated air enters the upper duct through openings located at frequent intervals in the roof over the roadway. The ventilation requirements are based on a maximum concentration of carbon monoxide of 4 parts in 10,000 parts of air.

This will ultimately require 3,600,000 cubic feet of fresh air per minute, representing an average of 40 complete air changes per hour.

After study of traffic across the ferries and bridges and on the city streets, it was seen that precaution must be taken to prevent the congestion of traffic on the streets at the tunnel terminals; and it is planned to separate the incoming from the outgoing traffic to permit of its concentration and absorption without endangering the capacity use of the tunnel and interference with normal street traffic.

The Manhattan entrance is from a plaza on Broome Street, from Hudson to Varick Streets, and the exit is on the south side of Canal Street at Varick and Vestry Streets. The Jersey City entrance is from a plaza at 12th and Provost Streets, and the exit at 14th and Provost Streets.

The entire cost of construction, approximately $30,000,000, can be amortized on the estimated traffic at rate of tolls equal to the present ferry rates in about eleven years, which conforms with the requirement of the New York act that tolls be collected to pay all maintenance and operating charges and amortize the cost of construction within twenty years.

### QUICK TRANSIT FOR FOOD SUPPLIES.

Among the advantages which the tunnel will afford will be the quick and certain transportation of merchandise, foodstuffs and coal from the mainland direct to final destination in Manhattan, the Bronx and Long Island, unhindered by climatic or other conditions. In the item of coal alone, the entire cost of the tunnel could have been defrayed out of any one of a dozen day's losses in January, 1918, due to the inability to move the coal barges across the river, not to mention the deaths, illness and physical suffering resulting from the coal famine.

Milk and produce wagons or trucks coming from the New York counties adjoining the New Jersey line could drive directly into the city and deliver their product with certainty many hours earlier than is now possible. Outgoing freight deliveries could also be made more efficiently and in larger volume than is now possible by the present lighterage system. This would do away with the necessity of using valuable waterfront property for railroad piers, floats and bridges on both the Manhattan and Jersey shores.

Finally the most important question of time in transit would be solved for all classes of freight or passenger-carrying vehicles at no increase in ferry cost. At present, owing to the crowded conditions at certain hours, a truck or car is forced to wait in line, sometimes for several hours, before it can be driven aboard the ferry, whereas with the tunnel proposed, and its wide plazas at each end, there would not be the slightest delay or congestion at any time.

### THE TUNNEL IN BRIEF.

Total length of proposed tunnels, 9,250 feet.

Outside diameter of circular subsurface tubes, 29 feet 6 inches.

Construction material, cast-iron ring lined with concrete.

Elevation of top of tube, 60 feet below mean low tide.

Maximum gradients on approaches at each end, 3½ per cent.

Width of roadway in each tunnel, 20 feet.

Ventilation—blower and exhaust fans at 4 shafts—2 on each side of river.

Estimated annual traffic on completion (both directions), 5,610,000 vehicles.

Total estimated annual capacity of tunnel (both directions), 15,800,000 vehicles.

Manhattan terminus of tunnel—entrance Broome Street—exit Canal and Varick Streets.

Jersey City terminus—entrance 12th Street—exit 14th Street.

## ALTITUDES IN NEW YORK CITY.

THE highest natural elevation of land in the City of New York—430 feet—is on top of Todt (Toad or Iron) Hill, Staten Island. This hill rises from the Richmond Road at Garretson's station on the rapid transit railway, and overlooks New Dorp and the Moravian cemetery where the Vanderbilts lie buried. A point near the summit referred to, where the altitude is 409.24 feet, is indicated by a bench mark eight feet from the east side of David J. Tysen's dwelling, near the southeast corner of Ocean Terrace and Todt Hill Road. The house is about 100 feet south of Ocean Terrace, and about 200 feet east of Todt Hill Road.

This is the highest point on the Atlantic Coast, south of Maine.

Other high road points in Richmond Borough are: Manor Road (244.35 ft.) at Castleton Corners, near the Eckstein brewery; and Manor Road (233.43 ft.) near the N. Y. City Farm Colony. There are several hills on Staten Island over 300 feet high. The elevation at the Fort Wadsworth Post-Exchange building is 107.15 feet above sea level.

The highest natural altitude in Manhattan—267 feet, 9 inches—is near the site of old Fort Washington, a little west of Fort Washington Avenue, approximately 900 feet north of W. 181st St. The hill at Inwood rises to a height of 232 feet, 9 inches. Other elevations in Manhattan above sea level, expressed in feet and decimals thereof, are—Custom House, 17.06; Bowling Green, 21.75; Pine St. and Broadway, 40.78; Municipal Building, 41.61; City Hall, 44.74; Astor Place, 43.01; Union Square, 45.73; Columbus Circle, 86.64; Central Park near W. 93rd St., 114.14; Amsterdam Ave., at Trinity Cemetery, 148.73; Audubon Ave., at W. 174th St., 185.92; Wadsworth Ave., near W. 182d St., 188.33; High Bridge water tower, at the street level, 203.25.

The highest natural elevation in the Bronx—284 feet, 6 inches—is on the hill bounded by Iselin Ave., Highland Ave., and W. 250th St., Riverdale Hill. Other Bronx altitudes are—Jerome Ave., near E. 233rd St., 210.73; Jerome and Mosholu Aves., Van Cortlandt Park, 193.39; Riverdale Ave., and Spuyten Duyvil Parkway, 178.49; Grand Boulevard and Concourse, and E. 199th St., 148.64; Hall of Fame Terrace, at University Ave., 170.32; Poe Park, E. 192d St., 140.22; East approach to Washington Bridge, at University and Aqueduct Aves., 141.63.

The highest natural elevation in Brooklyn—210 feet—is in Greenwood Cemetery, near the 9th Ave. entrance. Other Brooklyn altitudes are—Base of the Museum on Eastern Parkway, at Washington Ave., 163.44; 9th Ave. (Prospect Park West), 32 feet south of 14th St., 155.34; Prospect Park West and 5th St., 162.16; Union St., Plaza, at Flatbush Ave., 146.29; 59th St., and 5th Ave., 116.96; Atlantic and Classon Aves., 83.68; Borough Hall, on street level, 66.71; Surf Ave., Coney Island, at the Public Bath, 11.49.

The highest elevation in Queens Borough—266.48 feet—is on Little Neck Hill, 800 feet east of Little Neck Road and 435 feet south of 61st Ave. (Hyde Park Road) near the Vanderbilt estate.

The highest track elevation (altitude above sea level at base of rail) in the Interborough tubes—133.5 feet—is at the Museum station, Eastern Parkway and Washington Ave. The tracks in the lowest part of the Queensboro (42d St.) Interborough tube under the East River are 105 feet below sea level.

## LENGTH, COST, HEIGHT, ETC., OF NEW YORK CITY'S BIG BRIDGES.

| BRIDGE. | Length With Approach. | Length of Span. | Height Above Water. | Begun. | Opened. | Cost of Construction. | Cost of Land. | Total Cost. |
|---|---|---|---|---|---|---|---|---|
| | *Feet.* | *Feet.* | *Feet.* | | | *Dollars.* | *Dollars.* | *Dollars.* |
| Brooklyn | 6,016 | 1,595.5 | 133 | 1870, Jan. 3 | 1883, May 24 | 17,909,412 | 7,185,165 | 25,094,577 |
| Manhattan | 6,855 | 1,470 | 135 | 1901, Oct. 1 | 1909, Dec. 31 | 16,698,189 | 14,386,516 | 31,084,705 |
| Williamsburg | 7,308 | 1,600 | 135 | 1896, Nov. 7 | 1903, Dec. 19 | 15,091,497 | 9,096,593 | 24,188,090 |
| Queensboro | 7,449 | 1,182 | 135 | 1901, July | 1909, Mar. 30 | 12,872,364 | 4,719,398 | 17,591,762 |
| Hell Gate (N. H. R. R.) Arch | 18,000 | 1,017 | 135 | 1912, July 1 | 1917, Mar. 1 | 12,000,000 | 3,000,000 | 15,000,000 |
| Third Avenue | 2,228 | 300 | 25.8 | 1893, Oct. | 1898, Aug. 1 | 1,783,412 | 2,213,664 | 3,997,076 |
| Washington | 2,375 | 508.8 | 133.5 | 1886, July | 1888, Dec. | 2,851,684 | 37,902 | 2,889,586 |
| Total cost of all bridges | | | | | | 90,864,379 | 44,873,975 | 120,738,355 |

All except the Hell Gate are municipal-owned bridges. Height above water means at under part of centre of span.

### OTHER DATA ON THE BIG BRIDGES.

| BRIDGE. | Width Over All. | H'ght of Towers Over High-water. | Diameter of Cables | Weight of Cables. | H'ght of Roadway at Top, Centre. | Surface Railway Opened. | "L" Railway Opened. | Total Weight, Main Bridge. |
|---|---|---|---|---|---|---|---|---|
| | *Feet.* | *Feet.* | *Inches.* | *Tons.* | *Feet.* | | | *Tons.* |
| Brooklyn | 86.0 | 272.0 | 15¾ | 3,600 | 139 | 1898—Jan. 23 | 1908—Jan. 27 | 13,820 |
| Manhattan | 122.6 | 336.0 | 21¼ | 7,950 | 149 | 1912—Sept. 4 | 1915—June 22 | 41,700 |
| Williamsburg | 118.0 | 332.9 | 18⅜ | 4,900 | 145½ | 1904—Nov. 3 | 1908—Sept. 16 | 31,200 |
| Queensboro | 89.6 | 124.0 | Cantilever. | | 143 | 1909—Sept. 19 | 1917—July 23 | 52,600 |
| Hell Gate Arch | 93.0 | 240.0 | Arch. | | Traffic began on March 9, 1917. | | | 26,000 |

### TRAFFIC ON THE BIG EAST RIVER BRIDGES.

(Summary of count for 24 hours in both directions, on a day in November, 1921.)

The 1920 figures are in parentheses.

| BRIDGE. | Cars. | Car Passengers. | Vehicles, Including Autos. | Vehicle Passengers. | Pedestrians. | Total No. of Persons. |
|---|---|---|---|---|---|---|
| Brooklyn | 9,639 (9,700) | 200,216 (148,525) | 8,529 (5,188) | 13,444 (8,858) | 3,263 (1,928) | 216,923 (159,311) |
| Manhattan | 3,717 (3,475) | 254,261 (239,590) | 26,733 (20,785) | 34,953 (41,810) | 1,340 (932) | 310,554 (252,332) |
| Williamsburg | 9,601 (9,651) | 419,015 (366,885) | 19,922 (17,480) | 38,207 (35,382) | 1,375 (981) | 458,597 (403,248) |
| Queensboro | 2,322 (2,494) | 65,543 (62,604) | 20,829 (17,858) | 41,249 (35,896) | 1,860 (967) | 108,652 (99,467) |
| Third Ave. | 281 (311) | 1,067 (1,630) | 5,986 (4,353) | 9,125 (7,058) | 5,285 (5,726) | 15,477 (14,414) |

Count of total persons using, on other bridges—Harlem River: Willis Ave., 52,141; Madison Ave., 52,968; Washington, 41,237; Ship Canal, 51,065. Bronx: Westchester Ave., 21,088. Brooklyn: Hamilton Ave., 34,745; Ninth St., 30,738; Union St., 10,594; Washington Ave., 32,551; Harway Ave., 14,005; Third Ave., 17,206; Metropolitan Ave., 25,830. Newtown Creek: Vernon Ave., 59,625; Greenpoint Ave., 10,324; Grand St., 13,139. Queens: Borden Ave., 12,038; Flushing, 28,862. Richmond: Fresh Kills, 1,054.

Total 24-hour count, both ways, on the 44 municipal bridges—**Cars**, 39,862; **car passengers**, 1,212,660. **Vehicles**, 228,778; **vehicle passengers**, 443,007. **Pedestrians**, 105,661. **Total persons using the bridges**, 1,761,328.

### SUSPENSION AND CANTILEVER BRIDGES.

The suspension bridge is a fixed bridge and consists of a truss supported by cables resting on towers; the cables being anchored at each end in masonry anchorages. Suspender ropes or wires connect the truss to the cables.

The cantilever bridge is a fixed bridge in which the truss is supported on a pier and balanced by extending in both directions from the pier, one end of the truss extending over part of the space to be bridged toward a similar truss from an opposite pier and the other end of the truss extending back to a masonry anchor pier.

## THE HARBOR OF NEW YORK.

(Data by courtesy of the Chief of Engineers, U. S. Army.)

New York Bay is the principal entrance to New York City. It is divided into two parts, the Lower Bay and the Upper Bay, by the Narrows, a passage about five-eighths of a mile wide at its narrowest part. The entrance to the Lower Bay is between Sandy Hook on the south and Rockaway Point on the north and is about seven miles wide. The Upper Bay extends from the Narrows to the Battery. The principal entrance channels to the harbor of New York are the Ambrose Channel and the Main Ship-Bayside-Gedney Channel.

Ambrose Channel, which is the newer and more important channel, was completed April 17, 1914. It has a comparatively straight course in a northwesterly and then northerly direction from deep water in the ocean through the Lower Bay. It is 38,000 feet in length and 2,000 feet in width, and has a depth of 40 feet at mean low water. The mean range of tide is about 4.5 feet.

Main Ship-Bayside-Gedney Channel is the route formerly used by deep-draught vessels. It extends westward past Sandy Hook and then northward through the Lower Bay. It has a depth of 30 feet at mean low water and a nominal width of 1,000 feet, which has decreased in places to 500 feet. The Main Channel in the Upper Bay leads between Jersey Flats and Gowanus Flats and has depths of 40 to 90 feet and a width of about one-half mile. Within the harbor there are several channels connecting the different sections. Bay Ridge, Red Hook and Buttermilk Channels lie in Gowanus Bay along the Brooklyn shore of the Upper Bay and form an easterly channel that extends from the Narrows to East River and is separated from the Main Ship Channel by a broad shoal off Gowanus Bay and by Governor's Island. By means of these channels the extensive terminals of the Bush Terminal Co. and of the New York Dock Co., as well as the municipal terminals in South Brooklyn, are directly accessible for large ships and have easy communication with the other sections of the inner harbor.

Bay Ridge Channel has a minimum depth of 35 feet at mean low water for its full width of 1,200 feet, and of 40 feet for the middle 800 feet of that width. Red Hook Channel is approximately 1,200 feet wide and has available depths of 38 to 40 feet at mean low water throughout its length. The combined length of these channels is about 4.5 miles and the mean range of tide is about 4½ feet. Buttermilk Channel has a depth of 30 feet, but at places along the sides the depth does not exceed 27 feet. The channel is broad, having at its narrowest point a width of about 800 feet.

*Rivers, Creeks and Bays.*—The Hudson (North) River empties into Upper New York Bay at the Battery, the southernmost point of Manhattan Island. The width of the river between established pierhead lines is 3,900 feet at the Battery and gradually decreases to 2,750 feet between Castle Point, N. J., and West 14th Street, New York City, and 2,725 feet opposite West 59th Street.

A vessel drawing 40 feet can be carried at mean low water up to West 19th Street, through the eastern, or New York, side of the river; from West 19th to about West 50th Street, through the western, or New Jersey, side; and between West 50th and West 75th Streets, in the middle of the river, and thence generally near the east shore, to the north boundary of the city. The mean range of tide at the Battery is 4.4 feet.

The East River is a tidal strait about 16 miles long and from 600 to 4,000 feet wide, exclusive of bays and estuaries, and extends from the Battery in New York City to Throgs Neck at the head of Long Island Sound. The river separates the Boroughs of Manhattan and the Bronx from the Boroughs of Queens and Brooklyn.

The East River has a through channel to Long Island Sound 30 feet deep at mean low water and with width of 550 feet or more, except at Hell Gate, where the 30-foot channel is too narrow for navigation and the safe depth is limited to 26 feet. A project is under way for deepening the entire channel to 35 and 40 feet. The mean range of tide in the East River is 4.4 feet at the Battery, 4 feet at the Brooklyn Navy Yard and 6.6 feet at the east entrance to Hell Gate.

Harlem River and Spuyten Duyvil Creek together form a waterway about 8 miles in length, which extends from the East River to the Hudson River and separates the Borough of Manhattan from the Borough of the Bronx. The East River entrance to the Harlem River is about 8½ miles by water northeast of the Battery and the Hudson River entrance to Spuyten Duyvil Creek is about 13½ miles by water north of the Battery. The improved channel in Harlem River has a width of 150 to 400 feet and a depth of 15 feet at mean low water, except at Macombs Dam Bridge, where ledge rock projects at a point 12 feet below mean low water.

Bronx River is a short and narrow stream that empties into a shallow bay or estuary on the East River at Hunts Point, about 11 miles northeast of the Battery. The navigable portion of the river consists of a Channel extending from its mouth to a dam at East 177th Street. This channel is about 2½ miles long and from about 50 to 300 feet wide and has a depth of 7 feet at mean low water in the lower section. The mean range of tide in the Bronx River is about 7 feet in the estuary and 6 feet at the dam.

Westchester Creek is a small stream lying wholly within the limits of the City of New York. This stream extends northward from an estuary in the north shore of East River about 14 miles northeast of the Battery. The estuary is about 1 mile long and from 500 to 3,000 feet wide. The portion of the creek now under improvement is 2⅔ miles long from deep water in the East River and from 110 to 500 feet wide. The lower section has a depth at mean low water of 8 feet, while the upper section has a mean depth of 6 feet.

East Chester Creek is a shallow stream that empties into East Chester Bay on the north shore of Long Island Sound about 12 miles west of the Connecticut State line and about 21 miles northeast of the Battery. The lower two miles of the navigable portion of this stream lie wholly within the limits of the City of New York and have a depth of 4 feet at mean low water, or 11 feet at high water, while the upper section has a depth of about 5 feet at high water.

Flushing Bay is on the north shore of Long Island, about 12 miles from the Battery. The bay is about 1 mile wide and 2 miles long. Flushing Creek, which flows into the head of the bay, is a tidal stream navigable for a distance of about 3.5 miles from its mouth. The total length of dredged channel in the bay and the creek is about 3 miles and the mean low water depth of channel in the bay is 10 feet; in the creek, 8 feet. The mean range of the tide is about 7.1 feet.

Newtown Creek is the inlet of the East River that separates for a distance of about 4 miles the Boroughs of Queens and Brooklyn. The improved channel has a width of about 125 feet and a mean low water depth of 20 feet to Meeker Avenue bridge and 14 feet above. The mean range of tide is about 4 feet.

Wallabout Channel is a channel in Wallabout Bay, an inlet of the East River adjacent to the United States Navy Yard in Brooklyn. The channel consists of a waterway extending in a half circle around the inside of the island known as Cob Dock and is divided into two parts by a stone causeway connecting the mainland with Cob Dock. The eastern section of the channel is about 2,000 feet long and from 250 to 350 feet wide, and has a depth of about 20 feet at mean low water. At the head of Wallabout Channel are two bodies of navigable water, Kent Avenue Basin and Wallabout Basin, which are 2,200 feet long and 1,300 feet long respectively.

Jamaica Bay is situated on the south shore of Long Island and lies wholly within the limits of the City of New York. It is about 8 miles long and 4 miles wide, and covers an area of approximately 32 square miles. The bay is connected with the ocean at Rockaway Inlet by a shifting channel having a least depth over the bar of about 11 feet at mean low water. An entrance channel 17 feet deep at mean low water has been dredged through the north end of the bars. The bay contains numerous small low-lying islands. A channel 2½ miles long is under joint improvement by the Federal Government and the City of New York. The United States is to provide and maintain the entrance channel and to reimburse the city for dredging the main channel in the bay; while the city is to dredge the other channels within the bay, bulkhead the shores of the bay, and fill in behind the bulkheads. On June 30, 1920, an entrance channel had been completed to a width of about 200 feet, and a depth of 17 feet at mean low water.

*The New Jersey Portion of the Harbor.*—Newark Bay is a large estuary extending from the confluence of the Passaic and Hackensack Rivers south to Staten Island, a distance of about 6 miles. It is about 1½ miles wide. At Staten Island the bay is connected on the east with Kill van Kull and on the west with Arthur Kill. The navigable channel in the bay has a dredged depth of 20 feet

at mean low water and the range of tide is about 5 feet.

Passaic River is a tidal stream which is navigable for vessels drawing 6 feet of water as far as the city of Passaic, 16 miles above its mouth. In the lower portion of the river the depth of the navigable channel is 20 feet to within 800 feet of the Jackson Street bridge at Newark; thence 16 feet deep to the Montclair and Greenwood Lake railroad bridge; thence 6 feet deep to Passaic.

Hackensack River is a tidal stream which merges with the Passaic River at the head of Newark Bay. It is navigable to New Milford, 20½ miles from its mouth. At mean low water, 12 feet can be carried to Little Ferry, 12¾ miles; then 10 feet through the highway bridge at Little Ferry; thence 12 feet to Hackensack, 2¼ miles; thence quite shoal to New Milford.

### THE STATEN ISLAND KILLS.

Arthur Kill separates Staten Island from New Jersey. It is about 12 miles long. This channel, together with Kill van Kull, forms Staten Island Sound, and, with the lower end of Newark Bay, forms the inland waterway between New York and New Jersey, the boundary between the two States following the centre of the waterway. Vessels drawing 19 feet can be taken at mean low water into Newark Bay via Lower New York Bay, Raritan Bay and Arthur Kill. Vessels drawing 23 feet at mean low water can be taken through Upper New York Bay, Kill van Kull and Arthur Kill to Perth Amboy, N. J.

Kill van Kull, a connecting waterway about 3 miles in length, lies along the northern shore of Staten Island and extends from the lower end of Newark Bay to Upper New York Bay. Vessels having a draught of 25 feet can be brought at mean low water into Newark Bay through Upper New York Bay and the channel in Kill van Kull.

Raritan Bay lies at the southern end of Staten Island and forms the western portion of Lower New York Bay. Its greatest length from north to south is about 5 miles and from east to west about 7 miles. The Raritan River empties into the bay at its western end and the Arthur Kill extends northward from its western end. Vessels enter the bay by way of the Main Ship-Bay-side-Gedney Channel, but a draught of not more than 21 feet at mean low water can be carried through the dredged channels at the head of the bay.

### THE RARITAN RIVER.

Raritan River empties into Raritan Bay at Perth Amboy. At mean low water vessels with a draught of 16 feet can be carried to the Washington Canal at Sayreville, a distance of 6.7 miles; thence 10 feet to New Brunswick, a distance of about 5.3 miles.

Elizabeth River is a small stream that empties into the Arthur Kill near its junction with Newark Bay. The navigable channel in the lower river has a depth of 7 feet at mean high water for 1½ miles.

## THE PORT OF NEW YORK AUTHORITY.

(Headquarters, No. 11 Broadway, N. Y. City.)

By chapter 154 of the Laws of New York and chapter 151 of the Laws of New Jersey, 1921, Commissioners from the State of New York and Commissioners from the State of New Jersey were authorized to sign the compact between the State of New York and the State of New Jersey for the creation of the Port of New York District and the creation of Port of New York Authority. This treaty was subsequently ratified by Congress and approved by the President.

The Port of New York Authority is a body corporate and politic, having the powers enumerated in the compact for upbuilding the port. The Port Treaty says:

"The Port Authority shall constitute a body, both corporate and politic, with full power and authority to purchase, construct, lease and, or, operate any terminal or transportation facility within said district; and to make charges for the use thereof; and for any of such purposes to own, hold, lease and, or, operate real or personal property, to borrow money and secure the same by bonds or by mortgages upon any property held or to be held by it."

The compact was signed on April 30, 1921, by Commissioners William R. Willcox and Eugenius H. Outerbridge, on behalf of the State of New York, and by Commissioners J. Spencer Smith, Frank R. Ford and DeWitt Van Buskirk, and Attorney-General Thomas F. McCram, on behalf of the State of New Jersey. Attorney-General Charles D. Newton of the State of New York signed the compact on May 6, 1921.

### PERSONNEL OF THE COMMISSIONS.

The Commissioners from New Jersey were appointed April 7, 1921; those from New York State on April 16, 1921. Their names, with year of expiration of term in parentheses, are: Eugenius H. Outerbridge, *Chairman*, New York City (July 1, 1928); Alfred E. Smith, New York City (July 1, 1926); Lewis H. Pounds, Brooklyn (July 1, 1924); J. Spencer Smith, *Vice-Chairman*, Tenafly, N. J. (July 1, 1923); DeWitt Van Buskirk, Bayonne, N. J. (July 1, 1924); Frank R. Ford, Caldwell, N. J. (July 1, 1925); George W. Goethals, *Consulting Engineer*; B. F. Cresson, Jr., *Chief Engineer*; Julius Henry Cohen, *Counsel*; William Leary, *Secretary*; C. A. Ruhlmann, *Assistant Secretary*.

The Port Authority was delegated with the duty of recommending a comprehensive plan for the development of the Port of New York and such plan was approved by the Legislature of New Jersey on February 20, 1922, and New York on February 21, and approved by Congress in June. President Harding on July 1 signed the Congressional Resolution. Thus the Port Authority is the recognized agency of the two States and the Federal Government in developing the Port of New York.

The Port Authority seeks to co-ordinate and extend the facilities of the Port of New York in pursuance of these fundamental principles:

First—That terminal operations within the Port District, so far as practicable, should be unified.

Second—That there should be consolidation of shipments at proper classification points so as to eliminate duplication of effort, inefficient loading of equipment and realize reduction in expenses.

Third—That there should be the most direct routing of all commodities so as to avoid centres of congestion, conflicting currents and long truck-hauls.

Fourth—That terminal stations established under the comprehensive plan should be union stations, so far as practicable.

Fifth—That the process of co-ordinating facilities should so far as practicable adapt existing facilities as integral parts of the new system, so as to avoid needless destruction of existing capital investment and reduce as far as may be possible the requirements for new capital and endeavor should be made to obtain the consent of the States and local municipalities within the Port District for the co-ordination of their present and contemplated port and terminal facilities with the whole plan.

Sixth—That freight from all railroads must be brought to all parts of the port wherever practicable without cars breaking bulk, and this necessitates tunnel connection between New Jersey and Long Island, and tunnel or bridge connections between other parts of the port.

Seventh—That there should be urged upon the Federal authorities improvement of channels so as to give access for that type of water-borne commerce adapted to the various forms of development which the respective shorefronts and adjacent lands of the port would best lend themselves to;

### MOTOR TRUCK HIGHWAYS.

Eighth—Highways for motor truck traffic should be laid out so as to permit the most efficient interrelation between terminals, piers and industrial establishments not equipped with railroad sidings and for the distribution of building materials and many other commodities which must be handled by trucks; these highways to connect with existing or projected bridges, tunnels and ferries.

Ninth—Definite methods for prompt relief must be devised that can be applied for the better co-ordination and operation of existing facilities while large and more comprehensive plans for future development are being carried out.

Measures of immediate relief from present harbor conditions, such as the consolidation of marine equipment, and the establishment of motor trunk line highways and the increased use of motor truck facilities, are provided in the Port Authority programme.

The commission has authority to hold public hearings and has conferred with committees of railroad Presidents, steamship officials, and all other official and civic bodies within the Port District as well as with the representatives of the various business interests. The Port Authority has also conferred with municipal, State, and Federal officials on phases of port planning.

## COMMERCE OF CUSTOMS DISTRICT OF N. Y. SINCE 1860.

| YEAR (Fisc.) | GOLD AND SILVER. | | | MERCHANDISE. | | | |
|---|---|---|---|---|---|---|---|
| | Imports. | Exports—Domestic. | Exports—Foreign. | Imports. | Exports—Domestic. | Exports—Foreign. | Duties Collected. |
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1860.. | 2,382,855 | 50,338,957 | 7,758,729 | 231,310,086 | 70,292,018 | 9,755,960 | 37,731,913 |
| 1861.. | 34,176,188 | 19,112,779 | 4,903,477 | 188,790,086 | 118,267,177 | 8,408,018 | 28,141,559 |
| 1862.. | 11,689,687 | 24,726,183 | 4,237,670 | 130,525,949 | 127,651,778 | 6,164,414 | 34,529,146 |
| 1863.. | 1,731,530 | 46,014,880 | 6,406,060 | 175,522,885 | 175,903,098 | 10,963,293 | 48,636,649 |
| 1864.. | 2,099,057 | 55,610,517 | 3,562,187 | 227,407,442 | 156,626,705 | 9,173,453 | 72,406,636 |
| 1865.. | 1,890,431 | 37,733,355 | 1,764,495 | 152,248,978 | 181,646,518 | 20,862,523 | 55,292,514 |
| 1866.. | ..... | ..... | ..... | 302,505,719 | 264,510,247 | 7,453,845 | 132,569,159 |
| 1867.. | ..... | 36,917,429 | ..... | 277,469,510 | 170,465,028 | 11,235,211 | 119,901,520 |
| 1868.. | 5,789,631 | 69,868,588 | 6,441,298 | 236,791,028 | 166,162,651 | 8,574,975 | 107,854,915 |
| 1869.. | 13,057,674 | 26,615,429 | 10,574,463 | 282,060,008 | 158,768,835 | 7,167,373 | 119,920,692 |
| 1870.. | 12,941,193 | 22,880,333 | 10,816,822 | 281,048,813 | 187,092,158 | 9,522,588 | 127,970,548 |
| 1871.. | 9,154,001 | 72,232,410 | 10,675,087 | 348,755,769 | 213,298,365 | 9,412,124 | 140,125,530 |
| 1872.. | 2,353,317 | 52,190,940 | 4,873,301 | 416,162,512 | 218,222,734 | 10,287,917 | 146,981,398 |
| 1873.. | 7,611,934 | 55,016,415 | 7,556,348 | 418,709,493 | 258,113,548 | 11,415,751 | 125,582,198 |
| 1874.. | 18,401,242 | 46,433,364 | 3,925,830 | 376,730,380 | 293,926,705 | 10,707,633 | 110,481,879 |
| 1875.. | 11,500,687 | 75,723,329 | 6,547,415 | 357,136,893 | 253,478,584 | 8,954,649 | 108,227,467 |
| 1876.. | 8,246,000 | 41,589,908 | 4,132,736 | 303,466,910 | 253,115,991 | 9,735,585 | 101,263,075 |
| 1877.. | 31,770,581 | 26,847,747 | 9,174,196 | 298,261,378 | 274,120,814 | 8,096,565 | 91,056,962 |
| 1878.. | 20,382,090 | 11,766,270 | 3,556,673 | 292,797,559 | 327,226,478 | 9,267,199 | 90,878,353 |
| 1879.. | 11,766,309 | 11,020,727 | 4,335,909 | 302,349,053 | 327,796,819 | 8,073,476 | 96,833,029 |
| 1880.. | 83,658,245 | 2,935,062 | 5,138,574 | 459,937,153 | 385,506,602 | 7,053,488 | 130,431,008 |
| 1881.. | 100,302,913 | 8,646,882 | 2,907,182 | 435,450,905 | 393,658,208 | 13,522,816 | 138,300,312 |
| 1882.. | 28,215,006 | 38,395,605 | 3,761,188 | 493,060,891 | 332,102,136 | 12,401,639 | 151,529,894 |
| 1883.. | 12,695,200 | 15,263,319 | 7,049,832 | 496,005,276 | 347,308,334 | 14,117,027 | 146,581,223 |
| 1884.. | 21,735,725 | 43,039,148 | 11,690,789 | 465,119,630 | 320,016,246 | 9,867,021 | 138,866,903 |
| 1885.. | 25,957,687 | 15,220,998 | 8,031,562 | 380,077,748 | 334,718,227 | 9,796,534 | 125,313,677 |
| 1886.. | 15,209,857 | 41,915,728 | 11,741,087 | 419,338,932 | 304,496,611 | 9,832,800 | 132,635,369 |
| 1887.. | 41,238,214 | 12,515,123 | 5,648,541 | 456,698,631 | 306,842,375 | 9,504,844 | 146,158,589 |
| 1888.. | 39,841,658 | 49,56 | 5,852 | 470,426,774 | 301,486,784 | 9,140,712 | 144,426,620 |
| 1889.. | 7,279,618 | 71,68 | 5,395 | 472,153,507 | 310,928,151 | 8,910,404 | 144,360,120 |
| 1890.. | 11,070,503 | 41,64 | 6,121 | 516,426,693 | 340,268,765 | 8,783,026 | 151,845,132 |
| 1891.. | 15,402,705 | 95,91 | 6,277 | 537,786,007 | 337,806,277 | 8,722,570 | 145,378,355 |
| 1892.. | 39,708,007 | 93,20 | 4,967 | 536,538,112 | 404,935,770 | 9,017,013 | 117,787,839 |
| 1893.. | 12,305,641 | 119,493,996 | 12,610,457 | 548,558,593 | 339,040,667 | 8,355,050 | 134,454,353 |
| 1894.. | 68,039,604 | 93,451,985 | 14,884,446 | 415,795,991 | 359,192,983 | 9,953,382 | 85,576,111 |
| 1895.. | 30,243,384 | 82,908,886 | 12,225,380 | 477,741,128 | 317,906,816 | 7,673,246 | 101,750,165 |
| 1896.. | 30,972,139 | 147,045,289 | 7,139,055 | 499,932,792 | 344,355,492 | 9,919,449 | 106,666,185 |
| 1897.. | 76,345,231 | 85,013,883 | 2,568,513 | 480,603,580 | 382,610,975 | 9,068,932 | 113,365,076 |
| 1898.. | 94,116,902 | 48,811,422 | 6,230,248 | 402,281,050 | 437,426,637 | 8,089,157 | 100,424,617 |
| 1899.. | 52,480,759 | 69,463,439 | 12,865,848 | 465,559,650 | 449,801,525 | 9,642,692 | 134,071,173 |
| 1900.. | 24,765,253 | 85,498,014 | 2,450,539 | 537,237,282 | 507,930,476 | 10,903,995 | 150,153,068 |
| 1901.. | 27,351,777 | 102,389,646 | 1,553,325 | 527,259,906 | 516,929,035 | 12,663,943 | 159,330,669 |
| 1902.. | 14,136,005 | 79,195,540 | 1,405,212 | 559,930,849 | 479,193,385 | 11,168,310 | 163,606,071 |
| 1903.. | 15,233,351 | 69,456,488 | 3,025,638 | 618,705,662 | 492,874,449 | 12,955,245 | 178,852,021 |
| 1904.. | 29,948,116 | 108,398,066 | 1,929,788 | 600,171,033 | 493,705,709 | 13,102,304 | 168,677,030 |
| 1905.. | 15,537,694 | 105,227,432 | 6,791,302 | 679,629,256 | 511,067,199 | 13,658,806 | 170,570,029 |
| 1906.. | 60,288,409 | 52,268,485 | 6,744,325 | 734,350,823 | 595,410,061 | 11,750,253 | 192,985,952 |
| 1907.. | 61,221,577 | 62,460,287 | 7,781,311 | 853,696,952 | 616,270,674 | 11,679,183 | 217,127,610 |
| 1908.. | 117,746,796 | 99,738,210 | 6,267,399 | 688,215,938 | 688,410,827 | 12,652,086 | 184,235,337 |
| 1909.. | 20,685,652 | 112,108,673 | 2,623,340 | 779,308,944 | 595,670,688 | 11,568,793 | 195,008,723 |
| 1910.. | 16,785,552 | 116,635,626 | 5,607,565 | 935,990,958 | 634,288,230 | 17,698,126 | 214,686,318 |
| 1911.. | 35,529,111 | 50,622,443 | 4,580,442 | 881,592,589 | 756,473,074 | 16,078,475 | 200,818,317 |
| 1912.. | 32,396,676 | 81,328,034 | 8,229,400 | 975,744,320 | 802,476,214 | 15,469,589 | 194,752,639 |
| 1913.. | 48,909,622 | 120,107,142 | 4,966,898 | 1,048,320,629 | 900,622,431 | 17,313,557 | 198,471,127 |
| 1914.. | 37,914,458 | 133,209,708 | 3,324,967 | 1,040,380,526 | 845,342,530 | 19,203,808 | 197,074,780 |
| 1915.. | 46,833,391 | 78,728,786 | 7,544,956 | 930,693,041 | 1,162,727,641 | 32,199,925 | 146,546,589 |
| 1916.. | 179,563,207 | 75,415,943 | 25,182,107 | 1,191,473,268 | 2,272,291,977 | 37,270,069 | 150,597,503 |
| 1917.. | 58,873,716 | 158,237,884 | 9,047,995 | 1,338,588,225 | 3,035,838,584 | 23,171,012 | 153,869,441 |
| 1918.. | 24,327,934 | 85,886,664 | 3,993,522 | 1,251,842,010 | 2,582,182,184 | 32,546,191 | 115,596,095 |
| 1919.. | 32,488,950 | 73,989,865 | 10,182,926 | 1,394,270,206 | 2,925,715,466 | 102,523,998 | 115,743,708 |
| 1920.. | 95,440,254 | 212,680,268 | 2,727,135 | 2,904,844,143 | 3,293,304,084 | 100,744,758 | 227,102,417 |
| 1921.. | 567,707,323 | 12,143,786 | 6,391,278 | 1,922,741,371 | 2,429,396,801 | 78,838,577 | 205,863,859 |
| 1922.. | 431,855,511 | 12,821,091 | 16,312,497 | 1,366,010,488 | 1,277,810,118 | 40,445,485 | 226,743,570 |

### 200 COMPANIES OPERATE SHIPS AT THIS PORT.

There are approximately 200 companies operating ships into and out of the Port of New York, says a Chamber of Commerce bulletin. Over 5,000 vessels annually enter and clear the port in foreign commerce, and possibly nearly as many more in coastwise service. The tonnage of foreign vessels entering the port in 1920 was 17,404,185, which was over 27 per cent. of the total tonnage entering the United States.

The inland waterway connections with the Port of New York are numerous. Buffalo and the Great Lakes are connected by the Hudson River and the New York State Barge Canal; New England by Long Island Sound and the Cape Cod Canal; Southern States by the Delaware and Raritan Canal and the Delaware River: the Chesapeake and Delaware Canal to Chesapeake Bay ports.

Every important railroad in the United States serves New York either by its own railroads or by through traffic arrangements with the railroads leading to the port or by a coastwise steamship service from some other port. Convenient intra-communication between the different parts of the harbor is afforded by the many waterways, rivers, channels and bays provided by nature and modern engineering science.

The area of the port is 175 square miles, and it is estimated that any six of the other leading ports of the world could be placed within this area with plenty of room to spare.

## SHIPPING TONNAGE PORT OF NEW YORK.

VESSELS ENTERED.

| Year Ending June 30. | American. | | | | Foreign. | | | | Total. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sail. | | Steam. | | Sail. | | Steam. | | Number. | |
| | *No.* | *Tons.* | *No.* | *Tons.* | *No.* | *Tons.* | *No.* | *Tons.* | *Vessels.* | *Tons.* |
| 1899..... | 479 | 208,234 | 256 | 618,102 | 707 | 446,530 | 2,808 | 6,434,611 | 4,250 | 7,707,477 |
| 1900..... | 352 | 163,697 | 393 | 979,009 | 720 | 428,266 | 2,768 | 6,605,789 | 4,233 | 8,176,761 |
| 1901..... | 367 | 158,590 | 384 | 930,791 | 557 | 377,633 | 2,881 | 7,212,259 | 4,189 | 8,679,273 |
| 1902..... | 412 | 160,690 | 395 | 999,128 | 559 | 323,405 | 2,761 | 7,499,544 | 4,127 | 8,982,767 |
| 1903..... | 253 | 103,216 | 414 | 1,125,828 | 591 | 346,332 | 2,594 | 7,477,720 | 3,852 | 9,053,096 |
| 1904..... | 182 | 70,805 | 381 | 1,123,827 | 609 | 297,824 | 2,597 | 7,743,068 | 3,769 | 9,235,524 |
| 1905..... | 246 | 93,470 | 405 | 1,150,707 | 607 | 298,684 | 2,616 | 8,087,992 | 3,874 | 9,630,853 |
| 1906..... | 246 | 121,673 | 403 | 1,220,023 | 620 | 278,773 | 2,810 | 8,856,524 | 4,079 | 10,476,993 |
| 1907..... | 178 | 76,825 | 376 | 1,214,633 | 549 | 239,394 | 3,126 | 9,852,493 | 4,229 | 11,383,345 |
| 1908..... | 197 | 99,110 | 390 | 1 265,501 | 488 | 243,825 | 3,132 | 10,546,344 | 4,207 | 12,154,780 |
| 1909..... | 188 | 115,116 | 440 | 1,334,499 | 415 | 267,609 | 3,077 | 10,811,499 | 4,120 | 12,528,723 |
| 1910..... | 201 | 102,304 | 430 | 1,305,541 | 447 | 237,646 | 3,088 | 11,397,327 | 4,166 | 13,042,818 |
| 1911..... | 115 | 64,087 | 446 | 1,371,319 | 411 | 243,410 | 3,141 | 11,750,134 | 4,113 | 13,428,950 |
| 1912..... | 131 | 78,085 | 386 | 1,302,865 | 351 | 269,469 | 3,143 | 12,023,346 | 4,011 | 13,673,765 |
| 1913..... | 192 | 120,992 | 438 | 1,488,507 | 342 | 234,305 | 3,251 | 12,620,357 | 4,223 | 14,464,161 |
| 1914..... | 200 | 128,377 | 414 | 1,420,756 | 293 | 255,810 | 3,568 | 13,962,604 | 4,475 | 15,767,547 |
| 1915..... | 193 | 124,281 | 690 | 2,170,720 | 306 | 236,558 | 3,257 | 10,047,758 | 4,446 | 12,579,317 |
| 1916..... | 267 | 216,624 | 986 | 2,859,864 | 332 | 288,607 | 3,603 | 10,096,258 | 5,188 | 13,461,353 |
| 1917..... | 282 | 272,844 | 1,084 | 3,088,300 | 313 | 288,816 | 3,281 | 9,262,733 | 4,960 | 12,912,693 |
| 1918..... | 228 | 209,283 | 1,113 | 2,974,498 | 307 | 287,205 | 2,534 | 7,472,103 | 4,182 | 10,943,089 |
| 1919..... | 209 | 205,937 | 1,420 | 3,610,864 | 182 | 164,978 | 2,650 | 8,507,996 | 4,461 | 12,489,775 |
| 1920..... | 181 | 175,914 | 2,436 | 6,903,475 | 181 | 163,823 | 2,216 | 7,806,532 | 5,014 | 15,049,744 |
| 1921..... | 154 | 165,414 | 2,511 | 8,332,512 | 164 | 87,610 | 2,431 | 9,365,050 | 5,260 | 17,950,586 |
| 1922..... | 87 | 89,150 | 1,863 | 6,826,335 | 241 | 101,496 | 2,534 | 10,475,554 | 5,201 | 18,450,608 |

VESSELS CLEARED.

| Year Ending June 30. | American. | | | | Foreign. | | | | Total. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sail. | | Steam. | | Sail. | | Steam. | | Number. | |
| | *No.* | *Tons.* | *No.* | *Tons.* | *No.* | *Tons.* | *No.* | *Tons.* | *Vessels.* | *Tons.* |
| 1899..... | 326 | 169,318 | 291 | 685,971 | 777 | 470,405 | 2,660 | 6,170,585 | 4,054 | 7,496,279 |
| 1900..... | 295 | 174,468 | 387 | 983,616 | 773 | 453,776 | 2,563 | 6,231,669 | 4,018 | 7,843,529 |
| 1901..... | 272 | 143,184 | 374 | 920,560 | 606 | 378,023 | 2,571 | 6,676,660 | 3,823 | 8,118,427 |
| 1902..... | 193 | 101,094 | 402 | 1,025,309 | 580 | 361,598 | 2,491 | 6,927,290 | 3,666 | 8,415,291 |
| 1903..... | 148 | 83,377 | 435 | 1,200,323 | 631 | 390,535 | 2,466 | 7,172,837 | 3,680 | 8,847,072 |
| 1904..... | 68 | 46,947 | 412 | 1,172,661 | 535 | 304,218 | 2,288 | 7,176,764 | 3,303 | 8,700,590 |
| 1905..... | 96 | 62,673 | 435 | 1,187,299 | 510 | 305,282 | 2,398 | 7,756,273 | 3,439 | 9,311,527 |
| 1906..... | 142 | 85,746 | 424 | 1,224,344 | 581 | 287,887 | 2,543 | 8,315,983 | 3,690 | 9,913,960 |
| 1907..... | 107 | 73,975 | 399 | 1,235,335 | 538 | 236,286 | 2,720 | 8,927,005 | 3,764 | 10,472,601 |
| 1908..... | 69 | 43,844 | 424 | 1,379,517 | 473 | 232,325 | 2,912 | 10,284,278 | 3,878 | 11,939,964 |
| 1909..... | 96 | 83,240 | 465 | 1,411,775 | 379 | 268,769 | 2,763 | 10,102,629 | 3,703 | 11,866,413 |
| 1910..... | 87 | 56,356 | 476 | 1,457,499 | 412 | 250,894 | 2,771 | 10,777,154 | 3,746 | 12,541,903 |
| 1911..... | 71 | 46,550 | 489 | 1,537,018 | 345 | 252,252 | 2,948 | 11,531,073 | 3,853 | 13,366,893 |
| 1912..... | 78 | 65,246 | 445 | 1,523,136 | 326 | 278,766 | 2,947 | 11,681,990 | 3,796 | 13,549,138 |
| 1913..... | 86 | 76,599 | 472 | 1,633,335 | 242 | 232,350 | 3,066 | 12,428,335 | 3,866 | 14,370,619 |
| 1914..... | 210 | 130,005 | 462 | 1,586,173 | 360 | 275,693 | 3,240 | 13,429,523 | 4,272 | 15,421,394 |
| 1915..... | 244 | 148,890 | 713 | 2,235,357 | 372 | 246,156 | 2,954 | 9,531,971 | 4,283 | 12,162,374 |
| 1916..... | 355 | 228,799 | 1,009 | 2,996,625 | 439 | 348,878 | 3,589 | 10,344,655 | 5,392 | 13,918,957 |
| 1917..... | 351 | 267,116 | 1,120 | 3,248,687 | 386 | 328,517 | 3,176 | 9,343,093 | 5,033 | 13,187,413 |
| 1918..... | 224 | 188,271 | 1,027 | 2,846,397 | 306 | 257,067 | 2,300 | 7,292,982 | 3,857 | 10,584,713 |
| 1919..... | 292 | 248,691 | 1,386 | 3,799,922 | 234 | 207,782 | 2,601 | 8,683,188 | 4,513 | 12,939,587 |
| 1920..... | 158 | 150,529 | 2,008 | 6,003,983 | 187 | 165,834 | 2,235 | 7,955,109 | 4,588 | 14,275,455 |
| 1921..... | 129 | 138,672 | 2,134 | 7,087,600 | 174 | 95,751 | 2,397 | 9,277,648 | 4,834 | 16,599,671 |
| 1922..... | 77 | 96,698 | 1,820 | 6,698,503 | 277 | 117,261 | 2,345 | 9,908,929 | 5,280 | 19,470,642 |

Totals on entrances and clearances include vessels that reached and left the United States via other domestic ports.

Above data cover entire port district, including Newark and Perth Amboy.

The direct water front of Greater New York extends a distance of more than 3,000,000 linear feet, or approximately 578.4 miles, of which 43.2 miles is in Manhattan; 79.8 in the Bronx; 201.5 in Brooklyn; 196.8 in Queens; and 57.1 in Richmond. The port water front on the New Jersey side extends 192.93 miles—grand total, 771.33 miles.

## RAILROAD PASSENGER STATIONS IN MANHATTAN.

Baltimore & Ohio, foot W. 23d and Liberty Streets.

Central of New Jersey, foot of W. 23d and Liberty Streets; Sandy Hook Route (in Summer), foot of W. 42d and Cedar Streets, also.

Delaware, Lackawanna & Western, foot of Barclay, Christopher and W. 23d Streets.

Erie, foot of Chambers and West 23d Streets.

Hudson Terminal, Cortlandt, Dey, Church and Fulton Streets.

Lehigh Valley, foot of West 23d and Liberty Streets.

Long Island, 7th Avenue and 33d Street; foot East 34th Street.

New York Central & Hudson River, 42d Street and 4th Avenue, Grand Central Station; Putnam Division, 155th Street and Eighth Avenue.

New York, New Haven & Hartford, 4th Avenue and 42d Street, Grand Central Station.

New York, Ontario & Western, foot of Cortlandt and West 42d Streets.

New York, Susquehanna & Western, foot of Chambers and West 23d Streets.

Pennsylvania, foot of Cortlandt and Desbrosses Streets, 7th Avenue, 31st to 33d Street and Hudson Terminal (Fulton and Church Streets).

Philadelphia & Reading, foot W. 23d and Liberty Sts.

Staten Island, foot of Whitehall Street, South Ferry.

West Shore, foot Cortlandt and West 42d Streets.

## NEW YORK PORT FLOUR AND GRAIN RECEIPTS.

(Figures compiled by the Produce Exchange.)

| CAL. YEAR. | Wheat. | Corn. | Oats. | Barley. | Rye. | Total Grain. | Flour. | Total Grain and Flour. |
|---|---|---|---|---|---|---|---|---|
| | *Bushels.* | *Bushels.* | *Bushels.* | *Bushels.* | *Bushels.* | *Bushels.* | *Barrels.* | *Bushels.* |
| 1902.... | 35,101,950 | 6,744,960 | 29,983,327 | 2,811,302 | 2,736,395 | 77,377,934 | 6,893,734 | 108,399,737 |
| 1903.... | 22,347,675 | 27,428,210 | 29,504,100 | 3,491,700 | 1,338,475 | 84,110,160 | 7,686,338 | 118,698,681 |
| 1904.... | 8,401,322 | 15,504,030 | 26,826,800 | 6,432,000 | 183,671 | 57,347,823 | 6,379,498 | 86,055,564 |
| 1905.... | 11,431,836 | 30,298,430 | 35,721,100 | 9,189,200 | 338,250 | 86,978,816 | 6,436,028 | 115,940,942 |
| 1906.... | 24,697,600 | 21,938,715 | 31,206,800 | 6,329,400 | 393,350 | 84,565,865 | 6,260,724 | 112,739,123 |
| 1907.... | 33,573,621 | 22,286,425 | 26,754,200 | 3,027,382 | 1,493,575 | 87,135,203 | 6,509,359 | 116,427,317 |
| 1908.... | 27,797,800 | 8,057,305 | 23,853,600 | 4,152,765 | 876,850 | 64,738,320 | 7,393,843 | 98,010,612 |
| 1909.... | 23,304,300 | 7,428,005 | 22,717,562 | 3,469,325 | 300,100 | 57,219,292 | 7,069,142 | 89,030,428 |
| 1910.... | 16,413,300 | 12,285,500 | 23,115,225 | 2,047,743 | 287,788 | 54,149,556 | 8,098,007 | 90,590,585 |
| 1911.... | 28,406,400 | 16,061,358 | 24,650,510 | 3,888,717 | 301,997 | 73,308,982 | 8,304,334 | 110,678,485 |
| 1912.... | 45,976,100 | 7,463,972 | 24,152,650 | 7,070,864 | 331,200 | 84,994,786 | 8,670,484 | 124,011,964 |
| 1913.... | 52,979,500 | 10,704,275 | 20,382,300 | 6,194,725 | 739,175 | 90,999,975 | 9,451,447 | 133,731,482 |
| 1914.... | 50,516,660 | 14,686,325 | 27,786,385 | 6,135,500 | 2,273,700 | 101,398,570 | 11,237,172 | 151,965,844 |
| 1915.... | 99,342,750 | 14,383,985 | 38,382,922 | 6,671,785 | 2,020,650 | 160,802,092 | 12,846,662 | 218,612,071 |
| 1916.... | 127,316,180 | 11,055,200 | 33,277,800 | 14,055,023 | 744,700 | 186,448,903 | 8,772,434 | 225,924,856 |
| 1917.... | 78,217,300 | 13,768,700 | 38,406,000 | 11,543,461 | 3,441,500 | 148,745,761 | 7,929,386 | 181,069,197 |
| 1918.... | 33,856,528 | 7,726,900 | 27,229,800 | 5,684,576 | 3,790,650 | 78,288,454 | 8,534,978 | 116,925,603 |
| 1919.... | 50,154,500 | 1,976,100 | 31,692,600 | 9,941,875 | 12,529,350 | 102,777,337 | 7,996,057 | 142,883,909 |
| 1920.... | 62,573,335 | 6,746,896 | 14,731,900 | 5,409,307 | 24,719,214 | 114,198,652 | 6,905,711 | 145,534,201 |
| 1921.... | 54,100,228 | 13,229,736 | 11,213,051 | 6,259,875 | 3,099,743 | 87,902,633 | 11,925,610 | 141,567,878 |

Peas, malt and meal are not included in above table. In the total column, flour is reduced to its equivalent in wheat, on the basis of 4½ bushels per barrel.

RECEIPTS OF OTHER PRODUCE AT NEW YORK CITY.

| | 1921. | 1920. | 1919. | 1918. | 1917. | 1916. |
|---|---|---|---|---|---|---|
| Buckwheat.....bush. | 234,000 | 213,400 | 288,700 | 9,600 | 47,000 | 346,900 |
| Peas.....bush. | 4,810 | 28,751 | 642,880 | 1,084,927 | 655,806 | 490,121 |
| Beans.....sacks | 9,476 | 54,928 | 958,049 | 967,914 | 630,664 | 993,895 |
| Oatmeal.....bbls. | 45,239 | 25,750 | 636,939 | 805,246 | 903,155 | 399,265 |
| Cornmeal.....bbls. | 102,945 | 64,964 | 151,258 | 512,291 | 447,399 | 453,156 |
| Hominy.....pkgs. | 1,200 | ..... | 900 | 9,936 | 650 | 8,843 |
| Hay.....tons | 106,660 | 159,254 | 196,807 | 223,826 | 200,437 | 237,580 |
| Feed.....tons | 3,160 | 2,728 | 8,103 | 8,056 | 13,290 | 17,461 |
| Grass seed.....bags | 19,616 | 9,229 | 17,650 | 17,367 | 25,041 | 20,013 |
| Flax seed.....bush. | 3,967,133 | 5,714,131 | 378,928 | 163,800 | 3,372,800 | 5,343,900 |
| Hops.....bales | 10,633 | 5,564 | 33,895 | 15,426 | 32,239 | 50,748 |
| Whiskey.....bbls. | 600 | 17,652 | 56,493 | 31,385 | 55,415 | 41,491 |
| Alcohol.....bbls. | ..... | 9,930 | 36,929 | 7,444 | 16,582 | 75,198 |
| High wines.....bbls. | 75 | 14,186 | 23,639 | 39,266 | 67,674 | 74,350 |
| Beef.....tcs.. | 8,722 | 3,434 | 6,448 | 2,606 | 1,227 | 969 |
| Beef.....bbls. | 6,533 | 11,916 | 7,942 | 2,230 | 2,854 | 4,762 |
| Beef.....cases | 375 | 65,992 | 251,822 | 700,185 | 356,233 | 283,870 |
| Pork.....bbls. | 21,785 | 45,908 | 24,508 | 12,261 | 16,098 | 13,284 |
| Lard.....tcs.. | 357,989 | 185,509 | 341,930 | 221,686 | 128,612 | 186,035 |
| Lard.....kegs. | 2,044,582 | 745,616 | 478,909 | 922,412 | 538,851 | 607,331 |
| Lard.....cases | 1,434,679 | 25,693 | 60,574 | 97,827 | 40,774 | 44,286 |
| Cottonseed oil.....bbls. | 1,598 | 41,266 | 99,650 | 101,196 | 231,470 | 170,981 |
| Butter.....pkgs. | 2,823,566 | 2,169,220 | 2,887,475 | 2,787,241 | 2,565,101 | 2,917,628 |
| Cheese.....boxes | 790,442 | 784,484 | 919,750 | 731,259 | 944,873 | 813,030 |
| Eggs.....pkgs. | 6,294,382 | 4,971,025 | 5,817,567 | 5,019,086 | 4,359,163 | 4,858,274 |

## FOREIGN CONSULS IN NEW YORK CITY.

Argentina—Ernesto C. Perez, 17 Battery Place.
Austria—Dr. F. Fischerauer, 24 State St.
Belgium—Pierre Mali, 25 Madison Avenue.
Bolivia—Carlos Gumucio, 233 Broadway.
Brazil—Hello Lobo, 17 State St.
Chili—G. M. Varela, 280 Broadway.
China—Q. Ling Chang, 13 Astor Place.
Colombia—Jose M. Arango, 17 Battery Place.
Costa Rica—J. R. Oreamuno, 17 Battery Place.
Cuba—Filipe Taboada, 44 Whitehall St.
Czechoslovakia—Dr. Borivoj Prusik, 31 E. 17th St.
Denmark—George Bech, 16 Bridge St.
Dominican Republic—M. de J. Camacho, 17 Battery Place.
Ecuador—G. R. de Ycaza, 17 Battery Place.
Finland—K. F. Altio, 5 State St.
France—Gaston E. Liebert, 9 E. 40th St.
Germany—Carl Lang, 11 Broadway.
Great Britain—H. G. Armstrong, 44 Whitehall St.
Greece—Geo. Dracopoulos, 11 St. Luke's Place.
Guatemala—(Vacant), 50 Broad St.
Hayti—Andrew Faubert, 123 Liberty St.
Honduras—A. L. Ulloa, 233 Broadway.
Hungary—Dr. Charles Winter, 25 Broadway.
Italy—T. F. Bernardi, 20 E. 22d St.
Japan—Kyo Kumasaki, 165 Broadway.
Jugo-Slavia—Dr. Paul Karovitch, 443 W. 22d St.
Liberia—Edward G. Merrill, 326 W. 19th St.
Mexico—R. P. de Negri, 7 Dey St.
Monaco—Paul Fuller, 2 Rector St.
Montenegro—Luigi Criscuolo, Delegate Plenipotentiary, 53 E. 65th St.
Netherlands—D. J. Steyn Parve, 44 Beaver St.
Nicaragua—T. Tijerino, 17 State St.
Norway—Hans Fay, 115 Broad St.
Panama—Belisario Porras, Jr., 17 State St.
Paraguay—Wm. Wallace White, 233 Broadway.
Persia—H. H. Topakyan, 40 W. 57th St.
Peru—Eduardo Higginson, 42 Broadway.
Portugal—Geo. S. Duarte, 17 Battery Place.
Poland—Dr. S. Grotowski, 953 Third Ave.
Roumania—T. T. Wells, 1834 Broadway.
Russia—M. M. Oustinoff, 249 W. 34th St.
Salvador—P. R. Bosque, 42 Broadway.
Serbia—V. R. Savich, 443 W. 22d St.
Siam—F. Warren Sumner, 18 Broadway.
Spain—A. Berea, 158 W. 14th St.
Sweden—O. H. Lamm, 6 Beekman St.
Switzerland—Louis H. Junod, 104 Fifth Ave.
Turkey (rep. by Spain)—158 W 14th St.
Uruguay—Jose Richling, 17 Battery Place.
Venezuela—Pedro R. Rincones, 80 South St.

## THE NEW YORK SOUTHERN SOCIETY.

The New York Southern Society, with offices at 270 Broadway, was formally organized in the City of New York on Nov. 9, 1886, and incorporated under the laws of the State of New York in May, 1889. The object of the society is to cherish and perpetuate the memories and traditions of the Southern people and to cultivate friendly relations between the Southern men resident, or temporarily sojourning, in New York City.

The officers for the year 1922-1923 are *President*, Junius Parker; *Vice President*, Martin W. Littleton; *Secretary*, Charles Cason; *Treasurer*, George N. Hartmann.

The organization has a membership of about 1,100, with members located in nearly every State in the Union and in many foreign countries. Numbered among the members are: Mortimer N. Buckner, Frank W. Baldwin, Samuel McRoberts, Amos L. Beaty, Henry Evans, Grantland Rice, Ivy L. Lee, George Foster Peabody, Thomas F. Ryan, Martin W. Littleton, Irvin Cobb, Bernard M. Baruch, William G. McAdoo, Barron G. Collier, Percy H. Johnston, and many others of distinction.

## PIERS IN NEW YORK CITY.

(City-owned piers are in italics.)

**Recreation Piers**—MANHATTAN, *Pier 30, East River, bet. Market and Pike Sts.; Pier 55, East River, at 3d St.; Pier 72, East River, at 24th St.; Pier on Harlem River, at East 112th St.; Pier No. 43, North River, at Barrow St.; Pier No. 90, North River, at West 50th St.; Pier on North River, at West 129th St.* BROOKLYN, *Pier on East River, at No. 2d St.*

**Barge Canal Piers**—MANHATTAN, Piers 5 and 6, East River, at Counties Slip. BROOKLYN, Pier on East River, at Erie Basin, in Gowanus district; 2 piers on East River at Dupont and Clay Sts., in Greenpoint district.

All of the Barge Canal piers are owned by the State of New York.

### COMMERCIAL PIERS OTHER THAN THOSE ABOVE.

(The pier number is in parentheses; some piers have no number.)

#### PIERS ON THE NORTH RIVER.

**Manhattan**—NORTH (HUDSON) RIVER, (*New 1*) south of Battery Pl.; (*Old 1*) Battery Pl.; (2, 3, 4, 5) bet. Battery Pl. and Morris St.; (7) bet. Morris and Rector Sts.; (*8*) Rector St.; (*9*) Carlisle St.; (*10*) Albany St.; (*11*) Cedar St.; (13) bet. Cortlandt and Dey Sts.; (*14*) Fulton St.; (*15*) Vesey St.; (16) bet. Barclay St. and Park Pl.; (17) Park Pl.; (*18*) Murray St.; (*19*) Warren St.; (*20*) Chambers St.; (*21*) Duane St.; (*22*) Jay St.; (*23*) Harrison St.; (*24*) Franklin St.; (*25*) North Moore St.; (*26*) Beach St.; (*27*) Hubert St.; (*28*) Laight St.; (*29*) Vestry St.; (*31*) Watts St.; (32) Canal St.; (*33*) Canal St.; (*34*) bet. Canal and Spring Sts.; (*35*) Spring St.; (*36*) bet. Spring and Charlton Sts.; (*37*) Charlton St; (*38*) King St.; (*39*) West Houston St.; (*40*) Clarkson St.; (*41*) Leroy St.; (*42*) Morton St.; (*44*) Christopher St.; (*45*) West 10th St.; (*46*) Charles St.; (*47*) Perry St.; (*48*) West 11th St.; (*49*) Bank St.; (*50*) bet. Bethune and West 12th Sts.; (*51*) Jane St.; (*52*) Gansevoort St.; *4 Gansevoort Market piers*, at Grace St., Hewitt Ave. and Low Ave.; (*53*) Bloomfield St.; (*54*) West 13th St.; (*56*) bet. 14th and 15th Sts.; (*57*) West 16th St.; (*58*) West 17th St.; (*59*) West 19th St.; (*60*) West 20th St.; (*61*) West 21st St.; (*62*) West 22d St.; (*63*) West 23d St.; (*64*) West 24th St.; (*65*) West 25th St.; (*66*) West 26th St.; (*67*) West 27th St.; (*68*) West 28th St.; (*69*) West 29th St.; (*70*) West 30th St.; (*71*) West 31st St.; (*72*) West 32d St.; (*73*) West 33d St.; (*74*) West 34th St.; (*75*) West 35th St.; (*76*) West 36th St.; (*77*) West 37th St.; (*78*) West 38th St.; (*79*) West 39th St.; (*80*) West 40th St.; (*81*) West 41st St.; (*83*) West 43d St.; (*84*) West 44th St.; (*86*) West 46th St.; (*87*) West 47th St.; (*88*) West 48th St.; (*89*) West 49th St.; (*91*) West 51st St.; (*92*) West 52d St.; (*93*) West 53d St.; (*94*) West 54th St.; (*95*) West 55th St.; (*96*) West 56th St.; (*97*) West 57th St.; (*98*) West 58th St.; (*99*) West 59th St.; (B) West 63d St.; (D) West 64th St.; (E) West 65th St.; (F) West 66th St.; (G) bet. West 67th and 68th Sts.; (I) West 70th St.

The commercial piers on the Hudson in Manhattan, north of 70th St., *all of which are city-owned*, but are not numbered, are at the following streets: West 79th, West 90th, West 95th, West 96th, 2 at West 97th; West 131st; West 132d; West 133d; West 134th; West 135th; West 155th; West 156th; West 157th, and West 158th Sts. The city's new pier at Dyckman St., is now open.

#### PIERS ON THE EAST RIVER.

**Manhattan**—EAST RIVER, (*4*) Broad St.; (*7 and 8*) Coenties Slip; (*9*) bet. Coenties Slip and Old Slip. (*10*) Old Slip; (*11*) Gouverneur Lane; (*12 and 13*) Wall St.; (14) Maiden Lane; (*15 and 16*) Burling Slip; (*17*) Fulton St.; (*18*) Beekman St.; (*19 and 20*) Peck Slip; (*21*) Dover St.; (*Pier at Roosevelt St.*); (*22*) James Slip; (*25*) Oliver St.; (*26 and 27*) Catharine St.; (*28*) bet. Catharine and Market Sts.; (*29*) Market St.; (*31 and 32*) Pike St.; (*33*) bet. Pike and Rutgers Sts.; (*34*) Rutgers St.; (*35*) bet. Rutgers and Jefferson Sts.; (*35½*) Jefferson St.; (*36*) bet. Jefferson and Clinton Sts.; (*37*) Clinton St.; (*38*) bet. Clinton and Montgomery Sts.; (39) Montgomery St.; (40) bet. Montgomery and Gouverneur Sts.; (41) Gouverneur St.; (*42-45*) bet. Gouverneur and Jackson Sts.; (*Old 55*) bet. Cherry and Grand Sts.; (*Old 46*) Broome St.; (*Old 47*) south of Delancey St.; (*50*) Rivington St.; (*51*) bet. Rivington and Stanton Sts.; (*52*) Stanton St.; (*53*) south of Houston St.; (*54*) north of Houston St.; (*56*) East 4th St.; (*57*) East 5th St.; (58) East 6th St.; (*59*) East 7th St.; (*60*) East 8th St.; (*61*) East 9th St.; (*62*) East 10th St.; (*63*) East 11th St.; (*64*) East 12th St.; (65) East 13th St.; (*66*) East 18th St.; (*67*) East 19th St.; (*68*) East 20th St.; (*69*) East 21st St.; (*70*) East 22d St.; (*73*) East 25th St.; (*74*) East 26th St.; (*76*) East 28th St.; (*77*) East 29th St.; (*78*) East 30th St.; (*79*) East 31st St.; (*80*) East 32d St.; (*81*) East 33d St.; (*84*) north of East 34th St.; (*85*) East 35th St.; (*86*) East 36th St.; (*87*) East 37th St.; (*88*) East 38th St.; (*89*) East 39th St.; (*95*) East 45th St.; (*96*) East 46th St.; (*97*) East 47th St.; (*99*) East 49th St.

North of East 49th St., Manhattan, on the East River, there are unnumbered piers, *all city-owned*, at the following streets: East 53d, East 60th, East 61st, East 62d, East 86th, East 90th, East 91st, East 94th, East 95th, East 96th, East 99th, and East 100th Sts.

**Harlem River Piers**—MANHATTAN SIDE, *East 102d St., East 103d St., East 104th St., East 107th St., East 108th St., East 109th St., East 110th St., East 112th St., East 116th St., bet. 116th and 117th Sts. East 117th St., East 118th St., East 119th St., East 120th St., East 126th St.*, south of East 128th St., East 128th St., 209th St., BRONX SIDE *at Fordham road.*

**Bronx**—EAST RIVER, all unnumbered, *East 132d St., East 136th St., East 138th St.*, 2 north of East 141st St.; west of Dupont St.; east of Dupont St.; west of Truxton St.; east of Truxton St.; *at Tiffany St.*

#### PIERS IN BROOKLYN.

**Brooklyn**—SOUTH OF FULTON ST., on East River, *Fulton St.*; (4-12) on Furman St.; (15) Montague St.; (16-17-18) Jorelamon St.; (22) Pacific St.; (24) Amity St.; (26) bet. Warren and Congress Sts.; (27) bet. Baltic and Warren Sts.; (29) Harrison St.; (30) bet. Irving and Sedgwick Sts.; (32) DeGraw St.; (33-35) India Wharf; (36-38) Pioneer St.; (39) Coffey St.; (43) Vandyke St.; (41) Beard St.; (44) bet. Conover and Ferris Sts.; (46) bet. Conover and Van Brunt Sts.; (47A) bet. Richards and Van Brunt Sts.; (48B) bet. Richards and Dwight Sts.; (1-3) Erie Basin; *at 29th St.; at 30th St.; at 31st St.; at 32d St.; at 35th St.*; Bush Terminal Piers, 39th to 50th Sts.; U. S. Government piers, 57th to 62d Sts.; at 64th St.; *at Bay Ridge Ave.*

**Brooklyn**—NORTH OF FULTON ST., (2 and 3) Dock St.; (1) south of Main St.; *at Main St.*; at Jay St.; 3 terminal piers from Jay to Gold Sts.; *at Gold St.*; at Hudson Ave.; *5 piers at Wallabout Market Basin; at South 5th, 3d, 2d, and 1st Sts.*; at North 1st St. at North 3d St. and 4th St.; bet. North 4th and 5th Sts.; at North 6th, 7th, 8th and 9th Sts.; bet. North 9th and 10th Sts.; at North 10th and 11th Sts.; bet. North 11th and 12th Sts.; at North 12th St.

There are other private commercial piers at Quay, Oak, Milton, Kent, Java, India, Huron, Greene, Freeman and Eagle Sts. The *pier at Noble St.* is city-owned, as is that at *Whale Creek*, and at *Flatbush Ave.*

**Queens Borough**—All privately owned. Pigeon St.; Flushing St.; 3d, 4th, 5th, 7th and 8th Sts.; Nott Ave.; Jamaica Ave.; Whitestone Landing.

**Staten Island**—Piers 1 to 21, extending from Tompkinsville to Clifton, are privately owned. So are B. & O. R. R. piers 1 to 8, bet. St. George and New Brighton; also the Nicholas Ave. pier at Port Richmond. The city owns the *Harbor Road Pier*, Marimeo Harbor, and the *pier at Rossville.* The piers at Holland Hook and at Tottenville are privately owned.

The *city has built at Stapleton 12 piers*, 1,000 to 1,184 feet long, and 125 to 209 feet wide, four covered with two-story sheds, and eight with one-story sheds. One of the piers is reserved by the city for open wharfage, or general commercial use. The others, eleven in number, have been rented by the city for a term of years to various ocean steamship companies, the rent being fixed at 7½ per cent. a year on the construction cost, which was $20,000,000 for the 12 piers. They were commenced in 1920; and they furnish 26,000 linear feet of wharfage, and 1,800,000 square feet of pier space.

Piers A and New No. 1, at the Battery, North River, are the only stone piers in the city. The new city-owned pier at Roosevelt St., East River, Manhattan, is of concrete, and the city-owned pier at Barren Island, Jamaica Bay, rests on concrete piling.

## CIVIL SERVICE RULES IN THE CITY OF NEW YORK.

SYNOPSIS of regulations governing the admission of persons into the Civil Service of the City of New York. Information may also be had by applying to the Secretary of the Municipal Civil Service Commission, Municipal Building, 14th floor.

Under the White Civil Service Law, Chapter 370, Laws of 1899, April 19, the rules apply to all positions in the service of the City of New York except officers elected by the people, all legislative officers and employees, heads of any department, or superintendents, principals, or teachers in a public school, academy, or college. This requires "examinations, wherever practicable, to ascertain the fitness of applicants for appointment to the Civil Service of said city." The Constitution requires that these examinations shall be competitive, "so far as practicable."

There are approximately 55,000 permanent employees in the city service, exclusive of the teaching force of the Department of Education.

The entire Administration of the City of New York is divided into two general services; namely, the Unclassified Service and the Classified Service. The Unclassified Service includes all elective officers; the officers and employees of the Board of Aldermen; members of the Board of Elections; the head, or heads, of any department of the City Government; or any person appointed by name in any statute.

The Classified Service includes all positions not in the Unclassified Service.

The Classified Service is divided into four classes; namely:

**Exempt Class**—The Exempt Class includes the deputies of principal executive officers authorized by law to act generally for and in place of their principals; one secretary of each officer, board, and commission authorized by law to appoint a secretary; one clerk and one deputy clerk, if authorized by law, of each court, and one clerk of each elective judicial officer. In addition thereto there may be included in the Exempt Class all other subordinate offices for the filling of which competitive or non-competitive examination may be found to be not practicable.

**Non-Competitive Class**—Includes all those positions of a minor nature, in the city institutions or elsewhere, that it is not practicable to fill through competitive examination.

**Labor Class**—Includes all unskilled laborers and such skilled laborers as are not included in the competitive or non-competitive classes.

**Competitive Class**—Includes all positions in the Classified Service (excepting those in the Exempt, Non-Competitive or the Labor Class) for which it is practicable to determine the merit and fitness of the applicant by competitive examination.

Vacancies in the Exempt Class may be filled without examination, appointments being made by the Mayor or other official having jurisdiction over the department where the vacancy exists.

Positions in the Non-Competitive Class are filled as a result of the examinations held by the department where the person is to be employed.

**Filing Applications for Positions in Competitive Class**—Applications for positions in the Competitive Class will be issued and received only for the position or positions advertised, and only during the period specified by the commission in such advertisement. Advertisements for the various examinations appear in the prominent daily papers and in the *City Record*. The *City Record* is on file in the reading room of any of the city libraries.

All applications for an examination must be on a prescribed form addressed to the "Secretary of the Municipal Civil Service Commission." When an examination is advertised application blanks may be obtained at the office of the commission, Room 1400.

Application blanks will be mailed upon request provided a self-addressed stamped envelope or sufficient postage is inclosed to cover the mailing. The commission will not guarantee the delivery of the same. Postage on applications forwarded by mail must be fully prepaid.

Applicants must be citizens of the United States and residents of the State of New York. The requirement as to residence may be waived by the commission, but only with the proviso that applicants become residents of the State of New York prior to the date of their appointment.

Applicants for patrolmen must have resided within the State of New York at least one (1) year prior to the date of appointment.

The prescribed application form filled out in the applicant's handwriting sets forth the following:

The applicant's name, age, residence, statement regarding citizenship or naturalization, statement regarding arrests or previous service in a City Department, if any, and also the certificate for citizens whose residences or places of business are within the City of New York.

In examinations for positions requiring previous experience, applicants must fill in and file with their application an experience paper. In some examinations where experience is a qualifying subject, applicants receiving less than the minimun passing mark in this paper are barred from the remainder of the examination.

Applications for positions in the Labor Class are issued and received continually.

Applicants for all positions in the Competitive and the Labor Classes are required to take a medical and physical examination.

Applicants for Labor Class positions that require previous training or experience must take an oral, or practical test; no written examination is given to applicants.

### CONDUCT OF EXAMINATIONS.

Applicants shall be admitted to examination upon the production of the official notification to appear for that purpose.

All paper upon which examinations are to be written shall be furnished to the applicants by the examining board and shall bear some suitable official indorsement, stamp, or mark, for the purpose of identifying the same.

All examinations shall be in writing, except such as refer to expertness or physical qualities, and except as herein otherwise provided.

The sheets of questions shall be numbered and shall be given out in the order of their numbers, each, after the first, being given only when the competitor has returned to the examiners the last sheet given to him. In general, no examination shall extend beyond five hours without intermission, and no questions given out at any session, to any candidate, shall be allowed to be answered at another session.

The time allowed for completing the examination shall be announced before the first paper is given out.

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The following municipal departments and offices come under jurisdiction of Civil Service rules:

Accounts, Com. of
Armory, Board of.
Art Commission.
Assessors, Board of.
Bellevue and Allied Hospitals.
Board of Ambulance Service.
Board of Inebriety.
Board of Water Supply.
Borough President in each Borough, Office of the.
Buildings, Bureau of.
Central Purchase Committee.
Child Welfare, Board of.
City Chamberlain.
City Record, Supervisor of the.
Civil Service Commission.
College of the City of New York.
Correction, Dept of.
Court, City.
Court, City Magistrate.
Court, Municipal.
Court of Special Sessions.
Docks and Ferries, Dept. of.
Education, Dept. of.
Elections, Board of.
Estimate and Apportionment, Board of.
Finance Dept.
Fire Dept.
Health Dept.
Hunter College.
Law Dept.
Licenses, Dept. of.
Mayor's Office.
Medical Examiners
Normal College.
Parks, Dept. of.
Parole Commission.
Plant and Structures.
Plumbers, Examining Board of.
Police Dept.
Public Welfare, Dept. of.
Public Works Bureau.
Revision of Assessments, Board of.
Sinking Fund Commission.
Standards and Appeals, Board of.
Street Cleaning, Dept. of.
Taxes and Assessm'ts, Dept. of.
Tenement House Dept.
Water Supply, Gas, and Electricity, Dept. of.
Weights and Measures.

Inspectors of Elections and Poll Clerks are not subject to competitive examination.
The minimum height of firemen has been reduced one inch, from 5 ft. 7 in. to 5 ft. 6 in.

## FIRE DEPARTMENT IN NEW YORK CITY.

| Rank and Grade. | Total. | Rank and Grade. | Total. | Rank and Grade. | Total. |
|---|---|---|---|---|---|
| Chief of Dept., $10,000 | 1 | Lieutenants, $3,200 | 503 | Firemen—2d Grade, $1,980 | 522 |
| Deputy Chiefs, 14 at $5,500; 1 at $6,500; 1 at $7,500. | 16 | Pilots, $3,000 | 22 | Firemen—3d Grade, $1,769 | 361 |
| Chief of Battalion, $4,490 | 47 | Engin'rs of Steamer, $2,520 | 425 | Firemen—4th Grade, $1,769 | 115 |
| Medical Officers, 8 at $4,250; 1 Chief at $5,200 | 9 | Uniformed Marine Engineers, $2,460 | 4 | Probation, $1,769 | 39 |
| Captains, $3,700 | 303 | Firemen—1st Grade, $2,280 | 3,621 | Total | 5,995 |

Pursuant to the provisions of section 790, Greater New York Charter, all uniformed members of the Fire Department are entitled to retire at the expiration of twenty years' continuous service on a pension equal to not less than one-half of the salary they may be receiving at the time of their application.

## FIRE ENGINE COMPANIES, MANHATTAN AND BRONX.

(Headquarters, Municipal Building.)

1—165 W. 29th St.
2—530 W. 43d St.
3—417 W. 17th St.
4—119 Maiden Lane.
5—340 E. 14th St.
6—113 Liberty St.
7—100-102 Duane St.
8—165 E. 51st St.
9—55 E. Broadway.
10—8 Stone St.
11—437 E. Houston St.
12—261 William St.
13—99 Wooster St.
14—14 E. 18th St.
15—269 Henry St.
16—223 E. 25th St.
17—91 Ludlow St.
18—132 W. 10th St.
19—355 W. 25th St.
20—243 Lafayette St.
21—216 E. 40th St.
22—159 E. 85th St.
23—215 W. 58th St.
24—78 Morton St.
25—342 5th St.
26—220 W. 37th St.
27—173 Franklin St.
28—604 E. 11th St.
29—160 Chambers St.
30—278 Spring St.
31—87 Lafayette St. (Water Tower No. 1).
32—49 Beekman St.
33—42 Great Jones St.
34—440 W. 33d St.
35—223 E. 119th St.
36—1849 Park Ave.
37—83 Lawrence St.
38—1907 Amsterdam Ave.
39—157 E. 67th St.
40—142 W. 63d St.
41—330 E. 150th St.
42—178 Monroe Ave.
43—Sedgwick Ave. and 178th St.
44—221 E. 75th St.
45—925 E. 177th St.
46—451 E. 176th St.
47—502 W. 113th St.
48—2504 Webster Ave.
49—Blackwell's Island.
50—491 E. 166th St.
52—Riverdale Ave., near Spuyten Duyvil Parkway.
53—175 E. 104th St.
54—304 W. 47th St.
55—363 Broome St.
56—120 W. 83d St.
57—Battery Park (Boat).
58—81 W. 115th St.
59—180 W. 137th St.
60—352 E. 137th St.
61—1518 W'msbridge Rd.
62—3431 White Plains Rd., Williamsbridge.
63—4109 White Plains Rd.
64—1214 Castle Hill Ave. (Bronx).
65—33 W. 43d St.
66—Ft. Grand St., E. R. (Fire Boat).
67—518 W. 170th St.
68—1080 Ogden Ave.
69—248 W. 143d St.
70—169 Scofield St., C. I.
71—3134-36 Park Ave.
72—22 E. 12th St.
73—655 Prospect Ave.
74—207 W. 77th St.
75—2385 Jerome Ave.
76—105 W. 102d St.
77—Ft. Beekman St., E. R.
78—Ft. 99th St. and Harlem River.
79—2928 Briggs Ave.
80—503 W. 139th St.
81—3025 Bailey Ave.
82—1215 Intervale Ave.
83—618 E. 138th St.
84—513 W. 161st St.
85—Ft. W. 35th St. (Boat)
86—Ft. of Bloomfield St. (Boat).
87—Ft. of 135th St., Harlem River (Boat).
88—2225 Belmont Ave.
89—1799 First Ave.
90—1841 White Plains Ave.
91—244 E. 111th St.
92—1259 Morris Ave.
93—513 W. 181st St.
94—1238 Seneca Ave.
95—29 Vermilye Ave.

## FIRE ENGINE COMPANIES, BROOKLYN.

201—5119 4th Ave.
202—201 Van Brunt St.
203—533 Hicks St.
204—299 Degraw St.
205—160 Pierrepont St.
206—1196 Metropolitan Ave.
207—247 Pearl St.
208—227 Front St.
209—157 Taafe Pl.
210—160 Carlton Ave.
211—166 Clymer St.
212—136 Wythe Ave.
213—137 Powers St.
214—231 Herkimer St.
215—88 India St.
216—11 Scholes St.
217—940 De Kalb Ave.
218—650 Hart St.
219—735 Dean St.
220—530 11th St.
221—712 Driggs Ave.
222—836 Quincy St.
223—Ft. 38th St., E. Riv. (floating engine).
224—274 Hicks St.
225—657 Liberty Ave.
226—409 State St.
227—979 Herkimer St.
228—178 39th St.
229—75 Richardson St.
230—59 Ellery St.
231—107 Watkins St.
232—Ft. Noble St. (floating engine).
233—243 Hull St.
234—1472 Bergen St.
235—206 Monroe St.
236—Liberty Ave., near Euclid St.
237—55 Morgan Ave.
238—176 Norman Ave.
239—395 4th Ave.
240—1309 Prospect Ave.
241—Bay Ridge Ave., near Second Ave.
242—5th Ave., nr. 92d St.
243—8653 18th Ave.
244—W. 15th St. and Surf Ave., Coney Island.
245—2929 W. 8th St.
246—2731 E. 23d St.
247—60th St., near New Utrecht Ave.
248—2261 Church Ave.
249—Rogers Ave. and Midwood St.
250—Lawrence Ave., near E. 3d St.
251—Wallabout Market.
252—617 Central Ave.
253—86th St., nr. 24th Av
254—Ocean P'w'y&Av.W.
255—1369 Rogers Ave.
256—124 De Kalb Ave.
269—786 Union St.
271—Himrod St., near Nicholas Ave.
276—1635 E. 14th St.
277—582 Knickerbocker Ave.
278—5011 7th Ave.
279—252 Lorraine St.
280—489 St. John's Pl.
281—1210 Cortelyou Rd.
282—4210 12th Ave.
283—214 Bristol Ave.
284—1157 79th St.
290—480 Sheffield Ave.

Manhattan and Brooklyn have a high-pressure water service for use in quenching fires in the business districts. For details see article on N. Y. City Water Supply.

## FIRES AND FIRE LOSSES IN NEW YORK CITY.

| Year. | Fires. | Loss by Fires. | Year. | Fires. | Loss by Fires. | Year. | Fires. | Loss by Fires. |
|---|---|---|---|---|---|---|---|---|
| | | *Dollars.* | | | *Dollars.* | | | *Dollars.* |
| 1867 | 873 | 5,711,000 | 1886 | 2,415 | 3,340,810 | 1904 | 11,148 | 7,667,523 |
| 1868 | 740 | 4,342,000 | 1887 | 2,929 | 5,585,425 | 1905 | 11,524 | 7,279,514 |
| 1869 | 850 | 2,696,393 | 1888 | 3,217 | 5,485,922 | 1906 | 12,181 | 7,218,488 |
| 1870 | 964 | 2,120,212 | 1889 | 2,836 | 4,142,777 | 1907 | 12,547 | 9,413,042 |
| 1871 | 1,258 | 2,127,356 | 1890 | 3,479 | 4,168,165 | 1908 | 13,039 | 9,261,078 |
| 1872 | 1,649 | 2,891,818 | 1891 | 3,938 | 6,959,650 | 1909 | 12,437 | 7,431,635 |
| 1873 | 1,470 | 4,022,640 | 1892 | 4,011 | 5,060,973 | 1910 | 14,405 | 8,591,831 |
| 1874 | 1,355 | 1,430,306 | 1893 | 4,151 | 5,992,583 | 1911 | 14,574 | 12,470,806 |
| 1875 | 1,418 | 2,472,536 | 1894 | 3,983 | 4,208,553 | 1912 | 15,633 | 9,069,580 |
| 1876 | 1,382 | 3,851,213 | 1895 | 3,963 | 3,519,801 | 1913 | 12,958 | 7,467,997 |
| 1877 | 1,450 | 3,210,695 | 1896 | 3,890 | 3,418,591 | 1914 | 14,425 | 8,217,811 |
| 1878 | 1,654 | 1,884,505 | 1897 | 4,046 | 3,396,892 | 1915 | 13,416 | 5,757,018 |
| 1879 | 1,551 | 5,671,580 | 1898 | 6,442 | 5,186,890 | 1916 | 13,677 | 8,746,404 |
| 1880 | 1,783 | 3,183,440 | 1899 | 8,053 | 11,277,311 | 1917 | 14,053 | 14,278,523 |
| 1881 | 1,785 | 5,820,259 | 1900 | 8,405 | 8,573,347 | 1918 | 13,971 | 9,538,725 |
| 1882 | 2,001 | 4,195,960 | 1901 | 8,424 | 8,816,365 | 1919 | 13,429 | 12,488,258 |
| 1883 | 2,169 | 3,512,848 | 1902 | 8,700 | 6,998,563 | 1920 | 14,628 | 18,806,908 |
| 1884 | 2,406 | 3,474,547 | 1903 | 10,046 | 7,082,439 | 1921 | 16,350 | 20,200,808 |
| 1885 | 2,479 | 3,789,283 | | | | | | |

The 1921 fires by boroughs were: Manhattan, 7,334 ($13,335,113); Bronx, 1,783 ($1,072,975); Brooklyn, 4,988 ($4,216,890); Queens, 1,554 ($1,372,030); Richmond, 691 ($203,800).

The figures from 1898 include the five boroughs. Number of fires from 1866 to 1897, inclusive, 72,891; total loss from 1866 to 1897, inclusive, $128,116,733; average annual loss per fire from 1866 to 1897, inclusive, $1,757.65.

## POLICE FORCE OF NEW YORK CITY.

(Officially revised as of Oct., 1, 1922.)

The police force of the City of New York consists (Aug. 10, 1922) of 1 Chief Inspector ($7,500); 1 Deputy Chief Inspector ($5,300); 1 Marine Inspector ($4,900); 19 other Inspectors ($4,900); 1 Chief Surgeon ($6,500); 1 Deputy Chief Surgeon ($4,400); 18 other Surgeons ($4,400); 19 Honorary Surgeons (no compensation); 1 Superintendent of Telegraph ($5,300); 1 Assistant Superintendent of Telegraph ($3,800); 103 Captains ($4,000); 1 Military Captain ($4,500); 523 Lieutenants ($3,300); 769 Sergeants ($2,700); 10,420 Patrolmen ($1,769 to $2,280); 56 Policewomen ($1,769 to $2,280); 20 Patrolwomen ($1,769 to $2,280); 5 Chaplains ($1,830). Total—11,960.

Rank of Doorman abolished by Act of Legislature, April 16, 1912.

Patrolmen, First grade, five years' service, $2,280 each; Second Grade, less than five years and more than four years and six months, $2,100 each; Third Grade, less than four years and six months and more than four years, $2,040 each; Fourth Grade, less than 4 years and more than three years, $1,920 each; Fifth Grade, less than three years and more than two years, $1,769 each; Sixth Grade, less than two years and more than one year, $1,769 each; Seventh Grade, less than one year, $1,769 each.

Members of the police force may be retired on one-half rate of compensation after service of twenty-five years, or after twenty years' service upon certificate of police surgeons of permanent disability, or after twenty years' service if a veteran of Civil War.

Members of the police force may also be retired upon pension upon certificate of police surgeons of permanent disability or disease contracted without misconduct on the part of the officer, and by reason of the performance of duty, at not to exceed one-half of rate of compensation.

### POLICE STATION HOUSES IN MANHATTAN AND THE BRONX.

(Headquarters, 240 Centre Street.)

| Precinct and Location. | Precinct and Location. | Precinct and Location. |
|---|---|---|
| 1st. Old Slip. | 28th. 150 W. 68th St. | 47th. 1086 Simpson St. |
| 2d. Pier A, North River. | 29th. 163 E. 51st St. | 49th. 1925 Bathgate Ave. |
| 4th. 16-20 Beach St. | 31st. 153 E. 67th St. | 50th. Sedgwick Ave. and 167th St. |
| 5th. 9 Oak St. | 32d. 134 W. 100th St. | 51st. 1415 Williamsbridge Road. |
| 13th. 118-120 Clinton St. | 33d. The Arsenal, Central Park. | 53d. Webster Ave. and Mosholu Parkway. |
| 14th. 135 Charles St. | 37th. 229 W. 123d St. | 54th. 281 City Island Ave. |
| 15th. 321 Fifth St. | 38th. 239 W. 135th St. | 56th. 229th St. and White Plains Ave. |
| 16th. 253 Mercer St. | 39th. 177 E. 104th St. | 57th. Kingsbridge Terrace. |
| 18th. 230 W. 20th St. | 40th. 1854 Amsterdam Ave. | Traffic A. 230 W. 20th St. |
| 21st. 327 E. 22d St. | 42d. 177th St. and Haven Ave. | Traffic B. 229 W. 123d St. |
| Women's. 434 W. 37th St. | 43d. 148 E. 126th St. | Traffic C. 1086 Simpson St., Bronx. |
| 23d. 138 W. 30th St. | 45th. 257 Alexander Ave. | |
| 25th. 160 E. 35th St. | 46th. 3d Ave. and 160th St. | |
| 26th. 345 and 347 W. 47th St. | | |

Detective Division, main office, Criminal Identification Bureau, Homicide Squad, etc., 240 Centre Street.

### INSPECTION DISTRICTS (PRECINCTS THEREIN ARE IN PARENTHESES).

First, 118-120 Clinton St. (5, 13, 15, 21, 25); Second, 16-20 Beach St. (1, 4, 14, 16, 23); Third, 153 E. 67th St. (29, 31, 37, 38, 39, 43); Fourth, 150 W. 68th St. (26, 28, 32, 40, 42); Fifth, 1925 Bathgate Ave. (45, 46, 47, 49, 50); Sixth, 3016 Webster Ave., Bronx (51, 53, 54, 56, 57); Fourteenth, 230 W. 20th St. (Traffic A, B, C, 33).

### POLICE STATION HOUSES IN BROOKLYN.

(Headquarters, 72 Poplar Street, Columbia Heights.)

| Precinct and Location. | Precinct and Location. | Precinct and Location. |
|---|---|---|
| 3d. 179 Washington St. | 79th. 67 6th Ave. at Bergen St. | 95th. 627 Gates Ave. |
| 67th. W. 8th St. near Surf Ave., Coney Island. | 80th. Avenue G. near E. 95th St. | 96th. 298 Classon Ave. |
| 68th. 86th St. and 5th Ave. | 82d. 35 Snyder Ave., Flatbush. | 97th. 179 Wilson Ave. |
| 70th. Bay 22d St. and Bath Ave. | 83d. 484 Liberty Ave., East N. Y. | 98th. 148 Vernon Ave. |
| 72d. Ave. U and E. 15th St. | 85th. 2 Liberty Ave., East N. Y. | 101st. 2 Lee Ave. |
| 73d. 1830 Brooklyn Ave. | 87th. 1661 Atlantic Ave. | 102d. 171 Bushwick Ave. |
| 74th. 154 Lawrence Ave. | 88th. 653 Grand Ave. | 103d. 263 Bedford Ave. |
| 76th. 4302 4th Ave. | 89th. 44 Rapelyea St. | 104th. 43 Herbert St. |
| 77th. Prospect Pk. (Parade Gr'ds). | 91st. 17 Butler St. | 105th. 145 Greenpoint Ave. |
| 78th. 577 5th Ave. at 16th St. | 93d. 72 Poplar St. | Traffic D. 148 Vernon Ave |
| | 94th. 16 Ralph Ave. | |

### INSPECTION DISTRICTS (PRECINCTS THEREIN ARE IN PARENTHESES).

Eighth, Bay 22d St. and Bath Ave. (67, 68, 70, 72, 74, 76); Ninth, 2 Liberty Ave. (73, 80, 82, 83, 85, 87, 88); Tenth, 72 Poplar St. (78, 79, 89, 91, 93, 96); Eleventh, 148 Vernon Ave. (94, 95, 97, 101, 102, 103, 104, 105).

### POLICE STATION HOUSES IN QUEENS.

| Precinct and Location. | Precinct and Location. | Precinct and Location. |
|---|---|---|
| 109th. 85 4th St., L. I. City. | 116th. Sherman and Catalpa Sts., Glendale. | 120th. Flushing Ave. and Fulton St., Jamaica. |
| 111th. 152 Grand Ave., Astoria. | 118th. 275 Church St., Richmond Hill. | 123d. 322 Boulevard, Rockaway Beach. |
| 112th. Broadway and Court St., Newtown. | Traffic E. 275 Church St., Richmond Hill. | 125th. 300 Broadway, Far Rockaway. |
| 113th. 43 N. Prince St., Flushing. | | |

Twelfth, Flushing Ave. and Fulton St., Jamaica (116, 118, 120, 123, 125); Thirteenth, 85 Fourth St., Long Island City (109, 111, 112, 113).

### POLICE STATION HOUSES IN RICHMOND.

| Precinct and Location. | Precinct and Location. |
|---|---|
| 60th. 116 Main St., Tottenville. | 65th. 1590 Richmond Terrace, West New Brighton. |
| 63d. 150 New Dorp Lane. | 66th. 32 Beach St., Stapleton. |

### INSPECTION DISTRICT.

Seventh, St. George, S. I. (2, 60, 63, 65, 66).

### POLICE APPROPRIATIONS, AND ARRESTS (LATTER IN PARENTHESES).

1898, $10,561,447 (141,745); 1899, $11,349,626 (138,875); 1900, $11,494,393 (132,805); 1901, $11,319,105 (133,749); 1902, $11,367,630 (145,936); 1903, $11,636,881 (175,871); 1904, $12,291,520 (175,880); 1905, $12,505,657 (198,356); 1906, $12,826,153 (189,202); 1907, $13,144,841 (204,119); 1908, $14,049,077 (244,822); 1909, $14,162,060 (220,334); 1910, $15,316,478 (170,681); 1911, $15,520,729 (153,768); 1912, $16,114,782 (170,375); 1913, $16,738,071 (182,011); 1914, $17,996,039 (190,184); 1915, $17,364,594 (212,452); 1916, $17,617,287 (200,901); 1917, $18,200,192 (187,913); 1918, $19,394,614 (170,159); 1919, $20,662,219 (220,149); 1920, $24,595,187 (266,749); 1921, $29,901,379.22 (272,751).

NOTE.—For names of the Police Commissioner and his Deputies, see Police Department in the general roster list of Government of the City of New York.

## CRIME STATISTICS—MANHATTAN BOROUGH.

(Figures supplied by District Attorney, County of New York. They cover cases handled in years named, and do not indicate cases originating in year named.)

| Year. | Homicide. | | Felonious Assault. | | Burglary. | | Robbery. | | Grand Larceny. | | Forgery. | | Arson. | | Rape. | | Perjury. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Indicted. | Convicted | Indicted. | Convicted | Indicted. | Convicted | Indicted. | Convicted | Indicted. | Convicted | Indicted. | Convicted | Indicted. | Convicted | Indicted. | Convicted | Indicted. | Convicted |
| 1900... | 68 | 27 | 465 | 165 | 563 | 374 | 183 | 65 | 1,144 | 546 | 82 | 47 | 8 | 2 | 28 | 11 | 22 | 7 |
| 1901... | 57 | 25 | 365 | 208 | 691 | 414 | 227 | 82 | 1,248 | 569 | 98 | 68 | 6 | 1 | 63 | 32 | 5 | 1 |
| 1902... | 94 | 31 | 543 | 224 | 548 | 340 | 180 | 70 | 1,216 | 539 | 101 | 59 | 21 | 6 | 65 | 30 | 33 | 10 |
| 1903... | 84 | 42 | 488 | 202 | 558 | 384 | 199 | 61 | 1,227 | 632 | 96 | 60 | 7 | 4 | 50 | 22 | 12 | 6 |
| 1904... | 70 | 37 | 548 | 262 | 549 | 361 | 196 | 53 | 1,222 | 676 | 135 | 89 | 12 | 2 | 65 | 24 | 15 | 6 |
| 1905... | 57 | 32 | 506 | 234 | 657 | 464 | 166 | 54 | 1,281 | 757 | 124 | 75 | 7 | 3 | 84 | 37 | 17 | 8 |
| 1906... | 99 | 53 | 599 | 297 | 657 | 436 | 175 | 47 | 1,309 | 681 | 129 | 83 | 5 | 3 | 67 | 19 | 31 | 12 |
| 1907... | 62 | 39 | 628 | 273 | 819 | 542 | 205 | 54 | 1,538 | 863 | 110 | 62 | 4 | 1 | 73 | 18 | 13 | 7 |
| 1908... | 79 | 35 | 948 | 441 | 1,113 | 740 | 276 | 63 | 1,803 | 992 | 195 | 96 | 17 | 4 | 121 | 37 | 16 | 5 |
| 1909... | 66 | 43 | 808 | 391 | 840 | 572 | 176 | 38 | 1,417 | 781 | 186 | 107 | 6 | 3 | 89 | 39 | 23 | 4 |
| 1910... | 83 | 45 | 721 | 367 | 674 | 427 | 199 | 49 | 1,371 | 755 | 188 | 101 | 12 | 2 | 79 | 28 | 30 | 6 |
| 1911... | 92 | 42 | 924 | 443 | 807 | 551 | 239 | 64 | 1,413 | 817 | 133 | 102 | 5 | 1 | 80 | 34 | 14 | 5 |
| 1912... | 75 | 42 | 614 | 284 | 762 | 499 | 200 | 72 | 1,253 | 733 | 141 | 101 | 19 | 7 | 83 | 37 | 17 | 6 |
| 1913... | 67 | 47 | 720 | 357 | 783 | 494 | 309 | 113 | 1,196 | 688 | 165 | 118 | 22 | 12 | 67 | 28 | 19 | 2 |
| 1914... | 86 | 62 | 750 | 492 | 704 | 484 | 327 | 113 | 1,154 | 675 | 166 | 113 | 7 | 2 | 69 | 27 | 6 | 3 |
| 1915... | 125 | 70 | 828 | 559 | 698 | 515 | 310 | 78 | 1,169 | 682 | 154 | 103 | 12 | 2 | 69 | 28 | 22 | 8 |
| 1916... | 115 | 68 | 685 | 474 | 405 | 278 | 180 | 78 | 966 | 607 | 120 | 79 | 21 | 14 | 68 | 34 | 17 | 8 |
| 1917... | 83 | 44 | 606 | 423 | 425 | 270 | 198 | 75 | 874 | 508 | 103 | 70 | 5 | 3 | 144 | 23 | 23 | 12 |
| 1918... | 103 | 44 | 480 | 261 | 350 | 209 | 210 | 87 | 1,230 | 581 | 117 | 64 | 11 | 2 | 76 | 24 | 28 | 2 |
| 1919... | 132 | 73 | 584 | 288 | 527 | 300 | 382 | 169 | 1,423 | 753 | 125 | 85 | 7 | 1 | 72 | 23 | 13 | 6 |
| 1920... | 82 | 36 | 457 | 235 | 546 | 287 | 317 | 135 | 1,231 | 563 | 148 | 86 | 4 | 2 | 74 | 24 | 12 | 1 |
| 1921... | 82 | 34 | 472 | 284 | 565 | 349 | 359 | 166 | 1,222 | 668 | 125 | 93 | 11 | 2 | 100 | 23 | 10 | 3 |
| Total. | 1,861 | 971 | 13,739 | 7,164 | 14,241 | 9,290 | 5,213 | 1,786 | 27,907 | 15,066 | 2,941 | 1,861 | 229 | 79 | 1,686 | 602 | 398 | 128 |

HOMICIDE CONVICTIONS, NEW YORK COUNTY, BY CLASSES.

| Year. | Murder 1st Degree. | Murder 2nd Degree. | Manslaughter 1st Degree. | Manslaughter 2nd Degree. | Year. | Murder 1st Degree. | Murder 2nd Degree. | Manslaughter 1st Degree. | Manslaughter 2nd Degree. | Year. | Murder 1st Degree. | Murder 2nd Degree. | Manslaughter 1st Degree. | Manslaughter 2nd Degree. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900..... | 2 | 7 | 15 | 3 | 1908..... | 1 | 8 | 17 | 9 | 1916..... | 6 | 11 | 34 | 12 |
| 1901..... | 3 | 8 | 8 | 6 | 1909..... | 6 | 6 | 20 | 11 | 1917..... | 6 | 10 | 23 | 5 |
| 1902..... | 3 | 8 | 16 | 4 | 1910..... | 4 | 11 | 26 | 4 | 1918..... | 2 | 3 | 25 | 10 |
| 1903..... | 5 | 5 | 21 | 11 | 1911..... | 1 | 12 | 20 | 7 | 1919..... | 6 | 17 | 27 | 20 |
| 1904..... | 4 | 6 | 15 | 12 | 1912..... | 13 | 10 | 9 | 9 | 1920..... | 1 | 7 | 19 | 9 |
| 1905..... | 2 | 8 | 16 | 6 | 1913..... | 6 | 9 | 25 | 6 | 1921..... | 3 | 8 | 17 | 6 |
| 1906..... | 3 | 8 | 25 | 17 | 1914..... | 6 | 14 | 27 | 12 | | | | | |
| 1907..... | 3 | 13 | 13 | 10 | 1915..... | 9 | 10 | 41 | 9 | | | | | |

## POPULATION OF NEW YORK AND LONDON.

### NEW YORK.

The City of New York comprises five boroughs—Manhattan, Bronx, Brooklyn, Queens and Richmond. Manhattan covers New York County. Brooklyn covers Kings County, and the other boroughs cover the counties from which they were named. The total area of the five boroughs and of the incorporated City of New York, according to the Tax Department, is 314.75 square miles. By acres, the areas of the boroughs are as follows: Manhattan, 14,038; Bronx, 26,017; Brooklyn, 49,709; Queens, 75,082; Richmond, 36,600; total—201,446. Their population, Jan. 1, 1920, was, by the U. S. Census, as follows: Manhattan, 2,284,103; Bronx, 732,016; Brooklyn, 2,018,356; Queens, 469,042; Richmond, 116,531; total—5,620,048.

### LONDON.

The registration City of London coincides in area with the municipal and parliamentary City of London; it contains 675 acres, and in 1921 it had a night population of 13,706.

The registration County of London coincides in area with the administrative County of London; it contains 74,816 acres, and in 1921 it held a population of 4,483,249. The area of registration County of London is approximately the collective area of the London parliamentary boroughs. The registration County of London is the census London and is the area covered by the registration of London vital statistics.

The "outer ring" of London takes in many of the suburbs; in 1911 it had 2,729,673 population, estimated to have increased, in 1921, to 2,992,919. It is included in the bailiwick of the City and Metropolitan Police.

The area of the so-called Greater London, comprising the registration County of London and the "outer ring," is about 693 square miles (443,449 acres); in 1921 its population was 7,476,168.

Average population per square mile—Greater New York, 17,841; Greater London, 10,789.

## POPULATION OF NEW YORK CITY, BY ASSEMBLY DISTRICTS.

(U. S. Census of January 1, 1920 and for the Districts as they were then.)

Bronx—1, 110,315; 2, 117,611, 3, 83,042; 4, 84,195; 5, 88,428; 6, 70,482; 7, 89,123; 8, 88,820.

Brooklyn—1, 86,912; 2, 109,104, 3, 90,760; 4, 82,336; 5, 67,808; 6, 85,895, 7, 77,455; 8, 79,658, 9, 92,754; 10, 75,873; 11, 78,062; 12, 77,872; 13, 83,399; 14, 97,344; 15, 72,994; 16, 97,110; 17, 76,186, 18, 98,100; 19, 83,897; 20, 99,357; 21, 84,484; 22, 122,637; 23, 98,359.

Manhattan—1, 137,522; 2, 147,115; 3, 113,098; 4, 94,950, 5, 103,166; 6, 99,165; 7, 85,486; 8, 109,522, 9, 82,994; 10, 79,801; 11, 79,314; 12, 121,539; 13, 76,008; 14, 120,879; 15, 96,072; 16, 108,117; 17, 85,663; 18, 141,790; 19, 78,052; 20, 83,150, 21, 76,982; 22, 74,895; 23, 88,787.

Queens—1, 78,805; 2, 74,441; 3, 76,593; 4, 83,175, 5, 83,228; 6, 72,800.

Richmond—1, 55,681; 2, 60,850.

## AGE OF THE POPULATION IN N. Y. CITY, 1920.

(U. S. Census Returns, as of January 1.)

| Age Period. | All Classes. | | Native White. | | Foreign-Born White. | | Negro. | |
|---|---|---|---|---|---|---|---|---|
| | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |
| Whole City | 2,802,638 | 2,817,410 | 1,703,127 | 1,764,789 | 1,020,090 | 971,457 | 72,351 | 80,116 |
| Under 5 years | 283,873 | 276,996 | 276,271 | 269,184 | 1,967 | 1,980 | 5,466 | 5,681 |
| Under 1 year | 55,168 | 53,740 | 53,564 | 52,107 | 283 | 246 | 1,277 | 1,364 |
| 5 to 9 years | 269,451 | 267,039 | 255,490 | 252,837 | 9,541 | 9,524 | 4,271 | 4,562 |
| 10 to 14 years | 248,289 | 246,578 | 220,633 | 218,680 | 23,934 | 23,435 | 3,602 | 4,359 |
| 15 to 19 years | 219,332 | 234,426 | 169,765 | 178,649 | 45,269 | 50,191 | 4,089 | 5,503 |
| 20 to 44 years | 1,236,207 | 1,252,208 | 581,254 | 627,381 | 606,019 | 575,449 | 44,068 | 48,845 |
| 45 years and over | 540,844 | 537,000 | 196,854 | 216,392 | 331,754 | 309,549 | 10,703 | 10,999 |
| Age unknown | 4,642 | 3,163 | 2,860 | 1,666 | 1,606 | 1,329 | 152 | 167 |
| 18 to 44 years | 1,324,398 | 1,349,892 | 646,851 | 698,146 | 626,406 | 599,525 | 46,137 | 51,656 |
| 21 years and over | 1,737,043 | 1,738,999 | 749,387 | 810,162 | 927,742 | 870,140 | 53,614 | 58,127 |
| Bronx Borough | 364,208 | 367,808 | 226,292 | 233,727 | 135,456 | 131,515 | 2,269 | 2,534 |
| Under 5 years | 39,201 | 37,655 | 38,805 | 37,270 | 188 | 174 | 200 | 208 |
| Under 1 year | 7,245 | 7,038 | 7,178 | 6,970 | 28 | 20 | 37 | 46 |
| 5 to 9 years | 37,340 | 36,308 | 36,007 | 34,962 | 1,054 | 1,080 | 275 | 262 |
| 10 to 14 years | 34,667 | 33,760 | 31,528 | 30,689 | 2,912 | 2,841 | 221 | 225 |
| 15 to 19 years | 29,103 | 31,152 | 23,268 | 24,552 | 5,693 | 6,402 | 135 | 194 |
| 20 to 44 years | 160,398 | 165,403 | 76,505 | 84,127 | 82,785 | 80,049 | 1,007 | 1,215 |
| 45 years and over | 63,264 | 63,307 | 20,037 | 21,988 | 42,732 | 40,889 | 430 | 426 |
| Age unknown | 235 | 223 | 142 | 139 | 92 | 80 | 1 | 4 |
| 18 to 44 years | 171,757 | 178,266 | 85,250 | 93,713 | 85,340 | 83,237 | 1,064 | 1,302 |
| 21 years and over | 218,214 | 221,798 | 92,417 | 101,337 | 124,230 | 118,863 | 1,402 | 1,583 |
| Brooklyn Borough | 1,007,859 | 1,010,497 | 649,747 | 675,919 | 341,527 | 317,760 | 15,197 | 16,715 |
| Under 5 years | 108,008 | 105,643 | 106,101 | 103,693 | 615 | 614 | 1,275 | 1,320 |
| Under 1 year | 21,176 | 20,435 | 20,787 | 20,015 | 90 | 81 | 294 | 335 |
| 5 to 9 years | 102,150 | 102,253 | 98,092 | 98,045 | 3,019 | 3,098 | 1,027 | 1,102 |
| 10 to 14 years | 95,327 | 95,260 | 86,503 | 86,331 | 7,927 | 7,905 | 887 | 1,023 |
| 15 to 19 years | 84,069 | 88,485 | 66,884 | 69,900 | 16,128 | 17,368 | 959 | 1,205 |
| 20 to 44 years | 426,827 | 425,253 | 216,944 | 232,327 | 200,676 | 183,514 | 8,318 | 9,358 |
| 45 years and over | 190,566 | 192,858 | 74,620 | 85,127 | 112,896 | 105,048 | 2,691 | 2,671 |
| Age unknown | 912 | 745 | 603 | 496 | 266 | 213 | 40 | 36 |
| 18 to 44 years | 460,436 | 461,659 | 242,783 | 259,982 | 207,920 | 191,673 | 8,765 | 9,943 |
| 21 years and over | 601,695 | 599,606 | 279,952 | 304,417 | 309,815 | 283,451 | 10,741 | 11,674 |
| Manhattan Borough | 1,135,708 | 1,148,395 | 610,080 | 636,746 | 468,506 | 453,574 | 51,912 | 57,221 |
| Under 5 years | 106,256 | 103,833 | 101,431 | 98,838 | 979 | 1,034 | 3,709 | 3,839 |
| Under 1 year | 21,163 | 20,757 | 20,103 | 19,712 | 131 | 128 | 895 | 903 |
| 5 to 9 years | 99,656 | 99,072 | 91,968 | 91,283 | 4,843 | 4,786 | 2,718 | 2,908 |
| 10 to 14 years | 90,396 | 90,360 | 76,182 | 75,973 | 11,834 | 11,467 | 2,281 | 2,828 |
| 15 to 19 years | 82,676 | 90,621 | 58,241 | 62,489 | 21,541 | 24,292 | 2,800 | 3,779 |
| 20 to 44 years | 526,289 | 538,796 | 205,507 | 225,748 | 283,760 | 276,116 | 33,303 | 36,437 |
| 45 years and over | 227,845 | 224,393 | 74,862 | 81,562 | 144,966 | 135,517 | 7,003 | 7,276 |
| Age unknown | 2,590 | 1,320 | 1,889 | 853 | 583 | 362 | 98 | 104 |
| 18 to 44 years | 560,114 | 577,707 | 228,107 | 250,864 | 293,460 | 287,887 | 34,777 | 38,491 |
| 21 years and over | 738,899 | 742,403 | 271,178 | 295,542 | 423,541 | 403,879 | 39,482 | 42,517 |
| Queens Borough | 233,440 | 235,602 | 173,866 | 178,119 | 57,132 | 54,544 | 2,238 | 2,882 |
| Under 5 years | 24,362 | 23,917 | 24,038 | 23,601 | 112 | 81 | 205 | 225 |
| Under 1 year | 4,461 | 4,422 | 4,397 | 4,350 | 24 | 10 | 37 | 59 |
| 5 to 9 years | 23,994 | 23,347 | 23,391 | 22,767 | 396 | 351 | 202 | 221 |
| 10 to 14 years | 22,137 | 21,793 | 21,018 | 20,633 | 946 | 922 | 168 | 232 |
| 15 to 19 years | 18,693 | 19,672 | 17,123 | 17,761 | 1,411 | 1,654 | 152 | 251 |
| 20 to 44 years | 97,844 | 101,060 | 67,150 | 71,307 | 29,517 | 28,330 | 1,071 | 1,402 |
| 45 years and over | 46,153 | 45,587 | 20,970 | 21,907 | 24,680 | 23,144 | 430 | 530 |
| Age unknown | 257 | 226 | 176 | 143 | 70 | 62 | 10 | 21 |
| 18 to 44 years | 105,224 | 108,778 | 73,813 | 78,163 | 30,167 | 29,086 | 1,135 | 1,505 |
| 21 years and over | 140,657 | 142,875 | 85,052 | 89,887 | 53,942 | 51,070 | 1,485 | 1,893 |
| Richmond Borough | 61,423 | 55,108 | 43,142 | 40,278 | 17,469 | 14,064 | 735 | 764 |
| Under 5 years | 6,046 | 5,948 | 5,896 | 5,782 | 73 | 77 | 77 | 89 |
| Under 1 year | 1,123 | 1,088 | 1,099 | 1,060 | 10 | 7 | 14 | 21 |
| 5 to 9 years | 6,311 | 6,059 | 6,032 | 5,780 | 229 | 209 | 49 | 69 |
| 10 to 14 years | 5,762 | 5,405 | 5,402 | 5,054 | 315 | 300 | 45 | 51 |
| 15 to 19 years | 4,791 | 4,496 | 4,249 | 3,947 | 496 | 475 | 43 | 74 |
| 20 to 44 years | 24,849 | 21,696 | 15,148 | 13,872 | 9,281 | 7,440 | 369 | 383 |
| 45 years and over | 13,016 | 10,855 | 6,365 | 5,808 | 6,480 | 4,951 | 149 | 96 |
| Age unknown | 648 | 649 | 50 | 35 | 595 | 612 | 3 | 2 |
| 18 to 44 years | 26,867 | 23,482 | 16,898 | 15,424 | 9,519 | 7,642 | 396 | 415 |
| 21 years and over | 37,578 | 32,317 | 20,788 | 18,979 | 16,214 | 12,877 | 504 | 460 |

## POPULATION OF NEW YORK CITY WITH ITS SUBURBS.

(U. S. Census Figures as of Jan. 1, 1920).

Civil Divisions Comprised Within Metropolitan District and Adjacent Territory Central City.

METROPOLITAN DISTRICT (IN NEW YORK).

*Bronx County.*

| | |
|---|---|
| Bronx borough (part of New York city) | 732,016 |

*Kings County.*

| | |
|---|---|
| Brooklyn borough (part of New York city) | 2,018,356 |

*Nassau County.*

| | |
|---|---|
| Cedarhurst village | 2,838 |
| East Rockaway village | 2,005 |
| Farmingdale village | 2,091 |
| Floral Park village | 2,097 |
| Freeport village | 8,599 |
| Garden City village | 2,420 |
| Glen Cove City | 8,664 |
| Great Neck Estates village | 339 |
| Hempstead town, excl. Cedarhurst, East Rockaway, Freeport, Garden City, Hempstead, Lawrence, Long Beach, Lynbrook, Rockville Centre, and Woodsburgh villages, and part of Floral Park village | 32,999 |
| Hempstead village | 6,382 |
| Lawrence village | 2,861 |
| Long Beach village | 282 |
| Lynbrook village | 4,371 |
| Mineola village | 3,016 |
| North Hempstead town, excl. Great Neck Estates, Mineola, Plandome, Saddle Rock, and Sands Point villages and part of Floral Park village | 21,795 |
| Oyster Bay town, excl. Farmingdale and Sea Cliff villages | 16,097 |
| Plandome village | 319 |
| Rockville Center village | 6,262 |
| Saddle Rock village | 71 |
| Sands Point village | 284 |
| Sea Cliff village | 2,108 |
| Woodsburgh village | 220 |

*New York County.*

| | |
|---|---|
| Manhattan borough (part of New York city) | 2,284,103 |

*Queens County.*

| | |
|---|---|
| Queens borough (part of New York city) | 469,042 |

*Richmond County.*

| | |
|---|---|
| Richmond borough (part of New York city) | 116,531 |

*Westchester County.*

| | |
|---|---|
| Ardsley village | 730 |
| Bronxville village | 3,055 |
| Dobbs Ferry village | 4,401 |
| Eastchester town, excl. Bronxville and Tuckahoe villages | 2,808 |
| Elmsford village | 1,535 |
| Greenburg town, excl. Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington and Tarrytown villages | 3,181 |
| Hastings-on-Hudson village | 5,526 |
| Irvington village | 2,701 |
| Larchmont village | 2,468 |
| Mamaroneck town, excl. Larchmont village and part of Mamaroneck village | 1,797 |
| Mamaroneck village | 6,571 |
| Mount Vernon city | 42,726 |
| New Rochelle city | 36,213 |
| North Pelham village | 2,385 |
| Pelham village | 1,056 |
| Pelham Manor village | 1,754 |
| Scarsdale village | 3,506 |
| Tarrytown village | 5,807 |
| Tuckahoe village | 3,509 |
| White Plains city | 21,031 |
| Yonkers city | 100,176 |

METROPOLITAN DISTRICT (IN NEW JERSEY).

*Bergen County.*

| | |
|---|---|
| Alpine borough | 350 |
| Bergenfield borough | 3,667 |
| Bogota borough | 3,906 |
| Carlstadt borough | 4,472 |
| Cliffside Park borough | 5,709 |
| Closter borough | 1,840 |
| Cresskill borough | 942 |
| Delford borough | 1,286 |
| Demarest borough | 654 |
| Dumont borough | 2,537 |
| East Rutherford borough | 5,463 |
| Edgewater borough | 3,530 |
| Englewood city | 11,627 |
| Englewood Cliffs borough | 594 |
| Fairview borough | 4,882 |
| Fort Lee borough | 5,761 |
| Hackensack town | 17,667 |
| Harrington Park borough | 627 |
| Hasbrouck Heights borough | 2,895 |
| Haworth borough | 748 |
| Leonia borough | 2,979 |
| Little Ferry borough | 2,715 |
| Lodi borough | 8,175 |
| Lodi township | 987 |
| Lyndhurst township | 9,515 |
| Moonachie borough | 1,194 |
| North Arlington borough | 1,,67 |
| Northvale borough | 827 |
| Norwood borough | 820 |
| Old Tappan borough | 404 |
| Palisades township | 3,833 |
| Palisades Park borough | 2,633 |
| Ridgefield borough | 1,560 |
| Ridgefield Park village | 8,575 |
| Riverside borough | 1,077 |
| Rutherford borough | 9,497 |
| Teaneck township | 4,192 |
| Tenafly borough | 3,585 |
| Teterboro borough | 24 |
| Wallington borough | 5,715 |
| Wood Ridge borough | 1,923 |

*Essex County.*

| | |
|---|---|
| Belleville town | 15,660 |
| Bloomfield town | 22,019 |
| East Orange city | 50,710 |
| Glen Ridge borough | 4,620 |
| Irvington town | 25,480 |
| Montclair town | 28,810 |
| Newark city | 414,524 |
| Nutley town | 9,421 |
| Orange city | 33,268 |
| South Orange township | 5,283 |
| South Orange village | 7,274 |

*Hudson County.*

| | |
|---|---|
| Bayonne city | 76,754 |
| East Newark borough | 3,057 |
| Guttenberg town | 6,726 |
| Harrison town | 15,721 |
| Hoboken city | 68,166 |
| Jersey City | 298,103 |
| Kearny town | 26,724 |
| North Bergen township | 23,344 |
| Secaucus town | 5,423 |
| Union town | 20,651 |
| Weehawken township | 14,485 |
| West Hoboken town | 40,474 |
| West New York town | 29,926 |

*Middlesex County.*

| | |
|---|---|
| East Brunswick township | 1,857 |
| Helmetta borough | 687 |
| Highland Park borough | 4,866 |
| Metuchen borough | 3,334 |
| Milltown borough | 2,573 |
| Perth Amboy city | 41,707 |
| Raritan township | 5,419 |
| Roosevelt borough | 11,047 |
| Sayreville township | 7,181 |
| South Amboy city | 7,897 |
| South River borough | 6,596 |
| Spotswood borough | 704 |
| Woodbridge township | 13,423 |

*Monmouth County.*

| | |
|---|---|
| Atlantic Highlands borough | 1,629 |
| Highlands borough | 1,731 |
| Keansburg borough | 1,321 |
| Keyport borough | 4,415 |
| Matawan borough | 1,910 |
| Matawan township | 1,856 |
| Middletown township | 5,917 |
| Raritan township | 1,659 |

*Passaic County.*

| | |
|---|---|
| Clifton city | 26,470 |
| Little Falls townsnip | 3,310 |
| Passaic city | 63,841 |
| Paterson city | 135,875 |
| West Paterson borough | 1,858 |

*Union County.*

| | |
|---|---|
| Clark township | 795 |
| Cranford township | 6,001 |
| Elizabeth city | 95,783 |
| Garwood borough | 2,084 |
| Hillside township | 5,267 |
| Kenilworth borough | 1,312 |
| Linden borough | 1,756 |
| Linden township | 6,612 |
| Rahway city | 11,042 |
| Roselle borough | 5,737 |
| Roselle Park borough | 5,438 |
| Union townsnip | 3,962 |
| Westfield town | 9,063 |

ADJACENT TERRITORY OUTSIDE METROPOLITAN DISTRICT (IN NEW YORK).

| | |
|---|---|
| *Rockland County.* | |
| Grand-View-on-Hudson village | 175 |
| Nyack village | 4,444 |
| Orangetown town, excl. Grand-View-on-Hudson, Nyack, Piermont, and South Nyack villages | 6,266 |
| Piermont village | 1,600 |
| South Nyack village | 1,799 |
| *Westchester County.* | |
| Harrison town | 5,006 |
| Port Chester village | 16,573 |
| Rye town, excl. Port Chester and Rye villages and part of Mamaroneck village | 903 |
| Rye village | 5,308 |

ADJACENT TERRITORY OUTSIDE METROPOLITAN DISTRICT (IN NEW JERSEY).

| | |
|---|---|
| *Bergen County.* | |
| East Paterson borough | 2,441 |
| Emerson borough | 973 |
| Garfield city | 19,381 |
| Hillsdale township | 1,720 |
| Maywood borough | 1,618 |
| Midland township | 2,203 |
| Rivervale township | 583 |
| Saddle River township | 2,845 |
| Washington township | 194 |
| Westwood borough | 2,597 |
| *Essex County.* | |
| Milburn township | 4,633 |
| *Middlesex County.* | |
| Madison township | 1,808 |
| New Brunswick city | 32,779 |
| *Monmouth County.* | |
| Holmdel township | 1,100 |
| Marlboro township | 1,710 |
| *Union County.* | |
| Fanwood borough | 724 |
| Mountainside borough | 493 |
| Scotch Plains township | 2,343 |
| Springfield township | 1,715 |

SUMMARY.

| | |
|---|---|
| Metropolitan district | 7,910,415 |
| In city proper | 5,620,048 |
| Outside | 2,290,367 |
| City and Suburban territory | 8,034,349 |
| Suburban territory, detailed above | 2,414,301 |

## POPULATION OF NEW YORK CITY BY BOROUGHS.

THE figures, except for 1920 and other United States Census years, are estimates of the Bureau of Vital Statistics of the Municipal Department of Health. Figures for 1922 show a readjustment in accordance with the Federal Census of Jan. 1, 1920. The 1921 figures were not so readjusted.

| JULY 1. | Manhattan. | Bronx. | Brooklyn. | Richmond. | Queens. | Totals. |
|---|---|---|---|---|---|---|
| 1790 | 33,131 | 1,761 | 4,495 | 3,835 | 6,159 | 49,401 |
| 1800 | 60,515 | 1,755 | 5,740 | 4,564 | 6,642 | 79,216 |
| 1810 | 96,373 | 2,267 | 8,303 | 5,347 | 7,444 | 119,734 |
| 1820 | 123,706 | 2,782 | 11,187 | 6,135 | 8,246 | 152,056 |
| 1830 | 202,589 | 3,023 | 20,535 | 7,082 | 9,049 | 242,278 |
| 1840 | 312,710 | 5,346 | 47,613 | 10,965 | 14,480 | 391,114 |
| 1850 | 515,547 | 8,032 | 138,882 | 15,061 | 18,593 | 696,115 |
| 1860 | 813,669 | 23,593 | 279,122 | 25,492 | 32,903 | 1,174,779 |
| 1870 | 942,292 | 37,393 | 419,921 | 33,029 | 45,468 | 1,478,103 |
| 1880 | 1,164,673 | 51,980 | 599,495 | 38,991 | 56,559 | 1,911,698 |
| 1890 | 1,441,216 | 88,908 | 838,547 | 51,693 | 87,050 | 2,507,414 |
| 1900 | 1,850,093 | 200,507 | 1,166,582 | 67,021 | 152,999 | 3,437,202 |
| 1905 | 1,950,000 | 295,000 | 1,335,000 | 75,000 | 195,000 | 3,850,000 |
| 1906 | 2,112,697 | 271,629 | 1,358,891 | 72,846 | 198,241 | 4,014,304 |
| 1907 | 2,174,335 | 290,097 | 1,404,569 | 74,173 | 209,686 | 4,152,860 |
| 1908 | 2,232,828 | 308,256 | 1,448,095 | 75,420 | 220,836 | 4,285,435 |
| 1909 | 2 292,894 | 327,553 | 1,492,970 | 76,688 | 232,580 | 4,422,685 |
| 1910 | 2,331,542 | 430,980 | 1,634 351 | 85,969 | 284,041 | 4,766,883 |
| 1911 | 2,365,161 | 460,879 | 1,678,776 | 88,064 | 299,278 | 4,892,158 |
| 1912 | 2,389,204 | 483,224 | 1,710,861 | 89,573 | 310,523 | 4,983,385 |
| 1913 | 2,438,001 | 531,219 | 1,776,878 | 92,669 | 334,297 | 5,173,064 |
| 1914 | 2,538,606 | 641,980 | 1,916,655 | 99,186 | 387,444 | 5,583,871 |
| 1915 | 2,295,761 | 649,726 | 1,825,534 | 93,631 | 389,233 | 5,253,885 |
| 1916 | 2,634,223 | 575,877 | 1,928,432 | 97,883 | 366,426 | 5,602,841 |
| 1917 | 2,682,977 | 599,216 | 1,975,801 | 99,802 | 379,696 | 5,737,492 |
| 1918 | 2,731,731 | 622,555 | 2,023,170 | 101,721 | 392,966 | 5,872,143 |
| 1919 | 2,780,485 | 645,894 | 2,070,539 | 103,640 | 406,236 | 6,006,794 |
| 1920 | 2,284,103 | 732,016 | 2,018,356 | 116,331 | 469,042 | 5,620,048 |
| 1921 | 2,276,778 | 778,528 | 2,077,674 | 121,252 | 497,627 | 5,751,859 |
| 1922 | 2,271,892 | 809,536 | 2,117,227 | 124,400 | 516,683 | 5,839,738 |

In 1696 the population of New York City was 4,302, of whom 575 were negroes.
In 1711 a slave market was established in Wall St., near East River.

### MARITAL CONDITION IN NEW YORK CITY, 1920.
(U. S. Census Figures.)

The population of New York City, (5,620,048, on Jan. 1, 1920), comprised 2,001,025 males 15 years of age and over, of whom 1,143,643, or 57.2 per cent., were married; and 2,026,797 females above the same age limit, of whom 1,115,670, or 55 per cent., were married. In the earlier years of adult life the proportion married is much larger for females than for males, but after the age of 45 the proportion of married men exceeds that of married women—76.4 per cent. as against 54.3 per cent. The obvious explanation is that women marry at younger ages than men. There were in the population of New York City on the census date 78,999 widowers, 232,991 widows, 4,303 divorced men, and 6,775 divorced women. The population 45 years of age and over included 62,902 single men and 63,341 single women.

| AGE. | Total in Specified Age Group. | SINGLE. Number. | SINGLE. Pct. | MARRIED. Number. | MARRIED. Pct. | Widowed. | Divorced. |
|---|---|---|---|---|---|---|---|
| Males 15 years of age and over. | | | | | | | |
| Total | 2,001,025 | 761,197 | 38.0 | 1,143,643 | 57.2 | 78,999 | 4,303 |
| 15 to 24 years | 469,093 | 418,842 | 89.3 | 47,841 | 10.2 | 577 | 124 |
| 25 to 44 years | 986,446 | 278,066 | 28.2 | 681,120 | 69.0 | 17,288 | 2,371 |
| 45 years and over | 540,844 | 62,902 | 11.6 | 413,438 | 76.4 | 61,012 | 1,796 |
| Age unknown | 4,642 | 1,387 | 29.9 | 1,244 | 26.8 | 122 | 12 |
| Females 15 years of age and over. | | | | | | | |
| Total | 2,026,797 | 667,247 | 32.9 | 1,115,670 | 55.0 | 232,991 | 6,775 |
| 15 to 24 years | 530,325 | 395,023 | 74.5 | 131,404 | 24.8 | 2,243 | 421 |
| 25 to 44 years | 956,309 | 207,776 | 21.7 | 691,369 | 72.3 | 51,188 | 4,544 |
| 45 years and over | 537,000 | 63,341 | 11.8 | 291,640 | 54.3 | 179,239 | 1,803 |
| Age unknown | 3,163 | 1,107 | 35.0 | 1,257 | 39.7 | 321 | 7 |

Totals include persons whose marital condition was not reported.

## FOREIGN WHITE STOCK IN N. Y. CITY.

The Department of Commerce announces that, according to the Census of 1920, the foreign white stock in the population of New York City on Jan. 1 of that year numbered 4,294,629. By "foreign white stock" is meant the total foreign-born white population plus the native white population having one or both parents foreign-born. The corresponding total for 1910 was 3,747,844, and the increase between 1910 and 1920 was 546,785, or 14.6 per cent. The foreign white stock constituted 76.4 per cent. of the total population of the city in 1920 (5,620,048), as against 78.6 per cent. of the total in 1910 (4,766,883). The foreign white stock in 1920 comprised 1,991,547 persons who were themselves foreign-born and came to this country as immigrants and 2,303,082 who were born in this country but whose parents, one or both, were immigrants.

The classification of the foreign white stock by country of origin is based upon the pre-war map of Europe.

TOTAL FOREIGN WHITE STOCK IN NEW YORK CITY, BY COUNTRY OF ORIGIN.

| Country of Origin (Pre-war Boundaries). | 1920. | 1910. | Country of Origin (Pre-war Boundaries). | 1920. | 1910. | Country of Origin (Pre-war Boundaries). | 1920. | 1910. |
|---|---|---|---|---|---|---|---|---|
| | *Number.* | *Number.* | | *Number.* | *Number.* | | *Number.* | *Number.* |
| All foreign countries. | 4,294,629 | 3,747,844 | Cen. & East'n Europe: | | | Europe not specified.... | 700 | 382 |
| Northwestern Europe: | | | Germany... | 584,838 | 724,704 | Asia: | | |
| England.... | 136,605 | 162,306 | Austria..... | 431,397 | 299,029 | Tur. in Asia. | 15,342 | 7,508 |
| Scotland.... | 47,103 | 48,036 | Hungary.... | 123,175 | 112,584 | Other Asia.. | 998 | 692 |
| Wales..... | 3,777 | 4,052 | Russia..... | 985,702 | 733,924 | America: | | |
| Ireland..... | 616,627 | 676,420 | Finland..... | 14,542 | 9,845 | Can.-French | 3,476 | 6,172 |
| Norway.... | 40,544 | 33,179 | Roumania.. | 56,702 | 45,995 | Can.-Other.. | 37,873 | 43,081 |
| Sweden.... | 57,750 | 55,278 | Bulgaria, Serbia, and Mon'n'gro | 1,022 | 587 | Newfoundl'd | 2,461 | 1,386 |
| Denmark.. | 14,914 | 12,444 | Tur. in Eur'e | 6,770 | 4,071 | West Indies. | 11,483 | 8,751 |
| Netherlands. | 9,552 | 7,625 | So. Europe: | | | Mexico.... | 2,651 | 561 |
| Belgium.... | 4,342 | 2,972 | Greece..... | 23,204 | 8,925 | Cen. and So. America.. | 5,778 | 2,709 |
| Luxemburg.. | 486 | 105 | Italy..... | 802,946 | 544,449 | All other coun's | 2,691 | 3,549 |
| Switzerland.. | 16,063 | 16,691 | Spain..... | 14,659 | 4,922 | Of mixed for'n parentage... | 182,882 | 133,552 |
| France..... | 33,957 | 30,579 | Portugal.... | 1,617 | 779 | | | |

WHITE STOCK IN N. Y. CITY, FOREIGN-BORN AND OF FOREIGN PARENTS.

| Country of Origin (Pre-war Boundaries) | First Generation (Foreign-Born; Father Born in Specified Country). | | Second Generation (Natives of U. S.; One or Both Parents Foreign-Born. | | Country of Origin (Pre-war Boundaries) | First Generation (Foreign-Born; Father Born in Specified Country). | | Second Generation (Natives of U. S.; One or Both Parents Foreign-Born. | |
|---|---|---|---|---|---|---|---|---|---|
| | 1920. | 1910. | 1920. | 1910. | | 1920. | 1910. | 1920. | 1920. |
| All foreign countries | 1,991,547 | 1,927,703 | 2,303,082 | 1,820,141 | Turkey in Europe.. | 4,777 | 3,695 | 1,993 | 376 |
| Northwestern Europe: | | | | | Southern Europe: | | | | |
| England... | 56,436 | 78,135 | 80,169 | 84,171 | Greece.... | 18,220 | 8,038 | 4,984 | 887 |
| Scotland.. | 22,447 | 23,115 | 24,656 | 24,921 | Italy..... | 392,225 | 340,765 | 410,721 | 203,684 |
| Wales..... | 1,533 | 1,778 | 2,244 | 2,274 | Spain..... | 11,274 | 3,331 | 3,385 | 1,591 |
| Ireland.... | 211,789 | 252,662 | 404,838 | 423,758 | Portugal.. | 1,085 | 417 | 532 | 362 |
| Norway... | 24,291 | 22,280 | 16,253 | 10,899 | Europe, not specified. | 247 | 229 | 453 | 153 |
| Sweden... | 34,211 | 34,950 | 23,539 | 20,328 | Asia: | | | | |
| Denmark.. | 9,293 | 7,989 | 5,621 | 4,455 | Turkey in Asia.... | 11,113 | 6,160 | 4,229 | 1,348 |
| Netherl'ds. | 5,309 | 4,191 | 4,243 | 3,434 | Other Asia. | 560 | 474 | 438 | 218 |
| Belgium... | 3,160 | 2,259 | 1,182 | 713 | America: | | | | |
| Luxemb'g. | 292 | 94 | 194 | 11 | Can.-Frnch | 1,556 | 2,844 | 1,920 | 3,328 |
| Switzerl'd.. | 9,050 | 10,450 | 7,013 | 6,241 | Can.-Other | 15,630 | 23,228 | 22,243 | 19,853 |
| France.... | 18,883 | 18,265 | 15,074 | 12,314 | Newf'nd'ld | 1,273 | 839 | 1,188 | 527 |
| Cent'l & E'rn Europe: | | | | | W. Indies.. | 7,618 | 5,990 | 3,865 | 2,761 |
| Germany.. | 206,645 | 278,114 | 378,193 | 446,590 | Mexico.... | 2,301 | 404 | 350 | 157 |
| Austria.... | 236,838 | 190,237 | 194,559 | 108,792 | Cen. & So. America | 4,666 | 2,116 | 1,112 | 593 |
| Hungary.. | 72,440 | 76,625 | 50,735 | 35,959 | All other countries. | 1,315 | 2,288 | 1,376 | 1,261 |
| Russia.... | 559,225 | 484,189 | 426,477 | 249,735 | Of mixed foreign parentage.... | | | 182,882 | 133,552 |
| Finland... | 10,263 | 7,409 | 4,279 | 2,436 | | | | | |
| Roumania. | 34,738 | 33,584 | 21,964 | 12,411 | | | | | |
| Bulgaria, Serbia, & Mont'g'o | 844 | 539 | 178 | 48 | | | | | |

FOREIGN-BORN WHITES, 21 YEARS AND OVER, IN NEW YORK CITY.

| Country of Birth. | Total. | Naturalized. | Not Naturalized. | Country of Birth. | Total. | Naturalized. | Not Naturalized. |
|---|---|---|---|---|---|---|---|
| All countries... | 1,797,882 | 765,264 | 1,032,618 | Norway..... | 22,599 | 10,308 | 12,291 |
| | | | | France..... | 20,744 | 9,440 | 11,304 |
| Russia..... | 414,463 | 162,757 | 251,706 | Scotland..... | 19,510 | 10,781 | 8,729 |
| Italy..... | 341,086 | 90,370 | 250,716 | Greece..... | 18,608 | 2,992 | 15,616 |
| Ireland..... | 200,164 | 120,968 | 79,196 | Spain..... | 9,448 | 988 | 8,460 |
| Germany..... | 190,734 | 125,679 | 65,055 | Finland..... | 9,764 | 2,242 | 7,522 |
| Poland..... | 130,842 | 39,509 | 91,333 | Switzerland..... | 8,896 | 4,566 | 4,330 |
| Austria..... | 115,685 | 50,488 | 65,197 | Denmark..... | 8,541 | 4,553 | 3,988 |
| England..... | 61,326 | 34,445 | 26,881 | West Indies..... | 7,121 | 1,735 | 5,386 |
| Hungary..... | 58,834 | 24,819 | 34,015 | Lithuania..... | 7,043 | 1,248 | 5,795 |
| Roumania..... | 34,470 | 17,511 | 16,959 | Cent. & So. Amer. | 4,739 | 815 | 3,924 |
| Sweden..... | 32,627 | 16,315 | 16,312 | Jugo-Slavia..... | 4,816 | 1,145 | 3,671 |
| Czecho-Slovakia.. | 25,091 | 10,446 | 14,645 | Netherlands..... | 4,309 | 1,923 | 2,386 |
| Canada..... | 22,410 | 11,540 | 10,870 | Syria..... | 3,741 | 874 | 2,867 |
| Canada-French | 1,593 | 708 | 885 | All oth. countries. | 20,271 | 6,807 | 13,464 |

West Indies do not include Porto Rico. Column headed "not naturalized," comprises aliens, persons with first papers, and foreign-born of unknown status.

Of the total white population of New York City 21 years of age and over, 53.5 per cent. were immigrants; 22.8 per cent. were naturalized immigrants.

## FOREIGN-BORN WHITES IN N. Y. CITY, BY COUNTRY OF BIRTH.

(U. S. Census Returns, as of Jan. 1, 1920.)

| | The City. | Manhattan | Bronx. | Brooklyn. | Queens. | Richmond. |
|---|---|---|---|---|---|---|
| England | 71,404 | 29,817 | 8,624 | 25,003 | 6,047 | 1,913 |
| Scotland | 21,545 | 8,687 | 2,511 | 7,534 | 2,060 | 753 |
| Wales | 1,510 | 783 | 137 | 421 | 107 | 62 |
| Ireland | 203,450 | 116,749 | 18,679 | 53,660 | 10,618 | 3,744 |
| Norway | 24,500 | 3,595 | 974 | 17,505 | 844 | 1,582 |
| Sweden | 33,703 | 11,841 | 3,108 | 15,488 | 2,373 | 893 |
| Denmark | 9,092 | 2,942 | 797 | 4,201 | 795 | 357 |
| Belgium | 3,467 | 2,132 | 234 | 726 | 284 | 91 |
| France (incl. Als.-Lor.) | 23,020 | 14,359 | 2,121 | 3,861 | 2,241 | 438 |
| Luxemburg | 302 | 158 | 33 | 51 | 56 | 4 |
| Netherlands | 4,750 | 2,164 | 471 | 1,672 | 329 | 114 |
| Switzerland | 9,233 | 4,802 | 1,255 | 1,765 | 1,172 | 239 |
| Germany | 194,154 | 70,836 | 29,719 | 56,778 | 32,446 | 4,375 |
| Poland | 145,679 | 64,514 | 19,008 | 51,928 | 7,778 | 2,451 |
| Austria | 126,739 | 65,603 | 23,638 | 31,981 | 4,678 | 839 |
| Hungary | 64,393 | 40,644 | 10,644 | 8,795 | 3,555 | 755 |
| Czecho-Slovakia | 26,437 | 18,681 | 1,878 | 2,639 | 2,958 | 281 |
| Jugo-Slavia | 5,271 | 3,350 | 332 | 1,088 | 353 | 148 |
| Russia | 479,797 | 193,775 | 87,345 | 189,421 | 7,627 | 1,629 |
| Finland | 10,240 | 4,885 | 1,309 | 3,219 | 455 | 372 |
| Lithuania | 7,475 | 1,521 | 465 | 4,985 | 485 | 19 |
| Portugal | 1,026 | 417 | 39 | 495 | 45 | 40 |
| Spain | 10,980 | 7,502 | 257 | 2,902 | 157 | 162 |
| Italy | 390,332 | 184,546 | 39,519 | 138,245 | 19,794 | 8,728 |
| Greece | 21,455 | 17,209 | 957 | 2,700 | 401 | 188 |
| Bulgaria | 308 | 201 | 34 | 63 | 8 | 2 |
| Roumania | 38,139 | 16,714 | 8,519 | 12,109 | 734 | 63 |
| Turkey, Europe | 1,754 | 1,507 | 102 | 125 | 14 | 6 |
| Other Europe | 528 | 309 | 54 | 115 | 38 | 12 |
| Armenia | 3,779 | 2,168 | 419 | 746 | 421 | 25 |
| Syria | 4,485 | 923 | 102 | 3,405 | 42 | 13 |
| Asia | 12,764 | 6,061 | 836 | 5,230 | 559 | 78 |
| Africa | 1,125 | 611 | 90 | 358 | 54 | 12 |
| Australia | 1,023 | 545 | 82 | 300 | 75 | 21 |
| Canada, French | 1,757 | 893 | 164 | 442 | 199 | 59 |
| Canada, other | 23,514 | 11,390 | 2,083 | 7,694 | 1,608 | 739 |
| Newfoundland | 1,403 | 324 | 90 | 827 | 108 | 54 |
| Cuba et al. W. Ind. exc. P. Rico | 8,722 | 5,210 | 423 | 2,614 | 334 | 141 |
| Mexico | 2,487 | 1,843 | 75 | 472 | 68 | 29 |
| Central America | 879 | 674 | 22 | 154 | 15 | 14 |
| South America | 5,742 | 3,853 | 254 | 1,395 | 141 | 99 |
| Atlantic Islands | 414 | 150 | 30 | 170 | 23 | 11 |
| Pacific Islands | 226 | 143 | 10 | 57 | 12 | 4 |
| At sea | 205 | 86 | 24 | 72 | 17 | 6 |
| Country not specified | 103 | 24 | 25 | 37 | 11 | 6 |
| Totals | 1,991,547 | 922,080 | 266,971 | 659,287 | 111,676 | 31,533 |

## FOREIGN POPULATION OF NEW YORK CITY BY MOTHER TONGUE

(U. S. Census Returns, Jan. 1, 1920.)

By Foreign White Stock is meant the total foreign-born white population, plus the native white population having one or both parents foreign-born.

| Mother Tongue. | Total Foreign White Stock. | Foreign-Born White. | Native White, Foreign or Mixed Parentage | Mother Tongue. | Total Foreign White Stock. | Foreign-Born White. | Native White, Foreign or Mixed Parentage |
|---|---|---|---|---|---|---|---|
| All mother tongues. | 4,294,629 | 1,991,547 | 2,303,082 | Slavic and Lettic: | | | |
| English and Celtic.. | 897,452 | 324,984 | 572,468 | Polish | 161,310 | 88,844 | 72,466 |
| Germanic | 702,303 | 264,452 | 437,851 | Czech | 43,839 | 20,868 | 22,971 |
| Scandinavian | 114,782 | 68,447 | 46,335 | Slovak | 19,425 | 10,705 | 8,720 |
| Latin and Greek | 938,047 | 481,283 | 456,764 | Russian | 221,153 | 124,585 | 96,568 |
| Slavic and Lettic | 486,666 | 270,049 | 216,617 | Ruthenian | 9,706 | 6,385 | 3,321 |
| Unclassified | 1,050,038 | 581,809 | 468,229 | Slovenian | 10,571 | 5,839 | 4,732 |
| Unknown or mixed mother tongue | 105,341 | 523 | 104,818 | Serbo-Croatian | 4,037 | 3,100 | 937 |
| English and Celtic.. | 897,452 | 324,984 | 572,468 | Bulgarian | 215 | 186 | 29 |
| Germanic: German. | 690,789 | 257,727 | 433,062 | Slavic, notsp'cif'd | 1 | 1 | .. |
| Dutch & Frisian.. | 9,432 | 5,156 | 4,276 | Lith'n'n & L'ttish | 16,409 | 9,536 | 6,873 |
| Flemish | 2,082 | 1,569 | 513 | Unclassified: | | | |
| Sc'ndin'v'n: Sw'dish | 60,017 | 35,289 | 24,728 | Yiddish & H'br'w | 946,139 | 516,080 | 430,059 |
| Norwegian | 40,220 | 24,182 | 16,038 | Magyar | 76,575 | 45,833 | 30,742 |
| Danish | 14,545 | 8,976 | 5,569 | Finnish | 12,204 | 8,904 | 3,300 |
| Latin and Greek: | | | | Armenian | 4,700 | 3,803 | 897 |
| Italian | 803,048 | 392,190 | 410,858 | Syrian & Arabic.. | 7,760 | 5,262 | 2,498 |
| French | 48,534 | 26,673 | 21,861 | Turkish | 2,320 | 1,659 | 661 |
| Spanish | 32,658 | 25,171 | 7,487 | Albanian | 108 | 94 | 14 |
| Portuguese | 1,845 | 1,259 | 586 | All other | 232 | 174 | 58 |
| Roumanian | 26,948 | 16,454 | 10,494 | Unknown | 1,126 | 523 | 603 |
| Greek | 25,014 | 19,536 | 5,478 | Of mix. m'th'e t'gue | 104,215 | .. | 104,215 |

## STRANGERS IN THE GREAT METROPOLIS.

It is estimated that there are, on every day in the year, at least 100,000 strangers in the City of New York. They do not count, of course, in the census population. They come by water and by land, and tarry a while. The following figures show the numbers of strangers, visitors and commuters who arrived and departed in 1921 by the various railways: Baltimore & Ohio, 551,880; Central of N. J., 16,718,099; D., L. & W., 21,594,743; Erie, 30,026,406; Lehigh Valley, 829,706; Long Island, 60,386,698; New Haven, 16,653,438; New York Central, 28,434,974; Ontario & Western, 619,658; Westchester & Boston, 5,395,365; Pennsylvania, 39,936,082. Total, 220,847,049.

## FOREIGN-BORN WHITE AND COLORED IN NEW YORK CITY.

The following shows the foreign-born white and colored for New York City and for each of the boroughs.

| Borough | Foreign-born. | For.-born White. | For.-born Colored. | Borough. | Foreign-born. | For.-born White. | For.-born Colored. |
|---|---|---|---|---|---|---|---|
| Bronx | 267,742 | 266,971 | 771 | Queens | 112,171 | 111,676 | 495 |
| Brooklyn | 666,188 | 659,287 | 6,901 | Richmond | 31,795 | 31,533 | 262 |
| Manhattan | 950,264 | 922,080 | 28,184 | New York City | 2,028,160 | 1,991,547 | 36,613 |

## MANUFACTURING INDUSTRIES, NEW YORK CITY.

(U. S. Census of Manufactures covering the year 1919.)

SUMMARY BY BOROUGHS.

| Borough. | Establishments. | Total Persons Engaged. | Wage Earners (Aver. No.) | Salaries. | Wages. | Value of Products. | Capital. |
|---|---|---|---|---|---|---|---|
| | *No.* | *No.* | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Whole City | 32,590 | 825,056 | 638,775 | 326,171,741 | 805,822,451 | 5,260,707,577 | 3,038,557,492 |
| Bronx | 1,370 | 25,150 | 20,036 | 8,280,025 | 23,658,433 | 114,975,501 | 96,124,561 |
| Brooklyn | 6,738 | 203,021 | 166,724 | 65,281,669 | 201,232,510 | 1,184,973,144 | 729,166,203 |
| Manhattan | 22,981 | 519,647 | 386,907 | 230,192,469 | 502,042,139 | 3,525,574,539 | 808,764,796 |
| Queens | 1,249 | 56,918 | 47,222 | 17,784,933 | 54,282,704 | 331,285,294 | 310,682,294 |
| Richmond | 252 | 20,320 | 17,886 | 4,632,645 | 24,606,665 | 103,899,099 | 93,819,638 |

INDUSTRIES EMPLOYING 10,000 OR MORE WAGE EARNERS.

| Industry. | No. Estab. | No. Wage Earners. | Wages in Year. | Capital. | Value of Products. |
|---|---|---|---|---|---|
| Boots and shoes | 248 | 12,880 | $16,751,343 | $39,657,582 | $66,478,600 |
| Bread, crackers, cake | 2,319 | 21,738 | 28,034,120 | 69,341,039 | 173,510,009 |
| Clothing, men's | 2,273 | 47,311 | 70,760,273 | 187,582,481 | 480,596,385 |
| Clothing, women's | 5,089 | 95,842 | 132,666,042 | 251,327,900 | 866,243,561 |
| Candy, ice cream | 510 | 12,372 | 10,898,972 | 47,030,418 | 84,564,630 |
| Foundries, machine shops | 628 | 19,976 | 25,697,739 | 78,214,129 | 84,625,843 |
| Millinery, lace goods | 1,789 | 26,983 | 30,718,767 | 52,897,410 | 162,186,055 |
| Printing and publishing, job | 1,866 | 21,097 | 29,222,385 | 73,401,088 | 129,327,275 |
| Printing and pub., newspapers and periodicals | 841 | 15,871 | 23,396,016 | 119,550,066 | 216,661,989 |
| Shipbuilding, steel | 20 | 20,631 | 34,017,716 | 52,636,543 | 81,872,239 |
| Shipbuilding, wooden | 48 | 5,561 | 8,272,134 | 20,974,315 | 21,664,042 |
| Tobacco, cigars, etc. | 1,419 | 15,855 | 14,382,307 | 88,026,146 | 146,033,207 |

INDUSTRIES EMPLOYING 5,000 AND LESS THAN 10,000 WAGE EARNERS.

| Industry. | No. Estab. | No. Wage Earners. | Wages in Year. | Capital. | Value of Products. |
|---|---|---|---|---|---|
| Boxes, paper | 283 | 9,249 | $9,088,876 | $21,122,458 | $36,532,291 |
| Book binding, blank book making | 339 | 7,141 | 7,035,759 | 13,698,409 | 22,112,233 |
| Brass, bronze, copper products | 141 | 5,305 | 5,359,717 | 19,025,502 | 28,928,172 |
| Electrical machinery, apparatus, supplies | 176 | 9,376 | 9,821,328 | 37,060,492 | 48,404,444 |
| Fancy articles (beads, etc.) | 312 | 5,448 | 5,328,053 | 12,969,699 | 28,559,566 |
| Fur goods | 1,153 | 8,503 | 17,814,144 | 56,655,033 | 132,145,251 |
| Furnishing goods, men's | 233 | 5,275 | 5,348,584 | 20,818,185 | 50,232,860 |
| Furniture | 463 | 7,251 | 10,261,295 | 20,281,348 | 40,986,286 |
| Jewelry | 665 | 5,017 | 8,406,762 | 35,685,377 | 65,391,579 |
| Knit goods | 462 | 8,800 | 9,176,000 | 68,222,095 | 69,308,818 |
| Lithographing | 116 | 5,198 | 6,684,850 | 18,943,244 | 24,472,186 |
| Musical instruments (pianos) | 68 | 5,391 | 6,560,733 | 28,077,954 | 31,465,599 |
| Shirts | 243 | 6,474 | 6,561,340 | 39,746,466 | 83,811,354 |
| Silk goods | 126 | 6,818 | 6,414,153 | 43,761,503 | 54,526,901 |

INDUSTRIES EMPLOYING 2,000 AND LESS THAN 5,000 WAGE EARNERS.

| Industry. | No. Estab. | No. Wage Earners. | Wages in Year. | Capital. | Value of Products. |
|---|---|---|---|---|---|
| Auto bodies and parts | 177 | 2,447 | $2,943,686 | $5,479,506 | $11,248,656 |
| Auto repairing | 341 | 3,876 | 5,199,872 | 9,415,938 | 16,389,543 |
| Buttons | 228 | 3,153 | 3,086,164 | 5,299,208 | 10,022,673 |
| Cars (electric; and repairs) | 10 | 4,210 | 5,542,816 | 11,359,944 | 11,050,019 |
| Cars (steam); and repairs | 9 | 3,689 | 5,526,190 | 4,768,785 | 10,037,169 |
| Copper, tin and sheet work | 376 | 2,385 | 3,257,083 | 6,927,150 | 14,929,876 |
| Corsets | 60 | 2,949 | 2,292,811 | 5,204,317 | 12,865,474 |
| Dyeing (not in mills) | 113 | 3,032 | 2,929,033 | 16,727,711 | 25,992,335 |
| Engraving, steel and copper | 94 | 2,372 | 3,103,330 | 9,870,245 | 8,724,577 |
| Food preparations | 242 | 2,088 | 2,466,329 | 13,578,042 | 28,918,213 |
| Furs, dressed | 80 | 2,389 | 3,884,109 | 4,678,857 | 11,586,809 |
| Gas and electric fixtures | 93 | 2,875 | 3,303,990 | 7,874,660 | 11,492,360 |
| Hats and caps (not felt, straw or wool) | 328 | 3,332 | 4,693,308 | 8,071,659 | 21,180,810 |
| Hats, straw | 72 | 2,040 | 2,467,216 | 6,447,643 | 11,882,643 |
| Instruments, professional and scientific | 105 | 3,107 | 3,888,465 | 10,996,262 | 13,836,817 |
| Leather goods | 226 | 4,127 | 5,192,991 | 19,929,074 | 28,599,945 |
| Liquors, malt | 35 | 4,245 | 5,873,499 | 80,531,114 | 70,123,072 |
| Lumber | 173 | 2,923 | 3,837,820 | 9,630,848 | 16,615,568 |
| Musical instrum'ts (piano and organ materials) | 28 | 2,621 | 2,587,778 | 7,816,816 | 8,377,835 |
| Paints | 73 | 2,645 | 2,814,146 | 23,526,697 | 42,124,779 |
| Paper goods | 69 | 2,824 | 2,073,185 | 11,173,073 | 16,021,966 |
| Patent medicines and compounds | 237 | 3,470 | 2,860,372 | 27,063,403 | 42,214,378 |
| Perfumery and cosmetics | 135 | 2,203 | 1,524,986 | 12,141,331 | 22,983,326 |
| Photo-engraving | 75 | 2,225 | 3,512,110 | 3,245,064 | 9,415,505 |
| Rubber tires, tubes, etc. | 28 | 3,113 | 3,358,239 | 13,578,715 | 16,387,815 |
| Slaughtering and meat packing | 74 | 4,457 | 6,426,287 | 46,348,453 | 185,244,898 |
| Stamped and enamelled ware | 56 | 4,591 | 4,674,836 | 16,236,271 | 19,554,719 |
| Structural iron work (not in mills) | 249 | 2,675 | 3,440,199 | 8,834 442 | 15,375,830 |
| Tinware | 60 | 4,403 | 4,868,193 | 18,325,860 | 25,196,990 |
| Toys and games | 161 | 3,147 | 3,356,406 | 4,598,162 | 13,165,901 |

## BIRTHS, MARRIAGES AND DEATHS, N. Y. CITY.

(Compiled by Dr. W. H. Guilfoy, Registrar of Records, Department of Health.)

| YEAR. | Estimated Pop. July 1. | Births. | Rate Per 1,000. | Mar-riages. | Rate Per 1,000. | Deaths. | Rate Per 1,000. | Still-births. | Rate Per 1,000. |
|---|---|---|---|---|---|---|---|---|---|
| 1898 | 3,272,418 | 78,928 | 24.12 | 28,885 | 8.83 | 66,294 | 20.26 | 5,640 | 1.72 |
| 1899 | 3,356,722 | 77,632 | 23.13 | 30,474 | 9.08 | 65,343 | 19.47 | 5,463 | 1.63 |
| 1900 | 3,446,042 | 81,721 | 23.72 | 32,247 | 9.36 | 70,872 | 20.57 | 5,815 | 1.69 |
| 1901 | 3,554,079 | 80,735 | 22.72 | 33,447 | 9.41 | 70 720 | 19.90 | 5,750 | 1.62 |
| 1902 | 3,665,825 | 85,644 | 23.36 | 36,207 | 9.88 | 68,112 | 18.58 | 6,011 | 1.64 |
| 1903 | 3,781,423 | 94,755 | 25.06 | 38,174 | 10.10 | 67,864 | 17.94 | 6,078 | 1.61 |
| 1904 | 3,901,023 | 99,555 | 25.52 | 39,436 | 10.11 | 78,060 | 20.01 | 6,288 | 1.61 |
| 1905 | 4,025,742 | 103,880 | 25.80 | 42,675 | 10.60 | 73,714 | 18.31 | 6,352 | 1.58 |
| 1906 | 4,166,556 | 111,772 | 26.82 | 48,355 | 11.60 | 76,203 | 18.29 | 6,646 | 1.59 |
| 1907 | 4,314,237 | 120,720 | 27.98 | 51,097 | 11.84 | 79,205 | 18.36 | 7,351 | 1.70 |
| 1908 | 4,469,248 | 126,862 | 28.38 | 37,499 | 8.39 | 73,072 | 16.35 | 7,191 | 1.61 |
| 1909 | 4,632,078 | 122,975 | 26.54 | 41,513 | 8.96 | 74,105 | 16.00 | 6,697 | 1.45 |
| 1910 | 4,785,009 | 129,080 | 26.95 | 46,417 | 9.70 | 76,742 | 16.04 | 6,752 | 1.41 |
| 1911 | 4,873,211 | 134,542 | 27.61 | 48,765 | 10.01 | 75,423 | 15.48 | 6,669 | 1.37 |
| 1912 | 4,961,205 | 135,655 | 27.34 | 51,703 | 10.42 | 73,008 | 14.71 | 6,619 | 1.33 |
| 1913 | 5,049,199 | 135,134 | 26.77 | 51,268 | 10.15 | 73,902 | 14.64 | 6,631 | 1.31 |
| 1914 | 5,137,193 | 140,647 | 27.38 | 53,052 | 10.33 | 74,803 | 14.56 | 6,617 | 1.29 |
| 1915 | 5,225,189 | 141,256 | 27.04 | 50,997 | 9.76 | 76,193 | 14.58 | 6,413 | 1.23 |
| 1916 | 5,313,181 | 137,644 | 25.91 | 54,782 | 10.31 | 77,801 | 14.64 | 6,253 | 1.18 |
| 1917 | 5,401,175 | 141,564 | 26.21 | 59,210 | 10.96 | 78,575 | 14.55 | 6,117 | 1.13 |
| 1918 | 5,489,169 | 138,046 | 25.15 | 56,733 | 10.34 | 98,119 | 17.88 | 6,793 | 1.24 |
| 1919 | 5,577,163 | 130,377 | 23.35 | 60,256 | 10.80 | 74,433 | 13.35 | 5,984 | 1.07 |
| 1920 | 5,665,157 | 132,856 | 23.45 | 64,422 | 11.37 | 73,249 | 12.93 | 6,234 | 1.10 |
| 1921 | 5,751,859 | 134,241 | 23.34 | 60,846 | 10.58 | 64,257 | 11.17 | 6,297 | 1.09 |

### BROOKLYN BIRTHS, MARRIAGES AND DEATHS.

| YEAR. | Births. | Still-births. | Mar-riages. | Total D'ths, All Causes. | Pul'nary Tuberc's Deaths. | Pneu-monia Deaths. | Bright's Disease & Kidney Deaths. | Cancer Deaths. | Nervous Disease Deaths. |
|---|---|---|---|---|---|---|---|---|---|
| 1887 | 12,750 | 1,299 | 5,700 | 17,078 | 2,026 | 1,418 | 657 | 349 | 1,897 |
| 1888 | 11,562 | 1,277 | 4,783 | 16,061 | 2,051 | 1,663 | 867 | 345 | 2,198 |
| 1889 | 17,075 | 1,279 | 9,606 | 18,480 | 2,055 | 1,814 | 827 | 356 | 2,298 |
| 1890 | 15,000 | 1,305 | 7,500 | 19,827 | 2,169 | 2,325 | 892 | 414 | 2,438 |
| 1891 | 16,500 | 1,733 | 7,500 | 21,349 | 2,117 | 2,537 | 993 | 416 | 2,430 |
| 1892 | 18,000 | 1,682 | 7,800 | 20,807 | 2,128 | 2,357 | 1,039 | 418 | 2,619 |
| 1893 | 19,250 | 1,550 | 7,350 | 21,017 | 2,174 | 2,569 | 1,060 | 441 | 2,649 |
| 1894 | 19,419 | 1,673 | 5,935 | 21,183 | 2,260 | 2,181 | 1,199 | 457 | 2,292 |
| 1895 | 20,465 | 1,770 | 6,779 | 22,568 | 2,299 | 2,624 | 1,387 | 572 | 2,322 |
| 1896 | 21,424 | 1,807 | 7,116 | 22,501 | 2,245 | 2,553 | 1,448 | 534 | 2,215 |
| 1897 | 21,109 | 1,919 | 7,254 | 20,674 | 2,164 | 2,232 | 1,443 | 561 | 2,132 |
| 1898 | 21,395 | 1,888 | 7,129 | 21,989 | 2,394 | 2,384 | 1,503 | 632 | 2,137 |
| 1899 | 21,203 | 1,688 | 7,612 | 21,649 | 2,435 | 2,682 | 1,624 | 701 | 1,081 |
| 1900 | 22,572 | 1,813 | 8,124 | 23,507 | 2,445 | 3,216 | 1,717 | 695 | 1,853 |
| 1901 | 22,182 | 1,776 | 8,303 | 23,271 | 2,479 | 2,891 | 1,897 | 760 | 2,917 |
| 1902 | 23,507 | 1,829 | 9,014 | 22,344 | 2,317 | 3,001 | 1,976 | 791 | 1,668 |
| 1903 | 27,292 | 1,838 | 9,616 | 22,192 | 2,396 | 2,910 | 2,123 | 778 | 1,724 |
| 1904 | 28,859 | 1,922 | 10,019 | 24,831 | 2,634 | 3,670 | 2,253 | 817 | 2,054 |
| 1905 | 30,972 | 1,991 | 10,782 | 23,935 | 2,420 | 3,099 | 1,984 | 899 | 2,413 |
| 1906 | 34,538 | 2,071 | 11,966 | 25,024 | 2,557 | 3,557 | 2,076 | 975 | 1,998 |
| 1907 | 38,632 | 2,303 | 12,916 | 26,043 | 2,575 | 3,704 | 1,997 | 993 | 1,882 |
| 1908 | 41,906 | 2,286 | 10,171 | 23,938 | 2,484 | 3,063 | 1,762 | 1,016 | 1,499 |
| 1909 | 41,494 | 2,202 | 11,110 | 24,365 | 2,347 | 3,511 | 2,048 | 1,110 | 1,053 |
| 1910 | 42,708 | 2,221 | 12,881 | 25,676 | 2,430 | 3,645 | 2,160 | 1,212 | 883 |
| 1911 | 45,699 | 2,188 | 13,748 | 24,511 | 2,464 | 3,418 | 1,837 | 1,221 | 976 |
| 1912 | 45,454 | 2,230 | 14,563 | 23,994 | 2,441 | 3,392 | 1,977 | 1,252 | 854 |
| 1913 | 45,888 | 2,286 | 14,271 | 23,955 | 2,608 | 3,464 | 2,054 | 1,346 | 843 |
| 1914 | 48,241 | 2,231 | 14,888 | 24,092 | 2,692 | 3,229 | 1,921 | 1,428 | 926 |
| 1915 | 48,482 | 2,176 | 14,718 | 24,469 | 2,742 | 3,587 | 2,016 | 1,533 | 920 |
| 1916 | 48,590 | 2,234 | 15,920 | 25,567 | 2,599 | 3,877 | 2,341 | 1,552 | 2,076 |
| 1917 | 50,468 | 2,233 | 17,066 | 25,338 | 2,413 | 3,868 | 2,393 | 1,663 | 950 |
| 1918 | 49,568 | 2,422 | 13,592 | 32,944 | 2,677 | 4,877 | 2,268 | 1,692 | 960 |
| 1919 | 47,526 | 2,446 | 16,460 | 24,512 | 2,252 | 3,818 | 2,256 | 1,715 | 825 |
| 1920 | 49,171 | 2,193 | 18,242 | 24,420 | 1,959 | 3,317 | 2,099 | 1,731 | 776 |
| 1921 | 49,873 | 2,265 | 15,964 | 21,060 | 1,571 | 2,181 | 1,633 | 1,801 | 662 |

### BIRTHS, MARRIAGES AND DEATHS FORMER CITY (MANHATTAN AND BRONX).

(There were no reliable marriage records before 1854.)

| YR. | Births. | Mar-riages. | Deaths. | YR. | Births. | Mar-riages. | Deaths. | YR. | Births. | Mar-riages. | Deaths. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1854 | 17,979 | 5,595 | 28,473 | 1869 | 13,947 | 8,695 | 25,167 | 1884 | 30,527 | 11,805 | 35,034 |
| 1855 | 14,145 | 4,199 | 24,448 | 1870 | 14,524 | 7,985 | 27,175 | 1885 | 30,030 | 11,716 | 35,682 |
| 1856 | 16,199 | 3,633 | 21,748 | 1871 | 20,821 | 8,646 | 26,976 | 1886 | 31,319 | 12,216 | 37,351 |
| 1857 | 18,427 | 3,710 | 22,811 | 1872 | 22,068 | 9,008 | 32,647 | 1887 | 34,023 | 13,740 | 38,933 |
| 1858 | 13,340 | 3,942 | 23,269 | 1873 | 22,683 | 8,871 | 29,084 | 1888 | 36,136 | 14,533 | 40,175 |
| 1859 | 9,035 | 3,100 | 22,745 | 1874 | 25,747 | 8,397 | 28,727 | 1889 | 37,527 | 14,400 | 39,679 |
| 1860 | 12,454 | 4,241 | 24,760 | 1875 | 23,813 | 7,565 | 30,799 | 1890 | 39,250 | 14,992 | 40,103 |
| 1861 | 10,004 | 2,993 | 24,525 | 1876 | 23,744 | 7,099 | 29,152 | 1891 | 46,904 | 15,764 | 43,659 |
| 1862 | 7,612 | 2,896 | 23,150 | 1877 | 25,569 | 7,129 | 26,203 | 1892 | 49,447 | 16,001 | 44,329 |
| 1863 | 6,426 | 3,272 | 26,617 | 1878 | 25,729 | 7,629 | 27,008 | 1893 | 51,529 | 16,144 | 44,486 |
| 1864 | 5,877 | 2,675 | 25,792 | 1879 | 25,573 | 8,446 | 28,342 | 1894 | 55,636 | 17,388 | 41,175 |
| 1865 | 5,332 | 2,733 | 25,767 | 1880 | 27,536 | 9,002 | 31,937 | 1895 | 53,731 | 20,612 | 43,420 |
| 1866 | 10,006 | 5,792 | 26,815 | 1881 | 26,130 | 10,077 | 38,624 | 1896 | 56,623 | 20,513 | 41,622 |
| 1867 | 12,535 | 7,144 | 23,159 | 1882 | 27,321 | 11 085 | 37,924 | 1897 | 54,089 | 20,365 | 38,877 |
| 1868 | 12,590 | 6,926 | 24,889 | 1883 | 28,972 | 11,556 | 34,011 | | | | |

## DEATHS, CHIEF CAUSES, CITY OF NEW YORK, SINCE 1898.

(Official figures, from the Department of Health.)

| YEAR. | Diphtheria and Croup. | Pulmonary Tuberculosis. | Pneumonia. | Non-Pulm'y Tuberculosis. | Bronchitis. | Diarrhoea Under 5 Yrs. | Cancer. | Kidney Diseases. | Heart Disease. | Violence. | Puerp. Disease, Etc. | Typhoid Fever. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1898..... | 1,778 | 7,724 | 8,094 | 1,541 | 1,923 | 6,570 | 2,006 | 4,686 | 3,847 | 3,677 | 568 | 676 |
| 1899..... | 1,924 | 8,015 | 8,531 | 1,562 | 1,988 | 5,569 | 2,136 | 5,113 | 3,751 | 3,385 | 558 | 546 |
| 1900..... | 2,277 | 8,154 | 10,482 | 1,476 | 1,964 | 5,978 | 2,291 | 5,352 | 3,858 | 3,913 | 711 | 718 |
| 1901..... | 2,068 | 8,135 | 9,168 | 1,255 | 1,683 | 6,071 | 2,463 | 5,500 | 4,626 | 4,636 | 648 | 727 |
| 1902..... | 2,015 | 7,569 | 9,377 | 1,314 | 1,898 | 5,190 | 2,450 | 5,461 | 4,859 | 3,752 | 642 | 764 |
| 1903..... | 2,190 | 8,020 | 9,714 | 1,284 | 1,569 | 4,443 | 2,608 | 5,636 | 4,771 | 4,068 | 637 | 653 |
| 1904..... | 2,048 | 8,512 | 12,369 | 1,257 | 1,735 | 5,647 | 2,709 | 6,220 | 4,996 | 5,191 | 727 | 661 |
| 1905..... | 1,544 | 8,535 | 9,783 | 1,123 | 1,417 | 6,136 | 2,875 | 5,944 | 5,140 | 4,476 | 815 | 649 |
| 1906..... | 1,898 | 8,955 | 10,868 | 1,239 | 1,319 | 6,016 | 3,005 | 6,108 | 5,557 | 4,744 | 763 | 639 |
| 1907..... | 1,740 | 8,999 | 11,806 | 1,263 | 1,048 | 6,611 | 3,227 | 5,685 | 7,237 | 4,911 | 783 | 740 |
| 1908..... | 1,758 | 8,869 | 9,508 | 1,288 | 819 | 6,190 | 3,243 | 5,049 | 7,130 | 4,737 | 698 | 536 |
| 1909..... | 1,714 | 8,643 | 10,614 | 1,268 | 1,051 | 5,380 | 3,488 | 5,522 | 6,854 | 4,403 | 719 | 564 |
| 1910..... | 1,715 | 8,692 | 10,519 | 1,382 | 928 | 5,918 | 3,710 | 5,638 | 6,870 | 4,638 | 761 | 558 |
| 1911..... | 1,281 | 8,700 | 10,055 | 1,460 | 877 | 4,696 | 3,873 | 5,017 | 7,965 | 5,183 | 738 | 545 |
| 1912..... | 1,125 | 8,591 | 9,979 | 1,390 | 732 | 4,149 | 4,071 | 5,724 | 8,890 | 4,762 | 676 | 499 |
| 1913..... | 1,333 | 8,601 | 10,042 | 1,430 | 693 | 3,668 | 4,223 | 5,615 | 9,674 | 4,937 | 668 | 362 |
| 1914..... | 1,491 | 8,918 | 9,678 | 1,372 | 601 | 3,579 | 4,467 | 5,617 | 10,058 | 4,985 | 679 | 334 |
| 1915..... | 1,278 | 8,825 | 10,922 | 1,424 | 711 | 3,924 | 4,647 | 5,521 | 10,383 | 4,777 | 710 | 332 |
| 1916..... | 1,031 | 8,411 | 10,568 | 1,237 | 813 | 3,053 | 4,701 | 6,546 | 10,687 | 5,060 | 653 | 216 |
| 1917..... | 1,158 | 8,825 | 11,051 | 1,317 | 789 | 3,365 | 4,867 | 6,727 | 11,102 | 5,742 | 651 | 229 |
| 1918..... | 1,245 | 8,779 | 20,628 | 1,318 | 930 | 2,556 | 4,931 | 5,269 | 12,105 | 5,257 | 666 | 196 |
| 1919..... | 1,239 | 7,395 | 10,977 | 1,103 | 690 | 2,474 | 5,147 | 5,007 | 10,435 | 4,105 | 644 | 121 |
| 1920..... | 1,045 | 6,165 | 10,058 | 970 | 918 | 2,694 | 5,317 | 4,833 | 11,342 | 3,944 | 708 | 137 |
| 1921..... | 891 | 5,143 | 6,477 | 779 | 547 | 2,129 | 5,573 | 4,105 | 12,005 | 4,617 | 746 | 123 |

### DEATHS FROM OTHER CAUSES.

Deaths from other causes in City of New York in 1919 were: Measles, 218; scarlet fever, 136; infantile paralysis, 15; cerebro-spinal meningitis, 171; rabies, 5; whooping cough, 161.

Nervous diseases data do not include deaths from epidemic cerebro-spinal meningitis.

### DEATHS, CHIEF CAUSES, OLD CITY OF NEW YORK (MANHATTAN AND THE BRONX.)

| YEAR. | Total Deaths. | Death Rate Per 1,000 Pop. | Tuberculosis | Pneumonia. | Under Five Years. | Heart Disease. | Bri'hts Disease. | Cancer. | Diphtheria and Croup. | Bronchitis. | Accidents. | Suicides. | Homicides. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1868... | 24,889 | 29.24 | 3,414 | 1,668 | 3,526 | 615 | 534 | 315 | 619 | 803 | 733 | 98 | 46 |
| 1869... | 25,167 | 28.08 | 3,364 | 2,100 | 2,884 | 686 | 557 | 304 | 811 | 877 | 797 | 102 | 37 |
| 1870... | 27,175 | 28.80 | 4,030 | 1,836 | 3,917 | 699 | 787 | 355 | 729 | 855 | 834 | 101 | 45 |
| 1871... | 26,976 | 28.22 | 4,186 | 1,834 | 3,353 | 813 | 947 | 335 | 704 | 964 | 1,071 | 114 | 65 |
| 1872... | 32,647 | 33.70 | 4,274 | 2,150 | 4,915 | 894 | 949 | 392 | 721 | 1,040 | 1,108 | 144 | 69 |
| 1873... | 29,084 | 29.63 | 4,134 | 2,328 | 3,903 | 860 | 876 | 425 | 1,883 | 1,068 | 968 | 118 | 73 |
| 1874... | 28,727 | 27.89 | 4,034 | 2,398 | 3,468 | 883 | 828 | 416 | 2,259 | 1,065 | 1,008 | 180 | 59 |
| 1875... | 30,709 | 29.40 | 4,172 | 2,802 | 3,575 | 985 | 909 | 424 | 3,087 | 1,111 | 967 | 155 | 62 |
| 1876... | 29,152 | 27.11 | 4,194 | 2,542 | 3,632 | 992 | 958 | 459 | 2,277 | 1,214 | 902 | 150 | 55 |
| 1877... | 26,203 | 23.66 | 4,044 | 2,148 | 3,397 | 880 | 923 | 495 | 1,423 | 1,033 | 820 | 148 | 59 |
| 1878... | 27,008 | 23.67 | 4,466 | 2,888 | 2,785 | 1,068 | 919 | 570 | 1,506 | 1,184 | 809 | 142 | 58 |
| 1879... | 28,342 | 24.13 | 4,343 | 2,554 | 3,826 | 1,164 | 1,027 | 572 | 1,193 | 1,263 | 837 | 117 | 48 |
| 1880... | 31,937 | 26.42 | 4,706 | 2,822 | 3,815 | 1,153 | 1,029 | 659 | 2,300 | 1,375 | 1,007 | 152 | 58 |
| 1881... | 38,624 | 30.75 | 5,312 | 3,261 | 4,159 | 1,289 | 1,187 | 706 | 3,287 | 1,511 | 1,059 | 166 | 65 |
| 1882... | 37,924 | 29.61 | 5,247 | 3,472 | 3,959 | 1,477 | 1,241 | 732 | 2,254 | 1,583 | 1,099 | 199 | 76 |
| 1883... | 34,011 | 25.81 | 5,290 | 3,409 | 3,297 | 1,693 | 1,195 | 678 | 1,653 | 1,435 | 1,100 | 161 | 62 |
| 1884... | 35,034 | 25.83 | 5,235 | 3,159 | 3,722 | 1,662 | 1,163 | 731 | 1,838 | 1,485 | 1,055 | 229 | 55 |
| 1885... | 35,682 | 25.56 | 5,196 | 3,650 | 3,482 | 1,800 | 1,188 | 754 | 2,180 | 1,605 | 1,078 | 207 | 59 |
| 1886... | 37,351 | 26.00 | 5,477 | 3,656 | 3,595 | 1,894 | 1,210 | 779 | 2,695 | 1,701 | 1,176 | 223 | 63 |
| 1887... | 38,933 | 26.33 | 5,260 | 3,707 | 3,947 | 2,018 | 1,128 | 832 | 3,056 | 1,838 | 1,288 | 235 | 70 |
| 1888... | 40,175 | 26.39 | 5,260 | 4,288 | 3,648 | 1,880 | 1,147 | 870 | 2,553 | 1,892 | 1,085 | 247 | 57 |
| 1889... | 39,679 | 25.36 | 5,179 | 4,075 | 3,889 | 1,970 | 1,763 | 848 | 2,291 | 1,814 | 1,148 | 244 | 72 |
| 1890... | 40,103 | 24.87 | 5,492 | 4,989 | 3,779 | 1,978 | 2,024 | 954 | 1,783 | 1,987 | 1,449 | 239 | 61 |
| 1891... | 43,659 | 26.31 | 5,160 | 3,918 | 4,044 | 2,285 | 2,116 | 902 | 1,970 | 1,836 | 1,597 | 300 | 56 |
| 1892... | 44,329 | 25.95 | 5,033 | 5,841 | 4,177 | 2,330 | 1,991 | 996 | 2,106 | 1,754 | 1,900 | 241 | 38 |
| 1893... | 44,486 | 25.30 | 5,124 | 6,487 | 3,890 | 2,379 | 2,071 | 993 | 2,558 | 1,577 | 1,607 | 314 | 47 |
| 1894... | 41,175 | 22.76 | 4,658 | 4,725 | 3,757 | 2,170 | 1,879 | 1,022 | 2,870 | 1,329 | 1,728 | 331 | 61 |
| 1895... | 43,420 | 23.18 | 5,205 | 5,751 | 4,061 | 2,297 | 2,019 | 1,030 | 1,976 | 1,636 | 2,045 | 376 | 76 |
| 1896... | 41,622 | 21.84 | 4,994 | 5,383 | 3,776 | 2,396 | 2,195 | 1,141 | 1,763 | 1,292 | 2,641 | 384 | 71 |
| 1897... | 38,877 | 20.03 | 4,843 | 4,621 | 3,559 | 2,346 | 2,059 | 1,217 | 1,590 | 1,089 | 1,782 | 436 | 65 |

### DEATHS FROM STREET ACCIDENTS IN NEW YORK CITY.

(By S. W. Wynne, M. D., Assistant Registrar, Department of Health. The rate is per 100,000 population.)

| YEAR. | Horse Vehicl's | Rate. | Street Cars. | Rate. | Autos. | Rate. | YEAR. | Horse Vehicl's | Rate. | Street Cars. | Rate. | Autos. | Rate. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1898..... | 88 | 2.69 | 113 | 3.45 | .. | .... | 1910..... | 169 | 3.54 | 168 | 3.51 | 111 | 2.32 |
| 1899..... | 103 | 3.07 | 167 | 4.97 | 1 | 0.03 | 1911..... | 271 | 5.56 | 124 | 2.55 | 128 | 2.63 |
| 1900..... | 105 | 3.04 | 181 | 5.25 | 5 | 0.14 | 1912..... | 194 | 3.91 | 111 | 2.24 | 188 | 3.79 |
| 1901..... | 106 | 2.93 | 185 | 5.25 | 6 | 0.17 | 1913..... | 186 | 3.68 | 130 | 2.58 | 293 | 5.80 |
| 1902..... | 156 | 4.26 | 175 | 4.77 | 9 | 0.24 | 1914..... | 168 | 3.27 | 121 | 2.36 | 310 | 6.03 |
| 1903..... | 184 | 4.87 | 180 | 4.76 | 12 | 0.32 | 1915..... | 119 | 2.28 | 85 | 1.63 | 346 | 6.62 |
| 1904..... | 192 | 4.92 | 167 | 4.28 | 14 | 0.36 | 1916..... | 144 | 2.71 | 110 | 2.07 | 407 | 7.66 |
| 1905..... | 176 | 4.37 | 212 | 5.26 | 36 | 0.89 | 1917..... | 119 | 2.20 | 159 | 2.94 | 525 | 9.72 |
| 1906..... | 223 | 5.35 | 252 | 6.05 | 64 | 1.53 | 1918..... | 118 | 2.15 | 126 | 2.30 | 677 | 12.33 |
| 1907..... | 236 | 5.47 | 318 | 7.37 | 42 | 0.97 | 1919..... | 88 | 1.58 | 100 | 1.79 | 767 | 13.75 |
| 1908..... | 158 | 3.53 | 257 | 5.75 | 81 | 1.81 | 1920..... | 42 | .74 | 82 | 1.45 | 763 | 13.47 |
| 1909..... | 161 | 3.47 | 186 | 4.01 | 84 | 1.81 | 1921..... | 62 | 1.08 | 85 | 1.48 | 849 | 14.76 |

## NEW YORK CITY WEATHER RECORDS FOR 1921.

(Compiled under the direction of James H. Scarr, United States Meteorologist.)

DAILY PRECIPITATION, 1921, AT NEW YORK (INCHES).

| Day. | Jan. | Feb. | Mar. | April | May | June. | July | Aug. | Sept. | Oct. | Nov. | Dec. | Day. | Jan. | Feb. | Mar. | April | May. | June. | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ... | ... | .01 | .40 | .18 | ... | .09 | ... | ... | ... | .27 | ... | 18 | ... | ... | ... | .32 | ... | ... | ... | .35 | T. | .05 | ... | .19 |
| 2 | T. | .01 | T. | ... | ... | ... | T. | .73 | T. | ... | ... | .52 | 19 | ... | T. | T. | .08 | ... | ... | .65 | ... | ... | .01 | ... | ... |
| 3 | ... | ... | .11 | ... | ... | ... | ... | .55 | .06 | .21 | ... | ... | 20 | T. | 2.6 | T. | ... | ... | ... | T. | ... | T. | .27 | .47 | ... |
| 4 | ... | ... | ... | ... | 1.0 | .04 | ... | ... | ... | ... | T. | .30 | | | | | | | | | | | | | |
| 5 | .06 | .09 | T. | ... | .32 | ... | ... | ... | T. | T. | ... | T. | 21 | ... | ... | T. | T. | ... | ... | T. | ... | .55 | ... | .16 | T. |
| 6 | ... | .02 | T. | ... | .03 | ... | ... | T. | .17 | ... | ... | T. | 22 | .01 | .04 | ... | ... | .04 | T. | ... | ... | T. | ... | ... | ... |
| 7 | .17 | T. | ... | T. | ... | † | ... | 1.4 | .17 | ... | ... | ... | 23 | ... | T. | ... | .63 | .10 | T. | ... | ... | ... | ... | .01 | .31 |
| 8 | .04 | ... | T. | .05 | ... | ... | ... | .21 | ... | .14 | ... | ... | 24 | T. | ... | .10 | .03 | ... | ... | ... | ... | ... | ... | .17 | .28 |
| 9 | ... | .17 | .61 | .12 | ... | ... | .01 | ... | ... | ... | .37 | ... | 25 | ... | ... | .43 | ... | .59 | ... | ... | ... | .09 | ... | ... | .01 |
| 10 | ... | .05 | ... | ... | ... | T. | .63 | ... | ... | ... | .07 | ... | 26 | ... | ... | T. | ... | ... | .23 | .05 | ... | ... | .16 | ... | ... |
| | | | | | | | | | | | | | 27 | ... | .12 | ... | ... | ... | .02 | T. | ... | T. | ... | .19 | .08 |
| 11 | ... | ... | ... | .01 | ... | .32 | T. | ... | .18 | ... | ... | ... | 28 | ... | .36 | .06 | ... | ... | 1.1 | T. | T. | .01 | ... | .31 | ... |
| 12 | T. | .32 | .55 | ... | .18 | T. | ... | T. | .02 | .06 | .03 | .16 | 29 | ... | ... | ... | .32 | T. | .07 | .50 | T. | ... | ... | .02 | .04 |
| 13 | ... | ... | .05 | ... | .76 | T. | .02 | ... | ... | ... | T. | T. | 30 | .22 | ... | ... | .14 | T. | 1.1 | † | ... | 1.5 | ... | ... | ... |
| 14 | .91 | ... | T. | .55 | .17 | ... | T. | .48 | ... | ... | .35 | ... | 31 | .24 | ... | .36 | ... | ... | ... | T. | T. | ... | T. | ... | T. |
| 15 | ... | ... | ... | .59 | ... | ... | 1.1 | ... | ... | ... | ... | ... | | | | | | | | | | | | | |
| 16 | ... | ... | .03 | ... | .07 | ... | ... | ... | ... | ... | .11 | ... | Total | 1.6 | 4.9 | 2.2 | 2.8 | 3.4 | 3.2 | 3.1 | 3.8 | 2.9 | .74 | 3.4 | 1.8 |
| 17 | T. | ... | T. | .23 | ... | .24 | ... | .13 | .16 | ... | .79 | ... | | | | | | | | | | | | | |

"T," trace less than .01 inch. † Showers in vicinity.

DAILY MINIMUM TEMPERATURE, 1921, AT NEW YORK (DEGREES).

| Day. | Jan. | Feb. | Mar. | April | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | 21 | 38 | 33 | 46 | 60 | 62 | 62 | 68 | 55 | 54 | 39 |
| 2 | 43 | 29 | 41 | 31 | 47 | 57 | 66 | 61 | 69 | 55 | 44 | 42 |
| 3 | 37 | 29 | 41 | 44 | 48 | 53 | 69 | 61 | 73 | 61 | 42 | 38 |
| 4 | 36 | 29 | 26 | 51 | 44 | 62 | 77 | 61 | 67 | 50 | 38 | 30 |
| 5 | 39 | 38 | 26 | 54 | 44 | 55 | 63 | 65 | 65 | 48 | 37 | 28 |
| 6 | 27 | 37 | 43 | 55 | 45 | 57 | 63 | 67 | 67 | 50 | 33 | 30 |
| 7 | 25 | 34 | 42 | 42 | 48 | 58 | 70 | 68 | 66 | 55 | 42 | 29 |
| 8 | 36 | 32 | 38 | 42 | 54 | 59 | 73 | 67 | 67 | 46 | 35 | 25 |
| 9 | 32 | 32 | 47 | 38 | 54 | 59 | 75 | 62 | 67 | 41 | 35 | 21 |
| 10 | 33 | 36 | 35 | 35 | 53 | 60 | 70 | 67 | 66 | 52 | 38 | 30 |
| 11 | 32 | 32 | 38 | 28 | 44 | 60 | 69 | 66 | 66 | 54 | 32 | 36 |
| 12 | 25 | 28 | 40 | 34 | 43 | 68 | 69 | 70 | 66 | 45 | 35 | 34 |
| 13 | 19 | 29 | 47 | 46 | 53 | 62 | 69 | 71 | 64 | 41 | 30 | 26 |
| 14 | 27 | 29 | 42 | 52 | 58 | 62 | 73 | 64 | 60 | 43 | 34 | 23 |
| 15 | 32 | 24 | 46 | 53 | 60 | 58 | 67 | 58 | 62 | 49 | 38 | 18 |
| 16 | 26 | 33 | 43 | 52 | 49 | 60 | 66 | 61 | 63 | 55 | 34 | 19 |
| 17 | 15 | 33 | 37 | 43 | 43 | 60 | 68 | 64 | 63 | 52 | 46 | 39 |
| 18 | 7 | 24 | 35 | 38 | 51 | 58 | 67 | 69 | 65 | 54 | 58 | 36 |
| 19 | 4 | 24 | 30 | 37 | 53 | 57 | 69 | 66 | 56 | 58 | 59 | 32 |
| 20 | 23 | 20 | 48 | 42 | 51 | 59 | 70 | 67 | 59 | 47 | 40 | 29 |
| 21 | 33 | 15 | 48 | 52 | 58 | 60 | 66 | 62 | 60 | 46 | 38 | 12 |
| 22 | 42 | 27 | 37 | 54 | 63 | 69 | 64 | 58 | 66 | 45 | 39 | 8 |
| 23 | 34 | 27 | 35 | 52 | 51 | 70 | 67 | 60 | 63 | 49 | 35 | 21 |
| 24 | 15 | 16 | 38 | 48 | 48 | 70 | 67 | 62 | 58 | 48 | 34 | 34 |
| 25 | 4 | 11 | 50 | 56 | 47 | 71 | 69 | 62 | 63 | 43 | 35 | 23 |
| 26 | 10 | 21 | 50 | 50 | 48 | 66 | 72 | 62 | 59 | 38 | 41 | 17 |
| 27 | 14 | 36 | 48 | 50 | 58 | 66 | 72 | 58 | 60 | 40 | 37 | 26 |
| 28 | 26 | 38 | 34 | 55 | 59 | 67 | 75 | 60 | 62 | 46 | 37 | 24 |
| 29 | 31 | ... | 25 | 50 | 65 | 69 | 71 | 70 | 67 | 46 | 34 | 14 |
| 30 | 37 | ... | 32 | 50 | 59 | 64 | 70 | 70 | 59 | 47 | 36 | 4 |
| 31 | 23 | ... | 43 | ... | 59 | ... | 66 | 70 | ... | 52 | ... | 18 |
| Means | 26 | 28 | 40 | 46 | 52 | 62 | 69 | 64 | 64 | 49 | 39 | 26 |

DAILY MAXIMUM TEMPERATURE, 1921, AT NEW YORK (DEGREES).

| Day. | Jan. | Feb. | Mar. | April | May. | June. | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 44 | 34 | 54 | 49 | 55 | 78 | 71 | 77 | 80 | 70 | 63 | 58 |
| 2 | 55 | 36 | 57 | 54 | 68 | 69 | 74 | 69 | 90 | 74 | 56 | 57 |
| 3 | 48 | 39 | 54 | 68 | 63 | 73 | 91 | 65 | 91 | 68 | 50 | 56 |
| 4 | 50 | 41 | 41 | 76 | 59 | 76 | 93 | 77 | 80 | 64 | 52 | 38 |
| 5 | 51 | 50 | 43 | 75 | 51 | 71 | 84 | 79 | 76 | 61 | 52 | 36 |
| 6 | 40 | 45 | 63 | 74 | 54 | 73 | 78 | 74 | 80 | 68 | 44 | 40 |
| 7 | 42 | 41 | 68 | 59 | 65 | 74 | 86 | 81 | 82 | 72 | 58 | 41 |
| 8 | 44 | 41 | 58 | 58 | 73 | 72 | 89 | 78 | 82 | 65 | 45 | 37 |
| 9 | 36 | 42 | 64 | 69 | 77 | 71 | 84 | 80 | 80 | 57 | 43 | 39 |
| 10 | 43 | 46 | 51 | 55 | 73 | 75 | 79 | 82 | 82 | 73 | 49 | 44 |
| 11 | 50 | 42 | 53 | 48 | 55 | 83 | 80 | 81 | 77 | 73 | 48 | 46 |
| 12 | 39 | 38 | 58 | 62 | 59 | 82 | 81 | 83 | 75 | 60 | 46 | 45 |
| 13 | 30 | 43 | 62 | 67 | 70 | 86 | 82 | 80 | 80 | 55 | 41 | 40 |
| 14 | 55 | 50 | 56 | 66 | 76 | 72 | 86 | 81 | 74 | 67 | 47 | 34 |
| 15 | 43 | 42 | 62 | 62 | 77 | 78 | 78 | 75 | 76 | 72 | 51 | 34 |
| 16 | 38 | 63 | 61 | 63 | 65 | 80 | 80 | 76 | 74 | 72 | 51 | 41 |
| 17 | 38 | 56 | 52 | 70 | 65 | 70 | 83 | 74 | 70 | 62 | 60 | 54 |
| 18 | 16 | 36 | 45 | 44 | 74 | 81 | 82 | 84 | 80 | 65 | 71 | 56 |
| 19 | 24 | 41 | 48 | 53 | 70 | 72 | 84 | 82 | 73 | 69 | 71 | 42 |
| 20 | 36 | 37 | 74 | 70 | 70 | 77 | 85 | 83 | 70 | 60 | 64 | 42 |
| 21 | 54 | 32 | 80 | 74 | 81 | 88 | 78 | 76 | 70 | 52 | 47 | 44 |
| 22 | 49 | 38 | 50 | 72 | 85 | 93 | 80 | 72 | 80 | 66 | 53 | 26 |
| 23 | 52 | 40 | 48 | 58 | 74 | 86 | 85 | 76 | 80 | 64 | 47 | 39 |
| 24 | 34 | 36 | 50 | 73 | 58 | 89 | 85 | 78 | 73 | 60 | 47 | 43 |
| 25 | 20 | 29 | 69 | 72 | 55 | 86 | 88 | 76 | 74 | 55 | 51 | 38 |
| 26 | 30 | 40 | 63 | 66 | 73 | 74 | 89 | 74 | 73 | 52 | 48 | 33 |
| 27 | 41 | 40 | 62 | 67 | 78 | 86 | 90 | 70 | 72 | 58 | 43 | 41 |
| 28 | 42 | 46 | 78 | 71 | 80 | 86 | 89 | 72 | 80 | 63 | 43 | 41 |
| 29 | 41 | ... | 41 | 65 | 80 | 88 | 84 | 81 | 81 | 58 | 42 | 40 |
| 30 | 45 | ... | 44 | 59 | 75 | 72 | 85 | 91 | 84 | 62 | 50 | 25 |
| 31 | 39 | ... | 60 | ... | 81 | ... | 85 | 85 | ... | 58 | ... | 43 |
| Means | 41 | 42 | 57 | 64 | 69 | 79 | 84 | 78 | 78 | 64 | 51 | 42 |

WIND VELOCITY AT NEW YORK.

(Highest in miles per hour, direction and date.)

| Month. | Max. Veloc'y. | Direction. | Day. | Year. | Month. | Max. Veloc'y. | Direction. | Day. | Year. |
|---|---|---|---|---|---|---|---|---|---|
| January | 86 | sw | 3 | 1913 | July | 88 | nw | 23 | 1914 |
| February | 96 | sw | 22 | 1912 | August | 76 | nw | 12 | 1900 |
| March | 92 | nw | 28 | 1919 | September | 80 | s | 30 | 1920 |
| April | 84 | nw | 23 | 1912 | October | 76 | nw | 16 | 1900 |
| May | 90 | nw | 27 | 1914 | November | 76 | w | 21 | 1900 |
| June | 72 | nw | 8 | 1902 | December | 90 | nw | 26 | 1915 |
| | 72 | n | 16 | 1911 | | | | | |

EXTREMES OF PRECIPITATION AND SNOWFALL AT NEW YORK (INCHES).

| Month | Precipitation. | | | Snowfall.* | | | Month | Precipitation. | | | Snowfall.* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Greatest in 24 Hrs | Day. | Year. | Greatest in 24 Hrs | Day. | Year. | | Greatest in 24 Hrs | Day. | Year. | Greatest in 24 Hrs | Day. | Year |
| Jan. | 2.48 | 8–9 | 1884 | 13.1 | 14 | 1910 | July | 3.80 | 26 | 1872 | 0 | ..... | ..... |
| Feb. | 3.25 | 11–12 | 1886 | 17.8 | 17–18 | 1893 | Aug. | 5.05 | 16–17 | 1909 | 0 | ..... | ..... |
| March | 3.60 | 25–26 | 1876 | 10.5 | 12 | 1888 | Sept. | 6.17 | 23 | 1882 | 0 | ..... | ..... |
| April | 3.72 | 5–6 | 1886 | 10.2 | 3–4 | 1915 | Oct. | 9.40 | 8–9 | 1903 | T. | 11 | 1906† |
| May | 4.17 | 7–8 | 1908 | T. | 6 | 1891 | Nov. | 3.62 | 15–16 | 1892 | 8.8 | 26–27 | 1898 |
| June | 3.88 | 14–15 | 1917 | 0 | ..... | ..... | Dec. | 2.93 | 13–14 | 1909 | 14.0 | 26–27 | 1890 |

* Records extending to winter of 1884-5 only. † Also in 1903, 26th and 27th, and in 1885, 30th. "T," trace, less than 0.1 inch.

MONTHLY AND ANNUAL PRECIPITATION AT NEW YORK (INCHES).

| YEAR. | Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | An'ual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1873.... | 5.05 | 1.73 | 1.92 | 3.05 | 4.08 | 1.29 | 4.15 | 7.66 | 2.51 | 2.47 | 4.01 | 2.06 | 39.98 |
| 1874.... | 4.82 | 2.41 | 1.88 | 7.02 | 2.16 | 2.87 | 3.22 | 2.53 | 7.21 | 1.82 | 2.21 | 1.69 | 39.84 |
| 1875.... | 2.87 | 3.23 | 4.25 | 3.21 | 1.47 | 1.66 | 5.23 | 10.42 | 2.51 | 3.13 | 4.43 | 2.78 | 45.19 |
| 1876.... | 1.21 | 5.39 | 7.90 | 3.79 | 3.94 | 2.87 | 5.72 | 2.97 | 5.24 | 1.68 | 4.40 | 2.29 | 47.40 |
| 1877.... | 3.55 | 1.67 | 6.65 | 3.18 | 0.73 | 3.31 | 3.86 | 2.54 | 1.33 | 7.69 | 5.48 | 0.95 | 40.94 |
| 1878.... | 4.53 | 3.40 | 4.02 | 1.93 | 3.73 | 2.91 | 5.26 | 7.30 | 3.20 | 1.71 | 3.74 | 4.93 | 46.66 |
| 1879.... | 3.05 | 2.74 | 2.04 | 4.06 | 2.23 | 3.42 | 3.39 | 5.17 | 1.45 | 0.58 | 2.22 | 5.86 | 36.21 |
| 1880.... | 2.19 | 2.11 | 4.66 | 3.18 | 0.82 | 1.69 | 6.67 | 4.40 | 2.26 | 2.81 | 2.40 | 4.15 | 37.34 |
| 1881.... | 5.41 | 5.06 | 6.78 | 1.00 | 2.33 | 6.23 | 1.31 | 1.56 | 1.38 | 2.10 | 2.87 | 4.37 | 40.40 |
| 1882.... | 6.15 | 4.36 | 2.32 | 2.15 | 4.21 | 2.82 | 2.75 | 1.63 | 14.51 | 1.69 | 1.80 | 2.22 | 46.61 |
| 1883.... | 3.22 | 4.58 | 1.63 | 3.82 | 3.03 | 4.00 | 3.37 | 2.29 | 3.57 | 4.27 | 1.65 | 3.40 | 38.83 |
| 1884.... | 6.07 | 5.09 | 4.43 | 2.66 | 4.35 | 4.16 | 6.14 | 8.56 | 0.15 | 3.63 | 3.44 | 6.66 | 55.34 |
| 1885.... | 3.50 | 6.09 | 1.19 | 2.44 | 2.22 | 1.86 | 3.04 | 7.70 | 0.72 | 5.62 | 5.05 | 2.69 | 42.12 |
| 1886.... | 5.02 | 5.90 | 3.54 | 4.95 | 6.53 | 3.01 | 2.57 | 1.18 | 1.79 | 3.90 | 4.61 | 3.73 | 46.73 |
| 1887.... | 4.19 | 5.26 | 3.51 | 3.67 | 0.99 | 7.70 | 6.75 | 3.66 | 2.30 | 2.36 | 2.04 | 4.20 | 46.63 |
| 1888.... | 5.14 | 4.03 | 5.64 | 3.57 | 4.87 | 1.68 | 1.27 | 6.35 | 7.40 | 4.14 | 4.81 | 4.05 | 52.95 |
| 1889.... | 5.38 | 3.07 | 4.09 | 5.90 | 3.25 | 2.38 | 9.63 | 3.39 | 7.43 | 2.53 | 9.82 | 1.81 | 58.68 |
| 1890.... | 2.95 | 3.86 | 6.67 | 2.58 | 3.11 | 4.19 | 3.96 | 4.06 | 8.21 | 6.46 | 0.82 | 5.43 | 52.30 |
| 1891.... | 5.73 | 4.69 | 4.22 | 2.37 | 3.10 | 1.18 | 4.11 | 5.87 | 2.12 | 2.69 | 2.06 | 3.30 | 41.44 |
| 1892.... | 5.61 | 1.27 | 4.62 | 2.36 | 4.30 | 2.97 | 2.45 | 3.90 | 0.87 | 0.63 | 8.28 | 1.64 | 38.90 |
| 1893.... | 3.56 | 7.81 | 4.47 | 6.36 | 5.06 | 2.56 | 1.26 | 7.18 | 2.27 | 5.28 | 3.71 | 3.49 | 53.01 |
| 1894.... | 2.70 | 5.15 | 1.69 | 2.51 | 3.90 | 0.86 | 2.89 | 1.54 | 8.04 | 5.83 | 3.83 | 5.23 | 44.17 |
| 1895.... | 5.62 | 0.82 | 2.80 | 2.92 | 2.04 | 2.57 | 4.40 | 4.12 | 0.95 | 4.04 | 3.58 | 1.87 | 35.73 |
| 1896.... | 1.25 | 5.50 | 6.13 | 1.24 | 2.01 | 6.38 | 4.45 | 2.46 | 3.04 | 1.71 | 2.12 | 1.70 | 37.99 |
| 1897.... | 3.51 | 2.72 | 2.51 | 2.96 | 5.30 | 2.98 | 9.52 | 3.14 | 1.64 | 0.72 | 4.44 | 4.83 | 44.27 |
| 1898.... | 3.95 | 4.06 | 2.92 | 3.23 | 5.55 | 1.28 | 4.76 | 3.12 | 1.28 | 6.14 | 5.90 | 2.93 | 45.12 |
| 1899.... | 4.08 | 5.46 | 6.78 | 1.23 | 1.14 | 1.83 | 6.20 | 3.90 | 5.89 | 2.05 | 2.13 | 1.37 | 42.06 |
| 1900.... | 4.18 | 5.16 | 3.18 | 2.06 | 4.05 | 3.36 | 4.33 | 2.69 | 2.36 | 4.17 | 4.26 | 1.98 | 41.78 |
| 1901.... | 2.07 | 0.86 | 5.18 | 6.82 | 7.01 | 0.94 | 5.41 | 6.88 | 2.33 | 2.20 | 1.31 | 6.05 | 47.06 |
| 1902.... | 2.28 | 5.78 | 4.32 | 3.51 | 1.23 | 5.91 | 3.12 | 3.29 | 3.59 | 6.66 | 1.19 | 6.19 | 47.07 |
| 1903.... | 3.44 | 3.83 | 3.65 | 2.88 | 0.33 | 7.42 | 3.23 | 5.96 | 2.60 | 11.55 | 0.90 | 2.81 | 48.60 |
| 1904.... | 3.38 | 2.18 | 3.44 | 3.94 | 1.61 | 2.70 | 4.31 | 7.13 | 3.18 | 3.21 | 2.62 | 3.87 | 41.57 |
| 1905.... | 3.93 | 2.79 | 3.65 | 2.45 | 1.12 | 4.18 | 6.01 | 5.23 | 7.11 | 2.67 | 1.67 | 3.67 | 44.48 |
| 1906.... | 2.98 | 2.57 | 5.58 | 5.78 | 4.67 | 1.70 | 3.21 | 3.68 | 2.54 | 4.30 | 1.28 | 3.53 | 41.82 |
| 1907.... | 3.26 | 2.52 | 3.80 | 3.89 | 4.08 | 3.29 | 1.18 | 2.48 | 8.00 | 3.82 | 5.05 | 3.91 | 45.28 |
| 1908.... | 3.84 | 5.36 | 2.15 | 1.82 | 9.10 | 1.70 | 4.33 | 5.65 | 1.60 | 1.92 | 0.75 | 3.21 | 41.43 |
| 1909.... | 3.33 | 4.31 | 3.19 | 5.93 | 1.72 | 3.17 | 1.98 | 7.94 | 2.66 | 0.74 | 1.58 | 5.00 | 41.55 |
| 1910.... | 5.61 | 4.07 | 0.86 | 4.53 | 1.66 | 5.10 | 0.23 | 2.13 | 1.43 | 3.79 | 4.62 | 1.95 | 35.98 |
| 1911.... | 2.27 | 3.17 | 2.87 | 3.06 | 0.91 | 4.63 | 1.55 | 7.38 | 1.51 | 5.38 | 4.22 | 3.39 | 40.34 |
| 1912.... | 1.86 | 2.06 | 5.68 | 3.61 | 3.94 | 1.17 | 3.26 | 2.77 | 3.38 | 4.32 | 2.21 | 4.24 | 38.50 |
| 1913.... | 2.77 | 2.18 | 5.17 | 5.32 | 2.51 | 1.43 | 3.02 | 1.84 | 5.28 | 10.56 | 1.91 | 2.40 | 44.39 |
| 1914.... | 3.69 | 3.27 | 4.55 | 2.67 | 1.97 | 1.83 | 5.13 | 2.18 | 0.20 | 1.92 | 2.08 | 4.01 | 33.50 |
| 1915.... | 5.61 | 5.03 | 1.14 | 2.10 | 3.23 | 3.66 | 4.60 | 5.37 | 2.52 | 2.25 | 1.09 | 4.23 | 40.83 |
| 1916.... | 1.08 | 4.49 | 3.71 | 3.28 | 3.49 | 3.94 | 3.44 | 0.59 | 2.98 | 0.63 | 1.57 | 3.97 | 33.17 |
| 1917.... | 2.44 | 1.70 | 3.38 | 2.35 | 3.29 | 5.57 | 5.96 | 1.79 | 2.74 | 5.68 | 0.68 | 3.70 | 39.28 |
| 1918.... | 3.41 | 1.98 | 1.51 | 3.78 | 3.37 | 4.12 | 3.61 | 1.70 | 3.54 | 0.83 | 2.04 | 3.70 | 33.59 |
| 1919.... | 3.35 | 3.45 | 4.69 | 2.55 | 3.81 | 2.23 | 7.93 | 7.74 | 3.60 | 3.17 | 3.33 | 2.53 | 48.38 |
| 1920.... | 2.23 | 6.56 | 4.16 | 4.44 | 2.88 | 6.19 | 4.78 | 4.91 | 3.24 | 0.77 | 3.56 | 5.09 | 48.81 |
| 1921.... | 1.65 | 4.90 | 2.21 | 2.88 | 3.45 | 3.25 | 3.10 | 3.87 | 2.96 | 0.74 | 3.48 | 1.89 | 34.38 |
| Means | 3.58 | 3.74 | 3.85 | 3.39 | 3.19 | 3.30 | 4.22 | 4.38 | 3.42 | 3.52 | 3.19 | 3.43 | 43.21 |

THE WEATHER, JANUARY-SEPTEMBER, 1922.

Up to the close of the month of September, there was in 1922, in the City of New York, an accumulated excess of 3.73 inches of rainfall over the normal, since Jan. 1. There also was considerable rain in October, enough to insure 1922 as a "wet" year, as against the numerous "dry" years at the metropolis since 1909. In that period of thirteen years there are only two that show a total rainfall of more than 43.21 inches—the so-called average annual total at this city.

SEASONAL SNOWFALL AT NEW YORK (INCHES).

| SEASON. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | April. | May. | Total. | SEASON. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | April. | May. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1885–86. | T. | 0.1 | 0.3 | 18.6 | 4.7 | 0.2 | T. | 0 | 23.9 | 1904–05. | 0 | 0.5 | 27.8 | 19.3 | 7.2 | 3.0 | T. | 0 | 57.8 |
| 1886–87. | 0 | T. | 21.9 | 9.3 | 11.9 | 2.3 | 4.1 | 0 | 49.5 | 1905–06. | 0 | T. | 0.7 | 3.0 | 5.0 | 13.4 | T. | 0 | 22.1 |
| 1887–88. | 0 | 0.3 | 9.0 | 11.7 | 3.5 | 22.1 | T. | 0 | 46.6 | 1906–07. | T. | T. | 0.5 | 10.9 | 21.1 | 13.8 | 6.1 | 0 | 52.4 |
| 1888–89. | 0 | 0.9 | T. | 3.0 | 7.0 | 11.0 | 0 | 0 | 21.9 | 1907–08. | 0 | T. | 4.4 | 10.6 | 13.7 | 3.5 | T. | 0 | 32.2 |
| 1889–90. | 0 | 0.1 | 7.5 | T. | 4.0 | 21.3 | 1.2 | 0 | 34.1 | 1908–09. | 0 | 0.6 | 5.1 | 9.5 | 1.4 | 4.1 | T. | 0 | 20.7 |
| | | | | | | | | | | 1909–10. | 0 | 1.0 | 11.4 | 16.6 | 5.3 | 0.4 | 0 | 0 | 34.7 |
| 1890–91. | 0 | T. | 19.3 | 11.9 | 4.2 | 4.3 | T. | T. | 39.7 | | | | | | | | | | |
| 1891–92. | 0 | T. | T. | 13.1 | 0.5 | 19.9 | 3.0 | 0 | 36.5 | 1910–11. | 0 | T. | 8.9 | 1.1 | 12.5 | 2.8 | 0.7 | 0 | 26.0 |
| 1892–93. | 0 | 12.3 | 3.4 | 20.3 | 32.0 | 6.6 | 3.0 | 0 | 77.6 | 1911–12. | 0 | 1.0 | 7.3 | 9.0 | 1.8 | 4.2 | T. | 0 | 23.3 |
| 1893–94. | 0 | 0 | 8.0 | 10.2 | 37.9 | T. | T. | 0 | 56.1 | 1912–13. | 0 | 0.8 | 11.8 | 0.3 | 2.4 | 0.1 | T. | 0 | 15.4 |
| 1894–95. | 0 | 0.7 | 8.2 | 12.3 | 8.2 | 5.8 | 1.0 | 0 | 36.2 | 1913–14. | 0 | 0 | 0.3 | 1.2 | 14.1 | 21.5 | T. | 0 | 37.1 |
| 1895–96. | 0 | T. | T. | 3.0 | 8.8 | 28.5 | 1.7 | 0 | 42.0 | 1914–15. | 0 | 0 | 2.4 | 4.0 | 2.5 | 7.7 | 10.2 | 0 | 26.8 |
| 1896–97. | 0 | 3.8 | 12.6 | 11.7 | 3.8 | 2.2 | T. | 0 | 39.1 | 1915–16. | 0 | T. | 8.1 | 0.7 | 11.4 | 23.8 | 3.3 | 0 | 47.3 |
| 1897–98. | 0 | 1.5 | 2.9 | 8.7 | 2.5 | 1.9 | 2.6 | 0 | 20.1 | 1916–17. | 0 | T. | 13.7 | 5.9 | 12.2 | 11.4 | 6.5 | 0 | 49.7 |
| 1898–99. | 0 | 14.0 | 1.1 | 6.1 | 27.5 | 9.6 | T. | 0 | 58.3 | 1917–18. | 0 | 0.3 | 11.7 | 13.6 | 3.5 | 0.6 | 2.6 | 0 | 32.3 |
| 1899–00. | 0 | T. | 0.2 | 0.8 | 11.4 | 7.7 | T. | 0 | 20.1 | 1918–19. | 0 | 0 | 0.4 | 0.3 | 0.7 | 1.9 | T. | 0 | 3.3 |
| | | | | | | | | | | 1919–20. | 0 | T. | 7.9 | 7.8 | 24.2 | 5.7 | T. | 0 | 45.6 |
| 1900–01. | 0 | T. | 0.5 | 2.9 | 5.8 | T. | 0 | 0 | 9.2 | | | | | | | | | | |
| 1901–02. | 0 | 0.6 | 1.1 | 9.4 | 13.4 | 6.8 | 0 | 0 | 31.3 | 1920–21. | 0 | T. | 1.5 | 2.6 | 13.5 | T. | 0.1 | 0 | 17.7 |
| 1902–03. | 0 | 0 | 9.6 | 5.9 | 10.5 | 0 | T. | 0 | 26.0 | 1921–22. | 0 | T. | 7.3 | 9.9 | .... | .... | .... | .... | .... |
| 1903–04. | T. | T. | 7.7 | 15.2 | 5.6 | 4.4 | 0.1 | 0 | 33.0 | | | | | | | | | | |

MONTHLY AND ANNUAL MEAN TEMPERATURES AT NEW YORK (DEGREES).

| YEAR. | Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | An'ual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1873.... | 28.1 | 28.8 | 35.6 | 45.7 | 56.0 | 68.8 | 73.5 | 71.4 | 64.9 | 56.3 | 37.3 | 36.3 | 50.2 |
| 1874.... | 34.5 | 31.4 | 38.0 | 41.3 | 58.2 | 70.0 | 73.6 | 70.6 | 68.1 | 55.1 | 42.8 | 33.8 | 51.4 |
| 1875.... | 25.3 | 23.2 | 32.6 | 42.6 | 58.5 | 67.5 | 72.7 | 71.9 | 64.4 | 52.3 | 38.9 | 33.0 | 48.6 |
| 1876.... | 33.9 | 31.8 | 35.2 | 46.1 | 58.0 | 70.7 | 76.4 | 72.5 | 61.8 | 49.7 | 44.5 | 25.1 | 50.5 |
| 1877.... | 27.6 | 35.6 | 36.6 | 48.0 | 59.0 | 68.8 | 73.8 | 74.3 | 66.2 | 56.6 | 45.5 | 39.3 | 52.6 |
| 1878.... | 32.1 | 34.6 | 43.8 | 52.7 | 58.2 | 65.8 | 74.6 | 72.9 | 67.0 | 57.4 | 43.6 | 32.4 | 52.9 |
| 1879.... | 26.8 | 27.6 | 38.4 | 45.9 | 60.8 | 68.8 | 73.1 | 70.9 | 63.2 | 59.8 | 43.1 | 37.3 | 51.3 |
| 1880.... | 39.8 | 36.3 | 35.7 | 48.7 | 64.8 | 70.7 | 73.2 | 70.7 | 65.7 | 53.8 | 39.7 | 27.7 | 52.2 |
| 1881.... | 25.8 | 29.5 | 36.9 | 46.0 | 60.2 | 64.2 | 72.6 | 73.1 | 72.2 | 59.1 | 46.3 | 40.7 | 52.2 |
| 1882.... | 30.5 | 35.6 | 39.8 | 46.1 | 53.5 | 68.2 | 73.8 | 71.7 | 66.9 | 58.5 | 41.7 | 32.2 | 51.5 |
| 1883.... | 27.8 | 31.4 | 33.6 | 46.6 | 59.1 | 69.5 | 73.3 | 70.8 | 63.1 | 53.7 | 45.0 | 33.7 | 50.6 |
| 1884.... | 26.2 | 35.1 | 37.5 | 47.6 | 58.8 | 68.7 | 70.1 | 71.5 | 69.6 | 56.1 | 43.2 | 34.6 | 51.6 |
| 1885.... | 29.2 | 23.1 | 29.7 | 47.7 | 56.2 | 67.3 | 74.2 | 70.8 | 64.1 | 54.5 | 44.8 | 36.0 | 49.8 |
| 1886.... | 28.5 | 28.5 | 36.9 | 50.3 | 58.5 | 65.6 | 72.9 | 71.0 | 67.1 | 56.5 | 45.3 | 30.8 | 51.0 |
| 1887.... | 30.1 | 33.7 | 34.3 | 47.7 | 62.9 | 68.2 | 76.7 | 71.4 | 63.1 | 54.7 | 43.7 | 36.1 | 51.9 |
| 1888.... | 26.0 | 31.8 | 32.9 | 48.4 | 59.3 | 71.8 | 72.6 | 74.8 | 66.2 | 51.2 | 46.8 | 36.0 | 51.5 |
| 1889.... | 37.6 | 28.0 | 41.5 | 51.6 | 62.0 | 70.4 | 73.5 | 71.5 | 65.8 | 52.0 | 46.9 | 41.4 | 53.5 |
| 1890.... | 40.2 | 40.4 | 37.5 | 51.0 | 60.6 | 70.4 | 73.4 | 72.3 | 66.8 | 55.5 | 45.9 | 31.4 | 53.8 |
| 1891.... | 34.7 | 37.5 | 37.8 | 52.0 | 59.9 | 69.6 | 70.8 | 73.6 | 70.1 | 54.2 | 43.8 | 41.8 | 53.8 |
| 1892.... | 30.3 | 33.0 | 34.6 | 49.9 | 59.4 | 72.0 | 74.8 | 73.9 | 66.0 | 55.4 | 42.6 | 31.3 | 51.9 |
| 1893.... | 23.3 | 29.6 | 36.2 | 47.8 | 59.0 | 69.4 | 74.8 | 74.4 | 64.4 | 57.6 | 44.2 | 35.1 | 51.3 |
| 1894.... | 34.6 | 29.6 | 44.5 | 49.6 | 60.8 | 70.6 | 76.1 | 72.8 | 69.8 | 57.2 | 42.2 | 36.8 | 53.7 |
| 1895.... | 30.1 | 25.2 | 36.4 | 47.7 | 59.4 | 70.0 | 70.8 | 73.8 | 69.7 | 51.0 | 46.0 | 36.9 | 51.4 |
| 1896.... | 27.6 | 30.2 | 32.1 | 50.4 | 63.8 | 66.5 | 73.4 | 73.0 | 64.8 | 51.9 | 48.0 | 32.1 | 51.2 |
| 1897.... | 29.4 | 32.6 | 39.2 | 48.6 | 59.3 | 65.2 | 72.8 | 71.0 | 65.4 | 56.3 | 44.1 | 35.8 | 51.6 |
| 1898.... | 32.2 | 33.0 | 43.7 | 46.8 | 56.6 | 68.9 | 74.1 | 74.3 | 68.9 | 57.6 | 44.6 | 34.4 | 52.9 |
| 1899.... | 30.8 | 26.9 | 38.4 | 49.6 | 61.0 | 72.2 | 73.8 | 73.6 | 65.2 | 58.2 | 45.4 | 36.4 | 52.6 |
| 1900.... | 33.2 | 31.6 | 35.0 | 51.1 | 60.8 | 71.4 | 76.4 | 76.8 | 70.8 | 60.8 | 48.7 | 35.2 | 54.3 |
| 1901.... | 31.5 | 25.6 | 38.6 | 49.4 | 58.6 | 71.4 | 78.1 | 75.6 | 68.4 | 56.0 | 39.7 | 34.4 | 52.3 |
| 1902.... | 29.2 | 28.5 | 44.0 | 50.6 | 60.2 | 68.2 | 73.6 | 71.4 | 65.9 | 56.9 | 50.0 | 32.2 | 52.6 |
| 1903.... | 30.6 | 34.4 | 47.5 | 52.2 | 64.1 | 64.0 | 74.2 | 69.2 | 65.4 | 56.6 | 41.4 | 30.1 | 52.5 |
| 1904.... | 24.1 | 25.0 | 36.4 | 46.4 | 63.6 | 69.2 | 73.6 | 72.2 | 65.9 | 53.3 | 41.4 | 28.2 | 49.9 |
| 1905.... | 27.5 | 24.6 | 40.0 | 49.8 | 60.5 | 68.8 | 75.4 | 72.2 | 66.8 | 56.9 | 43.8 | 37.7 | 52.0 |
| 1906.... | 37.3 | 31.2 | 34.9 | 51.7 | 61.8 | 71.5 | 74.8 | 75.3 | 70.2 | 56.1 | 44.9 | 32.7 | 53.5 |
| 1907.... | 32.2 | 24.4 | 40.8 | 45.0 | 55.3 | 66.2 | 74.8 | 72.0 | 67.8 | 52.5 | 45.2 | 37.8 | 51.2 |
| 1908.... | 32.0 | 28.1 | 41.4 | 50.6 | 61.3 | 71.6 | 76.8 | 72.5 | 67.8 | 59.6 | 44.7 | 35.2 | 53.5 |
| 1909.... | 33.2 | 37.3 | 38.3 | 49.5 | 60.4 | 70.5 | 73.4 | 71.6 | 65.6 | 53.2 | 47.7 | 31.4 | 52.7 |
| 1910.... | 32.4 | 31.4 | 44.7 | 54.0 | 60.2 | 68.0 | 77.8 | 72.2 | 68.4 | 58.2 | 41.6 | 28.0 | 53.1 |
| 1911.... | 34.8 | 31.4 | 37.6 | 48.2 | 63.6 | 68.3 | 76.0 | 71.8 | 66.6 | 55.6 | 41.4 | 39.2 | 52.9 |
| 1912.... | 23.5 | 28.4 | 36.8 | 49.0 | 60.7 | 68.4 | 74.0 | 70.7 | 65.9 | 58.5 | 46.6 | 38.5 | 51.8 |
| 1913.... | 40.0 | 30.9 | 44.0 | 51.0 | 60.2 | 69.2 | 75.0 | 72.7 | 64.6 | 58.2 | 46.9 | 38.8 | 54.3 |
| 1914.... | 31.4 | 25.3 | 35.8 | 46.6 | 63.6 | 67.6 | 71.1 | 73.7 | 66.2 | 59.0 | 44.0 | 31.5 | 51.3 |
| 1915.... | 34.1 | 35.2 | 36.4 | 53.4 | 57.7 | 66.6 | 72.5 | 70.4 | 69.0 | 56.7 | 45.4 | 33.5 | 52.6 |
| 1916.... | 35.4 | 27.7 | 32.2 | 47.1 | 59.8 | 64.2 | 73.8 | 73.6 | 66.0 | 57.2 | 44.8 | 33.8 | 51.3 |
| 1917.... | 32.4 | 27.8 | 38.7 | 47.2 | 53.2 | 68.3 | 74.1 | 74.6 | 63.0 | 52.0 | 41.2 | 25.0 | 49.8 |
| 1918.... | 21.6 | 29.6 | 41.2 | 49.8 | 64.0 | 66.4 | 72.7 | 74.8 | 62.8 | 58.6 | 45.7 | 39.0 | 52.2 |
| 1919.... | 35.2 | 34.7 | 42.0 | 48.8 | 61.0 | 69.7 | 74.0 | 70.2 | 66.5 | 58.4 | 44.4 | 30.0 | 51.5 |
| 1920.... | 24.1 | 29.1 | 40.6 | 47.7 | 57.8 | 67.6 | 72.5 | 72.8 | 67.4 | 60.4 | 44.2 | 37.8 | 51.8 |
| 1921.... | 33.6 | 34.8 | 48.3 | 55.0 | 60.4 | 70.3 | 76.2 | 70.9 | 71.0 | 56.2 | 45.0 | 33.8 | 54.6 |
| Means | 30.8 | 30.6 | 38.2 | 48.8 | 59.9 | 68.8 | 74.0 | 72.6 | 66.5 | 55.9 | 44.0 | 34.1 | 52.0 |

EXTREMES OF PRESSURE AND TEMPERATURE AT NEW YORK (DEGREES).

| MONTH. | PRESSURE. | | | | TEMPERATURE. | | | |
|---|---|---|---|---|---|---|---|---|
| | Highest. | Date. | Lowest. | Date. | Maximum. | Date. | Minimum. | Date. |
| January | 30.97 | 19, 1921 | 28.61 | 3, 1913 | 67 | 12, 1890 | — 6 | 10, 1875 |
| February | 31.00 | 1, 1920 | 28.70 | 6, 1896 | 69 | 5, 1890 | — 7 | 5, 1918 |
| March | 30.95 | 18, 1913 | 28.38 | 1, 1914 | 80 | 21, 1921 | 3 | 5, 1872 |
| April | 30.68 | 13, 1911*a* | 29.14 | 2, 1884 | 91 | 27, 1915 | 20 | 5, 1874 |
| May | 30.52 | 18, 1914*b* | 29.13 | 4, 1893 | 95 | 31, 1895 | 34 | 1, 1880*f* |
| June | 30.56 | 2, 1883 | 29.34 | 26, 1902 | 97 | 6, 1899 | 45 | 2, 1907 |
| July | 30.51 | 21, 1892 | 29.46 | 3, 1909 | 99 | 3, 1898 | 50 | 15, 1873 |
| August | 30.44 | 19, 1918 | 29.28 | 24, 1893 | 102 | 7, 1918 | 51 | 27, 1885 |
| September | 30.61 | 7, 1888 | 29.19 | 30, 1920 | 100 | 7, 1881 | 39 | 30, 1912 |
| October | 30.66 | 17, 1883 | 29.15 | 10, 1894 | 88 | 1, 1881*d* | 29 | 31, 1917 |
| November | 30.80 | 19, 1891 | 28.70 | 13, 1904 | 74 | 1, 1882*e* | 7 | 30, 1875 |
| December | 30.93 | 28, 1896 | 28.97 | 26, 1909 | 68 | 23, 1891 | —13 | 30, 1917 |

(*a*) Also in 1895, 12th day. (*b*) Also in 1903, 2d day. (*d*) Also in 1879, 16th day. (*e*) Also in 1909, 12th day. (*f*) Also in 1876, 1st day.

MISCELLANEOUS DATA FOR 1921.

BAROMETRIC PRESSURE (reduced to sea level)—Mean, 30.05 inches; highest, 30.97 inches, January 19; lowest, 29.35 inches, December 12.

TEMPERATURE—Greatest daily range, 44°, March 28; least daily range, 4°, August 3. Greatest monthly range, 55°, March; least monthly range, 31°, July. Highest mean of three consecutive days, 81°, July 26-28; lowest mean of three consecutive days, 17°, January 17-19.

PRECIPITATION—Longest period without a measurable amount of precipitation (0.01 inch or more), 15 days, August 19-September 2. Greatest number of consecutive days with precipitation (0.01 inch or more), 6, June 26-July 1.

SNOW—Greatest amount in 24 hours, 12.5 inches, February 20. Greatest depth of snow on the ground, measured at 8 P. M., 12.0 inches, February 20. Last snow in spring occurred April 11; first snow in autumn occurred November 13.

FROST—In spring: last killing frost occurred April 11; last light frost occurred April 20. In autumn: first light frost occurred October 9; first killing frost occurred October 27.

THUNDERSTORMS—First, January 5; last, October 20.

HAIL—None at station.

AURORAS—May 14, 15.

## THE WATER SUPPLY OF NEW YORK CITY.

(For THE ALMANAC; by Merritt H. Smith, Chief Engineer.)

**Manhattan and Bronx**—The Boroughs of Manhattan and Bronx, prior to the introduction of Catskill water, were supplied entirely from the Croton watershed and from the Bronx and Byram watershed, the latter being now part of the Catskill system. Croton water was first introduced in 1842. Water from the Bronx River was introduced in 1854, and from the Byram River in 1896. The Croton watershed furnishes about half of the present supply for Manhattan and Bronx, the other half being supplied from the Esopus watershed. The Esopus watershed in the Catskills, from which the Catskill supply is obtained, has an area of 257 square miles. The water from the Esopus watershed is collected in the Ashokan Reservoir, about fourteen miles west of the Hudson at Kingston, N. Y., and about ninety-two miles from the northern city boundary. The available supply from the Esopus watershed is increased by the rainfall and run-off on some twenty-two square miles of watershed (the Bronx and Byram watershed) tributary to Kensico Reservoir, which lies east of the Hudson River, and about seventeen miles from the northern city boundary. Under average rainfall and run-off conditions the available supply from the Esopus watershed is 375,000,000 gallons daily, and from the Bronx and Byram watershed about 20,000,000 gallons daily, making the total available supply of water from the Catskill system 395,000,000 gallons daily; the safe minimum yield from these two sheds is 315,000,000 gallons daily.

The Croton watershed, which lies some 22 miles north of the city line, has an area of 375 square miles and a safe minimum yield of 336,000,000 gallons daily. Under average rainfall and run-off conditions the yield of this shed is 400,000,000 gallons daily. The water from the Croton watershed is collected in twelve reservoirs and six lakes and ponds.

**Brooklyn**—The Esopus watershed together with the old Brooklyn system furnish the entire supply for the Borough of Brooklyn, with the exception of the Twenty-ninth Ward, which is supplied by the Flatbush Water Works Company, a private water company, the source of supply being ground water collected from driven wells. The supply from the old Brooklyn system, which yielded about 150,000,000 gallons, and which is now for the greater part held in reserve, was obtained from driven wells, infiltration galleries, and small streams along the south shore of Long Island. This supply was first introduced in 1859.

**Queens**—The city supplies only the First, Second and Third Wards in the Borough of Queens. The Esopus watershed furnishes about 70 per cent of the supply to these wards. The First Ward was formerly supplied from the Brooklyn system, supplemented by a small amount derived from the municipal driven well pumping stations in the First and Third Wards. The Third Ward was supplied by two pumping stations, now held in reserve, one station drawing its supply from driven wells and the other obtaining about half its supply from wells and one-half from a small lake, the water being filtered. The combined yield of the two plants is about 6,000,000 gallons daily. The supply to the Second Ward was formerly furnished by the Citizens' Water Supply Co. This plant was taken over by the city in April, 1922. The Fourth and Fifth Wards, Queens, are supplied by private water companies, the source of supply being entirely ground waters, collected by means of driven wells. There are three of these private companies, with three others serving special customers.

**Richmond**—The Borough of Richmond is supplied from the Esopus watershed, supplemented by a small amount (about 7,000,000 gallons daily) derived from wells pumped at two stations. Silver Lake Reservoir, the terminal reservoir for the Catskill system, is located in this borough.

| YEAR. | Manhattan and Bronx. | Brooklyn. | Queens. | Richmond. | Private Companies, All Boroughs. | Total, Including Private Companies. |
|---|---|---|---|---|---|---|
| 1898..... | 226,000,000 | 93,600,000 | 4,800,000 | 100,000 | 23,600,000 | 348,100,000 |
| 1899..... | 246,000,000 | 95,900,000 | 7,700,000 | 100,000 | 24,000,000 | 373,700,000 |
| 1900..... | 267,000,000 | 85,600,000 | 7,700,000 | 100,000 | 22,000,000 | 392,400,000 |
| 1901..... | 272,000,000 | 96,700,000 | 7,700,000 | 100,000 | 23,600,000 | 400,100,000 |
| 1902..... | 280,000,000 | 100,300,000 | 7,700,000 | 100,000 | 24,100,000 | 412,200,000 |
| 1903..... | 285,000,000 | 104,800,000 | 7,700,000 | 100,000 | 25,700,000 | 423,300,000 |
| 1904..... | 299,000,000 | 113,100,000 | 8,900,000 | 200,000 | 27,900,000 | 449,100,000 |
| 1905..... | 316,000,000 | 119,200,000 | 9,000,000 | 200,000 | 29,000,000 | 473,400,000 |
| 1906..... | 325,000,000 | 127,100,000 | 9,500,000 | 200,000 | 33,400,000 | 495,200,000 |
| 1907..... | 330,000,000 | 135,600,000 | 11,600,000 | 200,000 | 35,600,000 | 513,000,000 |
| 1908..... | 327,000,000 | 140,600,000 | 12,200,000 | 200,000 | 38,600,000 | 518,600,000 |
| 1909..... | 323,000,000 | 136,500,000 | 12,400,000 | 8,700,000 | 32,100,000 | 512,700,000 |
| 1910..... | 331,000,000 | 143,100,000 | 12,600,000 | 8,900,000 | 32,900,000 | 528,500,000 |
| 1911..... | 298,000,000 | 140,300,000 | 13,400,000 | 9,500,000 | 33,200,000 | 494,400,000 |
| 1912..... | 303,000,000 | 142,000,000 | 14,200,000 | 10,200,000 | 35,600,000 | 505,000,000 |
| 1913..... | 314,000,000 | 124,300,000 | 13,600,000 | 11,600,000 | 35,500,000 | 499,000,000 |
| 1914..... | 347,000,000 | 134,300,000 | 14,800,000 | 11,700,000 | 36,900,000 | 544,700,000 |
| 1915..... | 341,000,000 | 128,800,000 | 13,000,000 | 11,500,000 | 34,600,000 | 528,900,000 |
| 1916..... | 365,000,000 | 136,500,000 | 12,700,000 | 12,500,000 | 39,300,000 | 566,000,000 |
| 1917..... | 373,800,000 | 140,300,000 | 18,500,000 | 12,400,000 | 39,600,000 | 584,600,000 |
| 1918..... | 413,300,000 | 170,000,000 | 16,200,000 | 15,500,000 | 43,400,000 | 658,400,000 |
| 1919..... | 417,400,000 | 168,600,000 | 15,900,000 | 17,000,000 | 41,300,000 | 660,200,000 |
| 1920..... | 466,200,000 | 187,200,000 | 18,100,000 | 18,400,000 | 45,000,000 | 734,900,000 |
| 1921..... | 462,300,000 | 186,600,000 | 18,000,000 | 17,800,000 | 46,600,000 | 731,300,000 |

The figures by boroughs show only daily consumption of city water. The "total" column shows daily city water consumption plus consumption of water of private companies. In 1920, for example, the total daily consumption in Brooklyn, including private water, was 200,700,000 gallons; in Queens, 49,600,000 gallons. Private companies supplied 13,500,000 gallons in Brooklyn, and 31,500,000 in Queens.

MANHATTAN AND BRONX WATER CONSUMPTION, 1868-1897 (City Water).

| YEAR. | Ave. Daily. | YEAR. | Ave Daily | YEAR. | Ave. Daily. | YEAR. | Ave. Daily. | YEAR. | Ave. Daily. |
|---|---|---|---|---|---|---|---|---|---|
| | *Gallons.* | | *Gallons.* | | *Gallons.* | | *Gallons.* | | *Gallons.* |
| 1868.... | 68,000,000 | 1874... | 84,000,000 | 1880... | 83,000,000 | 1886... | 99,000,000 | 1892... | 163,000,000 |
| 1869.... | 67,000,000 | 1875... | 86,000,000 | 1881... | 83,000,000 | 1887... | 99,000,000 | 1893... | 175,000,000 |
| 1870.... | 70,000,000 | 1876... | 81,000,000 | 1882... | 85,000,000 | 1888... | 103,000,000 | 1894... | 176,000,000 |
| 1871.... | 72,000,000 | 1877... | 80,000,000 | 1883... | 85,000,000 | 1889... | 103,000,000 | 1895... | 180,000,000 |
| 1872.... | 75,000,000 | 1878... | 84,000,000 | 1884... | 94,000,000 | 1890... | 119,000,000 | 1896... | 201,000,000 |
| 1873.... | 81,000,000 | 1879... | 84,000,000 | 1885... | 95,000,000 | 1891... | 153,000,000 | 1897... | 212,000,000 |

### WATER CONSUMPTION IN NEW YORK CITY—GALLONS PER DAY.

Catskill water was introduced into the city in 1917. Before that the supply in Manhattan and the Bronx was drawn from the Croton watershed, with a little from the Bronx and Byram watershed, the supply in Queens and Richmond was drawn from local Long Island sources; and Brooklyn got most of its water from wells, ponds, and springs out on Long Island, in Southern Nassau and Suffolk Counties. Private water companies still supply water in the boroughs of Brooklyn and Queens.

### OTHER DATA ON THE WATER SUPPLY.

The new Catskill Mountain water supply is a gravity system. For New York City's Catskill Mountain water system there are two contiguous drainage areas, or watersheds, occupying the central portion of the Catskill Mountains lying between 85 and 125 miles from New York. The Schoharie watershed has an area of 314 square miles. Esopus has an area of 257 square miles. These two watersheds have a total area of 571 square miles, from which 600,000,000 gallons of water daily can safely be

drawn throughout each year. Along the aqueduct provisions have been made for storing a large quantity of water. From the Ashokan reservoir it is almost a three-days' journey for the water to flow through the aqueduct to the Silver Lake terminal reservoir on Staten Island.

For surveys, real estate, construction, engineering and general supervision, and all other items except interest on the bonds, the total cost of the completed Catskill system will be about $177,000,000, of which $22,000,000 is for the Schoharie works.

Ashokan reservoir, about fourteen miles west of the Hudson at Kingston, was built at a cost of nearly $30,000,000. The water which the reservoir holds would cover all Manhattan Island to a depth of thirty feet; the area of its surface is equivalent to that of Manhattan below One Hundred and Tenth Street. The water surface of the west basin when full is at an elevation of 590 feet above mean tide in New York Harbor.

Kensico reservoir, east of the Hudson, and thirty miles from the City Hall, contains enough Catskill water to supply New York several months if carefully husbanded. It acts as a storage reservoir. This reservoir is formed by the Kensico dam across the valley of the Bronx River, about three miles north of White Plains and fifteen miles north of the Hill View reservoir. The total cost of Kensico reservoir was about $13,500,000. It is 355 feet above tidewater.

Hill View reservoir is located in the City of Yonkers, just north of the New York City line, and fifteen miles south of Kensico reservoir. Its function is to equallze the difference between the use of water in the city as it varies from hour to hour and the steady flow in the aqueduct. It is an uncovered, artificial reservoir of the earth embankment type. It holds 900,000,000 gallons of water, with a depth of 36½ feet and has a water surface of 90 acres. The total cost of Hill View reservoir was about $4,700,000. It was first filled December 29, 1915. It is 295 feet above tidewater.

The Hudson River is crossed by means of a tunnel wholly in granitic rock, at a depth of 1,114 feet below sea level, between a shaft at Storm King Mountain on the west bank and another shaft on the east side of the river at Breakneck Mountain.

At the Ashokan reservoir, and also at Kensico reservoir, aerators have been built. The aerators are substantially alike and are great fountain basins, approximately 500 feet long by 250 feet wide, each containing about 1,600 nozzles, through which jets of water are thrown vertically into the air, permitting thorough admixture of oxygen from the atmosphere and removal of undesirable gases and other matters causing tastes and odors.

Within the screen chamber down stream from Kensico reservoir chlorine is introduced into the water flowing in the aqueduct for the destruction of germ life. The gas is delivered at the chamber compressed to a liquid state in steel containers holding one hundred pounds each. Chlorine is used to insure the practical sterilization of the water before it goes to the city and is wholly neutralized or dissipated before the water reaches the distribution pipes.

From Hill View reservoir, Catskill water is delivered into the five boroughs by a circular tunnel in solid rock reducing in diameter from 15 to 14, 13, 12, and 11 feet. The total length of the tunnel is eighteen miles. From two terminal shafts in Brooklyn, steel and cast iron pipe lines extend into Queens and Richmond. A 36-inch flexible-jointed cast iron pipe, buried in a trench in the harbor bottom, has been laid across the Narrows to the Staten Island shore, whence a 48-inch cast iron pipe extends to the Silver Lake reservoir, holding 435,000,000 gallons. The total length of the delivery system is over thirty-four miles. The tunnel is at depths of 200 to 750 feet below the street surface, thus avoiding interference with streets, buildings, subways, sewers and pipes. These depths are necessary, also, to secure a substantial rock covering to withstand the bursting pressure of the water inside and afford the requisite watertightness. The waterway of the tunnel is lined throughout with Portland cement concrete.

The city tunnel, which is the longest tunnel in the world for carrying water under pressure, or for any other purpose, was constructed from twenty-five shafts, including the downtake shaft at Hill View reservoir, about 4,000 feet apart, located in parks and other places where they interfered very little with traffic. Through twenty-two of these shafts the water is delivered into the street mains. These connections from the tunnel to the mains are made by means of vertical riveted steel pipes (called risers) embedded in concrete in the upper part of each shaft and lined with concrete to prevent corrosion inside. Concrete fills all spaces outside the risers, sealing the shafts against the escape of water excepting through the pipes. Provision is made at Shaft 11, in Morningside Park, and at Shaft 21, on the shore of the East River, at Clinton and South Streets, Manhattan, for unwatering the tunnel, whenever necessary, for inspection, cleaning or repairs. Unusual features in connection with the operation of the tunnel are the bronze riser valves in the shafts. The former are located about 100 feet below the top of sound rock and are designed to close automatically in case of an important break in the valve chamber or in the street mains. They can also be closed by hand from within the chambers at the shaft tops.

The cost of the portions of the Catskill aqueduct within the city limits, including the tunnel, pipe lines, appurtenances and Silver Lake reservoir, was about $26,400,000.

The terminal Silver Lake reservoir for the Catskill water system, located on Staten Island, is about 2,400 feet long and 1,500 feet wide. It holds 435,000,000 gallons, and is 228 feet above tidewater.

## GIVING NEW YORK CITY FIRE PROTECTION.

*High Pressure Fire Service System*—The high pressure fire service system in Manhattan is bounded by Thirty-fourth Street, Madison Avenue, Twenty-fourth Street, Lexington Avenue, Fourteenth Street, Third Avenue, Bowery, Houston Street, East River, Battery, North River. There are two pumping stations—Gansevoort and West Streets, and Oliver and South Streets. Each station has six electrically driven centrifugal pumps. Either fresh or salt water may be used. Each pump can deliver 3,000 gallons a minute. The combined capacity of the two stations is equal to about fifty fire engines. The distributing system consists of 128 miles of mains, eight to twenty-four inches in diameter, and about 2,750 four-nozzle hydrants. There are approximately 696 telephones communicating with Fire Department headquarters and with the main and subsidiary stations of the New York Edison Company, from which the necessary electric power is obtained. The present system cost about $9,380,000.

In Brooklyn there are two high pressure fire service systems. The one for the business and manufacturing districts is bounded by the Navy Yard, St. Edward's Street, St. Felix Street, Fort Greene Place, Fifth Avenue, Twenty-fourth Street, Fourth Avenue, Thirty-ninth Street and the water front, covering an area of 4.8 square miles. The supply is furnished by two stations, one located at the foot of Joralemon Street, and the reserve at Willoughby and St. Edward's Streets. Both draw their supply from the Ridgewood mains. The main station is connected to the East River. The pumps are electrically operated in both stations, and have a combined rated capacity of 24,000 gallons per minute. The distributing system consists of about forty-five miles of mains, eight to twenty inches in diameter.

The Coney Island high pressure system protects an area of 470 acres. The pumping station is located at West Twelfth Street and Coney Island Creek. The total capacity is 4,500 gallons per minute. The water is distributed through six miles of mains.

## REGISTERS OF NEW YORK COUNTY—1812-1922.

Elbert Herring, May 1, 1812, to April, 1815; William T. Slocum, May 1, 1815, to December, 1817; James Gilbert, January, 1818, to December, 1820; James W. Lent, January, 1821, to December, 1828; Thomas Franklin, May, 1829, to February, 1830; Jameson Cox, December, 1830; Gilbert Coutant, 1831 to December, 1833; William H. Bunn, 1834-1836; James Gullck, 1837-1839; J. Sherman Brownell, 1840-1845; Samuel Osgood, 1846-1848; Cornelius V. Anderson, 1849-1851; Garret Dyckman, 1852-1854; Peter Asten, part of 1854; John J. Doane, 1855-1857; William Miner, 1858-1860; John Keyser, 1861-1863; John McCool, 1864-1866; Charles G. Haloine, 1867 to August 2, 1868; Patrick H. Jones, August, 1868, to December, 1868; Michael Conrolly, 1869-1871; Franz Sigel, 1872-1874; Patrick H. Jones, 1875-1877; Frederick W. Loew, 1878-1880; Augustus T. Docharty, 1881-1883; John Reilly, 1884-1886; James J. Slevin, 1887-1889; Frank T. Fitzgerald, 1890-1892, Ferdinand Levy, 1893-1895; William Sohmer, 1896-1897; Isaac Fromme, 1898-1901; John H. I. Ronner, 1902-1905; Frank Gass, 1906-1909; Max S. Grifenhagen, 1910-1913; John J. Hopper, 1914-1917; James A. Donegan, 1918-1921; Annie Mathews, 1922.

## MONUMENTS AND STATUES IN MANHATTAN.

ARTHUR, CHESTER A., Madison Square.

BARTHOLDI STATUE, see "Liberty."

BEAR AND FAUN FOUNTAIN (Seligman), Morningside Park and 116th St.

BEETHOVEN, bronze bust, on a granite pedestal, 15 feet high, Central Park, on the Mall; unveiled 1884.

BOLIVAR, GEN. SIMON, Bolivar Hill, Central Park West; unveiled 1921.

BROWNSON, ORESTES A., bronze bust of, Riverside Park and 104th St.

BRYANT, WILLIAM CULLEN, Bryant Park, W. 42d St. and 6th Ave.

BURNS, bronze statue, Central Park, on the Mall; unveiled 1880.

BUTTERFIELD, GENERAL DANIEL, bronze figure, on marble pedestal. Claremont Ave. and 122d St.

CARRERE, JOHN M., memorial to, Riverside Drive and 99th St.

CIVIC VIRTUE, fountain statue, City Hall Park, 1922.

COLUMBUS MONUMENT, 8th Ave. and 59th St. (Columbus Circle).

COLUMBUS, marble statue, south entrance to Mall, Central Park; unveiled 1892.

COMMERCE, bronze figure, Central Park, near the 8th Ave. and 59th entrance; unveiled 1865.

CONKLING, bronze statue, Madison Square Park, cor. Madison Ave. and 23d St.

COOPER, PETER, statue opposite Cooper Union.

COX, bronze statue of the statesman S. S. Cox, erected by the letter carriers, Astor Place.

DANTE, bronze statue, Broadway, 63d St., and Columbus Ave., 1921.

DE PEYSTER, ABRAHAM, statue in Bowling Green.

DODGE, bronze statue of William E. Dodge, at Broadway, 6th Ave. and 36th St.; unveiled 1885.

EAGLE AND PREY, bronze group, Central Park, west of Mall.

ERICSSON, statue of the inventor, on the Battery.

FALCONER, THE, Central Park, near W. 72d St entrance.

FARRAGUT, bronze statue, Madison Square Park, near 5th Ave. and 26th St.

FIREMEN'S MEMORIAL MONUMENT, 100th St. and Riverside Drive.

FORT WASHINGTON MONUMENT, Fort Washington Ave. and 183d St.

FOUNTAIN, 116th St. and Riverside Drive.

FRANKLIN, bronze statue, Printing House Square; unveiled 1872.

GARIBALDI, bronze statue, Washington Square; unveiled 1888.

GRANT, ULYSSES S., tomb, Riverside Drive and 123d St.; 160 feet high; dedicated April 27, 1897.

GREELEY, bronze statue, City Hall Park; unveiled 1890.

GREELEY, Greeley Square, 33d St. and Broadway.

HALE, bronze statue of Nathan Hale, martyr spy of the Revolution; City Hall Park, at Broadway and Murray St.

HALLECK, bronze statue, Central Park, on the Mall; unveiled 1877.

HAMILTON, granite statue of Alexander Hamilton Central Park, on the East Drive.

HANCOCK, in Hancock Square, St. Nicholas Ave. and W. 124th St.

HEINE, poet, Lorelei Fountain, Mott Ave. and 161st St.

HOLLEY, bronze bust of Alexander Holley, Washington Square; unveiled 1890.

HUDSON, HENRY, 100 foot shaft, Spuyten Duyvil.

HUMBOLDT, bronze bust, Central Park, near the 5th Ave. and 59th St. entrance.

HUNT, RICHARD M., Memorial, 5th Ave., opposite Lenox Library.

INDIAN HUNTER, bronze figure, Central Park, near lower entrance to the Mall.

IRVING, bronze bust, Bryant Park, on W. 40th St.; unveiled 1866.

JACK PHILIPS TITANIC MEMORIAL, U. S. Barge Office.

JEFFERSON STATUE, City Hall.

JEFFERSON, THOMAS, in front of the Pulitzer School of Journalism, Columbia University.

JOAN OF ARC, Riverside Drive and 93d St.

LAFAYETTE, bronze statue, Union Square, lower end of Park; unveiled 1876.

LIBERTY ENLIGHTENING THE WORLD, on Bedloe's Island, in the Harbor.

LINCOLN, bronze statue, Union Square, southwest corner; unveiled 1868.

LOWELL DRINKING FOUNTAIN, Bryant Park.

MAINE, U. S. S. MEMORIAL, National, Columbus Circle.

MARTYRS MONUMENT, Trinity Churchyard, in memory of the American soldiers and sailors who died in the British prison ships in the Revolutionary War.

MAZZINI, bronze bust, Central Park, on the West Drive.

MOORE, bronze bust of Thomas Moore, the poet, Central Park, near the Pond and 5th Ave. entrance; unveiled 1880.

MORSE, bronze statue of the inventor of the telegraph, Central Park, near 5th Ave. and 72nd St.

OBELISK, Central Park, near the Metropolitan Museum of Art; brought from Egypt and erected 1881; granite, 70 feet long, and weighs 200 tons.

PULITZER FOUNTAIN, 5th Ave. and 59th St.

SCHILLER, bronze bust, Central Park, in the Ramble; unveiled 1859.

SCHURZ, CARL, statue, 116th St. and Morningside Drive.

SCOTT, bronze statue of Sir Walter Scott, Central Park, on the Mall; unveiled 1872.

SEVENTH REGIMENT, bronze figure of a soldier of this regiment, to commemorate its dead in the Civil War, Central Park, on the West Drive.

SEWARD, bronze statue, southwest corner of Madison Square Park; unveiled 1876.

SHAKESPEARE, bronze statue, Central Park, at the lower end of the Mall; unveiled 1872.

SHERMAN, GENERAL, equestrian statue, 5th Ave. and 59th St.

SIGEL, FRANZ, bronze monument, 106th St. and Riverside Drive; unveiled in October, 1907.

SIMS, bronze statue of Dr. Marion Sims, Bryant Park, north side.

SOLDIER OF GREENWICH VILLAGE, bronze World War memorial, Abingdon Sq. Park.

SOLDIERS AND SAILORS' MONUMENT, Riverside Drive.

STEAD, W. T., tablet in memory of; in Central Park wall, 5th Ave. and 91st St.; July, 1921.

STILL HUNT, bronze statue, Central P'k. opp. 76th St.

STRAUS MEMORIAL, Broadway and 106th St.

STUYVESANT, marble effigy of Gov. Peter Stuyvesant in the outer wall of St. Mark's Church.

THE PILGRIM, bronze statue, Central Park, near E. 72d St. entrance.

THORWALDSEN, bronze statue, 59th St., facing 6th Ave.

TIGRESS AND CUBS, bronze group, Central Park near 64th St.

VERDI, statue, Sherman Square.

VERRAZZANO, statue, Battery Park.

WASHINGTON AND LAFAYETTE, bronze statue, W. 114th St., Morningside and Manhattan Aves.

WASHINGTON, bronze bust, City Hall.

WASHINGTON, bronze equestrian statue, Union Square, southeast side.

WASHINGTON, bronze statue, at the entrance to the Sub-Treasury Building, Wall St.; unveiled 1883.

WASHINGTON MARBLE ARCH, Washington Square, at the foot of 5th Ave. There are now two statues of Washington on the Arch—one representing Washington as President and the other as Commander-in-Chief of the Army.

WATER GATE, foot of W. 110th St., where Henry Hudson landed.

WEBB, ALEXANDER S., bronze statue of, near main building, College of the City of New York.

WEBSTER, bronze statue, Central Park, on the West Drive, near 72d St.

WORLD WAR MEMORIALS—Chelsea Park, 1921; tablet, Battery Park, 1922; bronze group, Mitchell Square, Inwood Heights, 1922.

WORTH, granite shaft in honor of Major General Worth, U. S. A., at Broadway and 25th St.

### LAFAYETTE PANEL, BROOKLYN.

The bronze Lafayette panel, Prospect Park, at 9th St., Brooklyn, was dedicated on May 10, 1917. Marshal Joffre, hero of the Marne, unveiled the statue, which was accepted for the city by Mayor Mitchel. Former Premier Viviani, who headed the French Commission to the United States, spoke, as did Marquis de Chambrun, great-grandson of Lafayette. The work cost $35,000, the gift of the Henry Marteau estate. The sculptor was Daniel Chester French. The monument consists of a panel of bronze about 12 feet long and 10 feet high, against which is a figure of Lafayette in the uniform of a General in the Continental Army, with a negro holding his horse's head. The panel rests against a structure of granite of Italian Renaissance design.

### MEMORIAL ARCH, BROOKLYN.

The chief monument in Brooklyn is the white marble Soldiers and Sailors Arch, surmounted by bronze groups, designed by Frederick W. MacMonnies. It stands at the plaza entrance to Prospect Park, Union Street, Flatbush and Vanderbilt Avenues.

## PARKS IN THE CITY OF NEW YORK.

THE total area of improved parks in Manhattan is 1,275 acres; unimproved parks, 209 acres; playgrounds, 5 acres; parkways, streets, etc., under jurisdiction of Department of Parks, 40,929 feet long, width varying from 90 to 168 feet.

### PARKS IN MANHATTAN.

Battery, foot of Broadway. 21 acres.
Bryant, 6th Ave. and W. 42d St. 4¾ acres.
Carl Schurz, between Ave. B and East River, E. 84th St. to E. 89th St. 12½ acres.
Central, 843 acres (see below).
Chelsea, 27th St. and 9th Ave. 3 acres.
City Hall Park, Broadway, Park Row, and Chambers St. 8 acres.
Colonial, 145th to 155th St., Bradhurst Ave. to Edgecombe Ave. 12¾ acres.
Columbus, Mulberry and Bayard Sts. 2¾ acres.
Corlears Hook Park, Corlears and South Sts. 8 acres.
De Witt Clinton, 52d to 54th St., North River. 7 acres.
Fort Washington, Ft. Washington Point, Hudson River. 40 2-3 acres.
Hamilton Fish Park, Houston and Willett Sts. 3½ acres.
Highbridge Park, 155th St. to Washington Bridge, west of Driveway. 75 2-3 acres.
Isham, 213th St. and Broadway to Harlem Ship Canal. 8 acres.
John Jay, 76th to 78th St., East River. 3 acres.
Kuyter Park, 129th St. and 3d Ave. .298 acres.
Madison Square, Broadway and 23d St. 6¾ acres.
Manhattan Square, Central Park W., 77th to 81st St. 17½ acres.
Morningside, between Columbus and Amsterdam Aves. and W. 110th and W. 123d Sts. 31¼ acres.
Mount Morris, between Madison and Mt. Morris Aves. and 120th and 124th Sts. 20 acres.
Park Ave., 34th to 42d St.; 56th to 96th St. 8 acres.
Riverside Drive Extension, 135th St. to 158th St.
Riverside Park, between Riverside Drive and the N. Y. C. R. R. and W. 72d and W. 129th Sts. 140 acres; and from 135th St. to 158th St. 24 acres.
St. Gabriel's Park, 1st Ave. and 35th St. 3 acres.
St. Nicholas, 130th to 141st St., St. Nicholas Ave. to St. Nicholas Terrace, 19¾ acres; and west of St. Nicholas Terrace and the extension at 130th and 141st Sts. 7½ acres.
Seward, Canal and Jefferson Sts. 3 acres.
Straus, 106th St. and Broadway.
Stuyvesant, Rutherford Pl. and E. 16th St. 4 acres.
Thomas Jefferson, 111th St., 1st Ave., 114th St. and Harlem River. 15½ acres.
Tompkins Square, Avenue A and 7th St. 10½ acres.
Union Square, Broadway and 14th St. 3½ acres.
Washington Square, 5th Ave. and Waverley Pl. 8 acres.

### PLAYGROUNDS—MANHATTAN.

Abingdon Square at Hudson St.
Carmansville, Amsterdam Ave. and 151st St.
Cherry and Market Sts.
Five Points Playground, Baxter and Worth Sts.
Fifty-ninth Street Playground, west of Amsterdam Ave.
Jackson Square Playground, 8th Ave. and Horatio St.
Queensboro Bridge Playground.
St. Catherine's Playground, 67th St. and 1st Ave.
Yorkville Playground, 101st St. near 2d Ave.

There are also playgrounds in the following named parks: Battery, Chelsea, Colonial, Columbus, Corlears Hook, De Witt Clinton, Hamilton Fish, Hudson, John Jay, Thomas Jefferson, Morningside, Mount Morris, Riverside, at 97th Street and ball ground at 79th Street, Ryan, St. Gabriel's, St. Nicholas, Carl Schurz, William H. Seward, Tompkins Square.

Of the parks in Manhattan named in the above list, Fort Washington, Highbridge, St. Nicholas, and Isham are unimproved. The Harlem River Driveway is 11,562 feet long and 100 to 150 feet wide; Morningside Drive is 3,538 feet long and 90 feet wide; Riverside Drive is 17,000 feet long and 90 to 168 feet wide, and the extension, 135th to 158th Street, is 6,560 feet long.

### SOME FACTS ABOUT CENTRAL PARK.

The great park of New York extends from 59th St. to 110th St., being over 2½ miles long, and from 5th Ave. to 8th Ave., being over half a mile wide. It covers 843 acres, of which 185 are in lakes and reservoirs and 400 in forest, wherein over half a million trees and shrubs have been planted. There are 10¼ miles of roads, 5½ of bridle paths, and 31 of walks. The landscape architects of the park were Frederick Law Olmsted and Calvert Vaux. Work was begun on the Park in 1857. The following fanciful names have been officially applied to the several entrances to the Park: 5th Ave. and 59th St., Scholar's Gate; 6th Ave. and 59th St., Artist's Gate; 7th Ave. and 59th St., Artisan's Gate; 8th Ave. and 59th S ., Merchant's Gate; 8th Ave. and 72d St., Woman's Gate; 8th Ave. and 81st St., Hunter's Gate; 8th Ave. and 85th St., Mariner's Gate; 8th Ave. and 96th St., Gate of All Saints; 8th Ave. and 100th St., Boy's Gate; 8th Ave. and 110th St., Stranger's Gate; 5th Ave. and 67th St., Student's Gate; 5th Ave. and 72d St., Children's Gate; 5th Ave. and 79th St., Miner's Gate; 5th Ave. and 90th St., Engineer's Gate; 5th Ave. and 96th St., Woodman's Gate; 5th Ave. and 102d St., Girl's Gate; 5th Ave. and 110th St., Pioneer's Gate; 6th Ave. and 110th St., Farmer's Gate; 7th Ave. and 110th St., Warrior's Gate.

#### UNION SQUARE.

Union Square was purchased by the city in 1833 for $116,051; Madison Square, in 1847, for $65,952; Tompkins Square, in 1834, for $93,358; Washington Square, in 1827, for $77,970; and Manhattan Square, in 1839, for $54,657.

The first park space in the City of New York was that now called Bowling Green Park. In 1732 this plot of ground was leased by citizens for playing the game of bowls. The plot was originally square and in the middle there was erected, in 1770, a lead statue of Ge rge III. After the Declaration of Independence the statue was torn down by a mob and the lead used fo making bullets for the American army. In 1786 Bowling Green was first laid out as a park. At that t me it was the centre of the fashionable residential district.

#### THE BATTERY.

Open water existed originally where the Staten Island Ferry houses now stand, and the site of the Aquarium was under water until about 1800. State Street was not laid out until 1789, and was then bounded by the Bay on one side. A ledge of rocks stretched across Manhattan Island, and facing these rocks along the edge of the water there was built in the early days a line of defensive works known as "The Battery." These works extended from Whitehall Street to what is now Rector Street, and cannon were mounted behind them. About 1723 the first steps were taken to fill in to the present water line, but many years passed before this was actually accomplished.

#### CITY HALL PARK.

The present City Hall Park constitutes a part of what was known in the latter half of the seventeenth century as "The Common Lands," which stretched from the site of the Post Office northward toward the Tombs and from the line of Broadway across what is now Park Row. This land was originally used for the grazing of cattle and at its northeasterly end was what was known as "Fresh Water Pond." The land originally comprising The Commons was gradually reduced by the laying out of streets and the construction of buildings. At the close of the Revolutionary War improvements were begun in City Hall Park. The erection of the present City Hall was authorized in 1803 and it was ready for occupancy in 1811. During the Civil War the present site of the Post Office Building was occupied by sheds where the soldiers were supplied with food. After the war it was ceded to the United States Government as a site for the Post Office.

### 1,000,000 TREES IN THE ENTIRE CITY.

There are in Manhattan Borough, according to Park Commissioner Francis D. Gallatin, about 130,000 trees, of eighty varieties, of which 90,000 are in Central Park, 25,000 in other parks, and 15,000 in the streets. These trees die at the rate of 3,500 a year, and 2,500 new trees are planted. In the entire city there are, it is estimated, over 1,000,000 trees.

PARKS IN BROOKLYN.

| Park. | Location. | Area in Acres. |
|---|---|---|
| Amersfort Park | Ave. J, E. 38th St., Ave. I and E. 39th St. | 3.56 |
| Bedford Park | Kingston & Brooklyn Aves., Prospect and Park Pls. | 4.10 |
| Bensonhurst Park | Bay Pkwy. & Gravesend Bay, 21st St. & Cropsey Ave. | 41.40 |
| Borough Hall Park | Joralemon, Court and Fulton Sts. | 1.70 |
| Bk. Bot. Garden and Arboretum (Incl. 12.69 acres of Bk. Ins. A&S Lands) | Eastern Pkwy., Washington and Flatbush Aves. & Malbone St. | 61.39 |
| Bk. Hgts. Park | Columbia Hgts. fronting on Furman St. | .86 |
| Bushwick Park | Knickerbocker and Irving Aves., Starr and Suydam Sts. | 6.86 |
| Canarsie Park | Skidmore, Sea View & Denton Aves., E. 88th St. & E. 93d St., Byrne Pl. & Jamaica Bay | 37.20 |
| Carroll Park | President, Court, Carroll & Smith Sts. | 1.90 |
| C.I. Concourse Lands (Excl. Seaside Pk.) | W. 5th St. & Sea Breeze Ave. & Atlantic Ocean | 46.70 |
| Cooper Park | Maspeth and Morgan Aves., Sharon and Olive Sts. | 6.10 |
| Cooper Gore | Junction of Metropolitan & Orient Aves. | .15 |
| Cuyler Gore | Cumberland & Fulton Sts. & Greene Ave. | .08 |
| Dreamland Park | W. 5th St. & W. 8th St., Surf Ave. & Atlantic Ocean | 16.70 |
| Dyker Beach Park | 7th Ave. & Bay 8th St., Cropsey Ave., 14th Ave. & Gravesend Bay | 139.80 |
| Fidelity Memorial Park | Engert & Meeker Aves., & Monitor St. | .01 |
| Ft. Greene Park | DeKalb Ave., Washington Park, Willoughby & St Edwards Sts. & Myrtle Ave. | 28.90 |
| Ft. Hamilton Memorial Park | 4th & 5th Aves., & 94th St. | .02 |
| Ft. Hamilton Park | 4th Ave., 101st St., Ft. Hamilton Ave. and Shore Road | 4.60 |
| Fulton Park | Chauncey and Fulton Sts. & Stuyvesant Ave. | 2.00 |
| Grant Sq. Gore Pk. | Bedford & Rogers Aves & Bergen St. | .019 |
| Gravesend Park | 18th & 19th Aves., 55th & 58th Sts. | 6.92 |
| Highland Park | Jamaica Ave. & U. S. Natl. Cemetery, Boro. Line, Reservoir & Warwick St. Ext. | 40.86 |
| Highland Pk. Adn. | Heath Pl., Highland Pk., Vermont Ave., private prop. and Highland Blvd. | 5.19 |
| Irving Sq. Park | Wilson and Knickerbocker Aves. and Weirfield & Halsey Sts. | 2.98 |
| Lincoln Terrace Pk. | Eastern Pkwy., Buffalo & Rochester Aves. and President St. | 7.60 |
| Lincoln Terrace Pk. Addition | President & Carroll Sts., Rochester and Buffalo Aves., & E. Pkwy., Portal St. & E. New York Ave. | 7.40 |
| Linton Park | Bradford St., Blake, Dumont & Miller Avs. | 2.29 |
| McKinley Park | Ft. Hamilton & 7th Aves. & 73d St. | 8.50 |
| Milestone Park | 18th Ave. N. of 82d St. | .007 |
| Prospect Park | Prospect Pk. W. & Flatbush, Ocean, Parkside Aves. & Prospect Park S. W. | 526.00 |
| Red Hook Park | Richards, Verona, Dwight & Pioneer Sts | 5.28 |
| Saratoga Sq. Park | Saratoga and Howard Aves., Halsey and Macon Sts. | 3.20 |
| Seaside Park | Ocean Pkwy., Concourse, W. 5th St. & Sea Breeze Ave. | 10.30 |
| Stuyvesant Gore Pk. | Stuyvesant & Vernon Aves. & Broadway | .08 |
| Sunset Park | 41st & 44th Sts., 5th & 7th Aves. | 24.50 |
| Tompkins Park | Tompkins, Greene, Marcy & Lafayette Aves. | 7.80 |
| Underhill Gore Pk. | Underhill and Washington Aves. and Pacific St. | .10 |
| Vanderveer Park | East New York and Pitkin Aves., Barrett & Grafton Sts. | .21 |
| Winthrop Park | Nassau & Driggs Aves., Russell and Monitor Sts. | 9.10 |
| Woodpoint Gore Pk. | Bushwick, Metropolitan and Maspeth Aves. | .05 |
| | Other and Total | 1,072.47 |

There are other small memorial parks: at E. Pkway., Washington and Classon Aves; at Roebling St., Division and Lee Aves.; at Myrtle, Willoughby and Bushwick Aves., and at Fulton and Chauncey Sts., and Lewis Ave.

| Combined Park and Playgrounds. | Location. | Area in Acres |
|---|---|---|
| City Park | St. Edwards & Navy Sts. Park & Flushing Aves. | 7.50 |
| McCarren Park | Berry, Lorimer, Leonard, Bayard & No. 12th Sts., Nassau, Driggs, Manhattan & Union Aves. | 38.42 |
| McLaughlin Park | Bridge, Tillary & Jay Sts. | 3.30 |
| Wmsburg Park | Boerum, Leonard and Lorimer Sts., and Johnson Ave. | 1.83 |
| | Total | 51.05 |

PLAYGROUNDS IN BROOKLYN.

| Playground. | Location. | Area in Acres |
|---|---|---|
| Betsy Head Memorial | Livonia, Dumont, Hopkinson Aves & Douglas St & Dumont, Blake, Hopkinson Aves. and Bristol St. | 10.50 |
| Bushwick | Putnam Ave., between Knickerbocker and Irving Aves. | 2.80 |
| McKibbin | Seigel, White & McKibbin Sts. | 1.37 |
| New Lots | Sackman St., Riverdale, Newport & Christopher Aves. | 2.29 |
| Parade Ground | Coney Island, Parkside, & Caton Aves. | 39.16 |
| Red Hook | Richards, King, Dwight & Pioneer Sts. | 2.29 |
| | Total | 58.41 |

| Other Property. | Location. | Area in Acres |
|---|---|---|
| Gravel Pits | N.W. Cor. of Ocean Parkway & Ave. P. | 2.71 |

PARKWAYS IN BROOKLYN.

| PARKWAYS. AND STREETS. | Location. | Miles | Area in acres between property lines. |
|---|---|---|---|
| Bay Parkway.... | Ocean Pkwy., bet. Aves. I & J, Bensonhurst Beach.. | 2.56 | 30.99 |
| Bay Ridge Pkwy. | Ft. Hamilton Ave., bet. 66th & 67th Sts., to 1st Ave., bet. 66th and Wakeman Pl.... | 1.40 | 40.89 |
| Buffalo Ave..... | Eastern Pkwy. bet. Rochester and Ralph Aves., to E.New York Av., bet. E.96th St. & E. 98th St..... | .12 | 1.98 |
| Bushwick Ave.. | Myrtle Ave., bet. Ditmars St. and Charles Pl. to Jamaica Av., bet. Sheffield & New Jersey Ave.... | 2.24 | 31.41 |
| Eastern Parkway. | Prospect Pk. Plaza to Ralph Ave., bet. Union St. & Lincoln Pl..... | 2.50 | 61.12 |
| E.Pkwy. Ext.... | Ralph Ave., bet. Union St. & Lincoln Pl., to Bushwick Ave., bet. DeSales Pl. and Stewart St..... | 1.39 | 18.55 |
| Ft. Hamilton Av. | Ocean Pkwy. and Prospect Ave. to Ft. Hamilton... | 4.27 | 48.15 |
| Highland Blvd... | Bushwick Ave., bet. Dahlia & Gillen Pls., to Highland Park..... | .67 | 9.00 |
| Lincoln Road.... | Ocean Ave. to Bedford Ave., bet. Lefferts Ave. and Maple St..... | .30 | 2.61 |
| Ocean Parkway.. | Prospect Pk. Circle to Coney Island Concourse..... | 5.50 | 140.00 |
| Parkside Ave.... | Prospect Pk. Circle to Flatbush Ave. at Robinson St.. | .68 | 8.15 |
| Plaza St..... | Prospect Pk.Plaza.. | .38 | 4.31 |
| Pennsylvania Av. | Jamaica Ave., bet. Sheffield & New Jersey Aves., to Jamaica Bay.... | 2.50 | 19.24 |
| Rockaway Pkwy. | Buffalo Ave. at E. New York Ave., to Canarsie Beach,bet.E.96th & E. 98th Sts... | 3.12 | 40.90 |
| Shore Road..... | First Ave.,bet. 66th St. & Wakeman Pl., to Ft. Hamilton..... | 2.65 | 106.30 |
| | Total..... | 30.28 | 563.60 |

PARKS IN THE BRONX.

| PARK. | Location. | Area in Acres. |
|---|---|---|
| Bronx Park..... | East 182d St., Southern Boulevard, St. John's College, property New York Central & Hudson River Railroad&White Plains Road..... | 719.12 |
| Crotona Park..... | Fulton Ave., Third Ave.,Tremont Ave. & Arthur Ave.... | 154.60 |
| Claremont Park.... | Teller Ave., Belmont St., Clay Ave. and 170th St..... | 38.00 |
| Devoe Park..... | Fordham Road, Sedgwick Ave. & 182d St..... | 5.87 |
| Drake Park, J. Rodman..... | Hunt's Point, Longfellow Ave. and Eastern Boulevard. | 2.80 |
| Echo Park..... | Junction of Burnside Ave. and Tremont Ave..... | 4.00 |
| Fulton Park..... | Fulton Ave., 169th & 170th Sts..... | 0.94 |
| Macomb's Dam Park..... | Jerome Ave., 162d St., Cromwell Ave. and Harlem River. | 27.00 |
| Melrose Park..... | 161st & 162d Sts., Courtlandt and Vanderbilt Aves... | 0.83 |
| Pelham Bay Park... | North east end of New York..... | 1,756.00 |
| Poe Park..... | E. 192d St. & Kingsbridge Road..... | 2.33 |
| Rose Hill Park..... | Pelham Ave., Park Ave. & Webster Ave..... | 0.72 |
| St. James Park..... | Jerome Ave., Creston Ave. & 191st St... | 11.83 |
| Sigel, Franz, Park.. | Walton Ave., 158th St. & Mott Ave. | 17.47 |
| St. Mary's Park.... | St. Ann's Ave. 149th St. & Robbins Ave. | 34.20 |
| St. Augustine Park.. | Franklin Ave., Fulton Ave, 166th St. and 167th St..... | 0.25 |
| University Park.... | Cedar Ave., 181st St. and Segdwick Ave. | 2.75 |
| Van Cortlandt Park. | Northern Boundary line of City, Broadway, Van Cortlandt Ave., Jerome Ave. and Mount Vernon Ave..... | 1,132.35 |
| Fort Independence Park..... | Northerly end of Jerome Park Reservoir Sedgwick Ave., Stevenson Place & Van Cortlandt Ave. | 2.97 |
| Fort No. 4 Park.... | On Reservoir Ave., approximately1,500 feet north of Kingsbridge Road..... | 6.71 |
| | Totals..... | 3,929.19 |

PARKWAYS IN THE BRONX.

| NAME. | Location. | Area in Acres. |
|---|---|---|
| Bronx and Pelham Parkway..... | Bronx Park East to Burr Ave..... | 108.92 |
| Crotona Parkway.... | Crotona Park South to Crotona Park North..... | 12.30 |
| Mosholu Parkway... | Van Cortlandt Park South to Park Ave. | 83.10 |
| Spuyten Duyvil Parkway..... | 242d St. and Broadway to Hudson River..... | 28.10 |
| | Totals..... | 232.42 |

PLAYGROUNDS IN THE BRONX.

Crotona Park.....2 Area average 1 acre each
St. Mary's Park.....2 Area average 1 acre each
Macomb's Dam Park. 1 Area average 1 acre.
Claremont Park.....1 Area average 1 acre.
Pelham Bay Park.....1 Area average 1 acre.
Franz Sigel Park.....1 Area average 1 acre.
Foot of Willis Ave....1 Area average 1 acre.

PARKS IN QUEENS.
Office "The Overlook" Forest Park.
The area of Parks and Parkways of Queens consists of 1,177.78 acres.

| NAME. | Acreage. | Location. |
|---|---|---|
| Ashmead | 0.27 | Canal St., Park Pl., & South St., Jamaica. |
| Astoria | 56.25 | Barclay St., Hoyt Ave. Ditmars Av. & East River, Astoria. |
| Baisley's Pond | 75.00 | Baisley Av., Sutphin Rd. & New York Ave., South Jamaica. |
| College Point | 1.14 | 5th Ave. & 15th St., College Point. |
| Flushing | 1.02 | Broadway & Main St., Flushing. |
| Forest | 536.00 | Myrtle Ave., Union Tpke., Park Lane, Ashland St., and Cypress Hills Cemetery. |
| Highland | 49.50 | Bulwer Pl., Vermont Ave., Cypress Ave., & Borough Line. |
| Jacob Riis | 262.58 | Neponsit, Rockaway. |
| King Park | 11.50 | Fulton St., Alsop St., Ray St., & Shelton Ave., Jamaica. |
| Kissena | 66.12 | Rose & Oak Sts., Flushing. |
| Leavitt | 7.61 | Myrtle Ave., Leavitt and Congress Sts., Flushing. |
| Linden | 3.00 | Lake St., Alburtis Av., Hunt Pl. & Culver Pl., Corona. |
| Old Newtown Cemetery | 0.87 | Toledo & Court Sts., Elmhurst. |
| One Mile Pond | 16.00 | Merrick Road near Central Av., Jamaica |
| Paupers' Cemetery | 3.00 | Queens Ave. bet. 24th &26th Sts., Flushing. |
| Police Training Farm | 23.12 | Hempstead Tpke., & Jamaica Av., adjacent to Kissena Pk., Flushing. |
| Rockaway | 17.87 | 110th St. to 126th St., Triton Ave. & Atlantic Ocean, Rockaway Park. |
| Rainey | 8.09 | Vernon and Graham Aves., Astoria. |
| Upland | 5.67 | Highland Ave., near Hillcrest Avenue, Jamaica. |
| Wayanda | 2.00 | Hollis Av., near Springfield Rd., Queens. |

TRIANGLE AND PARKING SPACES.

| NAME. | Acre. | Location. |
|---|---|---|
| Triangle | 0.5 | Jackson Av. & 6th St., Long Island City. (unofficial) |
| Triangle | 0.1 | Jackson Av. & 11th St., Long Island City. |
| Triangle | 0.1 | Jackson Av. & 12th St., Long Island City. |
| Triangle | 0.8 | Vernon & Nott Avs., Long Island City. |
| Triangle | 0.2 | Hoyt & Flushing Avs., Astoria |
| Triangle | 0.5 | College Av. & 13th St., College Point. |
| Triangle | 0.01 | Myrtle & Cypress Aves., Ridgewood. |
| Parking Space | .03 | Jamaica Av. bet. Crescent St. & 3d Av., Astoria. |
| Parking Space | 0.65 | Hayes Av. from Junction Av. to 43d St., Corona. |
| Parking Space | 0.91 | Nott Av. from Vernon Av. to Jackson Av., Long Island City. |
| Parking Space | 0.9 | 41st Av. bet. 17th & 18th Sts. College Point. |
| Parking Space | 26.5 | (Conduit lands) along Brooklyn Conduit from Highland Park to City Line. |

PARKWAY.

| | | |
|---|---|---|
| Forest | 2.5 | Jamaica Avenue to Forest Park. |

PUBLIC GOLF LINKS.

Located in Forest Park, on Myrtle, Woodhaven and Jamaica Avenues; consists of 118 acres and an 18-hole course. Golf House at Forest Parkway.

PARKS IN RICHMOND BOROUGH (STATEN ISLAND).

Silver Lake, bounded by Revere Ave., University Pl., Forest Ave., Richmond Turnpike and Clove Pl. 96.27 acres water; 68.84 acres land.

Tompkinsville Sq., bounded by Arrietta, Bay and Griffin Sts. 0.44 acres.

Barrett Park, at St. George; 0.20 acres.

Westerleigh Park, bounded by Maine, Williard, Springfield and Neal Dow Aves.; 1.43 acres.

Washington Park, Stapleton, bounded by Bay, Canal, Wright and Water Sts.; 1.43 acres.

Hero Park, bounded by Richmond Turnpike, Louis St. and Howard Ave.; 1.92 acres.

Clifton Park, bounded by Vanderbilt Ave., Bay St., and the Rapid Transit R. R.; 0.18 acres.

Port Richmond Park, bounded by Park and Heberton Aves., and Bennett and New Sts.; 1.28 acres.

Among the proposed parks is Clove Lake Park, 191 acres, bounded by Forest, Slosson and Brookside Aves.

PARKWAYS IN RICHMOND BOROUGH.

St. Austins Place, New Brighton, between St. Austins Place N. and St. Austins Place S.; 0.14 acres.

Haven Esplanade, Forest Ave. to Castleton Ave.; 0.18 acres.

Henderson Avenue, New Brighton, Henderson Ave, east side and Davis Ave.; 0.01 acres.

Canal Street, Stapleton, between Broad St. and Wright St.; 0.20 acres.

Ellicott Place, New Brighton, between Arnold St. and Prospect Ave.; 0.10 acres.

Maple Avenue, Mariners Harbor, between Netherland Ave. and Linden Ave.; 0.64 acres.

## PUBLIC MARKETS IN NEW YORK CITY.

Under the supervision of the Municipal Department of Public Markets.

THE public markets are West Washington, Gansevoort, Washington, Jefferson and Delancey in Manhattan, and Wallabout in Brooklyn.

Washington Market, at Fulton and West Streets, covers an area of 175 x 203 feet, and was established in 1812. Meat, fish and game, butter, eggs, cheese, fruits and vegetables are sold there. The city charges for space in this market.

West Washington Market, established in 1889 at Gansevoort and West Streets, covers 369 x 400 feet. There are ten buildings—two-story structures in blocks of twenty stands, with marketing space on the first floor and offices on the second. It is a wholesale market in which meat, garden produce and live poultry are sold. The stalls are leased.

Jefferson Market, at Greenwich Avenue and Sixth Avenue, occupies 36,000 square feet. This is a retail market. Space is rented by the city to dealers.

Gansevoort Market, an open square bounded by West, Little West Twelfth, Washington and Gansevoort Streets, has no buildings of any kind. It is by legislation restricted to the use of farmers and gardeners for the sale of products they themselves have grown. Each farmer is charged 25 cents daily. It is mostly a wholesale market for dealers.

Delancey Street Market is under the approach to Williamsburg Bridge at Pitt and Willett Streets, where fish, vegetables and fruits and miscellaneous dry goods are sold. It occupies a space 400 x 100 feet.

Harlem Market—Under Harlem Bridge, 130th Street and 3d Avenue. Things are sold at retail.

Queensboro Market, retail, under Queensboro Bridge; Manhattan approach, 1st Avenue, Avenue A, 59th and 60th Streets.

Wallabout Market has an area of thirty-six acres. It extends from Clinton Avenue to East Avenue, to Wallabout Basin. The city owns the land and the ground is leased. Many farmers use this market to sell their produce to dealers, and pay 25 cents a day for each wagon space in the market. Mostly all the purchases are wholesale.

Jamaica Public Market, parallel to L. I. R. R., Archer Avenue and Twombley Place. This is a farm produce market, established April, 1920.

There are about 34 open air street (pushcart) markets in Manhattan, 2 in the Bronx, and 18 in Brooklyn, under the direction of a supervisor of the Department of Public Markets. Prices are regulated by the department, and are sanctioned by the Board of Aldermen.

## THE NEW YORK PUBLIC LIBRARY.

(Prepared for The Almanac by Edmund L. Pearson, Editor of Publications of the Library.)

The corporate existence of the New York Public Library began May 23, 1895, by the consolidation of the Astor Library, the Lenox Library and the Tilden Trust. The Astor Library, incorporated 1849, owned at the time of consolidation a fund of $941,000 and 266,147 books. The Lenox Library, incorporated 1870, owned in 1895 a fund of $505,000 and 86,000 books. The Tilden Trust (founded by Samuel J. Tilden, who died 1886), brought to the library $2,000,000. In 1901, the New York Free Circulating Library, with 11 branches, was consolidated with the new system. Between 1901 and 1904, the New York Free Circulating Library for the Blind, the Aguilar, St. Agnes, Harlem, Tottenville, Washington Heights, University Settlement, Webster, and Cathedral Libraries all joined the corporation. In 1901 Andrew Carnegie gave $5,200,000 to Greater New York for library buildings, on condition that the city provide the land and maintain the libraries when built. With the part of this sum which was assigned to the New York Public Library, 37 branch libraries have been built. (The Boroughs of Brooklyn and Queens have their own libraries. The New York Public Library serves the Boroughs of Manhattan, the Bronx and Richmond.) There are in the New York Public Library, 42 branches in all. In addition there are six sub-branches, in buildings not owned by the library. In 1909 John S. Kennedy left the library $3,000,000.

The Central Building of the library, Fifth Avenue and 42d Street, built by the city, was opened May 23, 1911; cost, $9,000,000; architects, Carrere and Hastings; hours, week days, including Holidays, 9 A. M. to 10 P. M.; Sundays, 1 P. M. to 10 P. M. It contains the Reference Department, the descendant of the Astor and Lenox Libraries, and the headquarters of the Circulation Department (the branch libraries). Reference Department has 1,468,521 books and pamphlets; the Circulation Department has 1,161,608 books. Exceeded in size only by the Library of Congress in this country, and by two or three European libraries, it is the first library in the world in point of use. The number of persons recorded as using the Reference Department in 1921 was 1,157,275. The actual use is much larger; the count includes only those who apply on written slips for books. The number of books lent for home use by the Circulation Department in 1921 was 10,226,366. From 6,000 to 11,000 persons enter the Central Building daily. To maintain the Reference Department in 1921 the library disbursed $979,221.26, chiefly from its own endowments. In 1921 the disbursement for the Municipal Reference Branch, in the Municipal Building, was $22,725.21, of which sum the city gave $22,312.85. For the Circulation Department in 1921 was expended $1,190,982.72, of which the city gave $1,099,858.81. No public funds are spent for books, salaries, or other costs of the Reference Department in the Central Building, or for the Central Circulation Branch and Central Children's Room in that building.

The branch library buildings usually contain lending and reference departments for adults, similar departments for children, lecture rooms used for meetings for educational purposes and for organizations for social betterment. The branch libraries work in concert with the schools and pay special attention to the Americanization of foreign-born citizens. The Reference Department, in the Central Building, in addition to its main reading room, with seats for 768 readers, has special rooms devoted to art and prints, American history, maps, manuscripts, music, genealogy, Slavonic literature, Jewish literature, Oriental literature, economics and public documents, books for the blind, current periodicals, science and technology, and current newspapers. There are three exhibition rooms, and two galleries which are devoted to the Lenox and Stuart art collections, with portraits of Washington, by Gilbert Stuart, paintings by Reynolds, Raeburn, Copley, Turner, &c. The Avery collection of prints is notable. Valuable books include the Astor and Lenox collections, particularly strong in Americana, with many early printed Bibles, first folio Shakespeares, &c.; and the Spencer collection of illustrated books in fine bindings.

The library has 1,236 employees, counting both departments. A training school for librarians is maintained in the building. Director of the Library, Edwin H. Anderson. Chief Reference Librarian, Harry M. Lydenberg. Chief of Circulation Department, Franklin F. Hopper.

Branches of the New York Public Library—MANHATTAN, Chatham Square, 33 E. Broadway; Seward Park, 192 E. Broadway; Rivington Street, 61; Hamilton Fish Park, 388 E. Houston Street; Hudson Park, 66 Leroy Street; Ottendorfer, 135 Second Avenue, near Eighth Street; Tompkins Square, 331 E. 10th Street; Jackson Square, 251 W. 13th St.; Epiphany, 228 E. 23d Street; Muhlenberg, 209 W. 23d Street; St. Gabriel's Park, 303 E. 36th Street; 40th Street, 457 W.; Central Circulation, 42d Street and Fifth Avenue; Cathedral, 123 E. 50th Street; Columbus, 742 Tenth Avenue, near 51st Street; 58th Street, 121 E.; 67th Street, 328 E.; Riverside, 190 Amsterdam Avenue, near 69th Street; Webster, 1465 Avenue A, near 78th Street; Yorkville, 222 E. 79th Street; St. Agnes, 444 Amsterdam Avenue, near 81st Street; 96th Street, 112 E.; Bloomingdale, 206 W. 100th Street; Aguilar, 174 E. 110th Street; 115th Street, 203 W.; Harlem Library, 9 W. 124th Street; 125th Street, 224 E.; Columbia sub-branch, Room 108A, Columbia University Library; George Bruce, 518 W. 125th Street, 135th Street, 103 W.; Hamilton Grange, 503 W. 145th Street; Washington Heights, 1000 St. Nicholas Avenue, corner of 160th Street; Fort Washington, 535 W. 179th Street. THE BRONX—Mott Haven, 321 E. 140th Street; Woodstock, 759 E. 160th Street; Melrose, 910 Morris Ave., corner of 162d Street; High Bridge, 78 W. 168th Street; Morrisania, 610 E. 169th Street; Tremont, 1866 Washington Avenue, corner of 176th Street; Van Nest sub-branch, Van Nest and Wallace Avenues; Fordham, sub-branch, 2647 Bainbridge Avenue, near 194th Street; Kingsbridge, 3041 Kingsbridge Avenue, near 230th Street; Williamsbridge, sub-branch, 3777 White Plains Road, corner 219th Street; City Island sub-branch, 325 City Island Avenue. RICHMOND—St. George, 5 Central Avenue; Tompkinsville, P. O.; Port Richmond, 75 Bennett Street; Stapleton, 132 Canal Street; Tottenville, 7430 Amboy Road.

Municipal Reference Library, Room 512, Municipal Building.

Library for the Blind, Central Building.

Hours, Central Building: 9 A. M. to 10 P. M.; 1 to 10 P. M. Sundays. Branches: 9 A. M. to 9 P. M.

### OTHER LIBRARIES IN MANHATTAN.

Academy of Medicine, 17 W. 43d St.
Aeronautic, 280 Madison Avenue.
American Geographical Society, Broadway and W. 156th St.—Open from 10 A. M. to 5 P. M.
American Institute, 322 W. 23d St.—Open 9 A. M. to 4 P. M.
American Museum of Natural History, Central Park West, cor. W. 77th St.
American Numismatic Society, W. 156th St. and Broadway.
Bar Association (members only), 42 W. 44th St.
Blind.—See N. Y. Public Library.
Bryson (Teachers), W. 120th St., near Broadway.
Cathedral Library Ass'n, 24 E. 21st St.
Chemists' Club, 52 E. 41st St.
Clinton Hall Ass'n, 13 Astor Pl.
Columbia Univ., W. 116th St. and Amsterdam Ave.
Cooper Union, Fourth Ave. and 7th St.—Open 8 A. M. to 10 P. M.
Deaf, Books for, Ft. Washington Ave. and 163d St.
French Institute, 599 Fifth Ave.
Friends (Quakerania), 221 E. 15th St.—Open Mondays and Wednesdays, morning, and Fridays, afternoon.
Genealogical and Biographical, 226 W. 58th St.—Open 10 A. M. to 6 P. M.; Mondays, 8 to 10 P. M.
General Theological Seminary, Chelsea Sq.
Grolier, 47 E. 60th St.
Hispanic Society, W. 156th St., near Broadway.
Historical Society, 170 Central Park West.—Open 9 A. M. to 6 P. M., except during August and on holidays.
Huntington Free, Westchester Sq.
Insurance Society, 84 William St.
Inwood Public, Broadway and Academy St.
Italian, 395 Broome St.
Jewish Theological, 531 W. 123d St.
Law Library, 42 W. 44th St.
Lawyers', 2 Rector St.—Open 9 A. M. to 5.30 P. M.
Loan Libraries for Ships, 76 Wall St.
Masonic, 50 W. 24th St.—Open 7 to 10.30 P. M.
Mechanics and Tradesmen's Soc., 20 W. 44th St.
Mercantile, 13 Astor Place.—8.30 A. M. to 6 P. M.
Methodist, 150 Fifth Ave.—9 A. M. to 5 P. M.
Metropolitan Museum of Art, Fifth Ave. and 82d St.—Open daily, 10 A. M. to 5 P. M.
Morgan, J. Pierpont, Library, 33 E. 36th St.
Municipal Reference—See N. Y. Public Library.
N. Y. Port Society, 166 Eleventh Ave.—Open 10 A. M. to 9.30 P. M.
New York Society, 109 University Place—Open 9 A. M. to 6 P. M.

New York University, University Heights; Law, pedagogy, general, commerce, 32 Waverley Place; commerce, 90 Trinity Place; veterinary, 331 E. 26th St.; medical, 338 E. 26th St.

Railroad Men's, 309 Park Ave.

Russell Sage Foundation Library, 130 E. 22d St.

Seamen's, 25 South St.—Open 10 A. M. to 10 P. M.

Typothetae, 147 Fourth Ave.

Union Th. Sem., Broadway, cor. 120th St.—Open 8.45 A. M. to 5 P. M. Closed Aug. 15 to Sept. 15.

United Engineering Society, 29 W. 39th St.—Open daily except Sunday, 9 A. M. to 9 P. M.

Woman's, 9 E. 8th St.

Young Men's Christian Ass'n.—At the several branches—Open 9 A. M. to 10 P. M., Sundays, 2 to 10 P. M.

Young Men's Hebrew Ass'n, Lexington Ave. and 92d St.

Young Women's Christian Ass'n.—At the several branches.—Open 9 A. M. to 9.15 P. M., Sundays excepted.

In addition to the above, many of the large insurance and industrial concerns, as well as the trade schools, trade publications and exporting houses, have technical and trade libraries. Most of the 360 specialized business and technical libraries are in the City of New York.

## BROOKLYN PUBLIC LIBRARY.

Administration Department, 26 Brevoort Place, Brooklyn, N. Y. Frank P. Hill, Chief Librarian. 956,051 volumes. Circulation (1921), 6,072,707 volumes. City appropriation (1922), $674,184.82.

*Officers*—David A. Boody, *President;* John Hill Morgan, *Secretary.*

*Branches*—Astral, cor. Franklin and India Sts.; Bay Ridge, cor. 73d St. and Ridge Boulevard; Bedford, Franklin Ave. opposite Hancock St.; Borough Park, 1325 56th St.; Brownsville, cor. Glenmore Ave. and Watkins St.; Brownsville Children's, cor. Stone and Dumont Aves.; Bushwick, cor. Bushwick Ave. and Seigel St.; Carroll Park, cor. Clinton and Union Sts.; City Park, cor. St. Edward's St. and Auburn Pl.; Coney Island, Stillwell and Mermaid Aves.; De Kalb, cor. Bushwick and De Kalb Aves.; East, cor. Arlington Ave. and Warwick St.; Eastern Parkway, cor. Eastern Parkway and Schenectady Ave.; Flatbush, Linden Ave. near Flatbush Ave.; Fort Hamilton, Fourth Ave. and 95th St.; Greenpoint, cor. Norman Ave. and Leonard St.; Kensington, 771 Gravesend Ave.; Leonard, cor. Devoe and Leonard Sts.; Macon, cor. Lewis Ave. and Macon St.; Montague, 197 Montague St.; New Utrecht, cor. 86th St. and 20th Ave.; Pacific, cor. Fourth Ave. and Pacific St.; Prospect, cor. Sixth Ave. and 9th St.; Public*School No. 89, cor. Newkirk Ave. and East 31st St.; Red Hook, cor. Richards St. and Visitation Pl.; Ridgewood, 496 Knickerbocker Ave.; Saratoga, cor. Hopkinson Ave. and Macon St.; South, cor. Fourth Ave. and 51st St.; Tompkins Park, in Tompkins Park; Williamsburg, cor. Division and Marcy Aves.; Winthrop, cor. North Henry St. and Engert Ave.

The branches are open on week days from 9 A. M. to 9 P. M.; Sundays and holidays, from 4 to 6 P. M. On Saturdays during July and August the branches close at noon.

*Stations*—Concord, cor. Concord and Jay Sts.; Kings Highway, 1710 Kings Highway; Sheepshead, 1667 Sheepshead Bay Road.

Department of Library Extension, 46 Madison St. Hours: Weekdays, 9 A. M. to 5 P. M.; Saturdays, 9 to 12.

Library for the Blind, Fourth Ave. and Pacific St. Hours: Tuesday, Wednesday and Saturday, 2 to 6 P. M.; Friday, 2 to 9 P. M.

Library courses, elementary and advanced. For information address Miss Julia A. Hopkins, Supervisor of Staff Instruction.

New Central Building at Flatbush Ave. and Eastern Parkway now under construction. Approximate cost, when finished, $8,000,000.

### OTHER LIBRARIES IN BROOKLYN.

Brooklyn Museum, Eastern Parkway and Washington Ave.

Children's Museum, 185 Brooklyn Ave.

Friends', 110 Schermerhorn St.

Kings County Med. Soc., 1313 Bedford Ave.

Law, County Court House, opp. Borough Hall.

Long Isl. Hist'l Soc., Clinton and Pierrepont Sts.

New Church, 108 Clark St.

Pratt Institute, 220 Ryerson St.

Spicer Memorial, Polytechnic Inst., Livingston St., near Court St.

## THE QUEENS BOROUGH PUBLIC LIBRARY.

Office, 402 Fulton St., Jamaica, L. I. Public Circulating, incorporated 1896 as the L. I. City Public Library. Incorporated as The Queens Borough Public Library, April 17, 1907. *Board of Trustees,* officers, *1922*—Ferdinand L. Feuerbach, *President;* John W. Dolan, *Vice President;* Edward L. Hein, *Treasurer;* William J. Dolan, *Assistant Treasurer;* James A. Dayton, *Secretary.* Also the Mayor, Comptroller, and President of the Board of Aldermen of the City of New York, members ex-officio. *Director,* John C. Atwater.

*Branches*—Astoria, Main and Woolsey Sts., L. I. City; Bayside, Elsie Pl.; Broadway, 513 Jamaica Ave., L. I. City; Corona, 57 Kingsland Ave.; Elmhurst, Broadway and Maurice Ave.; Far Rockaway, Central and Mott Aves.; Flushing, Jamaica and Jagger Aves.; Grandview, Grandview and Forest Aves., Ridgewood, L. I.; Jamaica, 402 Fulton St.; Nelson, 244 Jackson Ave., L. I. City; Ozone Park, 4138 Jerome Ave.; Poppenhusen, 13th St. and First Ave., College Point, L. I.; Queens, Whittier St. and Wertland Ave., Queens, L. I.; Richmond Hill, Hillside Ave.; Ridgewood, 754 Seneca Ave.; Seaside, Boulevard and Oceanus Ave., Rockaway Beach, L. I.; Steinway, 441 Potter Ave., L. I. City; Whitestone, 30 Eighth Ave.; Woodhaven, 1229 Jamaica Ave.; Woodside, Greenpoint and Betts Ave.

*Travelling Libraries*—Arverne, 12 Beach 67th St.; Cedar Manor, 292 New York Ave., Jamaica, L. I.; Douglaston, Main Ave.; Dunton, 31 Jerome Ave.; Evergreen, 2536 Myrtle Ave., Ridgewood; Forest Hills, Greenway Terrace; Glendale, 2806 Myrtle Ave.; Hollis, Palatina Ave., cor. Fulton St.; Jackson Heights, Polk Ave., near 25th St., Elmhurst; Laurel Hill, Montgomery and Cypress Aves.; Little Neck, Old House Landing Road; Louona Park, 80 43d St., Corona; Maspeth, 80 Grand St.; Middle Village, 2177 Metropolitan Ave.; Morris Park, Atlantic Ave.; Ravenswood, Vernon Ave., L. I. City; Rockaway Park, Fifth Ave., near L. I. R. R.; Rosedale, Rosedale Ave.; St. Albans, Locust and Farmers' Ave.; South Ozone Park, Rockaway Blvd.; Springfield, Higbie Ave., near R. R.; Winfield, Queens Boulevard and Ramsey St.

Numerous other distributing agencies of travelling library such as community stations, village collections, and institutional stations.

All branch libraries are open daily except Sunday from 9 A. M. to 9 P. M. Bayside and Whitestone are open Monday, Wednesday and Friday, 10 A. M. to 6 P. M., Tuesday, Thursday and Saturday, 1 P. M. to 9 P. M. Queens is open Monday, Wednesday and Friday, 9 A. M. to 5.30 P. M., Tuesday, Thursday and Saturday, 1 P. M. to 9 P. M. Woodside branch, Monday, Wednesday and Friday, 1 P. M. to 9 P. M., Tuesday, Thursday and Saturday, 10 A. M. to 6 P. M.; Steinway branch, Monday, Wednesday and Friday, 12 M. to 9 P. M., Tuesday, Thursday and Saturday, 10 A. M. to 6 P. M. All branch libraries are open from 9 to 12 M. on all holidays except New Year's, Fourth of July, Labor Day, Thanksgiving and Christmas, on which days they are closed all day.

## PUBLIC BATHS IN THE CITY OF NEW YORK.

### MANHATTAN.

**Pool and Shower Baths**—100 Cherry St., at Oliver St.; 133 Allen St.; 326 Rivington St.; 5 Rutgers Pl.; 83 Carmine St.; Ave. A and E. 23d St.; W. 28th St., bet. 9th and 10th Aves.; 342 E. 54th St.; 232 W. 60th St.; 523 E. 76th St.; 243 E. 109th St.

**Floating Baths**—Two at the Battery, one for men, the other for women; foot of Pier 33, East River, near Pike St.; foot of E. 10th St.; foot of E. 90th St.; foot of E. 120th St.; foot of W. 99th St.; foot of W. 130th St. The floating baths, except those at the Battery, are for men on certain days and for women on the other days. All the floating baths are open daily, from July 1 to October 1.

The Board of Education maintains baths for pupils, in the public schools throughout the city.

### BROOKLYN.

The municipal baths in Brooklyn are at 486 Hicks St.; 4th Ave. and President St.; 42 Duffield St.; 6 Wilson (old Hamburg) Ave.; 14 Montrose Ave.; 139 Huron St.; 1752 Pitkin Ave.; 8th St., Long Island City; and Surf Ave., Coney Island.

The municipal bath in the Bronx is at Elton Ave. and 156th St.

## MUSEUMS IN NEW YORK CITY.

AQUARIUM—Battery Park. Open, free, every day; April-Sept., 9 A. M. to 5 P. M.; Oct.-March, 10 A. M. to 4 P. M

METROPOLITAN MUSEUM OF ART—Fifth Ave. and 80th-84th Sts. Open, Winter, 10 A. M. to 5.30 P. M.; Summer, 10 A. M. to 6 P. M.; Sundays, open 1 P. M. Free daily (except Mondays and Fridays, 25c).

AMERICAN MUSEUM OF NATURAL HISTORY—77th St. between Columbus Ave. and Central Park West. Open, free, every day; week days, 9 A. M. to 5 P. M.; Sundays, 1 P. M. to 5. P. M.

NEW YORK HISTORICAL SOCIETY AND MUSEUM—Central Park West and 76th St. Open daily 9 A. M. to 5 P. M.; Sundays, 2 P. M. to 5 P. M., except July-Aug.-Sept. Admission free. Closed during August and on Christmas, New Year's and July 4.

NEW YORK BOTANICAL GARDEN—Bronx Park, north of Pelham Parkway. Open daily.

BRONX ZOO—Bronx Park. Open daily, 10 A. M. to half hour before sunset. Free (except Mondays and Thurdays, 25c.).

CENTRAL PARK ZOO—Fifth Ave. and 63d St.; daily, free.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES, CENTRAL MUSEUM—Eastern Parkway and Washington Ave. Open daily, weekdays 9 A. M. to 5 P. M.; Sundays, 2 P. M. to 6 P. M. Free (except Mondays and Tuesdays, 25c.). Children's Museum, 185 Brooklyn Ave. Free. Open daily, 10 A. M. to 5 P. M.; Sundays, 2 P. M. to 5 P. M.

BROOKLYN BOTANIC GARDEN—Flatbush Ave. and Malbone St. (Empire B'l'v'd). Open daily, free.

## THE NEW YORK AQUARIUM IN BATTERY PARK.

(By Charles H. Townsend, Director.)

THE Aquarium Building was erected in 1807 by the United States Government as a fort, called West Battery, and after the war of 1812 was called Castle Clinton. It had a battery of thirty guns, the embrasures for which still remain in the outer wall, which is nine feet thick. The old ammunition rooms are surrounded with walls of masonry fifteen feet thick. In 1823 the building was ceded by Congress to the City of New York and used as a place of amusement called Castle Garden, which had a seating capacity of 6,000. It was connected with Battery Park by a bridge, the intervening space having since been filled in. Gen. Lafayette was received here in 1824; President Jackson in 1832; President Tyler in 1843; Louis Kossuth in 1851. Prof. Morse, inventor of the telegraph, demonstrated here in 1835 the use of the Morse telegraphic code.

Jenny Lind began singing here in 1850 under the management of P. T. Barnum. Among other notables received here were President Van Buren and the Prince of Wales. The building was used as a landing place for immigrants from 1855 to 1890, during which period 7,690,606 immigrants passed through its doors.

Then, for several years, the historic old structure was in process of repair for the use of the Aquarium, which was opened by the city on Dec. 10, 1896; and on Nov. 1, 1902, its management was transferred from the Department of Parks to the New York Zoological Society, a private scientific association with a membership of 2,550.

The Aquarium is reached by all elevated, surface and subway lines running to South Ferry. The building is open free, every day in the year. The hours for visitors are: 9 A. M. to 5 P. M., April-September; 10 A. M. to 4 P. M., October-March. The attendance exceeds 2,000,000 visitors a year.

The New York Aquarium is the largest in the world and contains a greater number of species and of specimens than any other. It has 7 large floor pools, 94 large wall tanks and 30 smaller tanks. There are also 26 reserve tanks containing specimens not on exhibition. The building is circular in form, with a diameter of 205 feet. The largest pool is 37 feet in diameter and 7 feet deep. During 1922 the space available for exhibits will be increased one-fifth. The exhibits include fishes, turtles, crocodilians, frogs, salamanders, marine mammals and invertebrates, and are both northern and tropical in character. There are usually about 200 species of fishes and other aquatic vertebrates on exhibition. The total number of specimens, exclusive of invertebrates and young fry in the hatchery, varies from 5,000 to 6,000. Most of the local fresh-water and salt-water species are collected by the employees. Tropical fishes are brought by steamer from the Bermuda Islands.

The fish hatchery, maintained as a fish-cultural exhibit, produces yearly from three to eight millions of young food and game fishes, which are afterward deposited in New York State waters. The Aquarium is equipped for heating sea water for tropical fishes in winter, and has a refrigerating plant for cooling fresh water in summer. Flowing fresh water is supplied from the city water system, while the pumps circulate about 300,000 gallons of salt water daily. The pumps run day and night. The salt water tanks are supplied from a reservoir holding 100,000 gallons of pure stored sea water. This water, originally brought in by steamer, is used as a "closed circulation," the water being pumped through the exhibition tanks, falling thence through sand filters back to the reservoir. It has been in continuous circulation since 1908.

## NEW YORK ZOOLOGICAL PARK.

(By W. T. Hornaday, the Director.)

THE New York Zoological Park was founded in 1895 by the New York Zoological Society, a scientific corporation. The park was formally opened Nov. 9, 1899. The grounds, many of the buildings, and an annual maintenance fund are provided by the city. The remainder of the buildings and the animal collections are furnished by the society, which is also charged with the direct management of the park.

The Zoological Park is free to the public on all days of the week except Mondays and Thursdays. Should Monday or Thursday fall on a legal holiday, admission to the Zoological Park is free. The opening and closing hours are 10 A. M. until one-half hour before sunset. On pay days admission for adults is 25 cents, and for children under twelve years, 15 cents. The park embraces a tract of 264 acres. It contains thirty-five acres of water, and its land consists of heavy forest, open forest and meadow glades, in about equal proportions. The park is about one mile long and three-fifths of a mile wide.

The principal buildings are the Elephant, Lion Primate, Zebra, Large Bird, Reptile, Antelope, Ostrich and Small Mammal Houses, and the Aquatic Bird House. The principal open-air enclosures are the Bear Dens, Flying Cage, Pheasant Aviary, the Eagle and Vulture Aviary, Wolf and Fox Dens, Burrowing Rodent Quarters, Beaver Pond, Duck Aviary, Wild Fowl Pond and Mountain Sheep Hill. The most valuable and important mammal collections are the apes, baboons and monkeys, the lions, tigers and leopards, the zebra and wild horse collection, the antelopes and deer, the bears, and the huge specimens in the Elephant House, comprising elephants, rhinoceroses and hippopotami. The collection of living birds in the Zoological Park is the largest and most varied to be found anywhere in the world. The collection of birds of paradise, including the rare bluebird of paradise, and the collections of parrots, parakeets and lories easily rank among the finest of their kind.

On May 25, 1922, the National Collection of heads and horns, for which a special museum building had been erected by the gifts of ten members of the Zoological Society, was dedicated and opened to the public. This collection is now displayed free to the public "in memory of the vanishing big game of the world." Both the collection and the building to contain it are quite unique, and the collection is almost complete for all the hoofed, horned and tusked animal species of the world. The total value of the building and collection is more than $500,000.

In 1921 the census of the collections in the park was 623 mammals representing 185 species, 2174 birds of 750 species, and 465 reptiles and amphibians, representing 73 species. Total number of specimens, 2,174; total number of species, 1,008. The attendance of visitors for 1921 was 2,562,138, an increase over the previous year of 311,961.

Routes to the Zoological Park—*Automobiles*—Lenox Avenue north to 145th Street, across Harlem River to 149th Street, continuing to top of hill, turn left at Mott Avenue; thence north along Franz Sigel Park to Grand Boulevard and Concourse; thence along Grand Boulevard and Concourse for about two miles to Fordham Road; thence to the right and continuing to the park. *Subway*—Seventh Avenue Division, Bronx Park train to end of the line at 180th Street and Boston Road entrance to the Zoological Park. Lexington Avenue Division, East 180th Street train to 177th Street and change to Bronx Park train to end of line at 180th Street.

## NEW YORK HISTORICAL SOCIETY GALLERY AND MUSEUM.

THE New York Historical Society, founded in 1804, is open free to the public daily, 9 A. M. to 5 P. M.; Sundays, 2-5 P. M., except July, August and September, and on holidays 1 to 5 P. M. (excepting Christmas, New Year's and July 4. Closed for the month of August for cleaning and repairs). The society has occupied since 1908 the building on Central Park West between 76th and 77th Streets, completed and furnished by the Society at a cost of $1,000,000, including the land. The home before that was on Second Avenue. It is supported by endowment funds and membership fees without aid from city or State. The society maintains a library, museum and gallery of art. The library contains 130,000 volumes and 150,000 pamphlets, newspapers, prints, maps and a large collection of manuscripts, all relating to American history. The newspaper collection numbers 5,386 volumes, of which 3,181 were printed in this city and State. The earliest file being the "Boston News-Letter," beginning in 1704. The first newspaper printed in New York City was "The New York Gazette," established in 1725 by William Bradford, the first printer in the Colony of New York. The society's file of this paper begins with 1730. The largest collection of New York City and State newspapers may be found here. The old New York prints cover the period from the earliest "View of the City," published in 1651, to modern times, and is unrivalled in its completeness by either private or public collections elsewhere, among which may be mentioned The Burgis View of the City, 1717, of which only one other copy is known; the Maverick View of Wall Street, about 1825, and the Tiebout Engraving of the City Hall on Wall Street. The maps include the James Lyne survey of the city in 1731, published by William Bradford—the first engraved map of the city published—one of three known copies; the Dyckinck plan of 1755, the Ratzer map of 1767, and the commissioners' map of 1811, besides a large collection of atlases and maps of all periods. The more important manuscripts are the Cadwallader Golden papers, De Peyster family papers, James Duane papers, Albert Gallatin papers, General Horatio Gates papers, diary of Philip Hone, Rufus King papers, Lloyd family papers, Rutherford papers, and Lord Sterling papers.

The museum contains many relics of New York and American history, besides an Egyptian collection of 3,000 objects, the first brought to America. Three mummied bulls from the tombs are features, while every form of Egyptian art during the Old and Middle Kingdom and the Empire, 2900-1167 B. C., is represented. The collection is especially rich in papyri. The society also possesses the Nineveh sculptures, presented in 1858 by the late James Lenox. Of local relics the Beekman family coach, used before the Revolutionary War, in this city, may be mentioned, as well as the remains of the famous equestrian statue of King George III., and the statue of William Pitt (the Earl of Chatham), champion of the American cause in Parliament.

The Gallery of Art now numbers over 1,000 paintings, including old masters. Over 300 of the paintings are American portraits: George Washington by Stuart, Peale and Durand, John Adams, John Quincy Adams, Bayard family portraits, Aaron Burr, Henry Clay, George and De Witt Clinton, John S. Copley by himself, De Peyster family portraits, Hamilton Fish, Benjamin Franklin, Albert Gallatin, Fitz-Greene Hallack, Alexander Hamilton, Andrew Jackson, John Jay. Thomas Jefferson, Lafayette, James Madison, Oliver H. Perry, Edgar Allen Poe, Red Jacket, Schuyler family portraits, Stuyvesant family portraits, Zachary Taylor, Daniel Webster, and N. P. Willis. The society also possesses the original water color drawings made by John James Audubon for his "Birds of America"—460 beautifully executed pictures. Special exhibitions of the society's collections are held from time to time to which the public is invited. Since the occupation of the present building in 1908 the society's treasures in art and literature have been exhibited and freely placed at the disposal of the public for its enjoyment, use and study.

## NEW YORK BOTANICAL GARDEN.

THE New York Botanical Garden occupies a reservation of nearly 400 acres of Bronx Park north of Pelham Parkway. The tract includes the beautiful natural features of the valley of the Bronx River, its gorge, its waterfall and its rapids, and over 100 acres of natural woodland, including the famous Hemlock Forest, the most southern grove of hemlock spruce near the Atlantic Coast. The institution was chartered by the Legislature of New York, 1891, and the first reservation of 250 acres was set aside by the city in 1895, and about 140 acres were added by the city in 1915. The grounds and buildings are open to the public every day in the year without charge.

**Museum Building,** situated a short distance from the Botanical Garden Station of the New York Central & Hudson River Railroad, has a frontage of 312 feet, is Italian Renaissance; front approach is ornamented by a bronze fountain by Carl E. Tefft and by terra cotta and marble fountains and seats; the vista lines are formed by four parallel lines of tulip trees. Three floors are devoted to public exhibits.

There is a large public lecture hall in the basement of the museum building, in which free public lectures are given every Saturday afternoon from Spring until Autumn. The upper floor of the building contains the library of 20,000 volumes on botany, horticulture and related sciences, including several special collections; the herbarium, containing prepared and dried specimens of plants from all parts of the world, occupies the greater portion of several rooms on the upper floor and comprises some 1,500,000 specimens. There are also laboratories equipped for research on the upper floor, to which properly qualified students of botany are admitted and instructed by one or another member of the garden staff.

The Conservatories include two ranges in the southern and eastern parts of the grounds. In them are housed collections of palms, cacti and other succulents, ferns, orchids, aquatics, and other groups of exotic plants. Flower shows and lectures are held in the central display house of Conservatory range 2, near the Allerton Ave. entrance.

The gardens, besides displays of shrubs, trees, and herbaceous plants, include flowering displays in season of tulips, narcissus, iris, peonies, roses, gladiolus and dahlias.

The Mansion—A large stone house built by the Lorillard family in 1850 stands above the Bronx River near the waterfall.

## BROOKLYN BOTANIC GARDEN.

THE Brooklyn Botanic Garden, located between Eastern Parkway and Empire Boulevard, and Flatbush and Washington Avenues was opened to the public on Linnaeus's birthday, May 13, 1911. The Garden comprises about 50 acres of land, on which are located the various plantations, the conservatories, and the laboratory building. The object of the Garden is the advancement and diffusion of a knowledge and love of plants, and its special aim is to be of service to the local community. The grounds are open free to the public daily. The Garden is supported, in part only, by the city.

The Native Wild Flower Garden contains about 900 species that grow without cultivation within 100 miles of New York City; the Rock Garden contains over 600 species of alpine and other rock-loving plants; the Japanese Garden has been pronounced the most perfect specimen of that kind of garden in any public park in America; the general Systematic Garden, chiefly of European herbs and shrubs, occupies the central portion of the grounds; the Ecological Garden illustrates the relation of plants to various factors of environment, such as water, light, gravity, insects, etc. The Iris Garden extends along the brook, and the Children's Garden, containing over 250 individual plots, are at the south end of the grounds. A library of over 13,000 books and pamphlets on plant life and gardening is open free to the public, and also the herbarium of over 150,000 specimens. Illustrated lectures and occasional exhibits are also open free. The Conservatories contain a collection of tropical and sub-tropical plants, including those used for food, fibre, and other economic purposes, including banana, sugar-cane, tea, coffee, rubber, hemp, papyrus, figs, citrus fruits, etc.

### FLOWER GARDENS IN PROSPECT PARK.

Owing to their accessibility, the Greenhouse (where flower shows are given in season), the Old Fashioned Flower Garden and the Zoo, in Prospect Park, are visited yearly by hundreds of thousands on foot and in vehicles.

## MUSEUMS OF THE BROOKLYN INSTITUTE OF ARTS AND SCIENCES.

THE Central Museum (Brooklyn Museum) on Eastern Parkway and Washington Ave., the Children's Museum in Bedford Park, the Department of Education with activities in the Academy of Music building, the Brooklyn Botanic Garden, adjoining the Museum, and the Biological Laboratory at Cold Spring Harbor, L. I., are under the general management of the Trustees of the Brooklyn Institute of Arts and Sciences, though each department has its own Director and Governing Committee. The Museum and the Botanic Garden receive appropriations from the city for maintenance, and their collections are provided for entirely from private sources. The construction work is done through the Department of Parks and the bills are audited through this department. The new wing of the Central Museum was finished in part in 1914. It is expected that the city will shortly complete it. The Eastern Parkway-Brooklyn Museum station of the Interborough Subway is directly in front of the Museum building.

The Central Museum contains a noteworthy collection of paintings, sculpture, carvings, textiles and other objects of art; archaeological gatherings, Egyptian relics and jewelry, Oriental objects, including Japanese, Chinese and East Indian armor and ornaments, objects from American Indian life and legends, etc.; Natural History, minerals, zoological collections, especially the fauna of Long Island, habitat groups, etc.

The Children's Museum, the first established of its kind, aided by an influential Woman's Auxiliary Committee interests and instructs thousands of children through its lectures and nature clubs and its historical and natural history exhibits.

## THE HALL OF FAME.

(Director, Dr. Robert Underwood Johnson.)

March 5, 1900, the Council of New York University accepted a gift of $100,000, afterward increased to $250,000, from a donor, whose name was withheld, for the erection and completion on University Heights, New York City, of a building to be called "The Hall of Fame for Great Americans." A structure was built in the form of a terrace with superimposed colonnade connecting the University Hall of Philosophy with the Hall of Languages. On the ground floor is a museum 200 feet long by 40 feet wide, consisting of a corridor and six halls to contain mementoes of the names that are inscribed above. The colonnade over this is 600 feet long with provision for 150 panels, each about 2 feet by 6 feet, each to bear the name of a famous American.

Only persons who shall have been dead twenty-five or more years are eligible to be chosen. Fifteen classes of citizens were recommended for consideration, to wit: Authors and editors, business men, educators, inventors, missionaries and explorers, philanthropists and reformers, preachers and theologians, scientists, engineers and architects, lawyers and judges, musicians, painters and sculptors, physicians and surgeons, rulers and statesmen, soldiers and sailors, distinguished men and women outside the above classes. Fifty names were to be inscribed on the tablets at the beginning, and five additional names every fifth year thereafter, until the year 2000, when the 150 inscriptions will be completed.

In February, 1904, the plan was announced of a Hall of Fame for Women near the former, with places for 50 tablets. This plan later was abandoned, and men and women now are admitted to one and the same Hall of Fame.

The rules prescribed that the council shall invite nominations from the public. Every nomination seconded by a member of the University Senate shall be submitted to an electorate of one hundred eminent citizens selected by the senate. Executive office of the Hall of Fame is at No. 342 Madison Avenue, New York.

The hall was dedicated May 30, 1901, when twenty-five or more national associations each unveiled one of the bronze tablets in the colonnade, and on May 30, 1907, eleven new tablets were unveiled, orations being given by the Governors of New York and Massachusetts.

### AMERICANS IN THE HALL OF FAME.

Chosen in 1900—George Washington, Abraham Lincoln, Daniel Webster, Benjamin Franklin, Ulysses S. Grant, John Marshall, Thomas Jefferson, Ralph Waldo Emerson, Henry W. Longfellow, Robert Fulton, Washington Irving, Jonathan Edwards, Samuel F. B. Morse, David G. Farragut, Henry Clay, Nathaniel Hawthorne, George Peabody, Robert E. Lee, Peter Cooper, Eli Whitney, John J. Audubon, Horace Mann, Henry Ward Beecher, James Kent, Joseph Story, John Adams, William E. Channing, Gilbert Stuart and Asa Gray.

Chosen in 1905—John Quincy Adams, James Russell Lowell, William T. Sherman, James Madison, John G. Whittier, Mary Lyon, Emma Willard, Maria Mitchell.

Chosen in 1910—Harriet Beecher Stowe, Oliver Wendell Holmes, Edgar Allan Poe, James Fenimore Cooper, Phillips Brooks, William Cullen Bryant, Frances E. Willard, Andrew Jackson, George Bancroft, John Lathrop Motley.

Chosen in 1915—Alexander Hamilton, Mark Hopkins, Francis Parkman, Louis Agassiz, Elias Howe, Joseph Henry, Rufus Choate, Daniel Boone, Charlotte Cushman. Of these Hamilton and Agassiz had been elected in 1905 to the separate hall proposed for famous foreign-born Americans. When the Constitution was amended in 1914 to do away with the line of discrimination between native-born and foreign-born, it was required that the four foreign-born, already chosen, be re-elected in competition with the native-born put in nomination. Two above named were approved, while John Paul Jones and Roger Williams lacked the votes.

Chosen in 1920—Samuel L. Clemens (Mark Twain), James B. Eads, Patrick Henry, William T. G. Morton, Augustus Saint-Gaudens, Roger Williams, Alice Freeman Palmer.

Total to date—Fifty-six men, seven women.

On May 21, 1921, there was a public unveiling at the Hall of Fame on University Heights of twenty-six bronze tablets bearing the names of men and women who have been elected in this and previous elections, thirty-seven tablets having already been unveiled.

In May, 1922, busts of Edgar Allan Poe, George Washington, Gen. U. S. Grant, Miss Maria Mitchell, and Mark Hopkins were unveiled. The only other busts in the hall are those of Robert Fulton and Horace Mann, unveiled several years ago.

### MEMORIAL TO AMERICAN PAINTERS, SCULPTORS AND ARCHITECTS.

A plan to create a memorial to American painters, sculptors and architects in Gould Memorial Library of New York University was inaugurated in 1921. Only busts of painters and architects will be placed in the reading room. The architects' corner will be in the hallway of the main entrance. Busts of George Inness, Clinton Ogilvie, Carroll Beckwith, Walter Shirlaw and J. Q. A. Ward already have been placed in the reading room. Present plans call for a bust to be placed at the foot of each of the sixteen columns of Connemara marble that encircle the reading room. Bronze doors have been hung at the main entrance as a memorial to Stanford White, who designed the library.

Gould Memorial Library is one of the group of university buildings in which is included the Hall of Fame, but the plans for the two memorials are unrelated movements.

## MUSEUM OF THE AMERICAN INDIAN.

The Museum of the American Indian (Heye Foundation), at Broadway and One Hundred and Fifty-fifth Street, houses the most complete collection of Indian relics ever assembled, totalling over 2,000,000 exhibits. The tracing of the Indian trails of New York and its vicinity, which is the work of Reginald Pelham Bolton, throws a new light on an unfamiliar period of local history.

Years of patient and intelligent research have been required to fix these ancient trails and reconstruct the civilization which once spread over the present site of New York City. Every section of the city has been explored for relics, often with gratifying results. The written history of the period and every possible reference in old manuscripts, maps and documents have been compared.

Tens of thousands of references have been made and an elaborate card index system followed in preserving them. Millions of people to-day are following these trails, which have become busy city streets or great highways of trade.

## NEW YORK FOUNDATIONS SPEED WORLD'S SOCIAL PROGRESS.

(From Better Times, N. Y.)

THE greatest fortune in America, if not in the whole world, is dedicated to the cause of humanity. No single millionaire in this or any other country can match the vast wealth held in trust by the great philanthropic foundations of New York for the betterment of mankind.

Ten of these great trusts hold, for purposes of general social welfare, funds conservatively estimated at more than half a billion dollars, though the actual total is probably much more.

Where these great funds came from, and to what purposes they are dedicated is of interest.

The Brez Foundation is probably the least known of the group. It was incorporated in 1917, in accordance with the will of one Brez, a watchmaker born in New York of Swiss parents who died in Switzerland about twenty years ago. By the terms of this will Mr Brez's daughter enjoyed the income of his estate for life. Should she die without issue the will directed that a corporation to be known as the Brez Foundation be formed to hold and administer the estate and to pay out the income to charitable institutions and for philanthropic purposes, the beneficiaries in every case to be within fifty miles of New York.

At the death of Miss Brez in 1916 the Foundation was formed. The selection of beneficiaries is entirely at the discretion of the trustees. In a general way the undertakings seeking support are considered in the following order: hospitals, orphan asylums, other charitable organizations, other philanthropic purposes, individuals. The exact amount held by the Foundation has never been announced but it is known to be not far from $2,000,000.

The Carnegie benefactions form a vast, far reaching network. It is estimated that the gifts of Andrew Carnegie to public causes, from 1881, when he made his first offer of a library to the City of Pittsburgh, until his death in 1919 amounted to $288,743,360. This includes the endowment of two great foundations which bear his name, the Carnegie Corporation of New York, established in 1911, and the Carnegie Foundation for the Advancement of Teaching, formed in 1906. While both are primarily for the advancement of education, that being apparently the underlying motive of most of the Carnegie benevolence, both have certain provisions in their charters which give them much latitude in the wide field of social welfare.

The stated purpose of the Carnegie Corporation is to "promote the advancement and diffusion of knowledge and understanding among the people of the United States by aiding technical schools, institutions of higher learning, libraries, scientific research, hero funds, useful publications, and by such other agencies and means as shall from time to time be found appropriate therefor."

Carnegie's gifts to the Corporation during his lifetime amounted to $125,000,000, but as, by his will, it received the residue of his estate it undoubtedly at the present time controls a much larger sum. No announcement has ever been made as to the amount of the residue.

Since its organization the Corporation has appropriated about $50,000,000 for purposes within its scope. Its donations to various wartime causes amounted to nearly $3,000,000. For the studies of methods of Americanization, which were directed by Allen T. Burns, and which are now being published, the sum of $190,000 was appropriated.

The Carnegie Foundation for the Advancement of Teaching, which is concerned with "those educational agencies which undertake to deal with the intellectual, social and moral progress of mankind," began with an endowment of $15,000,000, but through additional gifts and accruals its total resources are now put at $25,390,000. The largest expenditure of the Foundation is for retiring allowances and pensions to teachers and their dependents. This amounted in the last fiscal year to $956,262. The beneficiaries numbered 999, representing eighty-nine different institutions. Since 1906 the Foundation has expended for this purpose $8,920,661.

*Commonwealth Fund*—The Commonwealth Fund is among the youngest of the foundations, having been incorporated in 1918. It had its inception in the offer of a considerable sum by Mrs. Stephen V. Harkness, to be used for "benevolent, religious, educational and like purposes, of an eleemosynary character." This gift was in the form of securities with a value of $9,956,111.90. A year later Mrs. Harkness added to her gift to the extent of $6,379,925.26, making the total resources of the Fund approximately $16,336,000.

During its first years the Fund made a careful study of different fields of opportunity, and while it has made certain limited grants to miscellaneous and comparatively unrelated projects, its efforts in the main have been directed toward accomplishing results in three fields: Education, Child Welfare and Health. The most extensive project which the Fund is supporting is a study and demonstration, to extend over a five-year period, of methods of prevention of juvenile delinquency.

The Milbank Memorial Fund has been in existence for some time under the name of the Memorial Fund Association, but in March, 1921, it was increased by the will of Mrs. Elizabeth Milbank Anderson to approximately $10,000,000. At that time the name was changed to Milbank Memorial Fund. Its purpose is "to further secular and religious education among all classes; to care for the sick, the young, the aged and disabled; to minister to the needs of the poor; to improve the physical, mental and moral condition of humanity and generally to advance charitable and benevolent objects."

The New York Foundation has an interesting history. It was incorporated in 1909 to disburse the income from a fund of $1,000,000, left for philanthropic purposes by the late Louis Heinsheimer. Mr. Heinsheimer's will set aside this sum for Jewish charities provided that such charities, within a stated number of years, came together in a certain form of federation. The charities did not accomplish this organization within the time specified, but the surviving brothers of Mr. Heinsheimer, to whom, by the terms of the will, the estate reverted, were anxious to carry out the intention of their relative, and extended the time limit. Still the Jewish charities were unable to form the desired organization.

The Heinsheimer brothers then formed the New York Foundation to hold and administer the funds designated by Louis Heinsheimer for philanthropic purposes. The trustees have full power to disburse the income.

*Three Rockefeller Corporations*—The Rockefeller benefactions, like the Carnegie, are vast and far-reaching. Three great philanthropic boards have been formed for their administration; the General Education Board, incorporated in 1903, the Rockefeller Foundation, incorporated in 1913, and the Laura Spelman Rockefeller Memorial, established in 1920.

The Board has for its object "the promotion of education within the United States of America without distinction of race, sex or creed." Beginning with an initial sum of $1,000,000, Mr. Rockefeller's gifts to the Board have mounted to $126,788,000. Principal as well as income may be disbursed. The Board aids three general lines of education: Universities and Colleges, Medical Schools, and Negro Education. It has aided 207 institutions in these three groups with gifts totalling $48,665,639. To secure these gifts the institutions concerned raised in addition nearly $170,000,000.

The Rockefeller Foundation was chartered "to promote the well-being of mankind throughout the world, to provide an agency which shall deal with problems of human welfare in accordance with the principles and methods most approved in each generation." It devotes its resources almost entirely to public health and medical education, carrying on its activities through three departmental organizations; the International Health Board; the China Medical Board and the Division of Medical Education. The Foundation's principal funds are $170,000,000, both the income and principal of which are available for appropriation.

The Laura Spelman Rockefeller Memorial was established by John D. Rockefeller as a memorial to his wife, who died in 1915. The particular objects for which the Corporation is formed "are the application to charitable purposes of the income, and, if the Corporation so decides, of the principal of such property as the Corporation may from time to time possess." The Memorial has no connection with the Rockefeller Foundation or any of the other benevolent boards or institutions established by Mr. Rockefeller. The trustees have full and unrestricted discretion in the use of the funds, but the general policy, in keeping with the spirit of Mrs. Rockefeller's avowed interests, is that gifts should be made particularly to activities looking to the improvement of the conditions of women and children. Since the Memorial was established Mr. Rockefeller has made over to it securities with a total of approximately $64,000,000.

*The Sage Millions*—The Russell Sage Foundation was established in 1907 by Mrs. Sage in memory of her husband. The original endowment of $10,000,000 was added to, at Mrs. Sage's death, by an additional sum of about $5,000,000. This Foundation has for its purpose "the improvement of social and living conditions in the United States of America."

Its charter gives it very wide latitude as to the means which may be employed to achieve its purpose. It may, for instance, engage in "research, publication, education, the establishment and maintenance of charitable and benevolent activities, agencies and institutions, and the aid of any such activities, agencies and institutions already established.

The departments of the Foundation are: Charity Organization Department, Department of Child Helping, Department of Education, Division of Industrial Studies, Library, Department of Recreation, Division of Remedial Loans, Division of Statistics, Department of Surveys and Exhibits.

The Havens Relief Fund Society is less widely known than the newer foundations, though it has been active since 1870, when it was incorporated to administer an endowment received from Charles G. Havens. The amount of its resources is not publicly announced. The Society appropriates its income to corporate and individual almoners, charged to give "temporary relief to industrious persons to aid in restoring them to self-support."

The Altman Foundation is another great altruistic corporation which refrains from making public the extent of its resources. Incorporated in 1913, it administers funds accruing from the estate of the late B. Altman to promote the welfare of the employees of B. Altman & Co., a corporation, and to benefit "charitable, benevolent or educational institutions within the State of New York. The Foundation has not until very recently figured in any notable altruistic projects. The new Chair of Fine Arts at New York University, which it will finance, is its first essay into the general field open to it by the terms of its charter.

*Millions for Specific Purposes*—The great fortunes here enumerated are, it will be noted, only those which are held for general purposes of social welfare. The endowment of the Rockefeller Institute for Medical Research, for example, is not listed, since it is for a specific purpose. The Juilliard Foundation for the development of the musical arts is omitted for a like reason, as is also the Winifred Masterson Burke Relief Foundation for the benefit of convalescents, and the Baron de Hirsch Fund for the aid of resident Jewish immigrants. Should these and many other similar funds held for specific purposes be included the total amount of the vested wealth of charity would assume staggering proportions.

| | |
|---|---|
| Brer Foundation | $2,000,000 |
| Carnegie Corporation | 125,000,000 |
| Carnegie Foundation for the Advancement of Teaching | 25,390,000 |
| Commonwealth Fund | 16,336,000 |
| General Education Board | 123,000,000 |
| Laura Spelman Rockefeller Memorial | 64,000,000 |
| Milbank Memorial Fund | 10,000,000 |
| New York Foundation | 1,000,000 |
| Rockefeller Foundation | 171,000,000 |
| Russell Sage Foundation | 15,000,000 |
| Total | $552,726,000 |

## THE STATUE OF LIBERTY.

THE STATUE OF LIBERTY on Bedloe's Island, New York Harbor, was first proposed, soon after the Franco-German War, by a group of prominent Frenchmen, who commissioned one of their number, Frederic August Bartholdi, sculptor (born 1833, died 1904), to do the work. The U. S. Congress, Feb. 22, 1877, authorized President Hayes to set apart a site on the island, which Barthoidi, on a visit, had suggested. A committee was formed in 1874, to raise funds. In France, 180 cities, 40 general councils, many societies, and thousands of people contributed. In the United States, by the aid of The World, $300,000 was raised for the pedestal. The statue cost about $700,000, making the total about $1,000,000.

The head of the Statue was completed for the Paris Exposition, in 1878; the forearm had been sent to America and shown at the Centennial Exposition, Philadelphia, in 1876. Thence it was transferred to Madison Square, New York City, where it remained until 1886. On Oct. 24, 1881, the anniversary of the Battle of Yorktown, all the pieces of the framework and base were put in place at Paris, Levi P. Morton, the American Ambassador, driving the first rivet. The Statue was finished in 1883; on July 4, 1884, M. De Lesseps, President of the French Committee, officially presented the Statue to Ambassador Morton; on Aug. 5, 1884, the cornerstone of the pedestal was laid on Bedloe's Island; late in June, 1885, the French vessel, Isere, from Rouen, France, landed the Statue at New York in 210 packing cases; the work of putting the parts together was begun in May, 1886, and the Statue was unveiled on Oct. 28, 1886.

DIMENSIONS OF THE STATUE.

| | Ft. | In. | | Ft. | In. |
|---|---|---|---|---|---|
| Height from base to torch | 151 | 1 | Distance across the eye | 2 | 6 |
| Foundation of pedestal to torch | 305 | 6 | Length of nose | 4 | 6 |
| Heel to top of head | 111 | 6 | Right arm, length | 42 | 0 |
| Length of hand | 16 | 5 | Right arm, greatest thickness | 12 | 0 |
| Index finger | 8 | 0 | Thickness of waist | 35 | 0 |
| Circumference at second joint | 3 | 6 | Width of mouth | 3 | 0 |
| Size of finger nail | 13x10 in. | | Tablet, length | 23 | 7 |
| Head from chin to cranium | 17 | 3 | Tablet, width | 13 | 7 |
| Head, thickness from ear to ear | 10 | 0 | Tablet, thickness | 2 | 0 |

DIMENSIONS OF THE PEDESTAL.

| | Ft. | In. | | Ft. | In. |
|---|---|---|---|---|---|
| Height of pedestal | 89 | 0 | Square sides at top, each | 40 | 0 |
| Square sides at base, each | 62 | 0 | Grecian columns, above base | 72 | 8 |

DIMENSIONS OF THE FOUNDATION.

| | Ft. | In. | | Ft. | In. |
|---|---|---|---|---|---|
| Height of foundation | 65 | 0 | Square sides at top | 66 | 7 |
| Square sides at bottom | 91 | 0 | | | |

The Statue weighs 450,000 pounds (225 tons); the bronze alone weighs 200,000 pounds, and is 3-16 of an inch thick; 40 persons can stand in the head, and 12 in the torch; number of steps in statue, from pedestal to head, 154; number of rounds in ladder in uplifted right arm, 54.

### BEDLOE'S ISLAND HISTORY.

The Statue site, Bedloe's Island (Bedlow's Island), was named after Isaac Bedlow, who bought it from the old Colonial Government of New Amsterdam. It was called Kennedy's Island during the Revolution, after Capt. Kennedy, commander of the British Naval Station in New York. He bought the Island from the trustees of Mary Smith, a daughter of Bedlow, for one hundred pounds. In 1750 it was purchased by New York for a pest house site. In 1800 the State gave it to the general government. In 1841 the present star-shaped fort was built on the island, at a cost of $213,000, 70 guns were mounted on the parapets, and a garrison of 350 men was stationed there.

## HOW TO FIND ANY STREET NUMBER IN NEW YORK.

To find what street is nearest, take the number, cancel last figure, and divide by 2, add the key number found below. The result will be the nearest street. The key numbers are: Avenue A, 3; Avenue B, 3; Avenue C, 3; Avenue D, 3; First Avenue, 3; Second Avenue, 3; Third Avenue, 9 or 10; Fourth Avenue, 8; Fifth Avenue to Central Park, 18 or 17, above Mount Morris Park, 24; Sixth Avenue, 6; Seventh Avenue, 12, Eighth Avenue, 9; Ninth Avenue, 13; Tenth Avenue, 14, Eleventh Avenue, 15; Lexington Avenue, 22; Madison Avenue, 26; Park Avenue, 34 or 35; Columbus, Amsterdam, and West End Avenues, 59 or 60; Broadway above 14th Street (subtract), 30 or 31. Central Park West, divide house number by 10, and add 60; Riverside Drive, divide house number by 10, and add 72.

## CHURCHES IN THE CITY OF NEW YORK.

In the city of New York there are over 1,600 churches, attended each Sunday, it is estimated, by more than a million worshippers, of which 100,000, at least, are strangers visiting the metropolis.

### MANHATTAN.

There are three cathedrals: St. Patrick's (Roman Catholic), Fifth Ave. and 50th St.; the Cathedral, of St. John the Divine (Protestant Episcopal), located on W. 111th St., between Amsterdam and Morningside Aves.; and St. Nicholas (Greek Orthodox), located at 1 E. 97th St., near Fifth Ave.

The leading houses of worship, by chief denominations, follow:

**Baptist**—Calvary, W. 57th St., between Sixth and Seventh Aves.; Central, 92d St., and Amsterdam Ave.; Fifth Ave., formerly at 8 W. 46th St., and now named First Park Ave. Baptist Church, situated at Park Ave. and 64th St.; the First, W. 79th St., corner Broadway; Judson Memorial, 55 Washington Sq., So.; Madison Ave. Church, cor. F 31st St.; Metropolitan, W. 128th St. and 7th Ave., and the Mount Morris, 5th Ave., near W. 127th St.

The Hellenic Eastern Christian Orthodox Church of the Holy Trinity is on E. 72d St., near 3d Ave.

**Christian Science (Church of Christ)**—First, Central Park West and 96th St.; and the Second, 10 W. 68th St.

**Congregational**—Tabernacle, Broadway and 56th St.; and Manhattan, Broadway and W. 76th St.

**Disciples of Christ**—Central Church, W. 81st St., near Columbus Ave.

**Friends' (Quakers)**—Meeting Houses: (Hicksite), E. 15th St. and Rutherford Pl.; and (Orthodox), 144 E. 20th St.

**Jewish**—Temple Israel, W. 91st St., near B'way; Free Synagogue, Carnegie Hall; Shearith Israel, Central Park West and 70th St.; Temple Beth-El, 5th Ave. and 76th St.; Temple Emanu-El, 5th Ave. and 43d St.

**Lutheran**—Advent, Broadway and 93d St.; Grace, 123 W. 71st St.; Holy Trinity, Central Park West and 65th St.; and Immanuel, Lexington Ave. and E. 88th St.

**Methodist Episcopal**—Calvary, 129th St. and 7th Ave.; Grace, 131 W. 104th St.; John St., 44 John St.; Madison Ave., at E. 60th St.; Metropolitan Temple, 58 7th Ave.; St. Andrews, 126 W. 76th St.; St. Paul's, West End Ave. and 86th St.; and Union, W. 48th St., near Broadway.

**Presbyterian**—Brick, 5th Ave. and 37th St.; Broadway, at W. 114th St.; Central, Madison Ave. and 57th St.; Fifth Ave., at 55th St.; First, 5th Ave. and 11th St.; Fourth, West End Ave. and 91st St.; Madison Ave., at 73d St.; Park Ave., at E. 85th St.; Rutgers, Broadway and W. 73d St.; Scotch, Central Park West and 96th St.

**Protestant Episcopal**—Epiphany, 259 Lexington Ave.; Grace, Broadway and 10th St.; Heavenly Rest, 551 5th Ave.; Holy Trinity, 316 E. 88th St.; Incarnation, 205 Madison Ave.; "Little Church Around the Corner" (Transfiguration), 5 E. 29th St.; St. Andrew's, 127th St., near 5th Ave.; St. Bartholomew's, Park Ave. and 52d St.; St. George's, Stuyvesant Sq.; St. James's, Madison Ave. and 71st St.; St. Luke's, Convent Ave. and 141st St.; St. Mark's-in-the-Bouwerie, 2d Ave. and 10th St.; St. Paul's Chapel, Broadway and Vesey St.; St. Thomas's, 5th Ave. and 53d St.; Trinity Church, Broadway and Wall St.; Christ Church, Broadway and 71st St.

**Reformed Church in America**—Marble (Collegiate), 5th Ave. and 29th St.; St. Nicholas (Collegiate), 5th Ave. and 48th St.; West End (Collegiate), West End Ave. and 77th St.

**Roman Catholic**—Ascension, 107th St., near Broadway; Holy Trinity, 205 W. 82d St.; Notre Dame, Morningside Drive and 114th St.; St. Agnes's, 143 W. 43d St.; St. Andrew's, Duane St. and City Hall Place; St. Brigid's, 123 Ave. B.; St. Cyril, St. Mark's Pl.; St. Francis Xavier, 42 W. 16th St.; St. Ignatius Loyola's, Park Ave. and E. 84th St.; St. Leo's, 11 E. 28th St.; St. Patrick's, Mott and Prince Sts.; St. Paul the Apostle's, Columbus Ave. and W. 60th St.; St. Peter's, 20 Barclay St.

**Seventh Day Adventist**—First, Lenox Ave. and 120th St.

**Unitarian**—All Souls', 4th Ave. and 20th St.; and the Community Church, 61 E. 34th St.

**Universalist**—(Fourth) Church of the Divine Paternity, Central Park West and 76th St.

Among other places of worship in Manhattan are: All Night Mission, 8 Bowery; Bowery Mission, 227 Bowery; Broome St. Tabernacle, 395 Broome St.; Church of the Strangers (Deems Memorial), 307 W. 57th St.; De Witt Memorial, 280 Rivington St.; Divine Inspiration (Spiritualist), 20 W. 91st St.; Doyers St. Midnight Mission, 5 Doyers St.; Eighth Ave. Mission, 290 8th Ave.; Gospel Tabernacle, 44th St. and 8th Ave.; Labor Temple, 2d Ave. and 14th St.; McAuley Cremorne Mission, 216 W. 35th St.; McAuley's Water St. Mission, 316 Water St.; New Church (Swedenborgian), 35th St., near Park Ave.; Pentecostal Nazarene, 210 W. 14th St.; Progressive Spiritualists' Church, 325 W. 59th St.; Salvation Army (see Index); Seamen's Christian Association, 399 West St.; Seventh Day Christian, 151 W. 125th St.; Society of Ethical Culture, 2 W. 64th St.; Temple of International Bible Students' Ass'n, Inc., 22 W. 63d St.; Theosophical Society, 25 W. 45th St.; Vedanta Society, 236 Central Park West; Volunteers of America (see Index).

### BROOKLYN.

**Baptist**—Temple, 3d Ave. and Schermerhorn St.; Emmanuel, Lafayette Ave. and St. James Pl.; Hanson Place, at So. Portland Ave.; Sixth Ave., at Lincoln Pl.; Washington Ave., at Gates Ave.; First N. Y. Ave. and Dean St.

**Congregational**—Central, Hancock St., near Franklin Ave.; Clinton Ave., at Lafayette Ave.; Flatbush, Dorchester Rd. and E. 18th St.; Pilgrims, Henry and Remsen Sts.; Plymouth, Orange St., near Hicks St.; South, President and Court Sts.; St. Paul's, N. Y. Ave. and Sterling Pl.; Tompkins Ave., at McDonough St.

**Disciples of Christ**—Flatbush, Dorchester and Marlborough Roads.

**Friends**—(Hicksite), 110 Schermerhorn St.; (Orthodox), Lafayette and Washington Aves.

**Jewish**—Beth-El, 12th Ave. and 41st St.; Beth Judah, 904 Bedford Ave.; Beth Sholaum, 399 9th St.; Eighth Ave., at Garfield Pl.; Mt. Sinai, State and Hoyt Sts.; People's Temple, Bay P'kway and 85th St.; Temple Israel, Bedford and Lafayette Aves.

**Lutheran**—Emmanuel, 421 7th St.; Evangelical, Schermerhorn St., near Court St.; Good Shepherd, 4th Ave. and 75th St.; Redeemer, Lenox Rd. and Flatbush Ave.; St. Luke's, Washington Ave., near DeKalb Ave.; St. Peter's, Bedford Ave., near DeKalb Ave.; Zion, Henry St., near Clark St.

**Methodist Episcopal**—First, Henry and Clark Sts.; Grace, 7th Ave. and St. John's Pl.; Hanson Pl., at St. Felix St.; N. Y. Ave., at Dean St.; Simpson, Clermont and Willoughby Aves.; Summerfield, Washington and Greene Aves.

**Methodist**—(Primitive), Park Pl., near Nostrand Ave.

**Moravian**—Jay St., near Myrtle Ave.

**Presbyterian**—Bedford, Dean St. and Nostrand Ave.; Central, Marcy and Jefferson Aves.; First, Henry St., near Clark St.; Lafayette Ave., at So. Oxford St.; Memorial, 7th Ave. and St. John's Pl.; Spencer Memorial, Clinton and Remsen Sts.; Westminster, Clinton St. and 1st Pl.

**Protestant Episcopal**—Christ, Clinton and Harrison Sts.; Grace, Hicks St. and Grace Court; Holy Trinity, Clinton and Montague Sts.; Messiah, Greene and Clermont Aves.; Redeemer, Pacific St. and 4th Ave.; St. Ann's, Clinton and Livingston Sts.; St. Bartholomew's, Pacific St., near Bedford Ave.; St. James's, Lafayette Ave. and St. James Pl.; St. John's, 7th Ave. and St. John's Pl.; St. Luke's Clinton Ave., near Fulton St.; St. Paul's, Clinton and Carroll Sts.

**Reformed Church in America**—Bethany, Clermont Ave., near Willoughby Ave.; First, of Williamsburgh, Bedford Ave. and Clymer St.; First, Flatbush and Church Aves.; Heights, Pierrepont St., near Henry St.; Old First, 7th Ave. and Carroll St.

**Roman Catholic**—Holy Name of Jesus, Prospect Ave. and Prospect Park West; Our Lady of Lourdes, De Sales Pl., near Broadway; Our Lady of Mercy, Schermerhorn St., near Bond St.; Queen of All Angels, Lafayette and Vanderbilt Aves.; St. Agnes's, Hoyt and Sackett Sts.; St. Augustine's, 6th Ave. and Sterling Pl.; St. Charles Borromeo, Sidney Pl. and Livingston St.; St. Francis Xavier's, 6th Ave. and Carroll St.; St. James Pro-Cathedral, Jay and Chapel Sts.; St. John the Baptist's, Willoughby Ave., near Lewis Ave.; Sts. Peter and Paul, Wythe Ave., near So. 2d St.; St. Saviour's, 6th St. and 8th Ave.

**Swedenborgian**—Church of the New Jerusalem, Monroe Pl. and Clark St.

**Unitarian**—Saviour, Pierrepont St. and Monroe Pl.; Second, Clinton and Congress Sts.

**Universalist**—All Souls', Ditmas and Ocean Aves.

**Miscellaneous**—Brooklyn Spiritualist Soc., 28 Irving Pl.; Brooklyn Tabernacle, 17 Hicks St.; Christian and Missionary Alliance, 1560 Nostrand Ave.; Ethical Culture Soc., Academy of Music; Reformed Presbyterian, 452 Monroe St.; St. Nicholas Greek Orthodox, 301 Pacific St.

## PLACES OF AMUSEMENT IN NEW YORK CITY.

(Seating capacity and Fire Department figures in parentheses. Where there are no figures in the case of new theatres, the capacity was not officially fixed when The Almanac went to press.)

### MANHATTAN.

Academy of Music (2,602), 111 E. 14th St.
Adelphi (1,021), 2409 B'way.
Aeolian Hall (1,310), 34 W. 43d St.
Alhambra (1,386), 2110 7th Ave.
Ambassador (1,200), 215 W. 49th St.
American (1,695), Roof (1,154), 260 W. 42d St.
Apollo (1,168), 225 W. 42d St.
Apollo (1,197), 209 W. 125th St.
Arena (953), Roof (902), 623 8th Ave.
Astor (1,131), 1531 B'way.
Atlantic Garden (817), 50 Bowery.
Audubon (2,368), 3934 B'way.
Belasco (1,000), 111 W. 44th St.
Belmont (515), 121 W. 48th St.
Bijou (605), 209 W. 45th St.
Booth (708), 220 W. 45th St.
Bramhall (208), 138 E. 27th St.
Broadhurst (1,118), 235 W. 44th St.
Broadway (1,587), 1441 B'way.
Bunny (702), roof (622), 3589 B'way.
Capitol (4,624), 1639 B'way.
Carroll, Earl, (998), 755 7th Ave.
Casino (1,477), 1404 B'way.
Carnegie Hall (2,632), 880 7th Ave.
Central (922), 220 W. 47th St.
Century (2,890), Roof (422), Central Park West and 62d St.
Chelsea (913), 312 8th Ave.
Circle (1,671), 1,825 B'way.
City (2,378), 114 E. 14th St.
Claremont (1,100), 2789 B'way.
Clinton (1,274), 80 Clinton St.
Cohan (1,111), 1480 B'way.
Coliseum (3,095), 181st St. & B'way.
Colonial (1,473), 1887 B'way.
Columbia (1,313), 701 7th Ave.
Comedy (718), 108 W. 42d St.
Cort (1,043), 136 W. 48th St.
Cosmo (1,450), 175 E. 116th St.
Criterion (886), 1520 B'way.
Delancey St. (1,075), 62 Delancey St.
Delancey (Loew's) (788), 140 Delancey St.
Douglas, New (2,300), 646 Lenox Ave.
Dyckman (1,514), 552 W. 207th St.
Eighty-first St. (2,015), 2248 B'way.
Eighty-sixth St. (1,406), 162 E. 86th St.
Eighty-third St. (2,368), 2302 B'way.
Eltinge (892), 236 W. 42d St.
Empire (1,099), 1428 B'way.
Empress (602), 544 W. 181st St.
Forty-eighth St. (969), 155 W. 48th St.
Fourteenth St. (1,151), 105 W. 14th St.
Forty-fourth St. (1,323), Roof (860), 216 W. 44th St.
Forty-ninth St. (708), 231 W. 49th St.
Fifth Ave. (1,205), 1187 B'way.
Fifty-eighth St. (1,639), 154 W. 58th St.
Forty-second St. (1,258), 132 E. 42d St.
Florence (1,145), 83 E. B'way.
Frazee (770), 256 W. 42d St.
Fulton (913), 206 W. 46th St.
Gabel's (1,501), 1,421 5th Ave.
Gaiety (808), 1547 B'way.
Garden (1,092), Madison Ave. & 27th St.
Garrick (537), 63 W. 35th St.
Globe (1,416), 1555 B'way.
Gotham (2,600), 3410 B'way.
Grand (1,611), 255 Grand St.
Grand Opera House (2,084), 261 8th Ave.
Greeley Square (1,899), 501 6th Ave.
Greenwich Village (388), 218 W. 4th St.
Hamilton (1,892), 3560 B'way.
Harlem (978), 1314 5th Ave.
Harlem (Grand) (1,485), 115 E. 125th St.
Harlem Opera House (1,734), 209 W. 125th St.
Harris, Sam H. (1,051), 226 W. 42d St.
Hippodrome (4,651), 756 6th Ave.
Hudson (1,094), 139 W. 44th St.
Hurtig & Seamon's (1,755), 253 W. 125th St.
Hydegrade (771), 1770 3d Ave.
Irving Place (1,133), Irving Pl. & 15th St.
Jefferson (1,921), 214 E. 14th St.
Jewel (669), 11 W. 116th St.
Joison, Al. (1,776), 926 7th Ave.
Kessler's (1,639), 35 2d Ave.
Keystone (1,042), 2633 B'way.
Klaw (800), 251 W. 45th St.
Knickerbocker (1,412), 1396 B'way.
Lafayette (1,245), 2227 7th Ave.
Lenox (891), 8-10 Lenox Ave.
Lexington (2,559), 571 Lexington Ave.
Liberty (1,234), 234 W. 42d St.
Lincoln (854), 58 W. 135th St
Lincoln Square (1,539), 1947 B'way.
Lipzin (1,081), 235 Bowery.
Little (600), 238 W. 44th St.
Longacre (1,019), 220 W. 48th St.
Lyceum (957), 149 W. 45th St.
Lyric (1,406), 213 W. 42d St.
Madison Square Garden (13,000), 51 Madison Ave.
Majestic (1,400), Roof (1,000), 600 W. 185th St.
Manhattan (895), 209 Manhattan Ave.
Manhattan Opera House (3,246), 313 W. 34th St.
Maxine Elliott (934), 109 W. 39th St.
Metropolis (1,150), 2638 3d Ave.
Metropolitan Opera House (3,305), 39th St. & B'way.
Morosco (893), 217 W. 45th St.
Miller, Henry (946), 124 W. 43d St.
Music Box (1,000), 239 W. 45th St.
National (1,164), 208 W. 41st St.
National Winter Garden (983), 111 E. Houston St.
Nemo (900), 2834 B'way.
New Amsterdam (1,702), Roof (602), 214 W. 42d St.
New York (1,633), Roof (1,068), 1520 B'way.
North Star (1,212), 1250 5th Ave.
Odeon (896), 58 Clinton St.
Odeon (960), 256 W. 145th St.
Olympia (1,250), 2778 B'way.
Olympic (758), 143 E. 14th St.
Orpheum (2,230), 1538 3d Ave.
One Hundred and Twenty-fifth St. (1,372), 165 E. 125th St.
One Hundred and Sixteenth St. (1,809), 132 W. 116th St.
Palace (1,733), 1564 B'way.
Park (1,500), 6-8 Columbus Circle.
Park Richmond (487), 139 Canal St.
Peoples' (1,612), 199 Bowery.
Playhouse (879), 141 W. 48th St.
Plaza (1,845), 621 Madison Ave.
Plymouth (965), 232 W. 45th St.
Princess (299), 104 W. 39th St.
Proctor's Fifth Ave. (1,205), 1187 B'way.
Proctor's Twenty-third St. (1,190), 141 W. 23d St.
Proctor's Fifty-eighth St. (1,639), 154 W. 58th St.
Proctor's One Hundred and Twenty-fifth St. (1,681), 112 E. 125th St.
Punch & Judy (299), 153 W. 49th St.
Regent (1,854), 1910 7th Ave.
Regun (941), Roof (952), 60 W. 116th St.
Renaissance (920), 2341 7th Ave.
Republic (901), 209 W. 42d St.
Rex (734), 211 E. 67th St.
Rialto (1,960), 201 W. 42d St.
Rio (2,603), 159th St. & B'way.
Ritz (945), 219 W. 48th St.
Riviera (1,735), Roof (1,640), 2579 B'way.
Riverside (1,864), Roof (1,036), 2561 B'way.
Rivoli (2,122), 1,620 B'way.
Roosevelt (1,428), 145th St. & 7th Ave.
Royal Bowery (1,107), 16 Bowery.
Savoy (718), 112 W. 34th St.
Selwyn (1,067), 229 W. 42d St.
Seventh Ave. (1,606), 2081 7th Ave.
Sheridan (656), 2 7th Ave.
Star (2,342), 1714 Lexington Ave.
State (3,600), 1540 B'way.
Strand (2,989), 1571 B'way.
Superior (880), 443 3d Ave.
Symphony (1,169), 95th St. & B'way.
Thalia (1,571), 46 Bowery.
Thirty-ninth St. Theatre (673), 121 W. 39th St.
Thomashefsky's, (1,901), 111 E. Houston St.
Times Square (1,057), 215 W. 42d St.
Tivoli (1,443), Roof (951), 839 8th Ave.
Tuxedo (817), 650 3d Ave.
Twenty-third St. (1,190), 141 W. 23d St.
Vanderbilt (771), 148 W. 48th St.
Victory (1,772), 3024 3d Ave.
Washington (1,432), 1803 Amsterdam Ave.
Winter Garden (1,493), 1632 B'way.
Yorkville (1,165), 157 E. 86th St.
Victoria (2,394), 233 W. 125th St.
Waldorf-Astoria (1,500), 2 W. 34th St.
West End (1,672), 361 W. 125th St.

### THE BRONX.

Belmont (1,432), Tremont & Belmont Aves.
Benenson (1,318), 1580 Washington Ave.
Boulevard (1,975), 1030 So. Boulevard.
Miner's (1,750), 581 Melrose Ave.
Bronx Opera House (1,919), 436 E. 149th St.
Burland (1,896), 985 Prospect Ave.
Spooner, Cecil (1,807), 963 So. Boulevard.
Coleman's (729), 745 Westchester Ave.
Crescent (1,693), 1173 Boston Rd.
Crotona (2,210), 453 E. Tremont Ave.
Elsmere (1,574), 1924 Crotona Parkway.
Empire Bronx (1,660), 864 Westchester Ave.
Fay's (1,465), 1317 Boston Road.
Fordham (Keith's) (2,422), Fordham Rd. & Valentine Ave.
Franklin (2,855), 151st St & Prospect Ave.

Kingsbridge (1,115), 15 E. Kingsbridge Road.
Melrose (1,129), Roof (1,092), 417 E. 161st St.
National (2,333), 570 Bergen Ave.
Plaza Bronx (1,044), Roof (625), 2408 Washington Ave.
Prospect (1,500), 851 Prospect Ave.
Royal Bronx (2,196), 423 Westchester Ave.
Strand, Bronx (1,184), 827 Westchester Ave.
Tiffany (601), 1007 Tiffany St.
Tremont, 1942 Webster Ave.
United States (1,627), 2715 Webster Ave.
Valentine (1,252), Roof (482), Fordham Rd. & Valentine Ave.
Webster's (1,189), 400 E. 167th St.

BROOKLYN AND QUEENS.

Academy of Music (2,207), 30 Lafayette Ave.
Albemarle (2,700), Flatbush Ave. & Albemarle Rd.
Alpine (2,158), 69th St. & 5th Ave.
Amphion (1,420), 439 Bedford Ave.
Arion (1,073), 2152 Metropolitan Ave.
Arverne (966), Roof (996), Beach 62d St. & Blvd.
Astoria (2,810), Steinway & Grand Ave.
Atlantic, New (990), 201 Flatbush Ave.
Bay Ridge (1,796), 7118 3d Ave.
Bedford (1,931), 1372 Bedford Ave.
Belvedere (850), 2676 Myrtle Ave.
Benson (1,337), 2005 86th St.
Beverly (1,500), 117 Church Ave.
Borough Park (2,391), 51st St. & New Utrecht Ave.
Brevoort (2,039), 1274 Bedford Ave.
Brighton Beach Music Hall (1,835), 3115 Ocean Parkway.
Bushwick (2,208), 1396 B'way.
Capital (1,900), Saratoga Ave. & Dean St.
Casino (1,473), 96 Flatbush Ave.
Century (1,492), 1260 Nostrand Ave.
Chester, New (793), 359 Chester St.
City Line (848), 1114 Liberty Ave.
Coliseum (1,120), 5205 4th Ave.
Colonial (2,245), 1745 B'way.
Columbia (1,391), 262 Central Ave.
Commodore (1,427), 329 B'way.
Comedy (1,074), 194 Grand St.
Crescent (1,529), 460 Hudson Ave.
Criterion (928), 966 Fulton St.
Duffield (922), 245 Duffield St.
Electra (682), 7418 3d Ave.
Empire (1,661), 8 Ralph Ave.
Evergreen (1,104), 926 Seneca Ave.
Family (284), 101 Union St.
Farragut (1,938), 1405 Flatbush Ave.
Fifth Ave. (1,919), 342 5th Ave.
Gaiety (1,620), 18 Throop Ave.
Garden (1,021), Roof (802), 4564 Jamaica Ave.
Gates (2,868), 1340 B'way.
Gem (920), 637 B'way.
Glenwood (1,339), 2406 Myrtle Ave.
Glove (904), 226 15th St.
Gotham (1,086), 2562 Fulton St.
Greenpoint (1,822), 825 Manhattan Ave.
Halsey (2,262), 928 Halsey St.
Hamilton (1,000) 165 Hamilton Ave.
Henderson's Music Hall (1,610), Bowery & Henderson's Walk, Coney Island.
Howe's (845), 482 Hopkinson Ave.
Jamaica (1,796), 314 Fulton St.
Keeney's (2,256), Livingston St. & Hanover Pl.
Kingsway (2,219), 946 Kings Highway.
Kismet (1,303), 779 DeKalb Ave.
Liberty (1,467), 67 Liberty Ave.
Linden (924), 815 Flatbush Ave.
Lyceum (941), 86 Montrose Ave.
Majestic (1,828) 651 Fulton St.
March (873), March Ave. & B'way.
Merrick (2,490), Fulton St. & New York Ave.
Meserole (2,005), 725 Manhattan Ave.
Metropolitan (3,618), 394 Fulton St.
Midwood (1,208), 1307 Ave. J.
Montauk (1,409), 22 Hanover Pl.
Morrison's (832), Henry St. & Ocean Ave.
National (1,262), 720 Washington Ave.
New (820), 556 Boulevard.
New Brighton (1,523), Ocean Parkway & Sea Breeze Ave.
Normandy (1,770), 1927 Fulton St.
Olympic (1,564), 342 Adams St.
Orpheum (1,784), 578 Fulton St.
Oxford (689), 552 State St.
Ozone Park (922), Jerome & Hopkinson Aves.
Palace (904), Jackson Ave. & 44th St.
Park (1,340), 4322 5th Ave.
Park Queen (913), Roof (1,044), 150 Beach 116th St.
Parkway (701), 6409 20th St.
Parthenon (1,700), 327 Wyckoff Ave.
Prospect (2,448), 327 9th St.
Republic (2,700), Grand St. ext'd.
Rialto (1,552), Flatbush Ave. & Canarsie Lane.
Rialto Queen (2,000), 268 Fulton St.
Richmond Hill (605), 1121 Jamaica Ave.
Ridgewood (2,154), Myrtle & Cypress Aves.
Riviera (2,198), St. John's Pl. & Kingston Ave.
Rivoli (606), 374 Boulevard.
Roebling (987), 27 Lee Ave.
Roosevelt (1,442), 88th St. & Bay Ave.
Royal (797), 15 Willoughby St.
Sheffield (1,325), 308 Sheffield Ave.
Shubert (1,766), 850 Monroe St.
Stadium (2,069), 102 Chester St.
Star (1,487), 389 Jay St.
State (1,222), 510 DeKalb Ave.
Steinway (894), 321 Steinway Ave.
Stone Ave. (1,528), 385 Stone Ave.
Strand, Bklyn. (2,870), Fulton St. & Rockwell Pl.
Strand, Queens (1,675), Central & Carnegie Aves.
Sumner (1,728), 265 Livonia Ave.
Supreme B. R. (1,928), 966 Fulton St.
T. N. F. (625), 59 E. 16th St.
Universal (572), 162 16th St.
Utica (1,508), 1410 St. John's Pl.
Warwick (1,446), 134 Jerome St.
West End (848), 5128 New Utrecht Ave.
Whitney (928), 829 Fresh Pond Rd.

STADIUMS.

**Manhattan**—*City College* (17,000), Amsterdam Ave. & 136th St.; *Polo Grounds* (Brush Stadium), (38,000), 8th Ave. & 157th St.
**Brooklyn**—*Ebbets Field* (26,000), Bedford Ave. & Sullivan St.
**Bronx**—*Rice Playfield Stadium*, Pelham Park (5,000) Boston Road.

## FERRIES IN NEW YORK CITY.

MUNICIPAL.

Whitehall St. to St. George, Staten Island. Operation begun Oct. 25, 1905.

South St. to 39th St., So. B'klyn. Operation begun Nov. 1, 1906.

East 92d St. to Fulton Ave., Astoria, Queens. Operation begun Sept. 27, 1920.

Sound View Ave., Clason Point, Bronx, to 1st Ave., College Point, Queens.

East 23d St. to Greenpoint Ave., B'klyn. Operation begun Sept. 24, 1921.

Grand St. to Broadway, B'klyn. Operation begun Oct. 1, 1921.

PRIVATELY OWNED.

**Hudson River**—Liberty St. to Communipaw, J. C. (Central R. R. of N. J.); Cortlandt St. to Exchange Pl., J. C. (Penn. R. R.); Cortlandt St. to Weehawken (West Shore R. R.); Barclay St. to Newark St., Hoboken (Lackawanna R. R.); Chambers St. to Pavonia Ave., J. C. (Erie R. R.); Desbrosses St. to Exchange Pl., J. C. (Penn. R. R.); Christopher St. to Newark St., Hoboken (Lackawanna R. R.); W. 23d St. to 14th St., Hoboken (Lackawanna R. R.); W. 23d St. to Newark St., Hoboken (Lackawanna R. R.); W. 23d St. to Communipaw, J. C. (Central R. R. of N. J.); W. 23d St. to Pavonia Ave., J. C. (Erie R. R.); W. 42d St. to Weehawken (West Shore R. R.); W. 42d St. to West New York (West Shore R. R.); W. 130th St. to Edgewater, N. J.; Dyckman St. to Englewood Landing, N. J. (Palisades Park).

**East River**—Whitehall St. to Atlantic Ave., B'klyn.; Whitehall St. to Hamilton Ave., B'klyn.; Fulton St. to Fulton St., B'klyn.; E. 34th St. to L. I. City (L. I. R. R.); Clason Point, Bronx, to Whitestone, L. I. (passengers only).

**Staten Island** (non-municipal)—St. George, S. I. to 69th St., Bay Ridge, B'klyn.; Port Richmond, S. I., to Bayonne, N. J.; Holland Hook, S. I., to Elizabethport, N. J.; Linoleumville, S. I., to Carteret, N. J.; Tottenville, S. I., to Perth Amboy, N. J.

**Crossing New York Bay**—Battery Park to Governor's Island (U. S. Army); Battery Park to Ellis Island (U. S Dept. of Commerce); Battery Park to Liberty Island.

**Rockaway Ferries**—Sheepshead Bay to Breezy Pt., Kennedy's, Rockaway Pt., Reid's, Roxbury, and Campbell's.

**Departmental Ferries**—E. 16th St. to Hart's Island (Dept. of Health); E. 26th St. to Blackwell's (Welfare) Isl., Riker's Isl., and Hart's Isl. (Dept. of Correction); E. 26th St. to Blackwell's Isl. and Randall's Isl. (Dept. of Pub. Welfare); E. 86th St. to Blackwell's Isl. (Dept. of Pub. Welfare); E. 116th St. to Ward's Isl. (N. Y. State Hosp. Bd.); E. 125th St. to Randall's Isl. (Children's Hosp.) (Dept. of Pub. Welfare); E. 125th St. to Randall's Isl. (House of Refuge), N. Y. State Reformatory; E. 132d St. to No. Brother Isl. (Dept. of Health); Fordham St., City Island, to Hart's Island (Depts. of Correction and Pub. Welfare).

## PUBLIC SCHOOLS IN NEW YORK CITY.

### TRAINING SCHOOLS FOR TEACHERS.

There are three under the jurisdiction of the Board of Education, located as follows; **Manhattan**—212 West 120th St. **Brooklyn**—Park Place, west of Nostrand Ave. **Queensboro**—Parsons and Gilman Aves., Jamaica.

The three schools above named are not limited as to students but may receive them from the public schools in any borough.

### SCHOOL FOR CO-OPERATIVE STUDENTS.

Haaren High School, Hubert and Collister Sts., Manhattan. This institution, which is for those who study one week and work the next, takes students from the public schools in any borough.

### *MANHATTAN.*

HIGH SCHOOLS—De Witt Clinton (boys), Tenth Ave. and 59th St.; Annexes (P. S. 58), 317 W. 52nd St., and (P. S. 37), 113 E. 87th St.; George Washington (boys and girls), Broadway and Academy St.; High School of Commerce (boys), 155 W. 65th St., Annexes (P. S. 67), 120 W. 46th St., and (P. S. 166), 80th St., near Columbus Ave.; Julia Richman (girls), 60 W. 13th St., Annexes (P. S. 87) Amsterdam Ave. and 77th St., (P. S. 9), 225 W. 82nd St., (P. S. 66), 421 E. 88th St., (P. S. 117), 170 E. 77th St., (P. S. 179), 101st and 102nd Sts., east of Amsterdam Ave., (P. S. 96), Avenue A and 81st St.; Stuyvesant (boys) 15th and 16th Sts., near First Ave.; Wadleigh (girls), 114th St., near Seventh Ave.; Washington Irving (girls), 40 Irving Place.

TRADE SCHOOLS—(Manhattan and Bronx)—Manhattan Trade School for Girls, Lexington Ave. and 22d St.; Murray Hill Vocational School for Boys, 237 E. 37th St.; Textile High School, 124 W. 30th St.; Vocational School for Boys, 138th St., west of Fifth Ave.; Elementary and Trade School for the Deaf (The Gallaudet), 225 E. 23d St.

### ELEMENTARY SCHOOLS.

| No. | Name. | Location. |
|---|---|---|
| 1 | (No name) | Catharine & Oliver Sts |
| 2 | Henry Rutgers | 116 Henry St. |
| 3 | B. D. L. Southerland | Hudson & Grove Sts. |
| 4 | William Pitt | Rivington & Pitt Sts. |
| 5 | Alexander S. Webb | 141st St. & Edgecomb Ave. |
| 6 | Lillie Devereaux Blake | Madison Ave. & 85th St. |
| 7 | George F. Trimble | Hester & Chrystie Sts. |
| 8 | Richard Varick | 29 Kling St. |
| 9 | John Jasper | West End Ave. & 82d St. |
| 10 | St. Nicholas | 117th St. & St. Nicholas Ave. |
| 11 | William T. Harris | 314 W. 17th St. |
| 12 | Corlears | Madison & Jackson Sts |
| 13 | James Watt | 239 E. Houston St. |
| 14 | Lafayette B. Olney | 225 E. 27th St. |
| 15 | (No name) | 732 5th St. |
| 16 | Josiah H. Zabriskie | 208 W. 13th St. |
| 17 | La Salle | 47th St., west of 8th Ave. |
| 18 | John Winthrop | 121 E. 51st St. |
| 19 | William M. Evarts | 344 E. 14th St. |
| 20 | Forsyth | Rivington & Forsyth Sts. |
| 21 | John Doty | Mott & Prince Sts. |
| 22 | Hamilton Fish | Stanton & Sheriff Sts. |
| 23 | Columbus | Mulberry & Bayard Sts. |
| 24 | Mt. Morris | 128th St., nr. Madison Ave. |
| 25 | Schiller | 330 5th St. |
| 26 | Carlisle | 124 W. 30th St. |
| 27 | Thomas A. Edison | 42d St. & 3d Ave. |
| 28 | John Newton | 257 W. 40th St. |
| 29 | (No name) | Washington & Carlisle Sts. |
| 30 | Yorkville | 88th St. & 3d Ave. |
| 31 | Patrick F. McGowan | 200 Monroe St. |
| 32 | William Wood | 357 W. 35th St. |
| 33 | Chelsea | 418 W. 28th St. |
| 34 | Herman Ridder | 418 Broome St. |
| 35 | Wendell Phillips | 160 Chrystie St. |
| 36 | Tompkins Square | 710 E. 9th St. |
| 37 | John Barry | 113 E. 87th St. |
| 38 | Vittoria Colonna | Dominick & Broome Sts. |
| 39 | Harlem | 235 E. 125th St. |
| 40 | George W. Wingate | 320 E. 20th St. |
| 41 | Greenwich | 36 Greenwich Ave. |
| 42 | Benjamin Altman | Hester & Ludlow Sts. |
| 43 | Manhattanville | Amsterdam Ave. & 129th St. |
| 44 | St. John's Park | Hubert & Collister Sts. |
| 45 | Peabody | 225 W. 24th St. |
| 46 | Stinson McIver | St. Nicholas Ave. & 156th St. |
| 47 | Gallaudet | 225 E. 23d St. |
| 48 | Abram S. Hewitt | 124 W. 28th St. |
| 49 | Murray Hill Vocational | 237 E. 37th St. |
| 50 | Gramercy | 211 E. 20th St. |
| 51 | Elias Howe | 519 W. 44th St. |
| 52 | Inwood | Broadway & Academy St. |
| 53 | Salome Purroy | 207 E. 79th St. |
| 54 | (No name) | Amsterdam Ave. 104th St. |
| 56 | Gansevoort | 351 W. 18th St. |
| 57 | George Bancroft | 176 E. 115th St. |
| 58 | William L. Marcy | 317 W. 52d St. |
| 59 | Louisa Lee Schuyler | 226 E. 57th St. |
| 61 | John Eaton | E. 12th St., nr. Ave. B. |
| 62 | Seward Park | Hester & Essex Sts. |
| 63 | William McKinley | 3d St., east of 1st Ave. |
| 64 | Henry P. O'Neil | 9th St., east of Ave. B. |
| 65 | Charles Sumner | Eldridge, nr. Hester St. |
| 66 | Chester A. Arthur | 88th St., near 1st Ave. |
| 67 | Astor | 118W. 46th St. |
| 68 | (No name) | 116 W. 128th St. |
| 69 | Matthew J. Elgas | 129 W. 54th St. |
| 70 | Richard Riker | 207 E. 75th St. |
| 71 | Van Rensselaer | 190 7th St. |
| 72 | (No name) | Lexington Av. & 105th St. |
| 73 | Josephine Shaw Lowell | 209 E. 46th St. |
| 74 | William Blackstone | 220 E. 62d St. |
| 75 | Jacob T. Boyle | 157 Henry St. |
| 76 | (No name) | Lexington Ave. & 68th St. |
| 77 | Carl Schurz | 1st Ave. & 86th St. |
| 78 | Henry Clay | Pleasant Av. & 119th St. |
| 79 | Joseph J. Little | 38 1st St. |
| 81 | (No name) | 119th St., nr. 7th Ave. |
| 82 | Agassiz | 1st Ave. & 70th St. |
| 83 | Galvani | 216 E. 110th St. |
| 84 | Henry A. Rogers | 430 W. 50th St. |
| 85 | William Marconi | 1st Ave. & 117th St. |
| 86 | Nathan Hale | Lexington Ave. & 96th St. |
| 87 | William T. Sherman | Amsterdam Ave. & 77th St. |
| 88 | Rivington | 300 Rivington St. |
| 89 | Lenox | Lenox Av. & 134th St. |
| 90 | Riverside | 147th St., nr 7th Ave. |
| 91 | Wheelock | Stanton & Forsyth Sts. |
| 92 | Grace H. Dodge | Broome & Ridge Sts. |
| 93 | Jeanne D'Arc | Amsterdam Av. & 93 St. |
| 94 | Henry Kiddle | 68th St. & Amsterdam Ave. |
| 95 | Hudson Park | W. Houston, nr. Varic |
| 96 | Richard Kelly | Ave. A & 81st St. |
| 97 | Mangin | Mangin, nr. Stanton St. |
| 98 | (No name) | Tompkins & Delancey St. |
| 100 | Cyrus H. McCormick | 138th St., nr. 5th Ave. |
| 101 | Andrew S. Draper | 111th St., nr. Lexington Ave. |
| 102 | Cartier | 113th St., nr. 2d Ave. |
| 103 | Elbridge T. Gerry | 119th St. & Madison Ave. |
| 104 | Rutherford | 413 E. 16th St. |
| 105 | George G. Meade | 269 E. 4th St. |
| 106 | Francis Marion | Lafayette, nr. Spring. |
| 107 | (No name) | 272 W 10th St. |
| 108 | Verdi | 60 Mott St. |
| 109 | Century | 100th St., east of 3d Ave. |
| 110 | Florence Nightingale | 28 Cannon St. |
| 112 | Roosevelt | 83 Roosevelt St. |
| 114 | Vandewater | Oak, Oliver & James Sts |
| 115 | Humboldt | 176th St., east of St. Nicholas Ave. |
| 116 | Mary Lindley Murray | 215 E. 32d St. |
| 117 | Dante | 170 E. 77th St. |
| 119 | James Russell Lowell | 134th St., nr. 8th Ave. |
| 120 | Thomas Hughes | 187 Broome St. |
| 121 | Galileo | 102d St., nr. 2d Ave. |
| 122 | Silas Wright | 9th St. & 1st Ave. |
| 126 | Rosa Bonheur | 536 E. 12th St. |

| No. | Name. | Location. |
|---|---|---|
| 127 | Dearborn | 515 W. 37th St. |
| 130 | De Soto | 143 Baxter St. |
| 131 | Hannibal Hamlin | 272 E. 2d St. |
| 132 | Fort Washington | 182d St. & Wadsworth Ave. |
| 134 | Peter Miniut | 68 Pearl St. |
| 135 | Beekman Hill | 51st St. & 1st Ave. |
| 137 | Cyrus W. Field | Grand & Essex Sts. |
| 140 | Henry George | 116 Norfolk St. |
| 141 | Amsterdam | 462 W. 58th St. |
| 147 | Gouverneur | 293 E. Broadway |
| 150 | Martha Washington | 96th St., nr. 2d Ave. |
| 151 | Miles M. O'Brien | 91st St. & 1st Ave. |
| 157 | John Hancock | St. Nicholas Ave. & 127th St. |
| 158 | Bayard Taylor | Ave A & 78th St. |
| 159 | Elmer Ellsworth | 119th St., nr. 3d Ave. |
| 160 | James E. Sullivan | Rivington & Suffolk Sts. |
| 161 | Delancey | 105 Ludlow St. |
| 162 | (No name) | 36 City Hall Place |
| 165 | (No name) | 108th St. & Amsterdam Ave. |
| 166 | (No name) | 89th St., nr. Columbus Ave. |
| 168 | Richard Montgomery | 104th St. & 2d Ave |
| 169 | Audubon | Audubon Ave. & 168th St. |
| 170 | Julia Ward Howe | 111th St. & Lenox Av. |
| 171 | Patrick Henry | 104th St. & Madison Ave. |
| 172 | James Otis | 108th St. & 2d Ave. |
| 174 | Oliver Goldsmith | Attorney, near Rivington. |
| 177 | Roger Bacon | Market & Monroe Sts. |
| 179 | Daniel Webster | Amsterdam Ave. 102d St. |
| 183 | Robert Louis Stevenson | 66th St. & 1st Ave. |
| 184 | J. Fenimore Cooper | 116th St. & Lenox Av. |
| 186 | Alexander Hamilton | 145th St. & Amsterdam Ave. |
| 188 | B. Lewis | Manhattan & Lewis Sts. |
| 189 | (No name) | 189th St. & Amsterdam Ave. |
| 190 | Paul Revere | 82d St. & 2d Ave. |
| 192 | Henry Rice | 136th St. & Amsterdam Ave. |
| | Vocational for Boys | 138th St. & 5th Ave. |
| | Murray Hill Vocational | 37th St. & 2d Ave. |
| | Manhattan Trade | 127E. 22d St. |
| | Truant | 215 E. 21st St. |

## *THE BRONX.*

HIGH SCHOOLS—Evander Childs, 184th St. and Creston Ave., Annexes (P. S. 46), 196th St. and Briggs Ave., (P. S. 8), Mosholu Parkway and Briggs Ave., (P. S. 16), Carpenter Ave., near 240th St.; Morris, 166th St. and Boston Road, Annex, SS. Peter and Paul School, Brook Ave. and 159th St.; Theodore Roosevelt, Mott Ave. and 144th St. Annex (P. S. 47), Randolph St., St. Lawrence and Beach Aves.

### ELEMENTARY SCHOOLS.

| No. | Name. | Location. |
|---|---|---|
| 1 | College Avenue | College Ave. & 145th St. |
| 2 | Morrisania | 3rd Ave., nr. 170th St. |
| 3 | Melrose | 157th St. & Courtlandt Ave. |
| 4 | Crotona | Fulton Ave. & 173d St |
| 5 | Fordham | 2436 Webster Ave. |
| 6 | West Farms | Tremont & Vyse Aves. |
| 7 | Kingsbridge | Kingsbridge Ave. & 232d St. |
| 8 | Isaac Varian | Mosholu P'kw'y, Bedford Park. |
| 9 | Jonathan D. Hyatt | 481 E. 138th St. |
| 10 | Eagle Avenue | Eagle Ave. & 163d St. |
| 11 | Highbridge | Ogden Ave., Highb'ge |
| 12 | Westchester | Overing St., Benson Ave. |
| 13 | Williamsbridge | 216th St. & Willett Av |
| 14 | Throgg's Neck | Eastern Boulevard. |
| 15 | (No name) | Dyre Ave., Eastchester |
| 16 | Wakefield | Carpenter Ave. |
| 17 | City Island | Fordham Ave. |
| 18 | (No name) | Courtlandt Ave. & 148th St. |
| 19 | Edward Eggleston | 234th St., Woodlawn. |
| 20 | Charles James Fox | Fox & 137th St. |
| 21 | Philip H. Sheridan | 225th St., White Plains Ave. |
| 22 | (No name) | 599 E. 140th St. |
| 23 | Woodstock | 165th St. & Union Av. |
| 24 | (No name) | Kappock St., Spuyten Duyvil. |
| 25 | Phil Kearny | Union Ave. & 149th St. |
| 26 | Burnside Ave | Andrews & Burnside Aves. |
| 27 | St. Mary's Park | St. Ann's Ave., 148th St. |
| 28 | Mt. Hope | Tremont & Anthony Aves. |
| 29 | Port Morris | Cypress Ave. & 136th St. |
| 30 | Walton | 141st St. & Brook Ave. |
| 31 | William Lloyd Garrison | Mott Ave. & 144th St. |
| 32 | Belmont | 183d St. & Beaumont Ave. |
| 33 | Timothy Dwight | Jerome Ave. & 184th St. |
| 34 | Van Nest | Amethyst & Victor Sts. |
| 35 | Franz Sigel | 163d St. & Grant Ave. |
| 36 | Unionport | 1070 Castle Hill Ave. |
| 37 | (No name) | 145th St. & Willis Ave. |
| 38 | (No name) | St. Ann's Ave. & Carr St. |
| 39 | Longwood | Longwood Ave. and Kelly St. |
| 40 | Prospect Ave | Prospect Ave. & Jennings St. |
| 41 | (No name) | Olinville Ave., Magenta St. |
| 42 | Claremont | Claremont P'kw'y & Washington Ave. |
| 43 | Jonas Bronk | Brown Pl., 135th St. |
| 44 | David G. Farragut | Prospect Ave, 176th St. |
| 45 | Paul Hoffman | 189th & Hoffman Sts. |
| 46 | Edgar Allen Poe | 196th St., Briggs Ave. |
| 47 | John Randolph | Randolph St. & Beach Ave. |
| 48 | Joseph Rodman Drake | Spofford Ave. & Coster St. |
| 49 | Riverdale | 261st St., Riverdale. |
| 50 | Clara Barton | Vyse Ave., 172d St. |
| 51 | James K. Paulding | 158th St. & Jackson Ave. |
| 52 | Thomas Knowlton | Kelly St., east of St. John Ave. |
| 53 | (No name) | 168th St. & Teller Ave. |
| 54 | Intervale | Intervale Ave. & Freeman St. |
| 55 | (No name) | St. Paul's Pl. & Park Ave. |
| 56 | (No name) | 207th St., Hull Ave. |
| 57 | (No name) | Belmont Ave. & 180th St. |
| 58 | (No name) | 176th St. & Wash. Ave |
| 59 | (No name) | 182d St. & Bathgate Ave. |
| 60 | (No name) | Stebbins Ave. & Dawson St. |
| 61 | (No name) | Crotona Park & Charlotte St. |
| 62 | Casanova | South Blvd. & Leggett Ave. |
| 64 | (No name) | 171st St. & Walton Av. |

## *BROOKLYN.*

HIGH SCHOOLS—Bay Ridge (girls), 4th Ave. and 67th St., Annexes (P. S. 104), 5th Ave. and 92d St., (P. S. 185), Ridge Blvd. and 86th St.; Boys', Marcy Ave., cor. Madison St., Annexes (P. S. 3), (old), Bedford and Jefferson Aves., (P. S. 33), Broadway and Heyward St.; Bushwick, Irving Ave., Madison and Woodbine Sts., Annex (P. S. 75), Evergreen Ave., Ralph and Grove Sts.; Commercial (boys), Albany Ave. Dean and Bergen Sts., Annex (P. S. 15), Third Ave., State and Schermerhorn Sts.; Eastern District, Marcy Ave., Rodney and Keap Sts.; Annex (Commercial Course for girls), (P. S. 51), Meeker Ave. and Humboldt St.; Erasmus Hall, Flatbush Ave., near Church Ave.; Girls' Commercial, St. Mark's and Classon Aves., Annex (P. S. 129), Quincy St., near Stuyvesant Ave.; Girls' High School, Nostrand Ave. and Halsey St.; New Utrecht (boys), 86th St., near 18th Ave.

VOCATIONAL SCHOOLS—Vocational School for Boys, Cary Building, Jay and Nassau Sts.; Manual Training High School (boys and girls), 7th Ave. and 4th St., Annex (P. S. 94), Prospect Ave. and Reeve Place.

ELEMENTARY SCHOOLS.

| No. | Name. | Location. |
|---|---|---|
| 1 | John Adams | Adams & Concord Sts. |
| 2 | Bergen | 47th St., near 3d Ave. |
| 3 | Bedford | Hancock, near Bedford Ave. |
| 4 | Charles A. Schieren | Berkeley Pl., near 5th Ave. |
| 5 | McLaughin Park | Tillary & Bridge Sts. |
| 6 | (No name) | Warren, near Smith St. |
| 7 | John Jay | York, near Bridge |
| 8 | Robert Fulton | Hicks & Middagh. |
| 9 | Prospect Hill | Sterling Pl. & Vanderbilt Ave. |
| 10 | Peter Rouget | 7th Ave. & 17th St. |
| 11 | (No name) | Washington Ave., near Greene Ave. |
| 12 | Fort Greene | Adelphi, near Myrtle Ave. |
| 13 | Calvin Patterson | Degraw, near Hicks St |
| 14 | City Park | Navy & Concord Sts. |
| 15 | Schermerhorn | 3d Ave. & State St. |
| 16 | Leonard Dunkly | Wilson near Bedford Ave. |
| 17 | Henry D. Woodworth | Driggs Ave. & N. 5th St. |
| 18 | Edward Bush | Maujer, near Leonard. |
| 19 | John W. Bulkley | S. 2d & Keap St. |
| 20 | De Voe | Union Ave. & Keap St. |
| 21 | McKibbin | McKibbin, near Manhattan. |
| 22 | Greenpoint | Java, near Manhattan. |
| 23 | Old Bushwick | Conselyea & Humb'dt. |
| 24 | Bevidere | Arion Pl., cor. Beaver St. |
| 25 | Lafayette | Lafayette, nr. Sumner. |
| 26 | Quincy | Quincy, near Ralph. |
| 27 | Agnes J. Humphrey | Nelson & Hicks. |
| 28 | (No name) | Herkimer, near Ralph. |
| 29 | John Harrigan | Henry & Harrison Sts. |
| 30 | Wolcott | Conover & Wolcott. |
| 31 | Samuel F. Dupont | Dupont, near Manhattan. |
| 32 | Hoyt | Hoyt & President. |
| 33 | Thomas Heyward, Jr. | Heyward, nr. Broad'y. |
| 34 | Oliver H. Perry | Norman Ave. & Eckford St.. |
| 35 | Decatur | Decatur,cor. Lewis Av. |
| 36 | John McNamee | Stagg, near Bushwick. |
| 37 | Sylvester Malone | S. 4th, near Berry St. |
| 38 | Robert Emmet | N. 7th, near Bedford. |
| 39 | Henry Bristow | 6th Ave., cor. 8th St. |
| 40 | James Weir | 15th St., near 4th Ave. |
| 41 | Franklin W. Hooper | Dean, cor. New York Ave. |
| 42 | Concord | St. Mark's & Classon. |
| 43 | Walt Whitman | Boerum, nr. Manhat'n |
| 44 | Israel Putnam | Throop, cor. Putnam Ave. |
| 45 | De Kalb | Lafayette, nr. Classon. |
| 46 | Francis Parkman | Union, near Henry. |
| 47 | Pacific | Pacific & Dean, near 3d Ave. |
| 48 | Mapleton | 8th Ave. & 60th St. |
| 49 | Daniel Maujer | Maujer, near Graham. |
| 50 | John D. Wells | S. 3d St. & Driggs Ave. |
| 51 | Nathaniel Hawthorne | Meeker Ave. & Humboldt |
| 52 | William Ellery | Ellery, near Broadway |
| 53 | Paolo Toscanelli | Troutman, nr. Central |
| 54 | Samuel C. Barnes | Nostrand Ave. & Sanford St. |
| 55 | Stockton | Floyd, near Tompkins. |
| 56 | Thomas W. Field | Bushwick Ave. & Madison St. |
| 57 | Whitelaw Reid | Reid Ave & VanBuren |
| 58 | Degraw | Degraw, near Smith. |
| 59 | Horace Greeley | Leonard, near Nassau Ave. |
| 60 | Greenwood | 14th Ave., cor. 20th St. |
| 61 | Ditmas Jewell | Fulton St., N. Jersey Ave. |
| 62 | Bradford | Bradford nr. Liberty. |
| 63 | Hinsdale | Hinsdale, nr. Glenm're |
| 64 | Berriman | Berriman & Belmont. |
| 65 | (No name) | Richmond & Ridgewood Ave. |
| 66 | Lew Wallace | Osborn, near Sutter. |
| 67 | Elliott | N. Elliott Pl. & Park Ave. |
| 68 | Kosciusko | Bushwick & Kosciusko |
| 69 | Ryerson | Ryerson, near Myrtle. |
| 70 | Thomas McDonough | Patchen Ave., cor. Macon |
| 71 | Edward Rutledge | Heyward, nr. Lee Ave. |
| 72 | New Lot | New Lots Road and Schenck St. |
| 73 | William J. Morrison | McDougall, cor. Rockaway. |
| 74 | Almon G. Merwin | Kosciusko, nr. B'dway |
| 75 | Evergreen Grove | Evergr. & Ralph Aves. |
| 76 | Independence | Wyona, near Jamaica Ave. |
| 77 | William Penn | 2d St., near 6th Ave. |
| 78 | Seth Thayer Stewart | Pacific, near Court. |
| 79 | Evangeline E. Whitney | Kosciusko, nr. Sumner Ave. |
| 80 | Neptune | W. 17th St. & Neptune Ave. |
| 81 | Unionville | Harway Av.& Stryker. |
| 82 | J. Edward Swanstrom | 4th Ave. & 36th St. |
| 83 | Isaac Newton | Bergen & Schenectady |
| 84 | Glenmore | Glenmore, cor. Stone. |
| 85 | Franklin K. Lane | Evergreen Ave. and Government St. |
| 86 | Irvington | Irving Ave. & Harman St. |
| 87 | Grover Cleveland | Herkimer & Radde Pl. |
| 88 | Vandervoort | Thames St. & Vandervoort Pl. |
| 89 | Vanderveer Park | Newkirk Ave. & 31st St. |
| 90 | Flatbush | Bedford & Church Avs. |
| 91 | Albany Avenue | E. New York & Albany |
| 92 | (No name) | Rogers Ave. & Robinson St. |
| 93 | William H. Prescott | New York Ave. & Herkimer. |
| 94 | Longfellow | 6th Ave. & 50th St. |
| 95 | Gravesend | Van Sicklen, nr. Neck Road. |
| 96 | (No name) | Ocean Ave. & Ave. W. |
| 97 | (No name) | Benson & 25th Ave. |
| 98 | Sheepshead Bay | Ave. Z & 26th St. |
| 99 | Midwood | Coney Island & Elm Aves. |
| 100 | Coney Island | W. 1st St. & Sheepshead Ave. |
| 101 | James D. Lynch | 86th St., nr. 18th Ave. |
| 102 | Bay View | 71st St. & 2d Ave |
| 103 | Borough Park | 14th Ave. & 53d St. |
| 104 | Fort Hamilton | 92d St. & 5th Ave. |
| 105 | Blythebourne | Ft. Hamilton Ave. & 58th St. |
| 106 | Edward Everett Hale | Putnam Ave. & Cornelia St. |
| 107 | John W. Kimball | 8th Ave. & 13th St. |
| 108 | Arlington | Linwood & Arlington. |
| 109 | Isidor Straus | Dumont Ave. & Sackman St. |
| 110 | Monitor | Monitor St. & Driggs Ave. |
| 111 | Algernon S. Higgins | Sterling Pl. & Vanderbilt Ave. |
| 112 | Lefferts Park | 15th Ave., 72d St. |
| 113 | Isaac Chauncey | Evergreen Ave. and Moffat St. |
| 114 | Ryder | Remsen & Ave. F. |
| 115 | Canarsie | E. 92d St., nr. Ave. M. |
| 116 | Plymouth | Knickerbocker Ave. & Grove. |
| 117 | Ten Eyck | Stagg St. & Bushwick Ave. |
| 118 | Charles Dudley Warner | 59th St. & 4th Ave |
| 119 | Amersfoort | Ave. K & E. 38th St. |
| 120 | Barren Island | Barren Island |
| 121 | Livingston | E. 55th St. & Ave O. |
| 122 | William H. Harrison | Harrison Ave, Heyward St. |
| 123 | Suydam | Irving Ave. & Suydam St. |
| 124 | Silas B. Dutcher | 4th Ave. & 13th St |
| 125 | Richard H. Dana | Blake & Thatford Avs. |
| 126 | John Ericsson | Meserole & Guernsey. |
| 127 | McKinley Park | 7th Ave. & 78th St. |
| 128 | Bensonhurst | 21st Ave. & 84th St. |
| 129 | Gates | Quincy, nr Stuyvesant |
| 130 | Parkside | Fort Hamilton & E. 5th. |
| 131 | (No name) | Fort Hamilton & 43d St. |
| 132 | Conselyea | Manhattan & Met Avs |
| 133 | William A. Butler | Butler St & 4th Ave |
| 134 | Parkville | 18th Ave, nr Ocean Parkway. |
| 135 | Rugby | Church Av & E 48th St. |
| 136 | Charles O. Dewey | 4th Ave & 40th St. |
| 137 | Bainbridge | Saratoga Ave & Bainbridge. |
| 138 | (No name) | Prospect Pl. & Nostrand Ave. |
| 139 | Cortelyou | Cortelyou Rd, near Rugby |
| 140 | Winfield Scott | 60th St., w. of 4th Av. |
| 141 | Lucy Larcom | Leonard & McKibbin Sts. |
| 142 | Stranahan | Henry & Rapelye Sts. |
| 143 | Havemeyer | Havemeyer & N 6th S |

ELEMENTARY SCHOOLS IN BROOKLYN—*Continued.*

| No. | Name. | Location. |
|---|---|---|
| 144 | Lincoln Park | Howard & St. Mark's Aves. |
| 145 | Andrew Jackson | Central Ave. & Noll St. |
| 146 | Louisa M. Alcott | 18th St. & 6th Ave. |
| 147 | Isaac S. Remsen | Bushwick Ave. & Seigel St. |
| 148 | Hopkins | Ellery & Hopkins Sts. |
| 149 | East New York | Sutter Ave. & Vermont St. |
| 150 | Christopher | Christopher & Sackman. |
| 151 | Irving Park | Knickerb'ker & Halsey |
| 152 | Glenwood | Ave. G & E. 23d St. |
| 153 | Homecrest | Ave. T & E. 12th St. |
| 154 | Windsor Terrace | 11th Ave. & Sherman St. |
| 155 | Nicholas Herkimer | Eastern Parkway & Herkimer. |
| 156 | Waverly | Sutter Av. & Grafton St. |
| 157 | Franklin | Kent Ave., nr. Myrtle Ave. |
| 158 | Warwick | Belmont Ave. & Warwick. |
| 159 | Pitkin | Pitkin Av. & Crescent St. |
| 160 | William T. Sampson | Ft. Ham. Ave. & 51st St. |
| 162 | Willoughby | Willoughby Ave. & Suydam. |
| 163 | Bath Beach | Benson Ave. & Bay 14th St. |
| 164 | Rodney | 14th Ave. & 42d St. |
| 165 | John Lott | Lott Ave. & Amboy St |
| 166 | George L. A. Martin | S.4thSt.,nr.Havemeyer |
| 167 | Parkway | Schenectady & Eastern Parkway. |
| 168 | Bartlett | Throop Av. & Bartlett. |
| 169 | Sunse Park | 7th Ave. & 44th St. |
| 170 | Lefferts | 5th Ave. & 72d St. |
| 171 | Abraham Lincoln | Ridgewood & Lincoln. |
| 172 | Gowanus | 4 h Ave. & 29th St. |
| 173 | Liberty | Penn. & Glenmore. |
| 174 | Dumont | Dumont & Williams. |
| 175 | Hopkinson | Blake Ave.&Bristol St. |
| 176 | Ovington | Bay Ridge Ave. & 68th. |
| 177 | Marlboro | Ave. P & West Ave. |
| 178 | St. Clair McKelway | Dean St., Saratoga Ave. |
| 179 | Kensington | Ave. C & E. 2d St. |
| 180 | Homewood | 18th Ave. & 67th St. |
| 181 | (No name) | N. Y. Ave. & E. 34th St. |
| 182 | (No name) | Dumont Av. & Wyona St. |
| 183 | (No name) | Saratoga & Riverd'le Av |
| 184 | (No name) | Newport & Stone Aves.. |
| 185 | (No name) | Ridge Blvd. & 86th St. |
| 186 | (No name) | 19th Ave. & 76th St. |
| 194 | Columbia | Columbia & Amity St. |
| | Truant | Jamaica Ave. & Enfield St. |

*QUEENS.*

HIGH SCHOOLS—Training, Flushing and Highland Aves., Jamaica; Bryant, Wilbur Ave., Academy and Radde Sts., Long Island City; Far Rockaway, State St., Far Rockaway; Flushing, Broadway and Whitestone Ave, Flushing; Jamaica, Hillside Ave., Jamaica; Newtown, Chicago Ave. and Grove St., Elmhurst; Richmond Hill, Stoothoff Ave., Richmond Hill; Annexes (P. S. 90), 109th St., near Jamaica Ave., Richmond Hill; (P. S. 51), 117th St., near Jamaica Ave., Richmond Hill.

ELEMENTARY SCHOOLS.

| No. | Name. | Location. |
|---|---|---|
| 1 | Hunters Point | 9th St. & Van Alst Av. |
| 2 | Sunny Side | Hulst St. & Nelson Av. |
| 3 | Forest Hills | Colonial Ave. & Livingston. |
| 4 | Darwin | Prospect St., nr. Beebe Ave. |
| 5 | Van Dyke | Academy St., near Grand Ave. |
| 6 | John H. Thiry | Steinway Ave., near Patterson |
| 7 | Astoria | Van Alst Ave., near Astoria Ave. |
| 8 | John A. Dix | Steinway Ave., near Ditmas. |
| 9 | Hallett's Cove | Munson St., nr. Astoria Ave. |
| 10 | Phoebe Cary | Astoria Ave., nr. Frye St. |
| 11 | Woodside | Woodside Ave. |
| 12 | James B. Colgate | Sinclair Ave., nr. Fiske |
| 13 | Clement O. Moore | Parcell St., nr. Chicago St. |
| 14 | Fairview | Van Dusen St., Corona Heights. |
| 15 | Luona | Junction Ave., Corona |
| 16 | Corona | Alburtis Av., Corona. |
| 17 | Martense | Tremann Av., Corona. |
| 18 | Francis A. Walker | Corona Ave., Corona. |
| 19 | Lake | Roosevelt Av., Corona |
| 20 | (No name) | Sanford Av. & Union St. |
| 21 | (No name) | 37th Ave. & Union St. |
| 22 | (No name) | Sanford Av. & Murray St. |
| 23 | (No name) | 35th Av. & Union St. |
| 24 | (No name) | Holley & Robinson Avs. |
| 25 | Richard A. Proctor | Kissena Rd., Melbourne Ave. |
| 26 | (No name) | Fresh Meadow Rd., 67th Ave. |
| 27 | College Point | 122d St. & 14th Ave. |
| 28 | Tallman | 115th St., College Pt. |
| 29 | Poppenhusen | 122d Ave. & 125th St. |
| 30 | John D. Locke | 12th Rd., nr. Cross Island Road. |
| 31 | Bayside | Blvd. & 46th Ave., Bayside. |
| 33 | Creedmore | 222d St. & Bellwood Ave. |
| 34 | John Harvard | Springfield Road and Hollis Ave. |
| 35 | Woodhull | 191st St & Canonburg Road. |
| 36 | St. Albans | Everett St. & Westchester Ave. |
| 37 | Springfield | 40th Ave., nr. Coombs St. |
| 38 | Rosedale | Brookville Blvd. & 137th St. |
| 39 | Far Rockaway | Dinsmore & Nameoke Ave. |
| 40 | Samuel Huntington | Lambertville Ave. & Union Hall. |
| 41 | Crocheron | 35th Ave. & 214th Pl., Bayside. |
| 42 | R. Vernam | Blvd.& Beach 67th St. |
| 43 | Rockaway Park | Blvd.& Beach 110th St. |
| 44 | P. Sarsfield Gilmore | Blvd.& Beach 94th St. |
| 45 | Baisley Park | Garfield St., nr. Rockaway Blvd. |
| 46 | Daniel Boone | Old South Rd., Woodhaven. |
| 47 | (No name) | Hillside & Union Aves |
| 48 | William Wordsworth | South & Carlisle Sts. |
| 49 | Brenton | Brenton Ave., Jamaica |
| 50 | Talfourd Lawn | 101st St., So. Jamaica. |
| 51 | Arthur Middleton | Church, nr. Jamaica Ave. |
| 53 | Charles Carroll | 114th St. & 89th Ave. |
| 54 | Hillside Avenue | Hillside Av. & 125th St. |
| 55 | John Morton | 130th St. & 97th Ave. |
| 56 | Jacob W. Riis | 86th Ave. & 114th St. |
| 57 | Morris Park | 124th St. nr. Jerome Ave. |
| 58 | Woodhaven | Walker & Beaufort Aves. |
| 59 | University Place | 83d St. & Rockaway Blvd. |
| 60 | Snedeker | 87th Rd. & 80th St. |
| 61 | Alonzo B. Cornell | 89th Ave. & 102d St. |
| 62 | Chester Park | 107th St., nr. 101st Av |
| 63 | Old South | Pitkin Ave. & Woodhaven Blvd. |
| 64 | Andre Ampere | 101st Ave. & 83d St. |
| 65 | Pascal | 78th St., nr. Jamaica Ave. |
| 66 | Oxford | 102d St. & 85th Ave. |
| 67 | (No name) | Central Ave., Olmstead Place. |
| 68 | Cambridge | St. Felix Ave. & Seneca St. |
| 71 | East Williamsburg | ForestAv.,E. W'msbg |
| 72 | George Clinton | Maspeth Av., Maspeth |
| 73 | Willam Cowper | LaForge St., nr. Grand |
| 74 | Woodward Avenue | Woodward Av.& Starr St. |
| 76 | Augustus Rapelye | Montgomery & Congress Aves. |
| 77 | (No name) | Seneca Av. & George St. |

ELEMENTARY SCHOOLS IN QUEENS—*Continued.*

| No. | Name. | Location. | No. | Name. | Location. |
|---|---|---|---|---|---|
| 78 | James A. Garfield | Maurice Av. & Ca roll Place. | 90 | Horace Mann | Catalpa St, near Jamaica Ave. |
| 79 | Francis Lewis | 7th Ave. & 14th St. | 91 | Richard Arkwright | Central & Fosdick Avs. |
| 80 | Blissville | Greenpoint Ave. & Bradley. | 92 | Charles P. Leverich | Hayes Ave., 42d St. |
| 81 | Jean Paul Richter | Cypress Av. & Bleecker St. | 93 | Euclid | Forest Av. & Madison St. |
| 82 | Hammond | Kaplan Ave. & LeRoy Place. | 94 | David D Porter | Cutter Ave & Old House Landing. |
| 83 | Ravenswood | Vernon Av. & Graham | 95 | Eastwood | Harvard & Canonburg Road. |
| 84 | Steinway | 110th Ave., nr. Ditmars. | 96 | (No name) | Rockaway Rd. & 131st St. |
| 85 | Humphry Davy | 2d Av., nr. Woolsey, Long Island City. | 97 | Forest Park | 85th and Shipley Sts. |
| 86 | (No name) | Creek St, near Grand. | 98 | Douglaston | Main St., Douglaston. |
| 87 | Middle Village | Weisse Av & Pulaski St. | 99 | (No name) | Kew Gardens. |
| 88 | Seneca | Catalpa Av. & Fresh Pond Road. | 100 | (No name) | Glen Morris. |
| 89 | Elmhurst | Gleane St. & Britton Ave. | 101 | (No name) | Children's Lane and Russell Place. |
| | | | 102 | (No name) | Nassau Heights. |
| | | | | Parental School | Kissena Road., Melbourne Ave. |

*RICHMOND (STATEN ISLAND).*

HIGH SCHOOLS—Curtis, Hamilton Ave. and St. Mark's Pl., New Brighton; Annex, Heberton Ave., Port Richmond.

ELEMENTARY.

| No. | Name. | Location. | No. | Name. | Location. |
|---|---|---|---|---|---|
| 1 | Tottenville | Academy Place. | 19 | (No name) | Greenleaf Ave., W. New Brighton. |
| 2 | Richmond Valley | Wiener St. | 20 | Port Richmond | Heberton Ave. |
| 3 | Pleasant Plains | Latourette St. | 21 | Elm Park | Hooker Pl., Port Richmond. |
| 4 | Kreischer | Arthur Kill Road. | 22 | Graniteville | Washington & Columbus Aves. |
| 5 | Huguenot | Amboy Road. | 23 | Mariners H rbor | Andros Ave. |
| 6 | Betsy Ross | Rossville Av., Rossville | 24 | Summerville | Wash. Ave., Summerville. |
| 7 | Green Ridge | Arthur Kill Rd., Green Ridge. | 25 | Bloomfield | Chelsea Road. |
| 8 | (No name) | Lindenwood Av., Great Kills. | 26 | Carteret | Richmond Turnpike. |
| 9 | De Vries | Knight Av., New Dorp | 27 | Springville | Richmond Ave. |
| 10 | Egbert | Richmond Rd., New Dorp. | 28 | Richmond | Centre St. |
| 11 | Thomas Dongan | Jefferson St., Dongan Hills. | 29 | Castleton Corners | Manor Rd., W. New Brighton. |
| 12 | Ralph Waldo Emerson | Steuben St., Stapleton | 30 | Westerleigh | Fisk Ave., W. New Brighton. |
| 13 | Rosebank | Pennsylvania Ave. | 31 | Guyon | Pleasant Av., Bogardus Corners. |
| 14 | Vanderbilt | Broad & Wright Sts. | 32 | Grymes | Osgood Av., Stapleton |
| 15 | Daniel D. Tompkins | Grant St., Tompkinsville. | 33 | Grantland | Midland Ave. |
| 16 | Henry W. Slocum | Monroe Ave., Tompkinsville. | 34 | Fort Wadsworth | Fingerboard Road. |
| 17 | New Brighton | Prospect Ave. | | | |
| 18 | John Greenleaf Whittier | Broadway, W. New Brighton. | | | |

EDUCATION STATISTICS, NEW YORK CITY
(Compiled by the local school authorities.)

| SCHOOL YEAR. | Ave. Attendance, Day Sch'ls | Schools. | Teachers' Salaries. | Cost of Supplies. | Bond Expenditures. | Teachers, Excluding Sub'tutes. | Pension Payments. |
|---|---|---|---|---|---|---|---|
| | | | *Dollars.* | *Dollars.* | *Dollars.* | | *Dollars.* |
| 1898-1899 | 358,897 | 425 | 8,059,958.89 | 924,727.75 | 3,162,924 45 | 10,008 | 124,296.18 |
| 1899-1900 | 378,211 | 448 | 10,583,133.64 | 891,199.63 | 5,277,596.33 | 10,555 | 214,563.57 |
| 1900-1901 | 397,928 | 517 | 12,587,011.56 | 1,012,433.48 | 5,324,872.08 | 11,388 | 263,805.28 |
| 1901-1902 | 420,480 | 513 | 13,395,882.38 | 900,417.24 | 4,646,974.62 | 12,069 | 343,017.13 |
| 1902-1903 | 439,928 | 506 | 14,351,802.94 | 1,073,413.63 | 6,037,425.07 | 12,696 | 420,026.99 |
| 1903-1904 | 466,571 | 501 | 14,885,891.42 | 1,254,901.40 | 6,541,189.16 | 13,327 | 477,418.74 |
| 1904-1905 | 487,005 | 506 | 15,574,005.00 | 1,147,722.63 | 10,546,333.26 | 14,906 | 526,502.36 |
| 1905-1906 | 505,827 | 510 | 16,870,891.47 | 1,291,400.90 | 12,898,256.51 | 15,878 | 616,984.54 |
| 1906-1907 | 523,084 | 511 | 17,582,067.32 | 1,355,985.55 | 11,931,318.01 | 15,613 | 689,390.64 |
| 1907-1908 | 545,098 | 515 | 18,596,874.70 | 1,498 666.42 | 11,520,694.26 | 16,489 | 724,129.78 |
| 1908-1909 | 574,664 | 528 | 19,713,148.01 | 1,254,241.27 | 7,745,660.58 | 17,073 | 777,800.85 |
| 1909-1910 | 586,673 | 525 | 20,604,324.38 | 1,333,322.69 | 2,739,075.80 | 17,724 | 833,863.59 |
| 1910-1911 | 603,455 | 527 | 21,375,522.95 | 1,310,888.82 | 3,676,448.05 | 18,195 | 880,389.83 |
| 1911-1912 | 627,150 | 527 | 24,247,184.49 | 1,427,069.42 | 4,576,453.75 | 18,892 | 983,554.90 |
| 1912-1913 | 634,515 | 530 | 26,829,003.19 | 1,518,030.22 | 4,543,051.90 | 19,496 | 1,108,874.30 |
| 1913-1914 | 666,345 | 537 | 28,070,965.01 | 1,654,506.95 | 5,011,756.89 | 20,448 | 1,183,397.08 |
| 1914-1915 | 702,856 | 549 | 29,833,323.11 | 1,854,368.11 | 5,084,261.78 | 21,105 | 1,163,800.40 |
| 1915-1916 | 726,844 | 552 | 30,534,644.95 | 1,651,051.53 | 2,952,485.64 | 20,719 | 1,127,492.63 |
| 1916-1917 | 721,136 | 551 | 31,570,413.36 | 1,596,033.75 | 2,529,843.72 | 21,823 | 1,143,646.02 |
| 1917-1918 | 703,807 | 547 | 33,558,852.27 | 1,564,344.25 | 2,094,980 47 | 22,627 | 1,273,591.79 |
| 1918-1919 | 712,245 | 551 | 35,414,517.51 | 1,645,931.80 | 2,694,929.62 | 23,034 | 1,379,150.60 |
| 1919-1920 | 735,062 | 557 | 40,812,256.72 | 1,610,974.32 | 2,806,229.47 | 23,600 | 1,458,433.15 |
| 1920-1921 | 777,136 | | 60,209,528.82 | 1,949,666.65 | 9,559,011.22 | 24,235 | 1,550,933.05 |

Pension payments cover calendar years.

SCHOOL REGISTRATION, SEPTEMBER, 1922.

Elementary schools—Manhattan, 286,938; Bronx, 119,078; Brooklyn, 323,143; Queens, 78,358; Richmond, 20,009—Total, 827,526.

Vocational and training schools, total for the city, 110,254.

High schools, total for the city, 104,289.

Elementary, part-time pupils, 97,504, as against 92,875 in September, 1921.

High schools, part-time pupils, 69,213, as against 33,230 in September, 1921.

## ILLITERACY IN NEW YORK CITY.

[U. S. Census Data, as of January 1, 1920.)

| AGE. | Whole City. | Bronx. | Brooklyn. | Manhattan. | Queens. | Richmond. |
|---|---|---|---|---|---|---|
| Total 10 years of age and over | 4,522,689 | 581,512 | 1,600,302 | 1,875,286 | 373,422 | 92,167 |
| Number illiterate | 281,121 | 26,202 | 98,038 | 140,810 | 12,383 | 3,688 |
| Native white | 2,414,134 | 312,975 | 919,735 | 863,306 | 258,188 | 59,930 |
| Number illiterate | 6,552 | 462 | 2,246 | 3,095 | 592 | 157 |
| Foreign-born white | 1,968,535 | 264,475 | 651,941 | 910,438 | 110,736 | 30,945 |
| Number illiterate | 270,788 | 25,620 | 94,737 | 135,358 | 11,597 | 3,476 |
| Negro | 132,487 | 3,858 | 27,188 | 95,959 | 4,267 | 1,215 |
| Number illiterate | 2,756 | 63 | 791 | 1,723 | 146 | 33 |
| Total 16 to 20 years, inclusive | 465,970 | 61,436 | 175,690 | 181,264 | 38,356 | 9,224 |
| Number illiterate | 4,634 | 273 | 1,575 | 2,532 | 195 | 59 |
| Illiterate males 21 years of age and over | 112,476 | 9,264 | 39,328 | 56,680 | 5,465 | 1,739 |
| Native white | 2,052 | 142 | 716 | 921 | 209 | 64 |
| Foreign-born white | 108,473 | 9,037 | 38,059 | 54,563 | 5,173 | 1,641 |
| Negro | 995 | 31 | 308 | 600 | 43 | 13 |
| Illiterate females 21 years of age and over | 162,602 | 16,558 | 56,694 | 80,857 | 6,627 | 1,866 |
| Native white | 2,745 | 184 | 994 | 1,264 | 250 | 53 |
| Foreign-born white | 158,190 | 16,344 | 55,239 | 78,538 | 6,275 | 1,794 |
| Negro | 1,626 | 28 | 449 | 1,030 | 100 | 16 |

## SCHOOL ATTENDANCE IN NEW YORK CITY.

(U. S. Census Data, as of January 1, 1920.)

| AGE. | Whole City. | Bronx. | Brooklyn. | Manhattan. | Queens. | Richmond. |
|---|---|---|---|---|---|---|
| Total under 7 years of age | 780,375 | 106,819 | 296,658 | 292,246 | 67,662 | 16,990 |
| Total 7 to 13 years, inclusive | 720,933 | 99,429 | 277,514 | 263,742 | 63,700 | 16,548 |
| Number attending school | 675,796 | 92,616 | 259,505 | 247,853 | 60,456 | 15,366 |
| Total 14 and 15 years | 176,728 | 24,320 | 67,193 | 65,549 | 15,792 | 3,874 |
| Number attending school | 138,102 | 19,818 | 51,812 | 51,568 | 11,842 | 3,062 |
| Total 16 and 17 years | 182,073 | 24,396 | 69,815 | 68,597 | 15,663 | 3,602 |
| Number attending school | 49,106 | 7,547 | 17,423 | 19,533 | 3,725 | 878 |
| Total 18 to 20 years, inclusive | 283,897 | 37,040 | 105,875 | 112,667 | 22,693 | 5,622 |
| Number attending school | 24,935 | 3,407 | 8,411 | 11,054 | 1,631 | 432 |

## THE PULITZER SCHOOL OF JOURNALISM.

The School of Journalism at Columbia University, founded and endowed by the late Joseph Pulitzer, opened in September, 1912, and a year later entered its new building at 116th Street and Broadway. The Director is Dr. J. W. Cunliffe; the Director Emeritus, Dr. Talcott Williams. One-fourth of the 150 students in the scholastic year 1922-23 were from New York City and vicinity. There are a reference library of 100,000 books, a file of 50 daily papers (American and foreign) and a "morgue" of 500,000 newspaper clips of which Dr. Talcott Williams's choice private collection was the basis.

*Advisory Board* — Nicholas Murray Butler, Columbia University, N. Y. City; Solomon B. Griffin (1915-1923) *Springfield Republican*, Springfield, Mass.; John Langdon Heaton, *The World*, N. Y. City; Arthur M. Howe (1919-1923), *Brooklyn Daily Eagle;* Victor Fremont Lawson, *Chicago Daily News;* Robert Lincoln O'Brien (1919-1923), *Boston Herald;* Edward Page Mitchell, *The Herald* and *The Sun*, New York City; Melville Elijah Stone, Associated Press, N. Y. City; Ralph Pulitzer, *The World;* Joseph Pulitzer, Jr. (1920-24), *The St. Louis Post-Dispatch;* John Stewart Bryan, *Richmond, Va., News Leader.*

(Of the original Advisory Board of Editors, Gen. Charles Henry Taylor, *The Globe*, Boston, Mass.; Whitelaw Reid, *The Tribune*, New York; St. Clair McKelway, *The Eagle*, Brooklyn, N. Y.; and Charles Ransom Miller, *The Times*, New York, have died.)

Administrative Board—President Butler, Prof. Cunliffe, Dean Hawkes, Prof. Roscoe Brown, Prof. A. H. Thorndike, Prof. Pitkin, Prof. Seager, Prof. C. P. Cooper.

### 1921 PULITZER PRIZES AND TRAVELLING SCHOLARSHIPS.

(Awarded at Commencement, June 7, 1922.)

*For the most disinterested and meritorious public service rendered by an American newspaper* during the year—$500 gold medal to *The New York World* for its work in exposing the operations of the Ku Klux Klan. Previous awards: 1917, no award; 1918, *The New York Times* for its publication in full of so many official reports, documents and speeches relating to the World War; 1919, *Milwaukee Journal* for its campaign for Americanism; 1920, no award; 1921, *The Boston Post* for its work in exposure of Get-Rich-Quick Ponzi.

*For the best example of a reporter's work* during the year, the test being strict accuracy, terseness, the accomplishment of some public good commanding public attention and respect—$1,000 to Kirke L. Simpson of the Washington staff of the *Associated Press* for his articles on the burial of "The Unknown Soldier." Previous awards: 1917, Herbert Bayard Swope, for his articles in *The New York World* on conditions in the German Empire during the World War, Oct. 10, Oct. 15, and from Nov. 4 daily until Nov. 22 of that year; 1918, Harold L. Littledale, *New York Evening Post* for articles leading to reforms in the New Jersey Prison system; 1919, no award; 1920, John J. Leary, Jr., for his articles in *The New York World* during the national coal strike in the winter of 1919; 1921, Louis Seibold of *The New York World* for his interview with President Wilson, published June 18, 1920.

*For the American novel* published during the year which shall best present the wholesome atmosphere of American life, and the highest standard of American manners and manhood—$1,000 to Booth Tarkington, author of *Alice Adams* Previous awards: 1917, no award; 1918, to Ernest Poole, author of *His Family;* 1919, Booth Tarkington, author of *The Magnificent Ambersons;* 1920, no award; 1921, to Edith Wharton, author of *The Age of Innocence.*

*For the best book of the year upon the history of the United States*—$2,000 to James Truslow Adams, author of *The Founding of New England.* Previous awards: 1917, to His Excellency J. J Jusserand, the French Ambassador, author of *With Americans of Past and Present Days;* 1918, James Ford Rhodes, author of *A History of the Civil War;* 1919, no award; 1920, to Justin H. Smith, author of *The War with Mexico;* 1921, to Rear Admiral William Snowden Sims, author of *The Victory at Sea.*

*For the best American biography teaching patriotic and unselfish services* to the people, illustrated by an eminent example, excluding as too obvious, the names of George Washington and Abraham Lincoln —$1,000 to Hamlin Garland, author of *A Daughter of the Middle Border.* Previous awards: 1917, to Laura E. Richards and Maude Howe Elliott, assisted by Florence Howe Hall, authors of *Julia Ward Howe;* 1918, William Cabell Bruce, author of *Benjamin Franklin, Self-Revealed;* 1919, to Henry Adams (Post Obit), author of *The Education of Henry Adams;* 1920, to Albert J. Beveridge, author of *The Life of John Marshall;* 1921, to Edward Bok, for *The Americanization of Edward Bok* (autobiography).

*For the original American play* performed in New York which shall best represent the educational value and power of the stage in raising the standard of good morals, good taste and good manners—$1,000 to Eugene O'Neill, author of *Anna Christie.* Previous awards: 1918, to Jesse Lynch Williams, author of *Why Marry;* 1919, no award; 1920, Eugene O'Neill, author of *Beyond the Horizon;* 1921, Miss Zona Gale, author of *Miss Lulu Bett.*

*For the best editorial article written during the year*, the test of excellence being clearness of style, moral purpose, sound reasoning and power to influence public opinion in the right direction—$500, awarded to Frank M. O'Brien for an article entitled *The Unknown Soldier*, printed in the *New York Herald*, Nov. 11, 1921. Previous awards: 1917,

to an editorial in the *New York Tribune*, on the first anniversary of the sinking of the *Lusitania;* 1918, to the Louisville (Ky.) *Courier-Journal*, for the editorial article *Vae Victis*, by Henry Watterson; 1919, no award; 1920, to Harvey E. Newbranch of the *Evening World-Herald*, Omaha, Neb, for *Law and the Jungle;* 1921, no award.

*For the best cartoon published in any American newspaper during the year*, the determining qualities being that the cartoon shall embody an idea made clearly apparent, shall show good drawing and striking pictorial effect, and shall be helpful to some commendable cause of public importance—$500 to Rollin Kirby of *The New York World, On the Road to Moscow.*

*For the best book of verse by an American author*—$1,000 to Edwin Arlington Robinson for *Collected Poems.*

An award of $1,000 for *the best history of the services rendered to the public by the American press* during the preceding year was made in 1918 to Minna Lewinson and Henry Beetle Hough (School of Journalism), for *The History of Service Rendered to the Public by the American Press During the Year 1917.*

PULITZER SCHOLARSHIPS.

*Three travelling scholarships*, having the value of $1,500 each, to graduates of the School of Journalism who shall have passed their examinations with the highest honor and are otherwise most deserving, to enable each of them to spend a year in Europe to study social, political and moral conditions of the people, and the character and principles of the European press—Won by Robert Arthur Curry, Nassau, N. P., Bahamas I.; Zilpha Mary Carruthers, Denver, Colo.; Robert Henry Best, Spartanburg, S. C. Previous awards: 1917, Geddes Smith, David S. Levy, Otto D. Tolischus; 1918, no awards; 1919, no awards; 1920, Robert Gordon Wasson, Katherine MacMahon, Clyde Alden Beals; 1921, Martha Frances Drewry, Girard Chaput, Edward Harrison Collins.

*An annual scholarship* having the value of $1,500 to the student of music in America who may be deemed the most talented and deserving, in order that he may continue his studies with the advantage of European instruction—Awarded to Sandor Harmati, of Hollis, L. I., for a symphonic poem entitled *Folio.* Previous awards: 1917, Meyer I. Silver for composition; 1918, Samuel Gardner, student in the Institute of Musical Art; 1919, no award; 1920, Bernard Rogers, for composition; 1921, to Foster Montgomery Hankins, self-taught, for *Symphony in F Minor.*

*An annual scholarship* having the value of $1,500 to an art student in America who shall be certified as the most promising and deserving by the National Academy of Design, with which the Society of American Artists has been merged—Awarded to Miss Edith Bell, Des Moines, Ia. Previous awards: 1917, John Matulka, New York City; 1918, to Dusham M. Rusitch, of the National Academy of Design Schools; 1919, to Jacob B. Greene, student of National Academy of Design Schools; 1920, to Frederick C. Freder, National Academy of Design Schools; 1921, to Vincent Nesbert, Pittsburgh, Pa.

Henry Woodward Sackett has offered two scholarships of $250 each to the two graduates of 1923 in the Pulitzer School of Journalism who, in the faculty's judgment, do the best work in the study of the law of libel and the rights and duties of newspapers, and become candidates for the degree of master of science in journalism in 1923-1924.

PULITZER SCHOLARS.

Of the 61 candidates (graduates of New York City public schools) for the Pulitzer Scholarships at Columbia University, 1922, 37 passed the qualifying examinations. Of these 12 were selected. Each Pulitzer Scholar receives upon the usual conditions of satisfactory performance, a stipend of $250 and, in addition, free tuition if he attends Columbia University.

## ASYLUMS AND HOMES IN MANHATTAN AND BRONX.

American Female Guardian Society and Home for the Friendless, 936 Woodycrest Ave.
Anthony Home, 119 E. 29th St.
Association for the Relief of Respectable, Aged and Indigent Females, Amsterdam Ave. and 104th St.
Baptist Home for the Aged, 116 E. 68th St.
Beth Abraham (for Incurables), 612 Allerton Ave.
Big Sisters' Home, 378 E. Tremont Ave.
Blind, Asylum for Indigent, Welfare, (Blackwell's Isl).
Bourne Workshop for the Blind, 338 E. 35th St.
Catholic Guardian Soc., 114 E. 47th St.
Catholic Home Bureau for Dependent Children, 105 E. 22d St.
Catholic Centre for Blind, Sisters of St. Dominic, 119 W. 70th St.
Catholic Institute for the Blind, 221st St. and East Chester Road.
Catholic Orphan Asylum, office, 24 E. 52d St.
Catholic Protectory, Westchester, N. Y. City office and reception house, 415 Broome St.
Chapin Adoption Nursery, 2100 Lexington Ave.
Chelsea House Assoc., 434 W. 20th St., 363 W. 34th St.
Children's Aid Society, Headquarters, 105 E. 22d St.; Emergency Shelter, 307 E. 12th St.
Christian Workers' Home, 7 Gramercy Park West.
Christodora House, 147 Ave. B.
Chrystie Street House, 77 Horatio St.
Church of God Missionary Home, 2132-2146 Grand Ave.
Church Mission of Help, 2 E. 24th St.
City Home for the Aged and Infirm, Welfare Island.
Clara de Hirsch Home for Working Girls, 225 E. 63d St.
Colored Orphan Asylum, Palisade Ave. and W. 259th St.
Darrach Home, for Crippled Children, 118 W. 104th St.
Daughters of Jacob, 301 E. Broadway.
Dominican Home for Working Girls, 207 E. 71st St.
Dominican Sisters' Home for Working Girls, 207 E. 71st St.
Door of Hope (Tappan, N. Y.) office, 122 W. 14th St.
Edgewater Creche, (Englewood, N. J.), office, 105 E. 22d St.
Elizabeth Home for Girls, 307 E. 12th St.
Five Points House of Industry, office, 454 W. 23d St.
Florence Crittenton Home, 427 W. 21st St.
French Home for Young Women, 341 W. 30th St.
Half-Orphan Asylum, Manhattan Ave. and 104th St.
Harlem Home of the Daughters of Israel, 32 E. 119th St.
Hebrew Infant Asylum, University Ave. and Kingsbridge Road.
Hebrew National Orphan House, 1 2d Ave.
Hebrew Orphan Asylum, Amsterdam Ave. and 138th St.; Friendly Home, 545 W. 159th St.
Hebrew Immigrant Shelter, 229 E. Broadway.
Hebrew Sheltering and Immigrant Aid Society, 425 Lafayette St.
Hebrew Sheltering Guardian Society—Orphan Asylum Annex, 470 W. 145th St.
Home for the Aged (Little Sisters of the Poor), 213 E. 70th St.; 135 W. 106th St., Belmont Ave. and 183d St.
Home for Aged and Infirm Hebrews, 121 W. 105th St.
Home for Destitute Blind, Grand Concourse and Kingsbridge Road.
Home for Disch'd Women Prisoners, 17 Beekman Pl.
Home for Incurables, Third Ave. and 182d St.
Home for Old Men and Aged Couples, Amsterdam Ave. and 112th St.
Home of the Sons and Daughters of Israel, 232 E. 10th St.
Hopper, Isaac T., Home, 110 Second Ave.
House of the Annunciation for Crippled and Incurable Children, 155th St. and Broadway.
House of Calvary, Featherbed Lane and Macomb's Road.
House of the Good Shepherd, 90th St. and East River.
House of the Holy Comforter, 196th St. and Grand Concourse.
House of the Holy Family, 136 Second Ave.
House of Refuge, Randall's Island.
Howard Mission and Home for Little Wanderers, 225 E. 11th St.
Huguenot Home, 237 W. 24th St.
Hungarian Immigrants' Home, 32 Pearl St.
Industrial Christian Alliance, 243 W. 11th St.
Institution for the Improved Instruction of Deaf Mutes, Lexington Ave. and 67th St.
Institution of Mercy, Madison Ave. and 81st St.
International Institute for Young Women, 119 E. 21st St.
Isabella Heimath, Amsterdam Ave. and 190th St.
Israel Orphan Asylum, 274 Second St.
Japanese Christian Institute, 330 E. 57th St.
Jeanne d'Arc Home for French Girls, 251 W. 24th St.
Jewish Convalescence Home, 183 Second Ave.
Ladies' Christian Union, maintains the Young Women's Home, 49 W. 9th St.; Branch Home, 308 Second Ave.; The Eva, 153 E. 62d St.; The Rosemary, 24 W. 12th St.; The Katherine, 118 W. 13th St.
Leake & Watts Orphan Asylum, Hawthorne Ave., near City line; office, 262 Greene St.
Leo House for German Catholic Immigrants, 6 State St.
Letchworth Village (office), 7 Wall St.

Lincoln Hospital and Home, Concord Ave and E. 141st St.
Little Sisters of the Poor, 135 W. 136th St.; 213 E 70th St.; 183rd St. and Belmont Ave.
Maedchenheim-Verein, 217 E. 62d St.
Manhattan State Hospital (Insane Asylum), Ward's Island.
Margaret and Sarah Switze Institute and Home (Girls), 27 Christopher St.
Margaret Louisa, The (Y. W. C. A.), 14 E. 16th St.
Methodist Episcopal Church Home, Amsterdam Ave. and 92d St.
Methodist Deaconess Home, 1175 Madison Ave.
Milbank Memorial Home, 24 W. 12th St.
Missionary Home, 690 Eighth Ave.
Misericordia Home, 531 E. 86th St.
Montefiore Home and Hospital, Gun Hill Road, near Jerome Ave.
Montessori Children's House, 673 West End Ave.
Municipal Lodging House, 432 E. 25th St.
Newsboys' Lodging House (Brace Memorial), 14 New Chambers St.
New York Home for Homeless Boys, 443 E. 123d St.
New York Infant Asylum, 161 W. 61st St.
New York Institute for the Education of the Blind, 412 Ninth Ave.
New York Institute for the Instruction of the Deaf and Dumb Ft. Washington Ave. and W. 163d St.
Norwegian Immigrants' Home, 45 Whitehall St
Odd Fellows' Home, Unionport.
Old Ladies' Home, Amsterdam Ave. and 104th St.
Orphans' Home and Asylum of the P. E. Church, Convent Ave. and 135th St.
Peabody Home for Aged and Indigent Women, 2064 Boston Road.
Polish National Alliance, 23 St. Marks Pl.
Presbyterian Home for Aged Women, 49 E. 73d St.
Pullman Porters' Home, 280 E. 160th St.
Regina Angelorum Working Girls Home, 112 E. 106th St.
Sacred Heart Orphan Asylum, Ft. Washington Ave. and 190th St.
Sailors' Home and Institute, 507 West St.
St. Ann's Home for Children, 504 E. 90th St.
St. Barnabas's House, 304 Mulberry St.
St. Francis's Home for the Aged, 609 5th St.
St. Joseph's Asylum, 220 E. 4th St.
St. Joseph's Home for the Aged, 209 W. 15th St.
St. Joseph's Home for Destitute Children (Peckskill, N. Y.); House of Reception, 12 W. 129th St.
St. Joseph's Home for Working Girls, 117 Broad St.
St. Joseph's Institute for Deaf Mutes, Eastern Boulevard, Throgg's Neck.
St. Luke's Home for Aged Women, Broadway and 114th St.
St. Margaret's Home for Working Girls, 603 Walton Ave.
St. Mary's Home, 143 W. 14th St.
St. Philip's Home for Industrious Working Boys, 417 Broome St.
St. Raphael's Home for Italian Immigrants, 8 Charlton St.
St. Rose's Free Home for Incurable Cancer, 71 Jackson St.
Salvation Army, National Headquarters, 120 W. 14th St.; Home for Orphans and Deserted Children, Spring Valley, N. Y.; Industrial Homes for Men, 533 W. 48th St. and 229 E. 120th St.; Rescue Home for Fallen Women, 318 E. 15th St.; Hotel for Men (Memorial Hotel), 225 Bowery; Shelter for Homeless Women, 243 Bowery.
Samaritan Home for the Aged, 414 W. 22d St.
Scandinavian Immigrants' Home, 22 Greenwich St.
Seamen's Church Institute, 25 South St.
Seaside Home for Crippled Children, Hotel Ansonia (office).
Sevilla Home for Children, Hunts' Point.
Shelter for Respectable Girls, 212 E. 46th St.
Sheltering Arms, Amsterdam Ave. and 129th St.
Society for Prevention Cruelty to Children, 51 Irving Place; 214th St. and Bolton Road (Inwood); 355 E. 137th St. The new home, under construction late in 1921 is on 5th Ave., bet. 104th and 105th Sts.
Swedish Lutheran Immigrant Home, 5 Water St.
Travelers' Aid Society, 25 W. 43d St.; 465 Lexington Ave.
Tuberculosis Preventorium for Children (office), 125 E. 22d St.
Washington Heights Orphan Asylum, 841 St Nicholas Ave.
Washington Square Home for Friendless Girls, 9 W. 8th St.
Webb's Academy and Home for Shipbuilders, Sedgwick Ave. and 188th St.

## HOSPITALS IN MANHATTAN, BRONX AND RICHMOND BOROUGHS.

A. S. P. C. A. Shelter and Hospital, Ave. A and 24th St.
American Veterinary Hospital, 141 W. 54th St.
Army, U. S. Hospital and Institution for care of sick and disabled soldiers, Kingsbridge Road and Sedgwick Ave. (formerly the R.C. Orphan Asylum).
Babies' Hospital, 135 E. 55th St.
Beekman St. Hospital, Beekman and Water Sts.
Bellevue Hospital, First Ave. and E. 26th St.
Beth David Hospital, 1824 Lexington Ave.
Beth Israel Hospital, Jefferson and Cherry Sts.
Bide-a-Wee Home for Animals, 410 E. 38th St.
Bloomingdale Hospital for the Insane, White Plains, N. Y.; Office 8 W. 16th St.
Broad Street Hospital, 129 Broad St.
Bronx Eye and Ear Infirmary, 459 E. 141st St.
Bronx Hospital and Dispensary, 1385 Fulton Ave.
Bronx Jewish Maternity Hosp., 1525 Wash. Ave.
Bronx Maternity Hospital, 166th St. and Grand Concourse.
Central Islip State Hospital (Insane), Central Islip, L. I.; office, 30 E. 42d St.
Children's Clinic (Department of Health): Manhattan—Gouverneur Slip (Eye), Pleasant Ave. and 118th St. (Eye, Nose and Throat), 449 East 121st St. (Dental; Eye), P. S. 144, Hester and Allen Sts. (Eye), P. S. 21, 222 Mott St. (Eye). Bronx—580 E. 169th St. (Dental; Eye, Nose and Throat). Richmond—689 Bay St., Stapleton.
Children's Hospital, Randall's Island.
City Hospital, Blackwell's (Welfare) Island.
College of Dental and Oral Surgery of New York, Infirmary, 302 E. 35th St.
Columbus Hospital, 226 E. 20th St.
Community Hospital, 19 W. 101st St.
Cornell University Medical College, First Ave. and 28th St.
Dispensary for Animals, A. S. P. C. A., Avenue A and 24th St.
Emergency Relief Station for City and Metropolitan Hospitals, foot E. 70th St.
Fifth Ave. Hospital, at 105th St.
First Field Hospital, 56 W. 66th St.
Floating Hospital, St. John's Guild; office, 103 Park Ave.
Flower Hospital, Eastern Boulevard and E. 163d St.
Fordham Hospital, Crotona Ave. and Southern Boulevard.
French Hospital, 450 W. 34th St.
German Hospital and Dispensary (now called Lenox Hill Hospital), Park Ave. and 77th St.
Good Samaritan Dispensary, 75 Essex St.
Gouverneur Hospital, Gouverneur Slip and Front St.
Grace Hospital and Dispensary, 414 E. 14th St.
Harlem Dispensary, 108 E. 128th St.
Harlem Eye, Ear and Throat Infirmary, 2099 Lexington Ave.
Harlem Hospital, Lenox Ave. and 136th St.
Herman Knapp Memorial Eye Hospital, Tenth Ave. and 57th St.
Hospital and House of Rest for Consumptives, Inwood, N. Y. C.; office, 59 E. 59th St.
Hospital for Contagious Eye Diseases, Pleasant Ave. and 118th St.
Hospital for Deformities and Joint Diseases, 1919 Madison Ave.
Hospital for Incurables, City Home for Aged and Infirm, Blackwell's (Welfare) Island.
Hospital for Ruptured and Crippled, 321 E. 42d St.
House of the Annunciation for Crippled and Incurable Children, Broadway and 155th St.
House of Calvary (cancer, lupus, etc.), Featherbed Lane and Macomb's Road.
Hudson Street Hospital, 67 Hudson St. (U. S. Public Health Service Hospital, No. 70).
Italian Hospital, 83d St. and East River.
Jewish Maternity Hospital, 270 East Broadway.
Kings Park State Hospital, office 30 E. 42d St.
Knickerbocker Hospital, Amsterdam Ave. and 131st St.
Lebanon Hospital, Westchester, Cauldwell and Trinity Aves.
Lincoln Hospital and Home, E. 141st St. and Concord Ave.
Louisa Minturn Hospital, foot E. 16th St.
Lutheran Hospital, Convent Ave. and 144th St.
Lying-in Hospital, Second Ave., 17th and 18th Sts
Manhattan Eye and Ear Hospital, 210 E. 64th St.
Manhattan Maternity and Dispensary, 327 F, 60th St.
Manhattan State Hospital (Insane), Ward's Island; office, 30 E. 42d St.
Manhattan White Cross Hospital, 72 W. 50th St.
Marine Hospital, Stapleton, S. I. Office and Dispensary in Barge Office, Manhattan.
Memorial Hospital (cancer), Central Park West and 106th St.
Metropolitan Hospital, Blackwell's (Welfare) Island.

Metropolitan Throat Hospital, 351 W. 34th St.
Misericordia Hospital, 531 E. 86th St.
Montefiore Home and Hospital for Chronic Diseases, Gun Hill Road, near Jerome Ave.
Mount Sinai Hospital, Fifth Ave. and 100th St.
Neurological Hospital, Blackwell's (Welfare) Island.
New York Children's Hospital, Randall's Island.
New York College of Dentistry, Infirmary, 205 E. 23d St.
New York Dispensary, 34 Spring St.
New York Eye and Ear Infirmary, Second Ave. and 13th St.
New York Foundling Hospital, 175 E. 68th St.
New York Hospital, 8 W. 16th St.
New York Infirmary for Women and Children, 321 E. 15th St.
New York Neurological Institute, 149 E. 67th St.
New York Nursery and Child's Hospital, Amsterdam Ave. and 61st St.
New York Ophthalmic Hospital, 201 E. 23d St.
New York Orthopaedic Dispensary and Hospital, 426 E. 59th St.
New York Polyclinic Medical School and Hospital, 345 W. 50th St.
New York Post-Graduate Medical School and Hospital, Second Ave. and 20th St.
New York Skin and Cancer Hospital, Second Ave. and 19th St.
New York Throat, Nose and Lung Hospital, 229 E. 57th St.
New York Veterinary Hospital, 120 W. 25th St.
New York Women's League for Animals, Hospital and Dispensary, 350 Lafayette St.
North Eastern Dispensary, 222 E. 59th St.
North Western Dispensary, Ninth Ave. and 36th St.
Northern Dispensary, Waverley Place and Christopher St.
Pasteur Institute, Inc., 348 W. 22d St.

HOSPITALS IN BROOKLYN

Bethany Deaconesses' and Hospital Society Hospital, St. Nicholas Ave. and Bleecker St.
Bradford Street Hospital, 113 Bradford St.
Brooklyn City Dispensary, 11 Tillary St.
Brooklyn Eastern District Dispensary and Hospital, 108 S. 2d St.
Brooklyn Eastern District Homoeopathic Dispensary, 194 S. 3d St.
Brooklyn Eye and Ear Hospital, 94 Livingston St.
Brooklyn Hospital, Raymond St. and De Kalb Ave.
Brooklyn Maternity Hospital, 298 S. 2d St.
Brooklyn Nursery and Infants' Hospital, 396 Herkimer St.
Brownsville and East New York Hospital, Rockaway Parkway and Avenue A.
Bushwick and East Brooklyn Dispensary, Myrtle and Lewis Aves.
Bushwick Hospital, Howard and Putnam Aves.
Caledonian Hospital, 53 Woodruff Ave.
Children's Clinics (Eye, Nose, and Throat; Dental), Department of Health: Brooklyn—330 Throop Ave., 1249 Herkimer St., 45 Lawrence St. Queens Borough—374 Fulton St., Jamaica, L. I.
Coney Island Hospital, Ocean Parkway, near Avenue Z.
Cumberland Street Hospital, 109 Cumberland St.
Flushing Hospital, Parsons & Forest Aves., Flushing.
Greenpoint Hospital, Kingsland Ave. and Bullion St.
Harbor Hospital, Cropsey & 23d Aves.
Holy Family Hospital, 155 Dean St.
Hospital of the House of St. Giles the Cripple, Brooklyn Ave. and President St.
Jamaica Hospital, New York Ave., Jamaica, L. I.
Jewish Hospital, Classon and St. Marks Aves.
Kings County Hospital, Clarkson St., near Albany Ave.
Long Island College Hospital, Henry, Pacific, and Amity Sts.
People's Hospital, 203 Second Ave.
Philanthropian Hospital, Fifth Ave. and 128th St.
Presbyterian Hospital, Madison Ave., between 70th and 71st Sts.
Reconstruction (absorbed De Milt Dispensary and Park Hospital) 100th St. and Central Park West.
Riverside Hospital, North Brother Island, East River.
Rockefeller Institute for Medical Research Hospital, Avenue A and 66th St.
Roosevelt Hospital, Ninth Ave. and 59th St.
St. Andrew's Convalescent Hospital, 237 E. 17th St.
St. Ann's Maternity Hospital, 130 E. 69th St.
St. Elizabeth's Hospital, 415 W. 51st St.
St. Francis's Hospital, Brook Ave. and E. 142d St.
St. Joseph's Hospital, Brook Ave. corner E. 142d St.
St. Lawrence Hospital, Edgecombe Ave. and 163d St.
St. Luke's Hospital, Amsterdam Ave. and 113th St.
St. Mark's Hospital, 177 Second Ave.
St. Mary's Free Hospital for Children, 405 W. 34th St.
St. Vincent's Hospital, Seventh Ave. and 12th St.
Sanitarium for Hebrew Children, 224 W. 34th St.
Scarlet Fever and Diphtheria Hospital (Willard Parker), foot E. 16th St.
Seaside Hospital of St. John's Guild, New Dorp, S. I., 103 Park Ave.
Sea View Hospital, Castleton Corners, Staten Island.
Seton Hospital, Spuyten Duyvil Parkway (tuberculosis).
Sloane Hospital for Women, 447 W. 59th St.
Staten Island Hospital, New Brighton, S. I.
Union Hospital of the Bronx, Valentine Ave. and 188th St.
Vanderbilt Clinic, Amsterdam Ave. and 60th St.
Volunteer Hospital (See Beekman St.)
Washington Square Hospital, 31 Washington Sq. W.
Willard Parker and Reception Hospital, foot of E. 16th St.
Woman's Hospital, 141 W. 109th-St

HOSPITALS IN BROOKLYN AND QUEENS BOROUGHS.

Long Island State Hospital (insane), Clarkson St. and Albany Ave.
Lutheran Hospital, East New York Ave. and Junius St.
Mary Immaculate Hospital, Shelton Ave., Jamaica.
Memorial Dispensary for Women and Children, 827 Sterling Place.
Methodist Episcopal Hospital, Seventh Ave. and 7th St.
Naval Hospital, Flushing Ave., foot Ryerson St.
Neponsit Beach Hospital for Children, Rockaway Beach.
New Utrecht Dispensary, 1275 37th St.
Norwegian Hospital, Fourth Ave. and 46th St.
Peck, Carson C., Memorial Hospital, Crown St.
Prospect Heights Hospital, Washington Ave. and St. John's Place.
St. Anthony's Hospital, Woodhaven.
St. Catherine's Hospital, Bushwick Ave.; near Ten Eyck St.
St. Christopher's Hospital for Babies, 281 Hicks St.
St. John's Hospital, Atlantic and Albany Aves.
St. John's Long Island City Hospital, 12th St. and Jackson Ave.
St. Joseph's Hospital, Central Ave., Far Rockaway.
St. Mary's Hospital, St. Mark's Ave., near Rochester Ave.
St. Mary's Hospital, Ray St. and Shelton Ave., Jamaica.
St. Peter's Hospital, Henry St., between Congress and Warren Sts.
Samaritan Hospital, Fourth Ave. and 17th St.
Seaside Hospital for Babies, Surf Ave. and 21st St., Coney Island.
Surgical Sanitarium, 1223 Bushwick Ave.
Swedish Hospital, Rogers Ave. and Sterling Place.
Williamsburg Hospital, 108 S. 3d St.
Wyckoff Heights Hospital, St. Nicholas Ave. and Stanhope St.

HEALTH CENTRES.

In addition to the hospitals named above, there are being established throughout the city what are called Health Centres, planned to co-ordinate the activities of public and private health and welfare agencies. The first, East Harlem Centre, 345 E. 116th St., was founded by the American Red Cross.

## EXEMPT REAL ESTATE IN THE CITY OF NEW YORK.

(Figures show the estimated 1922 valuation.)

Owned by the United States Government—Forts, $18,398,400; Navy Yard, $21,514,000; Post Office, $21,268,500; Custom House, $9,176,000; Sub-Treasury, $6,350,000—Other and total, $148,346,300.

Owned by the State of New York—Armories, $3,102,900; State lands, $8,771,675—Other and total, $13,543,275.

Owned by the City of New York—Parks, $811,145,535; subways, $268,738,460; piers, $216,021,770; aqueduct (within the city only), $111,477,300; schools, $152,156,150; bridges, $109,331,370, sewers, $87,406,825; public buildings, $57,983,575; hospitals, $46,703,160; libraries, $32,230,000—Other and total, $1,963,336,170.

Owned by private organizations—Religious property, $222,604,420; institutions of instruction, $53,341,150; hospitals, $51,846,700, other benevolences, $48,227,950; asylums, $32,553,550; cemeteries, $38,860,025; subways, $9,060,452—Other and total, $462,082,509.

Exempt property by boroughs—Manhattan, $1,702,858,622; Bronx, $234,252,430; Brooklyn, $508,568,196; Queens, $95,546,695; Richmond, $46,081,345—Total for the City of New York, $2,587,306,688.

## VALUABLE MANHATTAN BUILDINGS.

(1923 Tax Department, assessed valuations, subject to revision.)

OFFICE BUILDINGS ($2,000,000 OR MORE).

| NAME. | 1923. | NAME. | 1923. | NAME. | 1923. |
|---|---|---|---|---|---|
| | *Dollars.* | | *Dollars.* | | *Dollars.* |
| Equitable | 30,000,000 | Fiske | 5,200,000 | 280 Broadway | 3,200,000 |
| Am. Tel. & Tel. | 17,800,000 | 50 Church Street | 5,110,000 | Longacre | 3,200,000 |
| Stock Exchange | 13,800,000 | Mills Building | 5,000,000 | Commercial Cable Co. | 3,000,000 |
| Metropolitan Life | 13,250,000 | N. Y. Prod. Exch. | 4,900,000 | Lincoln Trust | 3,000,000 |
| Woolworth Bldg. | 12,500,000 | Knickerbocker | 4,900,000 | World Building | 2,975,000 |
| Cunard | 11,000,000 | Marbridge | 4,825,000 | Consolidated Gas Co. | 2,800,000 |
| Mutual Life | 10,400,000 | Empire | 4,800,000 | Fitzgerald | 2,700,000 |
| 165 Broadway | 8,650,000 | Hanover | 4,775,000 | Heckscher No. 2 | 2,700,000 |
| 30 Church Street | 8,250,000 | Bowling Green | 4,500,000 | Aeolian | 2,600,000 |
| Singer Building | 8,200,000 | Garment Centre | 4,500,000 | Penn. Terminal | 2,540,000 |
| Whitehall Bldg. | 8,110,000 | American Express | 4,375,000 | 24 Broad Street | 2,500,000 |
| Adams Express | 8,000,000 | 42 Broadway | 4,375,000 | 60 Wall Street | 2,500,000 |
| American Surety | 7,500,000 | Strauss | 4,350,000 | Borden | 2,500,000 |
| 26 Broadway | 7,250,000 | Loew | 4,300,000 | 50 Broad Street | 2,450,000 |
| Bankers Trust | 7,000,000 | Carbon and Carbide | 4,300,000 | Metrop Life Annex | 2,350,000 |
| 111 Broadway | 7,000,000 | 80 Maiden Lane | 4,200,000 | Brokaw Brothers | 2,300,000 |
| Canadian Pacific | 6,600,000 | 500 Seventh Ave | 3,777,000 | Candler | 2,275,000 |
| National City Bank | 6,300,000 | 2 Rector Street | 3,700,000 | Wurlitzer | 2,200,000 |
| Broad Exchange | 6,000,000 | Guaranty Trust | 3,675,000 | Exhibition | 2,180,000 |
| 115 Broadway | 6,000,000 | Washington | 3,650,000 | Tribune Building | 2,150,000 |
| J. P. Morgan | 5,800,000 | National Park Bank | 3,600,000 | Ideal Investing Co. | 2,150,000 |
| Heckscher | 5,725,000 | Emigrant Bk. Bldg. | 3,525,000 | Liberty Tower | 2,050,000 |
| National Bk Com | 5,700,000 | Exchange | 3,500,000 | U. S. Rubber Co | 2,050,000 |
| Central Tel. Exchange | 5,325,000 | Mechanics and Metals | 3,500,000 | Flatiron Building | 2,025,000 |
| Textile | 5,250,000 | Putnam | 3,400,000 | Seaboard Bank | 2,000,000 |

HOTELS ($500,000 OR MORE).

| NAME. | 1923. | NAME. | 1923. | NAME. | 1923. | NAME. | 1923. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| Plaza | 11,500,000 | St. Regis | 2,850,000 | St. Urban | 1,100,000 | Wellington | 750,000 |
| Pennsylvania | 11,000,000 | Majestic | 2,225,000 | Belleclaire | 1,075,000 | Manhat'n Sq. | 750,000 |
| McAlpin | 9,850,000 | Imperial | 1,935,000 | P. Stuyvesant. | 1,050,000 | Robt. Fulton | 750,000 |
| Biltmore | 9,500,000 | Martinique | 1,920,000 | Bristol | 1,025,000 | Walcott | 735,000 |
| Commodore | 9,500,000 | Wallack | 1,750,000 | Cumberland | 925,000 | Hermitage | 715,000 |
| Waldorf | 7,700,000 | Annex | 440,000 | Poseley Court. | 925,000 | Wallace | 700,000 |
| Astor | 7,130,000 | Breslin | 1,625,000 | Berkeley | 850,000 | Colonial | 650,000 |
| Ritz-Carlton | 5,850,000 | Bretton Hall | 1,600,000 | Sherman Sq. | 835,000 | Endicott | 650,000 |
| Belmont | 5,000,000 | Continental | 1,500,000 | Annex | 600,000 | Hargrave | 640,000 |
| Waldorf | 4,525,000 | Chatham | 1,375,000 | American | 800,000 | Algonquin | 600,000 |
| Ansonia | 4,500,000 | Woodstock | 1,325,000 | Woodward | 800,000 | Collingwood | 600,000 |
| Ambassador | 4,200,000 | St. Andrew | 1,300,000 | Royalton | 800,000 | Somerset | 560,000 |
| Gotham | 3,000,000 | Marie Ant'tte. | 1,300,000 | Beresford | 800,000 | Longacre | 540,000 |
| Claridge | 2,900,000 | Turin | 1,140,000 | Gerard | 750,000 | Albemarle | 525,000 |

THEATRES ($200,000 OR MORE).

| NAME. | 1923. | NAME. | 1923. | NAME. | 1923. | NAME. | 1923. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| Loew's | 4,200,000 | Columbia | 1,250,000 | Belasco | 570,000 | Cort | 420,000 |
| Met. Op. H'se. | 3,800,000 | Astor | 1,225,000 | Eltinge | 570,000 | 48th Street | 420,000 |
| Strand | 2,950,000 | New Amst'd'm. | 1,120,000 | Republic | 565,000 | Longacre | 410,000 |
| Cohan | 2,700,000 | Lincoln Square | 1,100,000 | Lyceum | 560,060 | Klaw | 385,000 |
| Capitol | 2,550,000 | Booth-Shubert. | 1,020,000 | Liberty | 535,000 | Plymouth | 380,000 |
| Rialto | 2,070,000 | Globe | 925,000 | Miller | 520,000 | Central | 375,000 |
| Century | 2,000,000 | 44th Street | 920,000 | National | 510,000 | Selwyn | 370,000 |
| Carnegie Hall | 1,750,000 | American | 880,000 | Playhouse | 480,000 | Comedy | 350,000 |
| Galety | 1,570,000 | Earl Carroll's | 825,000 | Morosco | 460,000 | Vanderbilt | 340,000 |
| Winter Garden | 1,500,000 | Lyric | 720,000 | Ritz | 460,000 | Cohan & Harris | 335,000 |
| Times & Apollo | 1,450,000 | Park | 710,000 | Fulton | 450,000 | Bijou | 310,000 |
| Al Jolson's | 1,400,000 | Music Box | 610,000 | Maxine Elliot | 450,000 | 49th Street | 270,000 |
| Rivoli | 1,370,000 | Hudson | 590,000 | Broadhurst | 435,000 | Little | 250,000 |
| Palace | 1,300,000 | Ambassador | 575,000 | Harris | 430,000 | Belmont | 210,000 |

APARTMENT HOUSES.

| NAME. | 1923. | NAME. | 1923. | NAME. | 1923. | NAME. | 1923. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| 300 Park Ave. | 4,975,000 | De Soto | 1,175,000 | Della Robbia | 830,000 | B. Narrag'sett. | 475,000 |
| Belnord | 4,500,000 | Hend'k Hudson | 1,150,000 | Dallieu | 775,000 | B. Narrag'sett. | 450,000 |
| Astor Court | 2,700,000 | 927 Fifth Ave. | 1,150,000 | 876 Park Ave. | 760,000 | Victoria | 450,000 |
| 910 Fifth Ave. | 2,400,000 | Rockfall | 1,050,000 | 555 Park Ave. | 760,000 | Wallaston | 440,000 |
| 907 Fifth Ave. | 2,100,000 | Roxborough | 1,000,000 | Bonta Vesta | 750,000 | Peter Miniut | 350,000 |
| 820 Fifth Ave. | 1,800,000 | Gramont | 1,000,000 | P. Stuyvesant. | 675,000 | Shore View | 330,000 |
| 845 Fifth Ave. | 1,600,000 | 630 Park Ave. | 980,000 | 633 Park Ave. | 675,000 | Lido Apartm'ts | 325,000 |
| 850 Park Ave. | 1,330,000 | 640 Park Ave. | 980,000 | Manhasset | 600,000 | Barnard Court. | 325,000 |
| 570 Park Ave. | 1,280,000 | 721 Mad. Ave. | 925,000 | St. Valier | 585,000 | Stadium View. | 310,000 |
| 830 Park Ave. | 1,225,000 | Paterno | 850,000 | | | | |

CLUBS.

| NAME. | 1923. | NAME. | 1923. | NAME. | 1923. | NAME. | 1923. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| University | 3,500,000 | Yale | 1,400,000 | Bar Associat'n. | 775,000 | Delta Kappa | |
| Metropolitan | 2,200,000 | Harvard | 1,300,000 | Harmony | 600,000 | Epsilon | 375,000 |
| Union League | 1,950,000 | Knickerbocker | 1,000,000 | Democ'tic Club | 560,000 | City Club | 330,000 |
| Union | 1,800,000 | Colony | 900,000 | N. Y. Yacht | 480,000 | Calumet | 270,000 |
| Racq't & Ten's | 1,750,000 | | | | | | |

## NUMBER OF BUILDINGS IN NEW YORK CITY.

(From the 1922 report of the Department of Taxes and Assessments.)

| Class of Building. | Manhattan | Bronx. | Brooklyn. | Queens. | Richmond. | Total. |
|---|---|---|---|---|---|---|
| One-family dwellings | 23,111 | 14,303 | 72,680 | 51,228 | 19,944 | 181,266 |
| Two-family dwellings | 2,639 | 9,034 | 56,455 | 19,455 | 2,725 | 90,308 |
| Tenements without elevators | 39,649 | 11,100 | 49,824 | 6,748 | 550 | 107,871 |
| Hotels & elevator apt. houses | 2,375 | 86 | 279 | 219 | 90 | 3,049 |
| Warehouses, dept. stores, lofts | 8,084 | 125 | 1,746 | 93 | 121 | 10,169 |
| Office buildings | 897 | 82 | 172 | 113 | 30 | 1,294 |
| Factories | 1,281 | 486 | 3,268 | 1,239 | 527 | 6,801 |
| Stables and garages | 2,208 | 3,340 | 10,863 | 13,358 | 2,283 | 32,052 |
| Theatres | 186 | 27 | 134 | 45 | 4 | 396 |
| Miscellaneous, spec., etc. | 3,390 | 3,299 | 7,549 | 4,475 | 978 | 19,691 |
| Total | 83,820 | 41,882 | 202,970 | 96,973 | 27,252 | 452,897 |

In 1677 there were in New York City (present Manhattan) 12 streets and 384 houses.

## VACANT LAND IN THE CITY OF NEW YORK, 1922.

In the suburbs, vacant parcels are frequently acreage plots, hence the actual vacant area is greater than the following figures indicate. Every parcel which contains any improvement, however slight, is counted as improved. Exempt and partially exempt parcels are included in the total, but not in the number of vacant parcels. Only taxable land is listed in the number of vacant parcels.

| Borough. | Total Number of Parcels | Vacant Parcels | Assessed Value of Vacant Parcels | Borough. | Total Number of Parcels. | Vacant Parcels. | Assessed Value of Vacant Parcels. |
|---|---|---|---|---|---|---|---|
| Manhattan | 88,902 | 5,508 | $154,238,755 | Richmond | 45,085 | 22,796 | $16,971,510 |
| Bronx | 73,507 | 36,360 | 130,454,480 | | | | |
| Brooklyn | 232,738 | 47,675 | 134,902,811 | Total | 603,943 | 197,877 | $576,513,641 |
| Queens | 163,711 | 85,538 | 139,946,085 | | | | |

## OFFICIAL HOUSING STATISTICS, 1910-1921.

(From the Records of the Tenement House Department.)

| Year. | Erected in Five Boroughs. | | Demolished in Five Boroughs. | | Year. | Erected in Five Boroughs. | | Demolished in Five Boroughs. | |
|---|---|---|---|---|---|---|---|---|---|
| | Tenement Houses. | Suites in Tenements | Tenement Houses. | Suites in Tenements. | | Tenement Houses. | Suites in Tenements | Tenement Houses. | Suites in Tenements |
| 1910 | 2,698 | 22,113 | 362 | 2,331 | 1917 | 760 | 14,241 | 193 | 1,325 |
| 1911 | 2,934 | 32,673 | 340 | 2,099 | 1918 | 130 | 2,706 | 119 | 860 |
| 1912 | 1,885 | 26,763 | 339 | 1,987 | 1919 | 95 | 1,624 | 270 | 1,829 |
| 1913 | 1,794 | 28,038 | 260 | 1,341 | 1920 | 237 | 4,882 | 229 | 1,614 |
| 1914 | 1,242 | 20,576 | 324 | 2,227 | 1921 | 309 | 6,835 | 126 | 722 |
| 1915 | 1,365 | 23,617 | 203 | 1,305 | | | | | |
| 1916 | 1,207 | 21,359 | 170 | 976 | Converted into non-tenements | | | 315 | 1,446 |

## EXCESS OF FAMILIES OVER DWELLINGS IN NEW YORK CITY.

(U. S. Census figures, as of January 1, 1920.)

The following table shows the number of families in the City of New York that have no separate dwelling for their own occupancy, but occupy a home in common with others.

| City and Census Year. | Dwellings. | Families. | Excess of Families Over Dwellings. | | City and Census Year. | Dwellings. | Families. | Excess of Families Over Dwellings. | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Number. | Pct. Total Families. | | | | Number. | Pct. Total Families. |
| New York—1920 | 365,963 | 1,278,341 | 912,378 | 71.4 | Manhattan—1920 | 75,534 | 525,154 | 449,620 | 85.6 |
| 1910 | 305,698 | 1,020,827 | 715,129 | 70.1 | 1910 | 75,410 | 493,545 | 418,135 | 84.7 |
| 1900 | 249,991 | 735,621 | 485,630 | 66.0 | 1900 | 80,603 | 391,687 | 311,084 | 79.4 |
| Boroughs. | | | | | | | | | |
| Bronx—1920 | 33,985 | 166,260 | 132,275 | 79.6 | Queens—1920 | 64,323 | 109,559 | 45,236 | 41.3 |
| 1910 | 28,733 | 93,897 | 65,164 | 69.4 | 1910 | 39,764 | 62,001 | 22,237 | 35.9 |
| 1900 | 19,944 | 42,266 | 22,322 | 52.8 | 1900 | 24,221 | 32,121 | 7,900 | 24.6 |
| Brooklyn—1920 | 173,847 | 453,587 | 279,740 | 61.7 | Richmond—1920 | 18,274 | 23,781 | 5,507 | 23.2 |
| 1910 | 147,666 | 353,666 | 206,000 | 58.2 | 1910 | 14,125 | 17,718 | 3,593 | 20.3 |
| 1900 | 113,972 | 255,821 | 141,849 | 55.4 | 1900 | 11,251 | 13,726 | 2,475 | 18.0 |

## ALTERATIONS IN BUILDINGS IN MANHATTAN.

As new building operations decrease in Manhattan alterations in existing buildings increase, showing that the Borough is being steadily reconstructed. This is in part due to limited area, which restricts new building and compels Manhattan to provide for ever-increasing population by other means. This is shown in the following table:

| Period. | New Buildings. | | | Alterations. | Period. | New Buildings. | | | Alterations. |
|---|---|---|---|---|---|---|---|---|---|
| | No. | Cost. | Ave. Cost. | Cost. | | No. | Cost. | Ave. Cost. | Cost. |
| 1868-1873 | 2,089 | $34,157,589 | $16,300 | $3,308,301 | 1892-1901 | 3,157 | $79,401,104 | $25,000 | $7,113,856 |
| 1874-1881 | 1,784 | 21,807,115 | 12,200 | 3,438,566 | 1902-1911 | 1,179 | 94,988,348 | 80,000 | 12,710,719 |
| 1882-1891 | 3,354 | 54,981,181 | 16,400 | 6,184,628 | 1912-1921 | 539 | 74,220,088 | 137,885 | 18,579,070 |

## BUILDING CONSTRUCTION IN NEW YORK CITY SINCE 1899.

| YEAR. | MANHATTAN. | | BRONX. | | BROOKLYN. | | QUEENS. | | RICHMOND. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Bldgs. | Cost. | No. of Bldgs. | Cost. | No. of Bldgs. | Cost. | No. of Bldgs. | Cost. | No. of Bldgs. | Cost. |
| | | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| 1899.. | 2,599 | 109,250,649 | 2.335 | 19,999,727 | 4,627 | 23,248,839 | 1,033 | 3,280,056 | 385 | 1,063,050 |
| 1900.. | 1,009 | 49,622,400 | 1,023 | 8,500,863 | 3,019 | 16,499,582 | 944 | 2,796,521 | 283 | 872,178 |
| 1901.. | 1,471 | 112,576,660 | 1,080 | 9,599,980 | 3,377 | 18,198,617 | 1,452 | 4,869,596 | 277 | 806,844 |
| 1902.. | 860 | 80,384,375 | 882 | 6,503,979 | 3,173 | 18,549,062 | 1,231 | 5,159,979 | 350 | 1,137,904 |
| 1903.. | 1,038 | 75,104,200 | 795 | 6,792,884 | 3,999 | 23,946,292 | 1,321 | 4,829,929 | 349 | 1,653,521 |
| 1904.. | 1,423 | 75,267,780 | 1,684 | 23,068,185 | 5,998 | 42,027,997 | 1,923 | 8,863,774 | 337 | 921,080 |
| 1905.. | 2,572 | 124,746,552 | 2,278 | 38,313,498 | 8,788 | 66,660,856 | 3,251 | 12,827,960 | 480 | 2,099,340 |
| 1906.. | 1,621 | 107,977,515 | 2,246 | 27,622,730 | 8,584 | 65,066,325 | 4,070 | 17,003,216 | 824 | 4,216,641 |
| 1907.. | 948 | 74,939,900 | 1,967 | 20,784,600 | 8,478 | 64,150,107 | 3,929 | 15,944,259 | 840 | 3,231,381 |
| 1908.. | 659 | 84,976,376 | 1,912 | 21,415,160 | 6,737 | 39,838,866 | 3,896 | 13,842,000 | 763 | 2,850,146 |
| 1909.. | 995 | 131,246,483 | 2,402 | 40,748,610 | 10,305 | 60,130,476 | 4,758 | 19,407,921 | 730 | 2,527 545 |
| 1910.. | 838 | 96,703 029 | 2,028 | 44,034,405 | 5,770 | 34,813,720 | 4,133 | 15,144,377 | 841 | 3,363,868 |
| 1911.. | 840 | 98,537,275 | 1,357 | 32,837,060 | 5,288 | 32,598,240 | 5.374 | 22,212,355 | 911 | 2,513,324 |
| 1912.. | 757 | 116,325,135 | 1,310 | 34,644,400 | 5,105 | 36,472,377 | 4,821 | 19,651,222 | 1,007 | 3,412,103 |
| 1913.. | 577 | 73,970,685 | 846 | 20,072,489 | 3,616 | 30,719,101 | 4,653 | 17,504,955 | 1,013 | 3,377,109 |
| 1914.. | 411 | 45,471,165 | 735 | 16,347,382 | 4,379 | 38,269,185 | 4,596 | 18,098,290 | 1,166 | 2,272,898 |
| 1915.. | 489 | 64,652,869 | 962 | 28,119,100 | 5,121 | 40,300,600 | 5,756 | 20,316,392 | 1,381 | 2,630,192 |
| 1916.. | 564 | 114,690,145 | 650 | 16,725,582 | 4,946 | 35,397,480 | 5,333 | 20,009,683 | 1,378 | 4,563,716 |
| 1917.. | 321 | 29,068,525 | 640 | 8,545,475 | 2,696 | 27,613,290 | 3,619 | 11,651,078 | 1,171 | 3,715,570 |
| 1918.. | 182 | 8,507,000 | 206 | 3,991,900 | 2,815 | 17,858,425 | 2,228 | 6,768,138 | 891 | 2,085,293 |
| 1919.. | 379 | 72,283,061 | 1,089 | 21,006,865 | 12,889 | 68,137,966 | 8,910 | 46,022,687 | 2,135 | 4,295,399 |
| 1920.. | 783 | 96,199,860 | 1,115 | 18,585,600 | 8,598 | 63,548,948 | 6,914 | 38,092,548 | 2,026 | 4,838 841 |
| 1921.. | 936 | 121,032,441 | 3,529 | 72,150,739 | 15,208 | 146,812,715 | 13,991 | 81,663,823 | 3,441 | 10,170,910 |

### TOTAL—WHOLE CITY.

| YEAR. | No. of Bldgs. | Cost. | YEAR. | No. of Bldgs. | Cost. | YEAR. | No. of Bldgs. | Cost. | YEAR. | No. of Bldgs. | Cost. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Dollars.* | | | *Dollars.* | | | *Dollars.* | | | *Dollars.* |
| 1899.. | 10,979 | 156,843,327 | 1905.. | 17,369 | 244,648,206 | 1911.. | 13,770 | 178,698,154 | 1917.. | 8,447 | 80,593,938 |
| 1900.. | 6,278 | 78,291,544 | 1906.. | 17,345 | 221,886,427 | 1912.. | 13,000 | 210,505,237 | 1918.. | 6,322 | 39,210,756 |
| 1901.. | 7,657 | 146,551,697 | 1907.. | 16,162 | 179,050,247 | 1913.. | 10,705 | 145,644,339 | 1919.. | 25,402 | 221,745,978 |
| 1902.. | 6,496 | 111,735,299 | 1908.. | 13,967 | 62,912,548 | 1914.. | 11,287 | 120,458,920 | 1920.. | 19,436 | 221,265,897 |
| 1903.. | 7,502 | 112,326,826 | 1909.. | 19,190 | 254,061,035 | 1915.. | 13,709 | 156,019,153 | 1921.. | 37,105 | 431,830,628 |
| 1904.. | 11,365 | 150,148,816 | 1910.. | 13,610 | 194,059,399 | 1916.. | 12,871 | 191,386,606 | | | |

### BUILDING OPERATIONS IN MANHATTAN.

| | 1921. | | 1920. | | 1919. | |
|---|---|---|---|---|---|---|
| | No. | Cost. | No. | Cost. | No. | Cost. |
| | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| Dwellings costing over $50,000 | 10 | 1,855,000 | 8 | 1,170,000 | 17 | 1,882,000 |
| Dwellings costing $20,000 to $50,000 | 10 | 280,000 | 10 | 295,000 | .... | .... |
| Dwellings costing under $20,000 | 115 | 880,300 | 4 | 38,500 | 2 | 22,500 |
| Tenements (including flats and apt. houses) | 109 | 33,435,000 | 22 | 13,565,000 | 44 | 13,575,000 |
| Hotels | 4 | 14,600,000 | 3 | 1,915,000 | 14 | 8,788,000 |
| Stores, lofts, etc., costing over $30,000 | 38 | 11,159,000 | 27 | 6,591,000 | 23 | 3,185,000 |
| Stores, lofts, etc., costing $15,000 to $30,000 | 21 | 469,000 | 8 | 176,000 | 9 | 190,000 |
| Stores, lofts, etc., costing under $15,000 | 34 | 177,325 | 13 | 69,250 | 11 | 73,800 |
| Office buildings | 67 | 36,423,000 | 81 | 44,668,400 | 45 | 23,269,361 |
| Factories and workshops | 53 | 6,561,783 | 23 | 8,232,700 | 38 | 12,700,500 |
| Schoolhouses | 4 | 2,135,000 | 3 | 500,000 | 2 | 445,000 |
| Churches | 11 | 1,305,000 | 1 | 60,000 | 5 | 683,000 |
| Public buildings (municipal) | 5 | 839,000 | 14 | 1,676,800 | 1 | 3,500 |
| Public buildings (theatres, etc.) | 27 | 6,535,900 | 25 | 5,140,000 | 13 | 1,600,000 |
| Hospitals | 1 | 75,000 | 8 | 5,350,000 | 3 | 730,000 |
| Stables and garages | 348 | 4,162,453 | 482 | 6,348,318 | 98 | 4,991,700 |
| Other structures | 79 | 139,680 | 51 | 403,892 | 54 | 143,700 |
| Total | 936 | 121,032,441 | 783 | 96,199,960 | 379 | 72,283,061 |

| | 1918. | | 1917. | | 1916. | |
|---|---|---|---|---|---|---|
| | No. | Cost. | No. | Cost. | No. | Cost. |
| | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| Dwellings costing over $50,000 | 1 | 75,000 | 4 | 390,000 | 30 | 2,869,000 |
| Dwellings costing $20,000 to $50,000 | 3 | 140,000 | 1 | 30,000 | 5 | 185 000 |
| Dwellings costing under $20,000 | .... | .... | .... | .... | 3 | 11,700 |
| Tenements (including flats and apt. houses) | 9 | 1,780,000 | 23 | 2,661,000 | 183 | 37,841,500 |
| Hotels | 1 | 750,000 | 5 | 2,750,000 | 27 | 26,717,000 |
| Stores, lofts, etc., over $30,000 | 10 | 1,204,000 | 11 | 2,442,000 | 45 | 17,817,650 |
| Stores, lofts, etc., $15,000 to $30,000 | 6 | 128,000 | 6 | 125,500 | 5 | 107,000 |
| Stores, lofts, etc, under $15,000 | 9 | 57,450 | 5 | 44,000 | 16 | 106,000 |
| Office buildings | 8 | 398,500 | 20 | 8,127,500 | 43 | 12,651,500 |
| Factories and workshops | 7 | 334,200 | 34 | 2,795,000 | 35 | 6,167,600 |
| Schoolhouses | .... | .... | 2 | 88,000 | 3 | 795,000 |
| Churches | 2 | 150,000 | 3 | 985,000 | 10 | 858,500 |
| Public buildings (municipal) | .... | .... | 18 | 1,075,300 | 9 | 969,000 |
| Public buildings (theatres, etc.) | 5 | 720,000 | 31 | 2,496,525 | 30 | 3,639,500 |
| Hospitals | .... | .... | 3 | 940,000 | 2 | 1,000,000 |
| Stables and garages | 81 | 2,526,450 | 119 | 3,866,500 | 87 | 2,910,100 |
| Other structures | 40 | 243,400 | 36 | 252,200 | 31 | 44,095 |
| Total | 182 | 8,507,000 | 321 | 29,068,525 | 564 | 114,690,145 |

The average number of new dwellings in Manhattan for the previous 10 years is 23 against 135 for 1921, an increase of nearly 600 per cent. This increase is due to the adoption by the Board of Aldermen on Feb. 15, 1921, of an ordinance in relation to exemption from local taxation other than assessments for local improvements of new buildings planned for dwelling purposes.

## HIGH BUILDINGS IN MANHATTAN.

(Figures in parentheses show number of stories. The other figures show height, in feet; odd inches are not named in height.)

Adams, 61 B'way, (32), 424.
Am. Bnk. Note Co., 78 Trinity Pl., (28), 374.
Am. Express Co., 65 B'way., (32), 415.
Am. Surety Co., 100 B'way., (23), 306.
Amer. Tract Soc., Nassau & Spruce Sts., (23), 306.
Ashland, 4th Av. & 24th St., (20), 266.
Astor Trust, 5th Av. & 42d St., (21), 261.
Bankers Trust Co., Wall & Nassau Sts., (39), 539.
Biltmore Hotel, Madison Av. & 43d St., (26), 305.
Bowery Savings Bank, 4th Av. & 42d St., (14), 238.
Broad Exchange, 25 Broad St., (20), 277.
B'way & 48th St., (39), 432.
Bush Terminal, 130 W. 42d St., (29), 419.
Candler, 218-26 W. 42d St., (29), 341.
Church & Dey Sts., (27), 362.
Church & Fulton Sts., (27), 362.
City Investing, 165 B'way, (33), 487.
Claredon, 4th Av. & 18th St., (20), 263.
Columbia Trust Co., 60 B'way., (23), 306.
Commercial Cable Co., 20 Broad St., (21), 255 exclusive of dome.
Commonwealth Hotel, B'way & 55th St., (30), 363.
Corn Exchange Bank, 15 William St., (20), 260.
Cotton Exchange, Hanover Sq., (23), 291.
Croisic, 220 5th Av., (21), 269.
Eagle, 4th Av. & 21st St., (20), 299.
Eight West 40th St., (20), 271.
Eighty Maiden Lane, (25), 315.
Eleven-Thirteen E. 26th St., (21), 275.
Empire, B'way & Rector St., (20), 293.
Equitable, 120 B'way, (37), 486.
Federal Reserve Bank, Nassau St. & Maiden Lane, (14), 232.
Fifty Broad St., (20), 242.
Flatiron (Fuller) B'way & 23d St., (20), 286.
Forty-first St., 18-20 E. 41st St., (20), 252.
Forty-second St., 18-28 E. 42d St., (20), 272.
Forty-two B'way, (21), 249.
Four Sixty-one Eighth Av., (21), 340.
Germania Life, 50 Union Sq., (20), 281.
Hanover National Bank, Nassau and Pine Sts., (22), 385.
Heckscher, 307-315 Madison Av., (20), 270.
Heidelberg, B'way & 42d St., (30), 410.
Herald Square, 141 W. 36th St., (22), 259.
Hess, 4th Av. & 26th St., (20), 271.
Hudson Terminal, 30-50 Church St., (22) 275.
Kidder, Peabody & Co., 35 E. 42d St., (22), 283.
Lewisohn, 119 W. 40th St., (22), 325.
Liberty Tower, Nassau & Liberty Sts., (32), 385.
McAlpin Hotel, B'way & 34th St., (25), 307.
Mad. Av. & 40th St., n. w. cor., (22), 264.
Madison Av. & 45th St., (22), 260.
Madison Avenue, Mad. Av. & 25th St., (20), 288.
Madison Square, 15 E. 26th St., (20), 273.
Metropolitan Life, 1 Mad. Av., (50), 700.
Municipal, Park Row & Centre St., (24), 560.
National Bank of Commerce, (20), 270.
Nine Hundred Two-906 B'way, (20), 263.
Park Row, 13-21 Park Row, (29), 309.
Penna. Hotel, 7th Av. & 33d St., (20), 260.
Pershing Sq. Bldg., 4th Av. & 42d St., (30), 363.
Pulitzer, Park Row, (22), 375.
St. Paul, B'way & Ann St., (26), 308.
Schiff Estate, 52 William St., (21), 265.
Singer, 149 B'way, (41), 612.
Sixty Wall St., (26), 346.
Thirty-seven Wall St., (25), 318.
Times, B'way & 42d St., (28), 410.
Trinity, 111 B'way, (21), 280.
Two Hundred Twelve Fifth Av., (20), 264.
United States Rubber Co., B'way & 58th St., (20), 273.
Vanderbilt Hotel, 4th Av. & 33d St., (22), 225.
Victoria, B'way & 27th St., (20), 263.
Western Union, 195 B'way, (28), 403.
West Street, West & Cedar Sts., (23),
Whitehall, 17 Battery Pl., (32), 424.
William and John Sts., (20), 251.
Woolworth, 233 B'way, (51), 792.
World's Tower, 110-112 W. 40th St., (30), 335.
Yale Club, Vanderbilt Av. & 44th St., (20), 263.
24 West 59th St., (21), 245.
109-111 East 40th St., (20), 249.
351 W. 42d St., (22), 290.
112 Park Av., (32), 390.
201 B'way, (27), 362.
347 Madison Av., southwest corner 45th St., (20), 241.
27 West 43d St., (20), 237.

## THE ANNEKE JANS CLAIM—ITS HISTORY.

THOUGH the New York State Court of Appeals outlawed the Anneke Jans heirs' claim to the Trinity Church tract in New York City as long ago as 1856, and again in 1881, the claim still persists in the minds of some of Mrs. Jans's thousands of descendants. In the early part of 1922 the Appellate Division of the Supreme Court, in New York City, disbarred an attorney because he had circularized the Jans claimants in an attempt to obtain funds for another investigation and contest. The attorney, according to the Appellate tribunal, knew "that investigation had already been made and had proved futile."

The so-called Anneke Jans, later the Trinity P. E. Church, tract, contained about 62 acres and has been variously known as the King's Farm, the Duke's Farm, and the Queen's Farm. It extended from Warren Street, along Broadway to Duane Street, thence northwesterly a mile and a half to Christopher Street, the Hudson River forming the base of a sort of unequal triangle. Wouter Van Twiller, the Dutch Governor of New Amsterdam, sold this tract in 1636 to Roelof Jans, and by Roelof's will it became the property of his wife, Anneke. She married Everard Bogardus, who was drowned at sea, leaving Anneke again a widow. At her death, in 1663, she was called Anetje Bogardus. She left eight children, all but one of whom, Cornelius Bogardus, in March, 1670, executed an instrument known as a "transport," conveying the property to Col. Francis Lovelace, then Governor of the Province of New York. In the meantime (1667), Governor Nicholls had confirmed the title to the tract in Mrs. Jans-Bogardus and her eight children, Cornelius Bogardus died in 1707. He left no will, and never had made any claim to his share in the Jans tract.

Governor Lovelace seems to have acted merely as a Trustee for the State, for on May 6, 1697, Trinity Church was incorporated by Royal Charter, and thereafter in the same year a lease of the Jans tract was executed by the then Governor, Benjamin Fletcher, to the Trinity Church Corporation for seven years. This lease was afterward annulled and another one given by Governor Lord Cornbury in 1702 for his term of office. In 1703 Queen Anne formally presented the tract, then called "Queen Farm," to Trinity Church. The Queen Anne "patent" took the place of the Cornbury lease.

In 1785 a legislative report respecting the title to "the King's Farm" in the City of New York, was made to the New York Assembly. This report recites the grant by Lord Cornoury, but expresses the opinion "that the right and title of the premises were of right, before the late revolution, vested in the King of Great Britain, and now belong to and are of right vested in the People of this State."

The first attack on Trinity Church's title was made by one Cornelius Brouwer, about 1833. He claimed a one-fifth of one-sixth interest as an heir of Cornelius Bogardus, and named the Trinity Church Corporation as a tenant in common entitled to an undivided five-sixths. Defendants claimed ownership of the entire tract by virtue of the grant from Queen Anne. The Chancellor held that at the expiration of 60 years from that time the right of the complainant's ancestor, if he previously had any, was completely barred. On appeal to the Court of Errors, then the highest Court of the State, the decree was affirmed in 1835. The heirs of Cornelius Brouwer revived the suit and the cause was finally submitted to the Vice Chancellor in January, 1847 The hearing occupied fourteen days, at the end of which the bill was dismissed.

Notwithstanding this decision, an action of ejectment was begun in 1856. An appeal from the nonsuit directed in this case was taken to the Court of Appeals, where it was affirmed. Another phase of the litigation reached the Court of Appeals in 1881, where denial of an application for letters of administration with the will annexed of the estate of Anneke Jans-Bogardus, was affirmed.

The streets laid out by Trinity Church Corporation in the Jans tract were named after leading officers of the church—Vesey, after the Rev William Vesey, the rector; Barclay, after the Rev Mr. Barclay, who succeeded Vesey as rector; Murray, after a distinguished lawyer and officer of the church, Warren, after Sir Peter Warren, commander of the British naval forces at this station, who married Miss Delancey of New York City; Chambers, after John Chambers, a lawyer born in New York and a leader in civil and church affairs.

The various litigations attacking the Trinity Church title, none of which was successful, were each and all based on technical irregularities in the grants of conveyances, such as the absence of a seal to a signature or on allegations that the grantors themselves had no title. The defense has been adverse possession and the statutes of limitation.

## RICH NEW YORKERS.

(The figures represent the 1923 official tentative estimated valuation of personalty.)

$2,000,000—John D Rockefeller, Sr.

$1,000,000—Dorothy P. B Caruso; Emil E. Hepburn; James N Hill; Marguerite S. Hill; J. P. Morgan.

$500,000—Edith N Bailey· August Belmont; August Belmont, Jr· Eleanor Belmont; F. T. Davison, Henry P. Davison, Jr.; K. S. Davison; George Ehret; Mrs E H. Harriman· Kitty L. Harriman; Wm A. Harriman: Cordelia S. Hepburn: Fred A. Juilliard: Herman D. Kountze: Anne T. Morgan: May H. Potter· J. D. Rockefeller, Jr : T F. Ryan: Cornelius Vanderbilt· Rachel L. Vanderbilt: Gertrude V Whitney: Payne Whitney.

$400,000—Arabella D Huntington· Sadie Price.

$350,000—Florence V. N. Twombley· Fred F. Ayer: Elsie J. Ballot·· Frances M. Barclay: Percival M. Barker: Arthur D. Bingham; Louise W. Carnegie: Evelyn S. Griswold· Lillie Loewenstein; Dunlevy Millbank· Arthur M Mitchell· Mrs Eli Nadelman: Eva D. Outterson; Sarah J. Robinson: Emma W. Schaefer; Grace T Van Norden.

$250,000—Geo. F. Baker· James B Clews· John B Dennis; Walter Douglas: Edith H Dusenbury: Sol B. Guggenheim; Josephine L Hann· Anna M Harkness· Mary S Harkness· Adolph Lewisohn· Isabel J Morrison· Cecelia Namm· Rosalie Nathan: Sylvia L. New; Amos R E. Pinchot: Samuel M. Rice· Harry P. Whitney

$200,000—Elizabeth A Achelis· Fritz Achelis· Fred Achelis: Robert C Barclay· Mal C. Barrow· Edith C T. Bates· Rose N Baum: A. C. Bedford: Mary E. Bierstadt· Isa McB. Bindley: Helen C Bostwick: Geo. C. Clark, Jr.: James A Clark· Cora L Cogswell: Heyward Cutting· Chas Deering: Beni. N. Duke· A L Erlanger; Edw. W. Faulkner; Wm. Goldman· Marion Haviland; Rosina S. Hoyt: H K Hudson: Archer W Huntington: Walter Jennings· Karl Jungbluth· G. H W. Junghaus: Germaine L. Kann· Ignatz Kann: Irene Kann· Fred C. Kernochan· Annie P. Kountze; Isaac B. Kraus: Sol. B Kraus: Reginald B Lanier: Jas F D Lanier· Beni. Lawson; John McCormack; Beni. H. Namm: Estelle Namm; Lesley J. Pearson· Rachel L. Porter; Sol G. Rosenbaum; Margaret A. Sansome· James Spier; Mary C. Thompson· Emily N. Thorn; Anna H. Vanderbilt; Helen H. Whitney

$175,000—Wm M. Stevens

$155,000— Alice G Vanderbilt

$150,000—Emma B. Auchincloss; Alvina Barnet; Jessie D. Bingham; Stafford G Delam; Estelle Esterson· Robert W. Goelet· Marie F. Hardin; Mildred Mayer· Anna C. McCullough; Edw. A. McCullough· Josephine Myers; Harry Plotz; Harry F Sinclair· Emma L Wilmerding

$125,000—Jeanette C. Curtis; Robert Hendry.

$100,000—M. Aspegrin: Wm. Vincent Astor; Anna M W Babcock: Semon Bache; Edith B. Baker; Geo F Baker, Jr.: Matilda C. Bamberger; Bernard M Baruch: Rosina O Bateson; Henry W. Bendel; Lemuel O. Benedict: Xavier N. Benziger· Edward J. Berwind; Cortlandt Bishop; Harry S. Black: Lizzie P Bliss; Gustav Blumenthal· Addie S. Bodenheimer: Anna Bogert; Stephen N Bond: Elizabeth M. Bowson; Nicholas F. Brady; Sadie W. Brand: Alex H Brawner; Irving Brokaw: Henry L. Burnett: Henry W. Chappell; Elizabeth H. Childs: Starling W. Childs; Edw. A. Clark; Henry Clews; Thos Cochran; Chas. A. Coffin; Sarah S Collier; Charles Cory; Clarkson Cowl; H M Cowperthwait Wm R Craig; Elizabeth M. Crocker: Wm N. Cromwell; James H. Cullen; Joseph F. Cullinan; Arthur J. Cumnock; R. Fulton Cutting; Eleanor DeG Cuyler; Clarence S. Day; Emily D Day; Chas. B. Dillingham; Francis P. Dodge, Guy P. Dodge; Charlotte Doelger; Sarah A. Duke: Ralph W. Dundas; Lewis L. Dunham; Wm. A. Dunlap; Coleman du Pont; Henry F. du Pont· L. Allen Ebling; Edward Ebling; Robt. W. Ebling· Ida Ehrenberg: Abraham Erlanger; Moses Erlanger: Milton S. Erlanger; Michael Erlanger; Julia G. Fahnestock; Wm. Fahnestock; Bruce M. L. Falconer; Margaret C. Falconer; Jacob Fields: Eugene G. Foster; Jennie G. Foster; John H. Foster; William Fox; Michael Friedsam; Aaron Garfunkel; Thos. B. W. Gates; Bernard F. Gimbel; Isaac Gimbel: Louis S. Gimbel; Julie W. Grant; Anna C. Grey; Archie B. Gwathmey, Jr.; Olaf C. Hageman; Wm. A. Hall; Wm. P. Hamilton; Oliver Harriman; Louis Harris; Cornelia C. Hatch; Helen V. Hathaway; Stewart S. Hathaway; Chas. M Haymann; Wm. F. Herring; Louis Hilborn; Flora Hirsch; Lena Holstein; Lee Holstein; Louis L Hopkins; Annie B. Horne; Lillian Horner; L. J. Horowitz; Fred Housman; John S. Hoyt; Blanche Hutton: Lillian B. Hyde; H. R. Ickelheimer; Arthur Iselin: Columbus O'D. Iselin; Edith C. Iselin· Eleanor J. Iselin; Ernest Iselin; Lewis Iselin; Marie Iselin; Pauline Iselin; Wm. E. Iselin: S. M. Jacoby: Albert Jaeckel: Harriet E. P. James; Wm. A. Jamison; Pierre Jay; Mabel Jenks; Robert O. Jenks; A. G. Jennings· Fred Johnson: Marguerite L. Johnston; Nathan S. Jonas: Geo. A. Jones· Leo Joseph· Everett L. Judkins· Emma D. Kaescher: Joseph Kahn: Louis Kahn; Walter N. Kahn· Nathaniel I. Kalmus; Adolph Kaufman; Fred Kaufman; Julius Kaufman· Clara Jay Keich· Chas H. Keep; Emma R. Kelly; Stephen Kelly; Georgianna Kendall; Susan R. Kendall; Everetta Kernochan; J. Fred Kernochan; Mary S. Kernochan: Anna Estelle Kidd; Chas. H. Kimball: Edw J. King; Yale Kneeland; Chas. Kohlman; Augustus F. Kountze; Alvin W. Krech: Rush H. Kress; Samuel H. Kress: H R Kretschman; Mary Kridel; Samuel Kridel· Percival Kuhne; Geo. F. Kunz; Harriet B. W. Laidlaw; Vitus C. Lambert; Mrs. S. C. Lamport; Nat. D. Lancaster; Valerie Langeloth; Sig. Langsdorf; Harold M. Lehman: S. D. Langsdorf; Sophie K. Levy; Samuel A. Lewisohn; Beni. W. Loeb: Florence A. Loew; Wm. G. Loew: Milton Lubin; Anna I. Lyman; David I. Mackie: V. Everet Macy; Hiram R. Mallison; Peter J. Maloney; Robt. H. McCurdy: Marion McMullan· Elissa McNair· Wm. McNair; Janet S. McVickar: Lansing McVickar; Henry L. Meyer: Walter E. Meyer: Theodore Michel; Katharine G. Millbank· Clarence Milais; Ellen P. Moffatt; Ada W. S. Moore; John C. Moore; Louis DeB Moore: Wm. C. Moore: Francis L. T. Morgan; Geo. F. Morgan· Helen de W. Morgan; Jno. W. Morgan· Henry L. Moses; Warren B. Nash: Alfred Nathan: Elkan Naumberg; Alf. H. Newberger; Samuel M. Newberger; Chas. M. Newcombe: Emilie L. Norrie: Mary L. Norrie; Chas. P. Noyes; Julius W. Noyes: Anna E. Page; Eleanor Palmer; Laura A. Palmer; Edward C. Parish; Wm. D. N. Perine; Abraham S Phillips; Sarah L. Pierce: Mabelle N. Ponnert· Ralph Pulitzer: Daniel G Reid; William Rehnlen; John H. Rhoades; John D. Ryan: Chas. H. Sabin: Mortimer L. Schiff; Rebecca Schiffer; Jennie D. Sherwood; Franklin Simon; Emily H. Spafford; Mrs. A. Steinman; Helen N. P. Stokes; Cyrus L. Sulzberger; Charlotte T. Taussig; Frederick A. Taylor; Arch. S. Terrill; Belmont Tiffany; Chas L. Tiffany; Louis C. Tiffany; Otto Timme: J. Kennedy Tod; Robt. E. Todd; Ruth B. Twombley; Cornelius J. Vanderbilt; Fred W. Vanderbilt; Harold S. Vanderbilt; Louis A. Vanderbilt; W. K. Vanderbilt, Jr.: Warner M. Van Norden; Anna H. Von Zedlitz; Paul M. Warburg; Lawrence Waterbury; Herman M. Weaver; Josephine D. Weeks; Edmund C. Wendt; Richard T. Wilson; Katherine W. Winthrop; Helen M. Wisner; Rawson L. Wood; St. John Wood; Minnie S. Woolf; Jennie Woolworth.

### NON-RESIDENT TAXPAYERS.

The list of "non-resident" New Yorkers on the 1923 personal assessment roll includes: Percy A. Rockefeller, $500,000; W. A. Clark and Melville Gambrill, $400,000 each· Elizabeth F. Durazzo, $170,000; Geo. J. Gould, $150,000; E. T. Gerry, $106,000; and H. C. Cady, J. Duveen, W. A. Jamison, J. B. Duke, H. E. Huntington, Frances O. Jones, and Belmont Tiffany, $100,000 each.

### 75,147 ON PERSONALTY TAX ROLLS.

Although the possession of personal property valued at $100,000 by the tax assessors does not necessarily indicate that the owner thereof is a "millionaire," he or she is popularly so considered. When the New York City tax books were opened in 1922 there were disclosed the names of 75,147 persons from whom the assessors had decided a personal tax was collectible. This was an increase of 2,244 over 1921.

### CALENDAR FOR TAXPAYERS.

April 1—Commence to assess. Oct. 1—Annual record of assessed valuation of real and personal estate open for inspection. Nov. 15—Real estate books close. Nov. 30—Personal books close. Feb. 1—Make up assessment rolls. March 1—Deliver to Board of Aldermen. March 3—Board of Aldermen fix tax rate. March 28—Deliver to Receiver of Taxes. May 1—All personal taxes and half real estate taxes payable in May. If second half paid, rebate at rate of 4% per annum to Nov 1. June 1—Interest at 7% runs from May 1 on unpaid taxes due in May. Aug., Third Tues.—Hearing on assessments on shareholders of banks. Nov. 1—2d half of real estate taxes payable. Dec. 1—Interest at 7% from Nov. 1 on unpaid taxes due in Nov. Dec. 15 to 31—Bank taxes payable.

## NEW YORK CITY ASSESSED VALUES AND TAX LEVIES SINCE 1897.

| YEAR. | Realty Other Than Corp'n. | Realty of Corporat'n. | Special Franchises. | Total of 3 Prec. Col'ns. | Personal Property. | Grand Totals. | Tax Levy. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1897 | 2,389,399,987 | 74,949,690 | ..... | 2,464,349,677 | 419,679,395 | 2,884,029,072 | 45,332,402 |
| 1898 | 4,455,441,974 | 78,288,835 | ..... | 2,533,730,809 | 548,987,900 | 3,082,718,709 | 47,356,863 |
| 1899 | 2,837,461,039 | 94,984,425 | ..... | 2,932,445,464 | 545,906,565 | 3,478,352,029 | 86,179,794 |
| 1900 | 2,918,986,004 | 29,892,345 | 219,679,351 | 3,168,557,700 | 485,574,495 | 3,654,132,195 | 82,548,199 |
| 1901 | 2,995,580,622 | 30,863,445 | 211,334,194 | 3,237,778,261 | 550,192,612 | 3,787,970,873 | 88,241,853 |
| 1902 | 3,079,351,079 | 30,676,345 | 220,620,155 | 3,330,647,579 | 526,400,139 | 3,857,047,718 | 88,178,612 |
| 1903 | 4,487,399,006 | 28,967,495 | 235,184,325 | 4,751,550,826 | 680,866,092 | 5,432,416,918 | 77,631,787 |
| 1904 | 4,731,771,724 | 32,170,605 | 251,521,450 | 5,015,463,779 | 625,078,878 | 5,640,542,657 | 86,068,402 |
| 1905 | 4,886,924,891 | 32,463,860 | 302,193,550 | 5,221,582,301 | 690,561,926 | 5,912,144,227 | 88,980,728 |
| 1906 | 5,326,413,110 | 50,594,835 | 361,479,300 | 5,738,487,245 | 567,306,940 | 6,305,794,185 | 94,095,105 |
| 1907 | 5,704,009,652 | 69,615,950 | 466,855,000 | 6,240,480,602 | 554,861,313 | 6,795,341,915 | 101,947,668 |
| 1908 | 6,141,500,119 | 88,425,200 | 492,490,470 | 6,722,415,789 | 435,774,611 | 7,158,190,400 | 116,541,091 |
| 1909 | 6,257,352,379 | 75,825,425 | 474,001,900 | 6,807,179,704 | 443,320,855 | 7,250,500,559 | 122,742,630 |
| 1910 | 6,491,335,999 | 87,447,075 | 465,409,600 | 7,044,192,674 | 372,644,825 | 7,416,837,499 | 131,474,976 |
| 1911 | 7,211,325,769 | 166,496,295 | 481,018,100 | 7,858,840,164 | 357,923,123 | 8,216,763,287 | 142,237,757 |
| 1912 | 7,279,579,651 | 169,170,440 | 413,148,799 | 7,861,898,890 | 342,963,540 | 8,204,862,430 | 150,956,702 |
| 1913 | 7,387,237,104 | 180,549,176 | 438,861,581 | 8,006,647,861 | 325,418,440 | 8,332,066,301 | 151,786,264 |
| 1914 | 7,458,784,625 | 186,654,976 | 404,420,311 | 8,049,859,912 | 340,295,560 | 8,390,155,472 | 150,503,894 |
| 1915 | 7,527,890,627 | 200,897,090 | 379,973,070 | 8,108,760,787 | 352,051,755 | 8,460,812,542 | 160,295,797 |
| 1916 | 7,568,649,179 | 213,820,520 | 425,352,662 | 8,207,822,361 | 376,530,150 | 8,584,352,511 | 176,381,879 |
| 1917 | 7,570,367,350 | 222,614,005 | 461,567,645 | 8,254,549,000 | 419,156,315 | 8,673,705,315 | 177,067,174 |
| 1918 | 7,672,715,813 | 227,448,940 | 439,474,098 | 8,339,638,851 | 251,414,875 | 8,591,053,726 | 198,232,811 |
| 1919 | 7,775,808,999 | 242,832,150 | 409,681,604 | 8,428,322,753 | 362,412,780 | 8,790,735,533 | 204,756,495 |
| 1920 | 7,961,898,798 | 246,511,175 | 417,712,584 | 8,626,121,707 | 296,506,185 | 8,922,627,892 | 223,021,070 |
| 1921 | 9,268,281,195 | 276,447,330 | 428,256,579 | 9,972,895,104 | 213,222,175 | 10,186,207,279 | 284,146,634 |
| 1922 | 9,541,002,025 | 282,488,900 | 426,500,910 | 10,249,991,835 | 210,608,045 | 10,460,599,880 | 286,077,228 |

### NOTES TO THE ABOVE TABLE.

The valuations for the year 1897 have been ascertained as follows: In Manhattan and the Bronx from tax bills of 1897 and from information furnished by the Department of Taxes and Assessments; in the Boroughs of Brooklyn, Queens and Richmond from the reports of the various Boards of Supervisors as verified by the expert accountants of the City of New York. The valuations for year 1898 have been ascertained as follows: In Manhattan and the Bronx from the reports of the Department of Taxes and Assessments. In the Boroughs of Brooklyn, Queens and Richmond, as there was no tax levied in 1898, the valuations of the preceding year were repeated. The assessed valuations of real estate were increased in 1903 from a varying percentage theretofore of the full value to presumably the full value thereof.

### TAX RATES IN N. Y. CITY, BY BOROUGHS, SINCE 1899.

| YEAR. | Manhattan and Bronx. | Brooklyn. | Queens. | Richmond. | Rate of State Tax Levied by City, incl. in Tot. Tax Rate. | State Tax Paid by City to State. |
|---|---|---|---|---|---|---|
| | Cents. | Cents. | Cents. | Cents. | Mills. | Dollars. |
| 1899 | 2.48040 | 2.36424 | 3.27445 | 2.42373 | 2.49 | 6,204,639 |
| 1900 | 2.24771 | 2.32113 | 2.34216 | 2.22073 | 1.96 | 7,877,720 |
| 1901 | 2.31733 | 2.38853 | 2.35702 | 2.35191 | 1.20 | 6,922,652 |
| 1902 | 2.27344 | 2.35353 | 2.31873 | 2.33653 | .13 | 4,470,907 |
| 1903 | 1.41367 | 1.48945 | 1.47508 | 1.49675 | .13 | 496,955 |
| 1904 | 1.51242 | 1.57296 | 1.57228 | 1.59281 | .13 | 506,005 |
| 1905 | 1.49051 | 1.56264 | 1.55523 | 1.55821 | .09 | 662,281 |
| 1906 | 1.47890 | 1.53769 | 1.55484 | 1.55422 | .011495 | 824,217 |
| 1907 | 1.48499 | 1.55408 | 1.53393 | 1.56884 | ..... | Nil. |
| 1908 | 1.61407 | 1.67021 | 1.66031 | 1.71115 | ..... | Nil. |
| 1909 | 1.67804 | 1.73780 | 1.72536 | 1.77522 | ..... | Nil. |
| 1910 | 1.75790 | 1.81499 | 1.81079 | 1.87501 | ..... | Nil. |
| 1911 | 1.72248 | 1.75502 | 1.73645 | 1.81657 | ..... | Nil. |
| 1912 | 1.83 | 1.87 | 1.84 | 1.92 | .6 | 4,301,345 |
| 1913 | 1.81 | 1.85 | 1.85 | 1.92 | .99255 | 7,947,032 |
| 1914 | 1.78—1.77 | 1.84 | 1.80 | 1.90 | .545437 | 4,576,303 |
| 1915 | 1.87—1.94 | 1.92 | 1.95 | 2.24 | ..... | Nil. |
| 1916 | 2.04—2.09 | 2.08 | 2.06 | 2.13 | 1.629 | 13,975,021 |
| 1917 | 2.02—2.08 | 2.07 | 2.09 | 2.12 | ..... | Nil. |
| 1918 | 2.36—2.40 | 2.40 | 2.41 | 2.46 | .9852 | 8,463,756 |
| 1919 | 2.32—2.37 | 2.36 | 2.37 | 2.41 | .9695 | 8,522,630 |
| 1920 | 2.48—2.53 | 2.54 | 2.54 | 2.53 | .9570 | 8,539,153 |
| 1921 | 2.77—2.84 | 2.80 | 2.85 | 2.83 | 2.163826 | 22,041,183 |
| 1922 | 2.75—2.75 | 2.76 | 2.79 | 2.78 | .00137951 | 14,430,513.24 |

By a special State law, the N. Y. City tax rate was $2.74 on each $100 of assessed values in every borough, to which the city added certain amounts for local improvements.

Note—In 1914 and thereafter the first rate in second column is that of Manhattan, the second is that of the Bronx.

## ASSESSED VALUES, TAX LEVIES AND TAX RATES.

(Former City of New York. The tax rate is figured on each $100 of assessed valuation.)

| YEAR | Assess. Val. of Realty. | Assess. Val. Personalty. | Tax Levy. | Tax Rate. | YEAR | Assess. Val. of Realty. | Assess. Val. Personalty. | Tax Levy. | Tax Rate. |
|---|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dols.* | | *Dollars.* | *Dollars.* | *Dollars.* | *Dols.* |
| 1874 | 881,547,995 | 272,029,176 | 32,312,816.92 | 2.80 | 1886 | 1,203,941,065 | 217,027,221 | 32,421,550.15 | 2.29 |
| 1875 | 883,643,545 | 217,300,154 | 32,367,744.75 | 2.94 | 1887 | 1,254,491,849 | 253,148,814 | 32,370,696.78 | 2.16 |
| 1876 | 892,287,015 | 218,626,178 | 31,109,521.60 | 2.80 | 1888 | 1,302,818,879 | 250,623,552 | 34,329,860.12 | 2.22 |
| 1877 | 895,063,933 | 206,028,160 | 29,178,940.47 | 2.65 | 1889 | 1,331,578,291 | 272,260,822 | 31,145,370.05 | 1.95 |
| 1878 | 900,855,700 | 197,532,075 | 28,008,888.26 | 2.55 | 1890 | 1,398,290,007 | 298,688,383 | 33,212,034.93 | 1.97 |
| 1879 | 918,134,380 | 175,934,955 | 28,226,988.84 | 2.58 | 1891 | 1,464,247,820 | 321,609,518 | 33,764,394.00 | 1.90 |
| 1880 | 942,571,690 | 201,194,037 | 28,937,272.90 | 2.53 | 1892 | 1,504,904,603 | 323,359,672 | 33,725,555.84 | 1.85 |
| 1881 | 976,735,199 | 209,212,899 | 31,071,840.19 | 2.62 | 1893 | 1,562,582,293 | 370,936,136 | 35,622,690.60 | 1.82 |
| 1882 | 1,135,203,816 | 198,272,582 | 27,681,427.26 | 2.25 | 1894 | 1,613,057,735 | 390,274,302 | 35,659,026.78 | 1.79 |
| 1883 | 1,179,130,669 | 197,546,495 | 29,167,029.81 | 2.29 | 1895 | 1,646,028,655 | 370,919,007 | 38,403,761.18 | 1.91 |
| 1884 | 1,119,761,597 | 218,536,746 | 29,991,172.85 | 2.25 | 1896 | 1,731,509,143 | 374,975,762 | 44,900,330.28 | 2.14 |
| 1885 | 1,168,443,137 | 202,673,866 | 32,853,528.84 | 2.40 | | | | | |

## NEW YORK CITY ASSESSED VALUATIONS BY BOROUGHS.

| Year. | Manhattan Realty. | Manhattan Personalty. | Manhattan Total. | Bronx Realty. | Bronx Personalty. | Bronx Total. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1900 | 2,231,502,655 | 421,860,527 | 2,653,363,182 | 138,494,849 | 8,013,641 | 146,508,490 |
| 1901 | 2,285,188,713 | 428,279,951 | 2,713,468,664 | 143,808,303 | 12,188,607 | 155,996,910 |
| 1902 | 2,358,939,618 | 412,388,258 | 2,771,327,876 | 153,500,568 | 12,683,110 | 166,183,678 |
| 1903 | 3,483,793,382 | 549,843,253 | 4,033,636,635 | 247,090,767 | 14,762,041 | 261,852,808 |
| 1904 | 3,676,857,411 | 508,478,655 | 4,185,336,066 | 261,026,477 | 14,756,953 | 275,783,430 |
| 1905 | 3,820,754,181 | 568,390,790 | 4,389,144,971 | 274,859,593 | 16,673,625 | 291,533,218 |
| 1906 | 4,105,352,281 | 447,184,550 | 4,552,536,831 | 355,779,602 | 18,028,857 | 373,808,459 |
| 1907 | 4,391,970,951 | 432,654,158 | 4,824,625,109 | 396,687,730 | 14,115,690 | 410,804,429 |
| 1908 | 4,584,536,431 | 327,810,632 | 4,912,347,063 | 441,228,718 | 11,539,680 | 452,768,398 |
| 1909 | 4,614,446,286 | 332,202,634 | 4,946,648,920 | 462,704,008 | 13,959,671 | 476,663,679 |
| 1910 | 4,743,916,785 | 298,030,483 | 5,041,947,268 | 493,757,919 | 7,716,550 | 501,474,469 |
| 1911 | 5,037,872,685 | 289,797,952 | 5,327,670,637 | 605,222,933 | 4,986,895 | 610,209,828 |
| 1912 | 5,035,485,413 | 281,467,122 | 5,316,952,535 | 616,521,378 | 4,595,198 | 621,116,576 |
| 1913 | 5,126,942,595 | 265,509,435 | 5,392,452,030 | 640,340,593 | 5,094,060 | 645,434,653 |
| 1914 | 5,149,250,760 | 287,768,270 | 5,437,019,030 | 658,632,013 | 5,761,200 | 664,393,213 |
| 1915 | 5,145,802,495 | 292,349,590 | 5,438,152,085 | 677,126,664 | 6,804,800 | 683,931,464 |
| 1916 | 5,129,830,629 | 317,187,300 | 5,447,017,929 | 698,869,196 | 6,265,500 | 705,134,696 |
| 1917 | 5,088,344,403 | 339,106,700 | 5,427,451,103 | 714,226,994 | 9,524,400 | 723,751,394 |
| 1918 | 5,094,604,208 | 194,775,200 | 5,289,376,438 | 726,129,198 | 7,357,100 | 733,486,298 |
| 1919 | 5,115,811,621 | 291,286,700 | 5,407,098,321 | 731,808,972 | 12,674,400 | 744,483,372 |
| 1920 | 5,186,771,887 | 227,063,350 | 5,413,835,237 | 753,308,264 | 17,211,200 | 770,519,464 |
| 1921 | 5,878,847,633 | 152,742,600 | 6,031,590,233 | 852,447,403 | 13,899,700 | 866,347,103 |
| 1922 | 6,058,643,144 | 145,473,800 | 6,204,116,944 | 864,008,890 | 17,175,650 | 881,184,540 |

| Year. | Brooklyn Realty. | Brooklyn Personalty. | Brooklyn Total. | Queens Realty. | Queens Pers'nalty | Queens Total. | Richmond Realty. | Richm'd Pers'alty |
|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1900 | 651,383,900 | 43,947,440 | 695,321,330 | 104,427,872 | 5,498,681 | 109,926,553 | 42,723,924 | 6,264,204 |
| 1901 | 658,962,119 | 89,241,624 | 748,203,743 | 107,179,620 | 10,826,810 | 118,006,430 | 42,639,506 | 9,655,620 |
| 1902 | 670,533,508 | 85,577,102 | 756,110,610 | 108,859,704 | 9,026,134 | 117,885,838 | 38,514,181 | 6,725,535 |
| 1903 | 853,760,357 | 100,052,348 | 953,812,705 | 123,781,723 | 10,176,900 | 133,958,623 | 43,124,597 | 6,031,550 |
| 1904 | 901,995,227 | 88,573,775 | 990,569,002 | 131,379,225 | 7,477,425 | 138,856,650 | 44,205,709 | 5,792,070 |
| 1905 | 940,982,302 | 90,911,963 | 1,031,894,265 | 140,404,990 | 9,094,738 | 149,499,728 | 44,581,235 | 5,490,810 |
| 1906 | 1,072,007,172 | 87,722,810 | 1,159,729,982 | 159,446,205 | 9,694,428 | 169,140,633 | 45,901,985 | 4,676,295 |
| 1907 | 1,181,221,910 | 92,866,547 | 1,274,088,457 | 217,668,775 | 11,191,262 | 228,860,037 | 52,931,236 | 4,062,205 |
| 1908 | 1,334,864,835 | 83,448,072 | 1,418,312,907 | 296,458,980 | 9,908,830 | 306,367,810 | 65,326,825 | 3,067,397 |
| 1909 | 1,354,809,840 | 84,332,190 | 1,439,142,030 | 308,112,605 | 9,673,200 | 317,785,805 | 67,106,965 | 3,153,160 |
| 1910 | 1,404,036,521 | 59,331,825 | 1,463,368,346 | 334,563,960 | 5,358,480 | 339,922,440 | 67,917,489 | 2,207,487 |
| 1911 | 1,689,171,283 | 55,855,616 | 1,745,026,899 | 446,569,352 | 5,339,875 | 451,909,227 | 80,003,911 | 1,942,785 |
| 1912 | 1,674,742,409 | 48,753,985 | 1,723,496,394 | 456,750,539 | 6,396,750 | 463,147,289 | 78,399,151 | 1,750,485 |
| 1913 | 1,680,013,591 | 46,296,870 | 1,726,310,461 | 477,792,836 | 6,740,850 | 484,533,686 | 81,558,246 | 1,777,225 |
| 1914 | 1,671,175,930 | 39,296,065 | 1,710,471,995 | 488,686,756 | 5,915,150 | 494,601,906 | 82,114,453 | 1,554,875 |
| 1915 | 1,691,912,426 | 43,606,010 | 1,735,518,436 | 509,515,978 | 7,635,650 | 517,151,628 | 84,403,224 | 1,655,705 |
| 1916 | 1,752,360,970 | 43,789,090 | 1,796,150,060 | 539,394,614 | 6,711,060 | 546,105,674 | 87,366,952 | 2,577,200 |
| 1917 | 1,790,901,437 | 57,502,715 | 1,848,404,152 | 569,865,007 | 10,266,200 | 580,131,207 | 91,211,159 | 2,756,300 |
| 1918 | 1,826,813,885 | 39,683,575 | 1,866,497,460 | 591,599,075 | 7,969,400 | 599,508,475 | 100,495,455 | 1,689,600 |
| 1919 | 1,865,123,952 | 44,907,205 | 1,910,031,157 | 604,827,476 | 10,934,300 | 615,761,776 | 110,750,732 | 2,610,175 |
| 1920 | 1,937,811,205 | 41,192,900 | 1,979,004,105 | 636,409,159 | 8,792,100 | 645,201,259 | 111,821,192 | 2,246,635 |
| 1921 | 2,395,486,473 | 37,741,850 | 2,433,228,323 | 718,818,139 | 7,409,350 | 726,229,489 | 127,385,456 | 1,428,675 |
| 1922 | 2,447,036,937 | 38,908,850 | 2,485,945,787 | 748,609,486 | 7,758,000 | 756,367,486 | 131,693,378 | 1,291,745 |

In 1685 the assessed value of realty in New York City totalled 75,694 English pounds sterling.

## CITY OF NEW YORK BONDED DEBT.

(Prepared by the Department of Finance, as of January 1, each year.)

| As of January 1. | Funded Debt (Corp. Stock, Notes, and Assess. Bds.) | Sinking Fund Holdings (Bonds.) | Net Funded Debt (Col. 1, Less Column 2.) | Other Debt (General Fund Bonds.) | Other Debt (Special Revenue Bonds.) | Other Debt (Revenue Bonds and Bills.) | Interest on City Debt. |
|---|---|---|---|---|---|---|---|
| 1898 | $321,905,514 | $92,718,373 | $229,187,140 | ..... | $3,061,645 | $6,067,600 | $9,629,382 |
| 1899 | 341,844,225 | 99,386,291 | 242,457,933 | ..... | 8,179,665 | 7,600 | 11,430,778 |
| 1900 | 359,620,986 | 105,754,871 | 253,866,114 | ..... | 3,170,311 | 7,600 | 11,707,544 |
| 1901 | 384,794,597 | 114,388,129 | 270,406,468 | ..... | 5,388,335 | 2,107,600 | 12,100,206 |
| 1902 | 412,047,717 | 122,399,480 | 289,648,336 | ..... | 4,322,997 | 9,912,600 | 12,937,776 |
| 1903 | 434,339,605 | 137,442,948 | 296,896,656 | ..... | 4,272,308 | 22,467,600 | 13,276,709 |
| 1904 | 469,123,199 | 142,121,103 | 327,002,096 | $8,500,000 | 7,537,149 | 41,748,600 | 15,188,951 |
| 1905 | 534,954,131 | 139,330,352 | 395,623,778 | 18,000,000 | 5,408,640 | 34,457,000 | 17,101,850 |
| 1906 | 565,056,512 | 140,380,612 | 424,675,900 | 29,000,000 | 6,280,500 | 42,097,000 | 18,459,015 |
| 1907 | 617,484,892 | 150,294,186 | 467,190,705 | 40,750,000 | 7,462,500 | 50,412,270 | 20,799,880 |
| 1908 | 672,396,965 | 143,187,164 | 529,209,801 | 54,250,000 | 8,368,000 | 53,646,036 | 24,576,522 |
| 1909 | 730,691,994 | 141,671,340 | 589,020,654 | 68,750,000 | 8,991,990 | 74,006,600 | 29,671,070 |
| 1910 | 794,930,288 | 146,868,059 | 648,062,228 | 85,500,000 | 5,208,150 | 60,367,290 | 32,178,760 |
| 1911 | 843,503,798 | 154,140,289 | 689,363,508 | 102,500,000 | 7,364,625 | 58,874,533 | 34,214,137 |
| 1912 | 917,811,718 | 157,970,000 | 759,841,718 | 120,000,000 | 5,970,164 | 46,671,621 | 35,473,685 |
| 1913 | 985,190,042 | 161,679,241 | 823,510,800 | 137,500,000 | 7,038,065 | 34,712,775 | 38,453,876 |
| 1914 | 1,064,418,429 | 169,955,027 | 894,463,401 | 159,500,000 | 6,319,225 | 33,694,415 | 37,745,836 |
| 1915 | 1,124,020,221 | 180,217,873 | 943,802,347 | 183,000,000 | 11,925,425 | 48,536,947 | 42,428,903 |
| 1916 | 1,154,483,821 | 176,078,406 | 978,405,414 | 206,000,000 | 9,367,075 | 43,000,000 | 42,020,934 |
| 1917 | 1,191,317,251 | 176,111,545 | 1,015,205,706 | 229,500,000 | 9,999,948 | 26,004,500 | 43,284,252 |
| 1918 | 1,214,948,477 | 193,749,437 | 1,025,799,039 | 254,500,000 | 15,600,000 | 39,074,400 | 47,663,019 |
| 1919 | 1,225,05,569 | 183,013,219 | 1,042,042,350 | 281,500,000 | 15,325,000 | 33,996,500 | 48,949,997 |
| 1920 | 1,238,260,597 | 204,382,238 | 1,033,878,359 | 310,000,000 | 9,989,900 | 32,360,500 | 49,751,993 |
| 1921 | 1,246,858,861 | 215,236,727 | 1,031,622,134 | 342,500,000 | 40,354,583 | 62,767,000 | 53,501,482 |
| 1922 | 1,292,973,059 | 225,890,922 | 1,067,082,137 | 376,500,000 | 35,602,650 | 78,068,500 | 55,144,736 |

The 1922 total of $35,602,650 includes $5,000,000 of tax notes, payable from 1922 tax levy.

## NEW YORK CITY BUDGETS SINCE 1899.

| YEAR. | For City Purposes. | For County Purposes. | Total Budget. | Deficiencies in Taxes. | Grand Totals. |
|---|---|---|---|---|---|
| 1899 | $83,710,793 | $9,809,288 | $93,520,082 | $1,689,877 | $95,209,959 |
| 1900 | 79,201,763 | 11,577,209 | 90,778,972 | 1,618,473 | 92,397,446 |
| 1901 | 87,479,844 | 10,620,568 | 98,100,413 | 1,726,169 | 99,826,582 |
| 1902 | 94,932,872 | 3,686,728 | 98,619,600 | 1,730,018 | 100,349,619 |
| 1903 | 93,395,966 | 3,723,064 | 97,119,031 | 1,522,209 | 98,641,240 |
| 1904 | 102,963,260 | 3,711,694 | 106,674,955 | 1,687,667 | 108,362,622 |
| 1905 | 105,775,245 | 4,042,348 | 109,817,593 | 1,744,816 | 111,562,409 |
| 1906 | 112,654,129 | 4,151,360 | 116,805,490 | 1,845 061 | 118,650,552 |
| 1907 | 122,756,666 | 4,664,839 | 127,421,505 | 3,000,000 | 130,421,505 |
| 1908 | 135,474,403 | 5,097,862 | 140,572,266 | 3,000,000 | 143,572,266 |
| 1909 | 148,454,504 | 5,175,796 | 153,630,301 | 2,922,447 | 156,552,748 |
| 1910 | 153,773,145 | 5,355,124 | 159,128,270 | 4,000,000 | 163,128,270 |
| 1911 | 158,514,029 | 5,453,805 | 163,967,835 | 10,000,000 | 173,967,835 |
| 1912 | 167,585,735 | 10,217,154 | 177,802,889 | 3,287,366 | 181,090,256 |
| 1913 | 176,229,747 | 14,181,693 | 190,411,441 | 2,300,000 | 192,711,441 |
| 1914 | 179,289,082 | 11,206,469 | 190,495,551 | 2,500,000 | 192,995,551 |
| 1915 | 185,843,977 | 7,033,716 | 192,877,694 | 6,112,092 | 198,989,786 |
| 1916 | 187,879,589 | 21,076,587 | 208,956,177 | 4,000,000 | 212,956,177 |
| 1917 | 198,799,819 | 7,314,317 | 206,114,136 | 5,000,000 | 211,114,136 |
| 1918 | 219,159,468 | 15,864,290 | 235,023,759 | 3,100,000 | 238,123,759 |
| 1919 | 240,487,558 | 7,537,876 | 246,190,435 | 1,835,000 | 248,025,435 |
| 1920 | 263,305,596 | 8,708,888 | 272,014,485 | 1,675,000 | 273,689,485 |
| 1921 | 333,820,817 | 10,029,223 | 343,850,040 | 1,680,000 | 345,530,040 |
| 1922 | 339,686,087 | 9,988,183 | 349,674,270 | 927,300 | 350,516,525 |

The total for city purposes includes direct State taxes, which in 1922 were $14,430,513; interest on and redemption of the city debt amounted to $102,237,791.

Deficiencies in taxes, 1899-1906, inclusive, totalled $13,564,293.

The 1923 budget, adopted by the Board of Estimate Oct. 31, 1922, totalled $353,351,813.

## NEW YORK CITY PENSION LAW.

(Chapter 427, Laws of 1920, effective Oct. 1, 1920.)

THE New York City Pension Law provides that all employees, except those in exempt class, entering the city service after Oct. 1, 1920, shall become members of this system and all present city employees may become members by filing with the Board of Estimate and Apportionment a statement waiving all present or prospective benefits in other city retirement systems. The Board of Estimate and Apportionment has charge of all funds and of the entire system; the Comptroller is the custodian of the several funds, which are (1) Annuity savings funds, (2) Annuity reserve fund, (3) Contingent reserve fund, (4) Pension reserve fund, (5) Pension fund.

Teachers, policemen, firemen and street-cleaners do not enter into this system, as they have their own.

Among the provisions of this law are life insurance protection equal to the last six months' pay of the employee, disability insurance protection of from one-quarter to one-half of the salary any time after completing ten years of service and paying, as long as the disability continues, a three-quarter pay pension if the employee is disabled in the performance of duty, a half-pay pension to the dependents with return in cash of all contributions at 4 per cent. per annum if the employee is killed in the performance of duty, retirement on demand after the ages of fifty-eight, fifty-nine and sixty, regardless of the length of service.

The city pays for all of these benefits except one-half of the cost of service or superannuation retirement benefit on account of service during membership in the fund. If the employee joins within the first year, the city also pays the entire cost of the benefits allowed by reason of service rendered prior to Oct. 1, 1920. The amount of the salary paid into the pension fund will be from 3 to 8 per cent.

## TOTAL STOCK AND BOND SALES, BY YEARS, AT NEW YORK.

Total sales of stocks and bonds on the New York Stock Exchange, by years, have been as follows:

| YEAR. | Stocks (Shares). | Bonds (Par Value). | YEAR. | Stocks (Shares). | Bonds (Par Value). | YEAR. | Stocks (Shares). | Bonds (Par Value). |
|---|---|---|---|---|---|---|---|---|
| | *Number.* | *Dollars.* | | *Number.* | *Dollars.* | | *Number.* | *Dollars.* |
| 1889... | 72,014,600 | 408,456,625 | 1900... | 138,312,266 | 578,359,230 | 1911... | 126,515,906 | 889,567,100 |
| 1890... | 71,826,885 | 409,325,120 | 1901... | 265,577,354 | 999,404,920 | 1912... | 131,051,116 | 674,215,000 |
| 1891... | 99,031,689 | 888,650,000 | 1902... | 188,321,181 | 891,305,150 | 1913... | 83,083,585 | 501,155,920 |
| 1892... | 86,726,410 | 352,741,950 | 1903... | 100,748,366 | 684,200,850 | 1914... | 47,899,573 | 461,898,100 |
| 1893... | 77,984,965 | 301,303,777 | 1904... | 186,429,354 | 1,036,810,569 | 1915... | 173,378,655 | 956,077,700 |
| 1894... | 49,275,736 | 352,741,950 | 1905... | 263,040,993 | 1,018,090,420 | 1916... | 232,842,807 | 1,161,625,250 |
| 1895... | 66,440,576 | 519,142,100 | 1906... | 283,707,955 | 676,392,500 | 1917... | 184,536,371 | 1,052,346,950 |
| 1896... | 56,663,023 | 394,329,000 | 1907... | 195,445,321 | 527,166,350 | 1918... | 143,378,095 | 2,093,257,500 |
| 1897... | 77,470,963 | 544,569,939 | 1908... | 196,821,875 | 1,084,454,020 | 1919... | 312,875,250 | 3,771,517,175 |
| 1898... | 112,160,166 | 922,514,410 | 1909... | 214,425,978 | 1,314,656,200 | 1920... | 223,931,350 | 3,955,036,900 |
| 1899... | 175,073,855 | 336,451,120 | 1910... | 163,882,956 | 634,091,000 | 1921... | 173,020,950 | 3,619,178,000 |

## PRICES FOR NEW YORK STOCK EXCHANGE SEATS.

| YEAR. | High. | Low. | YEAR. | High. | Low. | YEAR. | High. | Low. | YEAR. | High. | Low. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1869... | $7,500 | $3,000 | 1883... | $30,000 | $23,000 | 1896... | $20,000 | $14,000 | 1909... | $94,000 | $73,000 |
| 1870... | 4,500 | 4,000 | 1884... | 27,000 | 20,000 | 1897... | 22,000 | 15,500 | 1910... | 94,000 | 65,000 |
| 1871... | 4,500 | 2,750 | 1885... | 34,000 | 20,000 | 1898... | 29,750 | 19,000 | 1911... | 73,000 | 65,000 |
| 1872... | 6,000 | 4,300 | 1886... | 33,000 | 23,000 | 1899... | 40,000 | 29,500 | 1912... | 74,000 | 55,000 |
| 1873... | 7,700 | 5,000 | 1887... | 30,000 | 19,000 | 1900... | 47,500 | 37,500 | 1913... | 53,000 | 37,000 |
| 1874... | 5,000 | 4,250 | 1888... | 24,000 | 17,000 | 1901... | 80,000 | 48,500 | 1914... | 55,000 | 34,000 |
| 1875... | 6,750 | 4,250 | 1889... | 23,000 | 19,000 | 1902... | 81,000 | 65,000 | 1915... | 74,000 | 38,000 |
| 1876... | 5,600 | 4,000 | 1890... | 22,500 | 17,000 | 1903... | 82,000 | 51,000 | 1916... | 76,000 | 60,000 |
| 1877... | 5,750 | 4,500 | 1891... | 24,000 | 16,000 | 1904... | 81,000 | 57,000 | 1917... | 77,000 | 45,000 |
| 1878... | 9,500 | 4,000 | 1892... | 22,000 | 17,000 | 1905... | 85,000 | 72,000 | 1918... | 60,000 | 45,000 |
| 1879... | 16,000 | 5,100 | 1893... | 20,000 | 15,250 | 1906... | 95,000 | 78,000 | 1919... | 110,000 | 60,000 |
| 1880... | 26,000 | 14,000 | 1894... | 21,250 | 18,000 | 1907... | 88,000 | 51,000 | 1920... | 115,000 | 85,000 |
| 1881... | 30,000 | 22,000 | 1895... | 20,000 | 17,000 | 1908... | 80,000 | 51,000 | 1921... | 100,000 | 77,500 |
| 1882... | 32,500 | 20,000 | | | | | | | | | |

## NEW YORK CLEARING HOUSE ASSOCIATION DATA.

(Prepared for The Almanac by the Manager, William J. Gilpin.)

THE association is composed of 18 national banks, 11 State banks, and 12 trust companies. The Federal Reserve Bank of New York and the Clearing House City Collection Department also make their exchanges at the Clearing House, making 43 clearing institutions. There are 7 banks and trust companies in the city and vicinity, not members of the association, which make their exchanges through banks that are members, in accordance with constitutional provisions. *President*—Walter E. Frew, President of the Corn Exchange Bank. *Secretary*—Lewis L. Clarke, President American Exchange National Bank. *Manager*—William J. Gilpin. *Assistant Manager*—Clarence E. Bacon. *Examiner*—Charles A. Hanna.

NEW YORK CLEARING HOUSE BUSINESS, YEAR ENDED SEPTEMBER 30, 1922.

| | | | |
|---|---|---|---|
| Exchanges | $213,326,385,751 | Smallest exchanges on any one day during the year (Apr. 15, 1922) | $299,755,004 |
| Balances | 21,032,674,951 | | |
| Total transactions | $234,359,060,703 | Smallest balances on any one day during the year (Apr. 15, 1922) | 43,347,971 |
| The average daily transactions: | | | |
| Exchanges | $706,378,760 | Smallest transactions on any one day during the year (Apr. 15, 1922) | 343,102,976 |
| Balances | 69,644,619 | | |
| Total | $776,023,379 | Largest daily transactions on record. Jan. 3, 1921. | |
| Total transactions since organization of Clearing House (69 years): | | Exchanges | 1,423,063,788 |
| Exchanges | $3,987,566,087,717 | Balances | 101,275,424 |
| Balances | 249,162,075,491 | Total transactions | $1,524,339,212 |
| Total | $4,236,728,163,208 | Largest exchanges, Jan. 3, 1921. | 1,423,063,788 |
| Largest exchanges on any one day during the year (May 2, 1922) | $1,125,561,884 | Largest balances, June 17, 1920. | 157,020,486 |
| | | Transactions of the Fed. Reserve Bank of New York: | |
| Largest balances on any one day during the year (Dec. 16, 1921) | 113,984,618 | Debit exchanges | 2,933,962,838 |
| | | Credit exchanges | 18,839,142,319 |
| Largest transactions on any one day during the year (July 1, 1922) | 1,218,911,274 | Credit balances | 15,905,179,480 |

NEW YORK BANK CLEARINGS SINCE 1855.

(For years ended September 30.)

| Yr. | No. of Members. | Clearings for Year. | Average Daily Clearings. | Yr | No. of Members. | Clearings for Year. | Average Daily Clearings. |
|---|---|---|---|---|---|---|---|
| 1855 | 48 | $5,362,912,098.38 | $17,412,052.27 | 1890 | 65 | $37,660,686,571.76 | $123,074,139 12 |
| 1856 | 50 | 6,906,213,328.47 | 22,278,107.51 | 1891 | 64 | 34,053,608,770.04 | 111,651,471.39 |
| 1857 | 50 | 8,333,226,718.06 | 26,968,371.26 | 1892 | 65 | 36,279,905,235.59 | 118,561,781.82 |
| 1858 | 46 | 4,756,664,386.09 | 15,393,735.88 | 1893 | 65 | 34,421,380,869.50 | 113,978,082.31 |
| 1859 | 47 | 6,448,005,956.01 | 20,867,333.19 | 1894 | 66 | 24,230,145,367.70 | 79,704,425.55 |
| 1860 | 50 | 7,231,143,056.69 | 23,401,757.47 | 1895 | 67 | 28,264,379,126.23 | 92,670,095.49 |
| 1861 | 50 | 5,915,742,758.05 | 19,269,520.38 | 1896 | 66 | 29,350,894,883.87 | 96,232,442.24 |
| 1862 | 50 | 6,871,443,591.20 | 22,237,681.53 | 1897 | 66 | 31,337,760,947.98 | 103,424,953.62 |
| 1863 | 50 | 14,867,597,848.60 | 48,428,657.49 | 1898 | 65 | 39,853,413,947.74 | 131,529,418.97 |
| 1864 | 49 | 24,097,196,655.92 | 77,984,455.20 | 1899 | 64 | 57,368,230,771.33 | 189,961,029.04 |
| 1865 | 55 | 26,032,384,341.89 | 84,796,040.20 | 1900 | 64 | 51,964,588,564.31 | 170,936,146.61 |
| 1866 | 58 | 28,717,146,914.09 | 93,541,195.16 | 1901 | 62 | 77,020,672,493.65 | 254,193,638.59 |
| 1867 | 58 | 28,675,159,472.20 | 93,101,167.11 | 1902 | 60 | 74,753,189,435.86 | 245,898,649.46 |
| 1868 | 59 | 28,484,288,636.92 | 92,182,163.87 | 1903 | 57 | 70,833,655,940.29 | 233,005,447.17 |
| 1869 | 59 | 37,407,028,986.55 | 121,451,392.81 | 1904 | 54 | 59,672,796,804.41 | 195,648,514.11 |
| 1870 | 61 | 27,804,539,405.75 | 90,274,478.59 | 1905 | 54 | 91,879,318,369.00 | 302,234,599.89 |
| 1871 | 62 | 29,300,986,682.21 | 95,133,073.64 | 1906 | 55 | 103,754,100,091.25 | 342,422,772.57 |
| 1872 | 61 | 33,844,369,568.39 | 109,884,316.78 | 1907 | 54 | 95,315,421,237.96 | 313,537,569.86 |
| 1873 | 59 | 35,461,052,825.70 | 115,885,793.58 | 1908 | 50 | 73,630,971,913.18 | 241,413,022.66 |
| 1874 | 59 | 22,855,927,636.26 | 74,692,573.97 | 1909 | 51 | 99,257,662,411.03 | 326,505,468.45 |
| 1875 | 59 | 25,061,237,902.09 | 81,899,470.26 | 1910 | 50 | 102,553,959,069.28 | 338,461,911.11 |
| 1876 | 59 | 21,597,274,247.04 | 70,349,427.51 | 1911 | 67 | 92,420,120,091.67 | 305,016,897.99 |
| 1877 | 58 | 23,289,243,701.09 | 76,358,176.06 | 1912 | 65 | 96,672,300,863.67 | 319,050,497.89 |
| 1878 | 57 | 22,508,438,441.75 | 73,785,746.54 | 1913 | 64 | 98,121,520,297.15 | 323,833,400.32 |
| 1879 | 59 | 25,178,770,690.50 | 82,015,539.70 | 1914 | 62 | 89,760,344,971.31 | 296,238,762.28 |
| 1880 | 59 | 37,182,128,621.09 | 121,510,224.25 | 1915 | 63 | 90,842,707,723.90 | 299,810,916.58 |
| 1881 | 61 | 48,565,818,212.31 | 159,232,190.86 | 1916 | 63 | 147,180,709,461.18 | 484,147,070.60 |
| 1882 | 62 | 46,552,846,161.34 | 151,637,935.38 | 1917 | 62 | 181,534,031,387.84 | 601,106,064.20 |
| 1883 | 64 | 40,293,165,257.65 | 132,543,306.76 | 1918 | 59 | 174,524,179,028.72 | 575,987,389.53 |
| 1884 | 62 | 34,092,037,337.78 | 111,048,981.55 | 1919 | 60 | 214,703,444,468.43 | 708,592,225.96 |
| 1885 | 64 | 25,250,791,439.90 | 82,789,480.38 | 1920 | 55 | 252,338,249,466.28 | 830,060,031.13 |
| 1886 | 64 | 33,374,682,216.48 | 109,067,588.94 | 1921 | 52 | 204,082,339,375.84 | 673,539,073.84 |
| 1887 | 65 | 34,872,848,785.90 | 114,337,209.13 | 1922 | 43 | 213,326,385,751.57 | 706,378,760.76 |
| 1888 | 64 | 30,863,686,609.21 | 101,192,415.11 | | | | |
| 1889 | 64 | 34,796,465,528.87 | 114,839,820.23 | Totals.... | | $3,987,566,087,717.01 | $189,325,139.48 |

AGGREGATE CAPITAL OF CLEARING HOUSE BANKS.

The aggregate capital of the 18 national banks, 11 State banks, and 12 trust companies in the New York Clearing House, as of Oct. 28, 1922, was $289,600,000. This did not include the Federal Reserve Bank. In addition, there were 4 institutions in New York City and 1 in Bayonne, N. J. (not members of the Clearing House but making through it their clearings) with a total capital of $3,200,000, and with deposits of $54,708,000.

## VALUE AND WEIGHT OF GOLD.

(By the United States Assay Office, New York.)

THE unit in weighing gold is the troy ounce. A "fine" ounce means an ounce of pure gold. The mint value of gold does not fluctuate, but remains constant at $20.67183462 per fine ounce. Troy measure is used in weighing gold. The grain is the same in both troy and avoirdupois measure, but the ounce and the pound are not the same. The troy ounce contains 480 grains and the troy pound 5,760 grains, there being 12 ounces to the pound. The troy pound is never used in weighing gold, even when the weights of large quantities are to be computed. The avoirdupois ounce contains 437½ grains and the avoirdupois pound contains 7,000 grains, there being 16 ounces to the pound.

## CONDITION OF MEMBERS, N. Y. CLEARING HOUSE ASSOCIATION.

For the week ending Oct. 28, 1922. The figures are six-day averages, except as to capital and net profits. The last named item covers the period from the foundation of the institution.

| CLEARING HOUSE MEMBERS. | Capital. | Net Profits. | Loans, Dis. Inv'ts, etc., Average. | Cash in Vault, Average. | Net Demand Deposits, Average. | Time Deposits, Average. |
|---|---|---|---|---|---|---|
| MEMBERS OF FEDERAL RESERVE BANK. | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Bank of N. Y. & Trust Co.... | 4,000,000 | 11,879,700 | 72,088,000 | 1,059,000 | 49,109,000 | 6,395,000 |
| Bank of the Manhattan Co... | 5,000,000 | 17,584,000 | 125,663,000 | 2,261,000 | 99,674,000 | 19,039,000 |
| Mechanics' & Metals Nat. Bk. | 10,000,000 | 17,847,700 | 167,034,000 | 5,335,000 | 151,964,000 | 7,002,000 |
| Bank of America..... | 5,500,000 | 5,502,500 | 67,734,000 | 1,869,000 | 66,651,000 | 2,916 000 |
| National City Bank..... | 40,000,000 | 50,929,000 | 473,679,000 | 7,327,000 | 541,069,000 | 46,937,000 |
| Chemical National Bank..... | 4,500 000 | 16,004,200 | 123,166,000 | 1,169,000 | 101,549,000 | 12,283,000 |
| Nat. Butchers & Drovers Bk.. | 500,000 | 214,200 | 5,282,000 | 82,000 | 3,684,000 | 5,000 |
| American Exchange Nat. Bk.. | 5,000,000 | 7,846,000 | 101,714,000 | 1,204,000 | 79,338,000 | 9,363,000 |
| National Bank of Commerce.. | 25,000,000 | 37,778,500 | 331,348,000 | 953,000 | 278,248,000 | 15,227,000 |
| Pacific Bank..... | 1,000,000 | 1,720,800 | 22,911,000 | 1,029,000 | 22,394,000 | 798,000 |
| Chatham & Phenix Nat. Bank. | 10,500,000 | 9,810,400 | 151,138,000 | 6,011,000 | 122,702,000 | 23,339,000 |
| Hanover National Bank..... | 5,000,000 | 20,529,100 | 116,213,000 | 457,000 | 102,656,000 | ..... |
| Corn Exchange Bank..... | 8,250,000 | 11,402,200 | 172,083,000 | 6,294,000 | 154,578,000 | 22,320,000 |
| Importers & Traders Nat. Bk. | 1,500,000 | 8,627,700 | 34,238,000 | 607,000 | 26,695,000 | 25,000 |
| National Park Bank..... | 10,000,000 | 23,757,000 | 157,392,000 | 955,000 | 126,990,000 | 5,001,000 |
| East River National Bank.... | 1,000,000 | 834,200 | 14,062,000 | 369,000 | 12,018,000 | 1,947,000 |
| First National Bank..... | 10,000,000 | 47,398,300 | 300,321,000 | 529,000 | 184,523,000 | 34,491,000 |
| Irving National Bank..... | 12,500,000 | 11,027,400 | 196,005,000 | 4,349,000 | 195,796,000 | 7,000,000 |
| Continental Bank..... | 1,000,000 | 879,400 | 7,182,000 | 138,000 | 5,849,000 | 380,000 |
| Chase National Bank..... | 20,000,000 | 21,787,300 | 343,012,000 | 4,552,000 | 301,479,000 | 36,520,000 |
| Fifth Avenue Bank..... | 500,000 | 2,359,200 | 22,730,000 | 616,000 | 21,634,000 | ..... |
| Commonwealth Bank..... | 400,000 | 935,000 | 8,860,000 | 437,000 | 8,853,000 | ..... |
| Garfield National Bank..... | 1,000,000 | 1,621,700 | 14,882,000 | 453,000 | 13,846,000 | 66,000 |
| Fifth National Bank..... | 1,200,000 | 1,058,900 | 18,455,000 | 254,000 | 15,670,000 | 764,000 |
| Seaboard National Bank..... | 4,000,000 | 6,934,900 | 77,747,000 | 1,152,000 | 73,344,000 | 1,899,000 |
| Coal and Iron Nat. Bank..... | 1,500,000 | 1,339,600 | 15,026,000 | 679,000 | 11,957,000 | 712,000 |
| Bankers Trust Co..... | 20,000,000 | 25,014,300 | 269,079,000 | 1,028,000 | 229,768,000 | 20,507,000 |
| U. S. Mortgage & Trust Co... | 3,000,000 | 4,510,400 | 59,132,000 | 756,000 | 50,541,000 | 6,103,000 |
| Guaranty Trust Co..... | 25,000,000 | 17,804,500 | 368,331,000 | 1,349,000 | 394,436,000 | 32,936,000 |
| Fidelity-Intern'l Trust Co.... | 1,500,000 | 1,824,100 | 19,693,000 | 365,000 | 17,939,000 | 541,000 |
| Columbia Trust Co..... | 5,000,000 | 7,945,000 | 79,098,000 | 651,000 | 73,076,000 | 6,700,000 |
| New York Trust Co..... | 10,000,000 | 17,336,700 | 151,570,000 | 442,000 | 125,259,000 | 14,519,000 |
| Metropolitan Trust Co..... | 2,000,000 | 3,729,000 | 40,954,000 | 555,000 | 35,915,000 | 3,585,000 |
| Farmers Loan & Trust Co.... | 5,000,000 | 14,889,300 | 131,969,000 | 523,000 | 89,853,000 | 30,234,000 |
| Columbia Bank..... | 2,000,000 | 2,055,400 | 30,017,000 | 729,000 | 27,179,000 | 2,111,000 |
| Equitable Trust Co..... | 12,000,000 | 15,462,700 | 158,104,000 | 1,444,000 | 191,874,000 | 8,633,000 |
| STATE BANKS NOT MEMBERS OF FEDERAL RESERVE BANK. | | | | | | |
| Greenwich Bank..... | 1,000,000 | 2,097,100 | 18,852,000 | 1,689,000 | 18,706,000 | 56,000 |
| Bowery Bank..... | 250,000 | 873,300 | 5,492,000 | 325,000 | 2,631,000 | 2,097,000 |
| State Bank..... | 2,500,000 | 4,630,000 | 80,917,000 | 3,328,000 | 27,071,000 | 50,602 000 |
| TRUST COMPANIES NOT MEMB'S FEDERAL RESERVE BANK. | | | | | | |
| Title Guarantee & Trust Co.. | 7,500,000 | 14,528,200 | 52,793,000 | 1,354,000 | 35,392,000 | 1,038,000 |
| Lawyers Title & Trust Co.... | 4,000,000 | 6,690,800 | 26,650,000 | 902,000 | 17,550,000 | 814,000 |
| TOTALS: | | | | | | |
| Members Federal Reserve Bk. | 274,350,000 | 447,980,300 | 4,447,972,000 | 57,982,000 | 3,791,593,000 | 380,298,000 |
| State Banks, not members of Federal Reserve Bank... | 3,750,000 | 7,600,400 | 105,261,000 | 5,342,000 | 48,408,000 | 52,755,000 |
| Trust companies, not members of Federal Reserve Bank... | 11,500,000 | 21,219,000 | 79,443,000 | 2,256,000 | 52,942,000 | 1,852,000 |
| Aggregate 41 members..... | 289,600,000 | 476,799,700 | 4,632,676,000 | 65,580,000 | 3,892,943,000 | 434,905,000 |

Reserves with legal depositories totalled $517,989,000.
Net demand deposits do not include $217,031,000 deposits in foreign branches of the National City Bank and the Bankers, Guaranty, Equitable, and Farmers Loan and Trust Companies.

### THE FEDERAL RESERVE BANK OF NEW YORK.

The Federal Reserve Bank of New York, in the calendar year 1921, had total earnings of $34,767,289, from which were deducted $8,673,456 for expenses, including operation, self-insurance, etc. This left a net income in 1921 of $26,093,832, as against $53,128,131 in 1920. Of the 1921 net earnings, $1,068,721 were paid in dividends to member banks, at 6 per cent. on paid-in capital; $3,782,671 were added to the surplus; and the balance, $20,702,440, was paid to the United States Government. In 1921 the net earnings were 97.3 per cent. of the bank's capital.

## GOVERNMENTAL COSTS TO A RESIDENT OF N. Y. CITY--1921.

| ITEMS. | Amount. | Population. | Amount Per Capita. | Pct. of Total Per Capita Tax. |
|---|---|---|---|---|
| New York City budget..... | $323,488,857 | 5,620,000 | $57.56 | 49.3 |
| New York State budget..... | 145,798,093 | 10,385,000 | 14.04 | 12.0 |
| Federal Appropriations..... | 4,780,829,510 | 106,000,000 | 45.10 | 38.7 |
| Total..... | ..... | ..... | $116.70 | 100.0 |

### FEDERAL APPROPRIATIONS FOR NATIONAL DEFENSE.

| ITEMS. | Amount. | Population. | Amount Per Capita. | Pct. of Total Per Capita Tax. |
|---|---|---|---|---|
| Military..... | $418,135,257 | 106,000,000 | $3.95 | 3.4 |
| Naval..... | 450,753,820 | 106,000,000 | 4.25 | 3.6 |
| Total..... | $868,889,077 | ..... | $8.20 | 7.0 |

## SAVINGS BANKS IN THE CITY OF NEW YORK.

(Their condition, as reported by State Banking Dept., July 1, 1922.)

| NAME. | Resources. | Due Depositors. | Surplus at Par. | No. Depositors. | Deposited in Year. | Withdrawn in Year. |
|---|---|---|---|---|---|---|
| BRONX COUNTY. | *Dollars.* | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* |
| Bronx Savings Bank | 9,332,115 | 8,955,467 | 382,338 | 19,024 | 5,630,757 | 4,145,760 |
| Dollar Savings Bank | 46,043,556 | 42,769,194 | 3,721,157 | 72,840 | 19,711,293 | 15,628,091 |
| North Side Savings Bank | 8,961,016 | 8,581,782 | 242,969 | 18,440 | 5,171,906 | 3,975,358 |
| Total | 64,336,688 | 60,306,442 | 4,346,465 | 110,304 | 30,513,956 | 23,749,209 |
| KINGS COUNTY. | | | | | | |
| Bay Ridge Savings Bank | 9,474,559 | 8,916,135 | 477,223 | 24,580 | 7,789,916 | 6,853,479 |
| Brevoort Savings Bank | 13,839,809 | 12,815,243 | 977,933 | 27,145 | 6,626,854 | 5,554,350 |
| Brooklyn Savings Bank | 81,545,647 | 72,055,689 | 11,256,906 | 76,062 | 20,637,257 | 20,526,550 |
| Bushwick Savings Bank | 12,784,967 | 11,688,531 | 1,030,076 | 21,877 | 4,903,605 | 4,859,842 |
| City Savings Bank of B'klyn | 11,777,520 | 10,757,605 | 794,043 | 19,308 | 5,297,627 | 4,973,661 |
| Dime Savings Bank of B'klyn | 93,957,391 | 84,265,573 | 11,418,175 | 132,269 | 30,516,264 | 27,725,870 |
| Dime Sav. Bank of W'msb'gh | 18,610,352 | 17,181,831 | 1,357,028 | 21,722 | 6,759,579 | 6,247,555 |
| East Brooklyn Savings Bank | 17,878,575 | 16,298,086 | 1,871,417 | 23,345 | 6,660,881 | 5,657,066 |
| East New York Savings Bank | 14,531,002 | 13,528,400 | 936,904 | 29,935 | 7,784,217 | 6,004,956 |
| Flatbush Savings Bank | 7,748,994 | 7,304,939 | 191,261 | 22,846 | 5,649,337 | 4,633,240 |
| Fulton Savings Bank, Kings Co. | 17,993,901 | 16,480,899 | 1,617,587 | 22,332 | 5,797,079 | 6,089,951 |
| Greater N. Y. Savings Bank | 19,448,967 | 18,325,408 | 750,870 | 39,753 | 10,517,295 | 8,702,351 |
| Greenpoint Savings Bank | 23,579,290 | 21,442,280 | 2,298,060 | 28,464 | 9,004,969 | 8,014,166 |
| Hamburg Savings Bank | 7,816,042 | 7,363,411 | 351,643 | 16,467 | 3,944,810 | 3,336,025 |
| Home Savings Bank | 1,928,263 | 1,852,970 | 59,130 | 5,068 | 1,387,479 | 877,544 |
| Kings County Savings Bank | 16,697,683 | 15,244,361 | 1,919,700 | 14,161 | 3,401,431 | 4,042,202 |
| Lincoln Savings Bank | 49,910,736 | 45,348,444 | 4,389,319 | 57,917 | 18,634,514 | 16,707,701 |
| Navy Savings Bank | 373,106 | 349,566 | 28,279 | 2,841 | 947,766 | 689,058 |
| Prudential Savings Bank | 9,252,181 | 8,632,626 | 496,960 | 16,489 | 4,724,944 | 4,144,496 |
| Roosevelt Savings Bank | 27,073,792 | 24,848,389 | 1,621,713 | 48,761 | 13,154,417 | 10,797,877 |
| South B'klyn Savings Inst | 37,586,525 | 32,579,894 | 5,492,210 | 37,839 | 9,334,855 | 9,729,546 |
| Sumner Savings Bank | 3,276,770 | 3,128,740 | 208,840 | 7,579 | 1,702,744 | 1,436,713 |
| Williamsburgh Savings Bank | 129,990,038 | 111,814,694 | 17,877,739 | 118,238 | 31,538,477 | 31,186,884 |
| Total | 627,076,110 | 562,223,719 | 67,423,020 | 814,998 | 216,716,322 | 198,790,727 |
| NASSAU COUNTY. | | | | | | |
| Roslyn Savings Bank of Roslyn | 4,047,339 | 3,624,470 | 495,274 | 5,819 | 986,398 | 962,468 |
| NEW YORK COUNTY. | | | | | | |
| American Savings Bank | 8,941,861 | 8,162,284 | 659,107 | 18,091 | 4,970,174 | 4,215,354 |
| Bank for Savings, City of N. Y. | 134,059,094 | 120,607,444 | 19,873,290 | 140,874 | 27,686,074 | 25,485,679 |
| Bowery Savings Bank | 189,412,009 | 169,732,018 | 23,209,098 | 155,343 | 49,197,440 | 46,979,186 |
| Broadway Savings Institution | 13,900,778 | 12,884,386 | 1,244,733 | 15,401 | 3,303,351 | 3,716,582 |
| Central Sav. B'k, City of N. Y. | 137,999,617 | 124,020,282 | 17,285,781 | 129,757 | 34,759,581 | 35,427,866 |
| Citizens Savings Bank | 32,580,517 | 29,084,844 | 3,211,718 | 29,100 | 8,335,140 | 7,776,837 |
| Commonwealth Savings Bank | 5,364,895 | 5,112,809 | 310,222 | 15,143 | 3,096,334 | 2,286,602 |
| Dry Dock Savings Institution | 100,283,909 | 90,321,857 | 10,477,501 | 95,631 | 27,818,209 | 25,028,153 |
| East River Savings Institution | 43,797,396 | 37,726,095 | 7,021,020 | 33,791 | 12,223,247 | 9,610,154 |
| Emigrant Indust. Sav. Bank | 238,229,712 | 218,889,219 | 25,024,733 | 193,440 | 56,244,248 | 52,707,518 |
| Empire City Savings Bank | 21,038,300 | 19,766,163 | 1,530,253 | 37,124 | 11,110,763 | 7,819,741 |
| Excelsior Savings Bank | 26,243,300 | 24,204,897 | 2,528,673 | 33,640 | 7,699,979 | 8,649,179 |
| Franklin Savings Bank | 58,193,569 | 51,699,520 | 6,543,689 | 84,622 | 21,753,109 | 17,528,145 |
| Greenwich Savings Bank | 97,232,466 | 86,536,442 | 12,210,837 | 95,174 | 17,490,963 | 17,459,083 |
| Harlem Savings Bank | 55,443,731 | 50,850,260 | 5,189,995 | 68,220 | 16,891,918 | 14,189,581 |
| Irving Savings Bank | 21,365,069 | 19,257,785 | 2,500,564 | 21,069 | 4,517,081 | 5,269,966 |
| Italian Sav. B'k, City of N. Y. | 17,111,332 | 15,263,544 | 1,462,634 | 25,761 | 8,189,268 | 7,026,746 |
| Maiden Lane Savings Bank | 4,225,567 | 4,005,007 | 245,209 | 12,868 | 2,978,119 | 2,833,392 |
| Manhattan Savings Institution | 16,815,558 | 15,251,467 | 2,071,539 | 24,076 | 5,478,632 | 5,269,713 |
| Metropolitan Savings Bank | 19,793,891 | 18,297,369 | 1,964,632 | 25,293 | 5,511,198 | 5,478,582 |
| New York Savings Bank | 57,186,603 | 50,805,848 | 7,057,521 | 51,706 | 12,749,188 | 13,985,605 |
| North River Savings Bank | 20,498,740 | 18,966,839 | 1,574,187 | 31,825 | 8,646,379 | 7,320,110 |
| Seamen's Bank for Savings | 82,765,399 | 73,928,527 | 12,172,615 | 82,760 | 13,869,213 | 18,202,040 |
| Union Dime Savings Bank | 82,264,834 | 74,858,394 | 8,343,226 | 156,170 | 29,818,287 | 27,850,866 |
| Union Square Savings Bank | 24,115,634 | 22,399,837 | 2,419,605 | 25,757 | 8,098,406 | 7,220,485 |
| United States Savings Bank | 16,092,435 | 14,960,923 | 1,443,409 | 24,420 | 7,346,199 | 5,248,710 |
| West Side Savings Bank | 8,765,526 | 8,159,279 | 626,468 | 15,253 | 3,253,200 | 2,985,626 |
| Total | 1,533,721,742 | 1,385,762,342 | 178,202,261 | 1,642,309 | 413,035,705 | 387,573,503 |
| QUEENS COUNTY. | | | | | | |
| College Point Savings Bank | 3,637,181 | 3,357,653 | 358,424 | 5,392 | 1,258,386 | 1,239,249 |
| Jamaica Savings Bank | 12,120,111 | 11,197,846 | 960,497 | 18,056 | 4,657,544 | 4,228,560 |
| Long Island City Savings Bank | 24,232,997 | 21,658,654 | 2,312,211 | 35,772 | 10,692,916 | 9,233,244 |
| Queens Co. Sav. B'k, Flushing | 8,811,725 | 8,000,354 | 865,722 | 13,384 | 3,259,484 | 3,106,364 |
| Rockaway Sav. B'k, Far Rock'y | 235,791 | 210,089 | 25,295 | 683 | 307,338 | 100,631 |
| Savings Bank of Richmond Hill | 1,177,412 | 1,112,664 | 43,395 | 3,431 | 1,237,774 | 507,152 |
| Savings Bank of Ridgewood | 1,575,139 | 1,488,866 | 38,677 | 4,396 | 1,921,284 | 568,940 |
| Total | 51,790,356 | 47,026,127 | 4,604,222 | 81,114 | 23,334,726 | 18,984,142 |
| RICHMOND COUNTY. | | | | | | |
| Rich. Co. Sav. B'k, W. N. Bright'n | 3,673,159 | 3,413,379 | 307,706 | 8,471 | 1,790,642 | 1,866,545 |
| Staten Is. Sav. B'k, Stapleton | 12,035,168 | 11,047,815 | 1,105,616 | 23,429 | 4,794,638 | 4,952,298 |
| Total | 15,708,327 | 14,461,194 | 1,413,322 | 31,900 | 6,585,280 | 6,818,843 |
| WESTCHESTER COUNTY. | | | | | | |
| Bank for Savings of Ossining | 5,291,162 | 4,664,359 | 726,339 | 6,660 | 1,340,381 | 1,332,652 |
| Eastchester Sav. B'k, Mt. Ver'n | 7,492,764 | 6,912,545 | 710,158 | 12,036 | 3,330,173 | 3,036,621 |
| Greenburgh Sav. B'k, Dobbs F'y | 1,259,257 | 1,154,724 | 108,233 | 2,375 | 457,696 | 368,787 |
| Home Sav. B'k, White Plains | 7,366,794 | 6,814,027 | 627,887 | 14,743 | 2,352,925 | 2,326,566 |
| Peekskill Savings Bank | 6,336,831 | 5,433,555 | 893,292 | 8,953 | 1,192,320 | 1,245,474 |
| Peoples B'k for Sav., N. Rochelle | 1,490,921 | 1,415,711 | 92,054 | 5,375 | 972,769 | 946,721 |
| Peoples Savings Bank, Yonkers | 15,902,548 | 14,544,423 | 1,332,192 | 20,032 | 4,596,831 | 4,013,495 |
| Port Chester Savings Bank | 7,671,780 | 7,041,004 | 641,523 | 10,701 | 2,210,956 | 1,939,650 |
| Union Sav. B'k, Mamaroneck | 1,745,919 | 1,618,044 | 153,363 | 3,567 | 768,305 | 672,716 |
| Westch. Co. Sav. B'k, Tarryt'wn | 6,260,396 | 5,138,646 | 1,242,975 | 7,505 | 1,295,226 | 1,277,889 |
| Yonkers Savings Bank | 16,601,694 | 14,898,858 | 1,793,190 | 21,394 | 4,387,306 | 3,815,411 |
| Total | 77,420,067 | 69,635,897 | 8,321,208 | 113,341 | 22,904,889 | 20,975,981 |

County totals are official; cents eliminated as to individual banks.

## POPULATION AND AREA—STATES AND COUNTRIES.

| Country. | Continent. | Owning or Ruling Power. | Area, Sq. Miles. | Population. | Pop. Per Square Mile. | Capital or Chief City. |
|---|---|---|---|---|---|---|
| Abyssinia | Africa | Kingdom | 350,000 | 10,000,000 | 28.06 | Addis Abeba. |
| Aden | Asia | Britain | 75 | 55,000 | 733.33 | Aden. |
| Afghanistan | Asia | Monarchy | 245,000 | 6,330,500 | 26.00 | Kabul. |
| Albania | Europe | Republic | 11,000 | 1,700,000 | 127.27 | Durazzo. |
| Alberta | No. Amer. | Britain | 255,285 | 588,454 | 2.35 | Ottawa. |
| Algeria | Africa | France | 220,180 | 5,801,000 | ..... | Algiers. |
| Alsace | Europe | France | 3,197 | 1,150,000 | ..... | Strassbourg. |
| Amur | Asia | China | 203,000 | 1,500,000 | ..... | |
| Angola, Kabinda | Africa | Portugal | 484,800 | 2,124,000 | 8.66 | Loanda. |
| Annam | Asia | Fr. Protect | 39,758 | 5,750,000 | 144.03 | Hue. |
| Andorra | Europe | Fr.-Sp. Protect. | 191 | 5,231 | 21.80 | Andorra. |
| Anhalt | Europe | Germany | 888 | 332,000 | 375.00 | Dessau |
| Antigua | West Indies | Britain | 108 | 35,073 | ..... | Antigua. |
| Arabia | Asia | ..... | 1,200,000 | 5,000,000 | 5.50 | Mecca. |
| Argentina | So. Amer. | Republic | 1,153,119 | 8,698,516 | 7.54 | Buenos Aires. |
| Armenia | Asia | Soviet Republic | 15,240 | 1,214,000 | 80.50 | Erivan. |
| Ashanti | Africa | Britain | 11,000 | 3,000,000 | ..... | Kumasi. |
| Asia Minor | Asia | ..... | 199,272 | 10,186,900 | ..... | |
| Assam (India) | Asia | Britain | 53,015 | 7,600,000 | 143.35 | Shillong. |
| Australia | Oceania | Britain | 2,974,581 | 5,436,794 | 1.84 | Melbourne. |
| Austria | Europe | Republic | 30,766 | 6,132,000 | 199.31 | Vienna. |
| Azerbaijan | Asia | Russian Soviet | 33,970 | 2,100,000 | 61.82 | Baku. |
| Azores | Africa | Portugal | 922 | 242,611 | ..... | Angra. |
| Baden | Europe | Germany | 5,819 | 2,210,000 | 381.50 | Mannheim. |
| Bahamas | West Indies | Britain | 4,404 | 53,000 | 20.39 | Nassau. |
| Bahrein Isles | Asia | Britain | 300 | 110,000 | 366.66 | Moharek. |
| Balearic Isles | Europe | Spain | 1,935 | 330,167 | 170.62 | Palma. |
| Baluchistan (India) | Asia | Britain | 54,228 | 422,000 | 7.78 | Queta. |
| Barbados | West Indies | Britain | 166 | 199,000 | 1198.79 | Bridgetown. |
| Baroda (India) | Asia | Semi-Britain<br>Semi-Kingdom | 8,182 | 2,200,000 | 256.21 | Paroda. |
| Bashkir | Europe | Soviet Russia | 40,420 | 1,268,132 | 317.00 | |
| Basutoland | Africa | Britain | 11,716 | 498,000 | 42.50 | Maseru. |
| Bavaria | Europe | Germany | 30,562 | 7,200,000 | 235.22 | Munich. |
| Bechuanaland | Africa | Kingdom | 275,000 | 153,000 | .56 | Serowe. |
| Bengal (India) | Asia | Britain | 78,700 | 46,700,000 | 59.33 | Calcutta. |
| Belgium | Europe | Kingdom | 11,744 | 7,684,272 | 670.00 | Brussels. |
| Berar (India) | Asia | Semi-Britain<br>Semi-Kingdom | ..... | ..... | ..... | |
| Bermudas | No. Amer. | Britain | 19 | 22,000 | 113.88 | Hamilton. |
| Bhutan | Asia | Brit. Protect | 20,000 | 250,000 | 12.50 | Punakha. |
| Bismarck Island | Oceania | British | 15,752 | 188,000 | ..... | |
| Bohemia | Europe | Czecho-Slovakia | 20,065 | 6,769,548 | ..... | Prague. |
| Bokhara | Asia | Soviet Russia | 83,000 | 1,250,000 | 15.00 | Bokhara. |
| Bolivia | So. Amer. | Republic | 597,460 | 2,820,074 | 4.85 | La Paz. |
| Bombay Presidency | Asia | Britain Protect. | 123,059 | 19,672,642 | ..... | Bombay. |
| Bombay (India) | Asia | Britain | 75,993 | 16,000,000 | 210.54 | Bombay. |
| Borneo (Isl.), (Brit. No.) | Asia | Britain | 31,106 | 208,183 | 9.03 | Sandakan. |
| Borneo (Isl.), (D'tch) | Asia | Holland | 212,738 | 1,625,000 | 7.63 | Banjermasin. |
| Bosnia, Herzego'na | Europe | Jugo-Slavia | 20,709 | 1,950,000 | 94.11 | Sarajevo. |
| Brazil | So. Amer. | Republic | 3,275,510 | 30,645,605 | 9.35 | Rio de Janeiro. |
| Bremen | Europe | Germany | 99 | 312,000 | 3151.51 | Bremen. |
| British Columbia | No. Amer. | Britain | 355,855 | 524,528 | 1.32 | Victoria. |
| British Empire | ..... | Britain | 13,406,103 | 441,895,965 | ..... | London. |
| Brunei | Asia | British Prot | 4,000 | 25,500 | 6.37 | Brunei. |
| Brunswick | Europe | Germany | 1,424 | 480,600 | 337.50 | Brunswick. |
| Bulgaria | Europe | Kingdom | 40,656 | 4,337,513 | 119.55 | Sofia. |
| Burma (India) | Asia | Semi-Britain | 230,839 | ..... | ..... | Rangoon. |
| Cambodia | Asia | Fr. Protect | 57,900 | 2,100,000 | 36.26 | Pnom-penh. |
| Cameroon (Fr.) | Africa | Ex-Ger.; now Fr. Mandate. | 166,489 | 1,750,000 | 3.03 | Yaounda. |
| Cameroon | Africa | British Prot | 31,000 | 400,000 | ..... | Buca. |
| Campeche | No. Amer. | Mexico | 18,087 | 86,661 | 4.79 | Campeche. |
| Canada | No. Amer. | Britain | 3,729,665 | 8,788,500 | 2.35 | Ottawa. |
| Canary Isles | Africa | Spain | 2,807 | 419,809 | 149.55 | Santa Cruz. |
| Cape Breton Islands | No. Amer. | Canada | 3,975 | 122,084 | 30.71 | Sydney |
| Cape of Good Hope | Africa | British | 276,966 | 2,781,185 | ..... | Cape Town. |
| Cape Province | Africa | Britain | 276,775 | 2,781,000 | 10.02 | Cape Town. |
| Cape Verde Isles | Africa | Portugal | 1,480 | 150,900 | 102.03 | Porto Grande. |
| Caucasus | Europe | Russia | 85,708 | 5,719,600 | 66.73 | Tiflis. |
| Celebes | Asia | Holland | 49,390 | 415,999 | 8.42 | Celebes. |
| Ceylon (Isl.) | Asia | Britain | 25,481 | 4,505,000 | 176.79 | Colombo. |
| Chad, Colony | Africa | France | 501,676 | 2,100,000 | 4.10 | Bangui. |
| Channel Islands | Europe | British Kingdom. | 75 | 89,614 | 1194.85 | St. Heliers. |
| Chihuahua | No. Amer. | Mexico | 87,802 | 405,707 | 4.84 | Chihuahua. |
| Chile | So. Amer. | Republic | 289,829 | 3,755,000 | 12.90 | Santiago. |
| China (18 Provinces) | Asia | Republic | 1,532,420 | 302,110,000 | 97.13 | Pekin. |
| China (inc. Mongolia, Thibet, Manchuria and other dependencies) | Asia | Republic | 4,277,170 | 320,065,000 | ..... | |
| Chosen (Korea) | Asia | Japan | 84,738 | 17,285,000 | 202.79 | Seoul. |
| Christmas Islands | Pacific | Britain | 81 | 700 | 8.64 | |
| Cochin-India | Asia | Semi-French<br>Semi-Kingdom | 22,000 | 3,795,613 | ..... | Cochin. |
| Colombia | So. Amer. | Republic | 461,606 | 5,855,000 | 13.27 | Bogota. |
| Congo, Belgian | Africa | Belgium | 909,654 | 10,000,000 | 12.09 | Kinshasa. |
| Congo, French | Africa | France | 982,000 | 6,370,000 | 9.16 | Libreville. |
| Corsica | Europe | France | 3,366 | 295,589 | 87.81 | Ajaccio. |
| Costa Rica | C. Amer. | Republic | 23,000 | 468,400 | 20.36 | San José. |
| Courland | Europe | Former Russian. | 10,435 | 812,300 | 77.84 | Mitau. |
| Crete | Europe | Greece | 2,950 | 336,151 | 113.94 | Candia. |
| Crimea | Europe | Soviet Russia | 15,060 | 761,600 | 50.7 | Sebastopol. |
| Croatia, Slavonia | Europe | Jugo-Slavia | 17,405 | 2,716,000 | 150.30 | Agram. |

| COUNTRY. | Continent. | Owning or Ruling Power. | Area, Sq. Miles. | Population. | Pop. Per Square Mile. | Capital or Chief City. |
|---|---|---|---|---|---|---|
| Cuba | West Indies. | Republic | 41,634 | 2,898,865 | 65.58 | Havana. |
| Curacao | So. Amer. | Holland | 212 | 32,700 | 141.50 | Willemstad. |
| Cyprus (Isl.) | Asia | Great Britain | 3,584 | 311,000 | 86.08 | Miosia. |
| Cyrenaica, Tripoli | Africa | Italy | 410,000 | 1,000,000 | 2.43 | Bengazi. |
| Czecho-Slovakia | Europe | Republic | 54,264 | 13,600,000 | 250.62 | Prague. |
| Daghestan | Europe | Soviet Russia | 13,730 | 798,181 | 61.3 | Petrovsk. |
| Dahomey | Africa | France | 42,460 | 850,000 | 20.04 | Porto Noro. |
| Dalmatia | Europe | Jugo-Slavia | 5,099 | 622,000 | 122.20 | Zara. |
| Danzig (City) | Europe | Free State | 709 | 351,380 | 496.47 | Danzig. |
| Denmark | Europe | Kingdom | 16,958 | 3,283,000 | 192.48 | Copenhagen. |
| Dominican Republic | West Indies. | Republic | 18,750 | 700,000 | 46.50 | Santo Domingo. |
| Durango | No. Amer. | Mexico | 42,272 | 436,147 | 10.31 | Durango. |
| Dutch East Indies | Asia | Holland | 683,000 | 49,200,000 | 72.02 | Batavia. |
| East Africa Protec. | Africa | Britain | 246,822 | 2,800,000 | 11.34 | |
| Ecuador | So. Amer. | Republic | 276,000 | 1,500,000 | 5.8 | Quito. |
| Egypt | Africa | Kingdom | 360,000 | 11,387,000 | 38.28 | Cairo |
| England | Europe | Britain | 50,874 | 35,678,530 | 701.31 | London. |
| Eritrea | Africa | Italy | 45,435 | 402,893 | 8.86 | Asmara. |
| Esthonia | Europe | Republic | 18,000 | 1,250,000 | 75.56 | Reval. |
| Ethiopia, Abyssinia | Africa | Kingdom | 350,000 | 10,000,000 | 22.85 | Addis Abeba. |
| Far Eastern Republic | Asia | Soviet Russia | 652,740 | 1,811,725 | 2.9 | Chita. |
| Faroe Isles | Europe | Denmark | 515 | 19,600 | 37.47 | Thornshawn. |
| Falkland Isles | So. Amer. | Britain | 6,500 | 3,255 | .05 | Stanley. |
| Fed. Malay States | Asia | Brit. Protect. | 27,506 | 1,316,000 | 47.08 | |
| Fiji | Oceania | Britain | 7,435 | 162,604 | 28.46 | |
| Finland | Europe | Republic | 125,689 | 3,241,000 | 22.72 | Helsingfors. |
| Fiume | Europe | Republic | 11 | 53,000 | 62.50 | Fiume. |
| Flanders, West | Europe | Belgium | 1,249 | 874,135 | 699.86 | Bruges. |
| Flanders, East | Europe | Belgium | 1,158 | 1,120,335 | 967.37 | Ghent. |
| Formosa, Taiwan | Asia | Japan | 13,944 | 3,654,000 | 192.88 | Tansui. |
| France (inc. Als.-Lor.) | Europe | Republic | 212,659 | 39,402,800 | 185.29 | Paris. |
| French India | Asia | France | 195 | 234,000 | 1347.44 | |
| French Indo-China | Asia | France | 256,000 | 18,935,052 | ..... | Hanoi. |
| French West Africa | Africa | France | 1,800,566 | 12,283,962 | ..... | Dakar. |
| Gabun Colony | Africa | France | 121,862 | 1,300,000 | 10.66 | Libreville. |
| Gambia | Africa | Britain | 4 | 8,000 | 20.00 | Bathurst. |
| Georgia, Rep. of | Europe | Soviet Republic | 25,760 | 2,372,403 | 97.65 | Tiflis. |
| German Em., Europe, as in 1913. | Europe | Germany | 208,780 | 65,000,000 | 311.33 | Berlin. |
| German Republic | Europe | Republic | 185,889 | 59,858,284 | 239.54 | Berlin. |
| Gibraltar | Europe | Brit. Kingdom | 2 | 17,690 | 9434.66 | Gibraltar. |
| Goa | Asia | Portugal | 1,469 | 515,772 | 323.60 | New Goa. |
| Gold Coast, Etc | Africa | Britain | 80,000 | 2,100,000 | 26.25 | Accra. |
| Gozo Island | Europe | Britain | 27 | 20,000 | 740.74 | Rabato. |
| Greece | Europe | Kingdom | 41,933 | 4,777,380 | 92.65 | Athens. |
| Greenland | No. Amer. | Denmark | 46,740 | 13,440 | 3.47 | Sydproven. |
| Guadeloupe | West Indies. | France | 688 | 229,822 | ..... | Pointe-a-Pitre. |
| Guatemala | Cen. Amer. | Republic | 47,500 | 2,100,000 | 43.48 | Guatemala. |
| Guernsey | Europe | Britain | 25 | 40,477 | 1615 08 | St. Peter-le-Port. |
| Guiana, British | So. Amer. | Britain | 89,480 | 298,000 | 3.47 | Georgetown. |
| Dutch | So. Amer. | Holland | 46,060 | 113,181 | 2.06 | Parimaribo. |
| French | So. Amer. | France | 32,000 | 50,000 | 1.56 | Cayenne. |
| Guinea, French | Africa | France | 95,218 | 1,852,000 | 19.43 | Konakry. |
| Portuguese | Africa | Portugal | 13,940 | 290,000 | 20.80 | Bissau. |
| Spanish | Africa | Spain | 12,000 | 200,000 | 16.66 | Santa Isabel. |
| Hamburg | Europe | Germany | 160 | 1,100,000 | 65.87 | Hamburg. |
| Haiti | West Indies. | Republic | 10,204 | 2,000,000 | 2.45 | Port-au-Prince. |
| Hejaz | Asia | Kingdom | 112,500 | 900,000 | 5.29 | Mecca. |
| Hesse | Europe | Germany | 2,968 | 1,300,000 | 438.00 | Darmstadt. |
| Holland | Europe | Kingdom | 12,582 | 6,841,155 | 544.51 | The Hague. |
| Honduras | Cen. Amer. | Republic | 44,275 | 637,200 | 14.39 | Tegucigalpa. |
| Honduras, British | No. Amer. | Republic | 8,592 | 45,400 | 5.28 | Belize. |
| Hongkong (Isl.) | Asia | Great Britain | 391 | 625,200 | 1953.50 | Victoria. |
| Hungary | Europe | Republic | 35,654 | 7,841,000 | 219.63 | Budapest. |
| Hyderabad (India) | Asia | Semi-Britain / Semi-Kingdom | 82,698 | 12,500,000 | 157.75 | Hyderabad. |
| Iceland | No. Amer. | Denmark | 39,799 | 94,700 | 2.58 | Reykjavik. |
| India | Asia | Great Britain | 1,093,074 | 247,140,000 | 226.09 | Delhi. |
| India (Native States) | Asia | British Protect. | 709,555 | 71,936,736 | 100.00 | |
| Indo-China | Asia | French Protect. | 310,344 | 17,000,000 | 54.77 | Saigon. |
| Ireland | Europe | Britain | 32,585 | 4,496,000 | 137.94 | Dublin-Belfast. |
| Isle of Man | Europe | Britain | 227 | 60,238 | 265.36 | Douglas. |
| Italy | Europe | Kingdom | 117,982 | 38,835,184 | 340.72 | Rome. |
| Ivory Coast | Africa | France | 121,976 | 1,545,680 | 13.00 | Bingerville. |
| Jamaica | West Indies. | Britain | 4,207 | 858,000 | 203.89 | Kingston. |
| Japan, proper | Asia | Kingdom | 148,756 | 55,963,053 | ..... | Tokyo. |
| Japan Empire | Asia | Kingdom | 260,738 | 77,105,112 | 295.33 | Tokyo. |
| Java and Madura | Asia | Holland | 50,000 | 35,000,000 | 699.99 | Batavia. |
| Jersey, Isle | Europe | Britain | ..... | 51,898 | ..... | St. Helier. |
| Johore | Asia | Brit. Protect. | 7,500 | 185,000 | 24.66 | Johore Bahru. |
| Jugo-Slavia | Europe | Kingdom | 86,878 | 11,600,000 | 118.16 | Belgrade. |
| Kamchatka | Asia | Soviet Russia | 502,424 | 41,400 | .08 | Petropavl'sk. |
| Kashmir (India) | Asia | Semi-Britain / Semi-Kingdom | 84,432 | 3,350,000 | 39.67 | Serinagur. |
| Kenya and Prot | Africa | British | 245,000 | 2,630,000 | ..... | Nairobi. |
| Khiva | Asia | Soviet Russia | 24,000 | 646,000 | 21.87 | Khiva. |
| Khorassan | Asia | Persia | ..... | ..... | ..... | Meshed. |
| Kiaochau | Asia | China | 193 | 184,000 | 954.40 | Tsingtau. |
| Kirghiz | Euro-Asia | Soviet Russia | 843,640 | 5,058,553 | 60.00 | |
| Kwangchauwan | Asia | French Protect. | 190 | 169,000 | 889.47 | Kwangchan. |
| Kwangtung | Asia | Japan | 1,300 | 600,644 | ..... | Dairen. |
| Kurdestan | Asia | Russia | 71,990 | 2,470,900 | 34.32 | Diarbekr. |
| Labrador | No. Amer. | Britain | 120,000 | 3,800 | .03 | St. John's. |
| Laos | Asia | French Protec. | 96,500 | 800,000 | 8.27 | Piabang. |
| Latvia | Europe | Republic | 25,000 | 1,813,000 | 261.97 | Itiga. |
| Lebanon | Asia | French Mandate | 7,300 | 750,000 | 122.73 | Beirut. |
| Leeward Isles | West Indies. | Britain | 715 | 128,000 | 172.20 | St. Johns. |
| Liberia | Africa | Republic | 40,000 | 2,000,000 | 50.00 | Monrovia. |

| Country. | Continent. | Owning or Ruling Power. | Area, Sq. Miles. | Population. | Pop. Per Square Mile. | Capital or Chief City. |
|---|---|---|---|---|---|---|
| Liechtenstein | Europe | Principality | 65 | 15,000 | 230.76 | Vaduz. |
| Lippe | Europe | Germany | 469 | 155,000 | 321.72 | Detmold. |
| Lithuania | Europe | Republic | 33,000 | 4,500,000 | 82.00 | Vilna. |
| Lombardy | Europe | Italy | 9,333 | 4,790,473 | 513.28 | Milan. |
| Lorraine | Europe | France | 2,400 | 600,000 | 250.00 | Metz. |
| Lubeck | Europe | Germany | 115 | 121,000 | 105218 | Lubeck. |
| Luxemburg | Europe | Grand Duchy | 999 | 263,824 | 82.00 | Luxemburg. |
| Macao | Asia | Portugal | 4 | 74,866 | 18716.5 | Macao. |
| Madagascar | Africa | France | 228,000 | 3,546,000 | 15.15 | Tananarivo. |
| Madeira | Africa | Portugal | 251 | 200,000 | 796.08 | Funchal. |
| Madras (India) | Asia | Semi-Britain / Semi-Kingdom | 142,330 | | | |
| Madura | Asia | Brit. Protect | 50,557 | 36,035,435 | 712.76 | Bankalan. |
| Malay States Fed | Asia | Britain | 27,506 | 1,316,000 | 47.84 | Kualadump. |
| Malay States, Other | Asia | British Protect | 23,486 | 1,123,175 | | |
| Malta (Isl.) | Europe | British | 91½ | 212,000 | 2459.01 | Valletta. |
| Manchuria | Asia | China | 382,630 | 20,112,100 | 52.22 | Mukden. |
| Manitoba | No. Amer | Britain | 251,832 | 610,118 | 2.43 | Winnipeg. |
| Martinique (Isl.) | W. Indies | France | 385 | 245,000 | 636.36 | Fort de France. |
| Mauretania | Africa | France | 345,400 | 262,000 | .73 | Morocco. |
| Mauritius (Isl.) | Asia | Britain | 720 | 376,000 | 522.22 | Port Louis. |
| Meckl'b'g-Schwerin | Europe | Germany | 5,068 | 660,000 | 132.00 | Wismar. |
| Meckl'b'g-Strelitz | Europe | Germany | 1,131 | 107,000 | 94.60 | New Strelitz. |
| Mesopotamia, Iraq | Asia | Kingdom | 143,250 | 2,849,282 | 20.24 | Bagdad. |
| Mexico | No. Amer | Republic | 767,198 | 15,800,000 | 20.58 | Mexico. |
| Miquelon | No. Amer | France | 83 | 443 | 5.33 | |
| Molucca Isles | Asia | Holland | 21,500 | 430,850 | 20.03 | Ternate. |
| Monaco | Europe | Principality | 8 | 22,956 | 7500.03 | Monaco. |
| Mongolia | Asia | China | 1,369,600 | 2,800,000 | 2.04 | Urga. |
| Montenegro | Europe | Jugo-Slavia | 3,536 | 240,000 | 67.87 | Cettinje. |
| Morocco (French) | Africa | French Protec | 220,400 | 5,400,000 | 23.75 | Rabat. |
| Morocco (Spanish) | Africa | Spanish Prot | 10,960 | 550,000 | 50.00 | Tetuan. |
| Mozambique (Port. Africa) | Africa | Portugal | 426,712 | 3,150,000 | 7.38 | Lourenco-Marquez. |
| Mysore (India) | Asia | Semi-Britain / Semi-Kingdom | 29,495 | 6,000,000 | 203.56 | Bangalore. |
| Natal | Africa | Britain | 35,284 | 1,205,000 | 34.18 | Pieterm'b'g |
| Nepal | Asia | Kingdom (Brit.) | 54,000 | 5,639,092 | 103.70 | Kathmandu. |
| Netherlands | Europe | Kingdom | 12,582 | 6,841,155 | 203.89 | The Hague. |
| New Brunswick | No. Amer | Britain | 27,985 | 387,876 | 13.86 | Fredericton. |
| New Caledonia | Australasia | France | 7,650 | 51,000 | 6.66 | Noumea. |
| Newfoundland | No. Amer | Britain | 42,734 | 263,700 | 6.17 | St. John's. |
| New Guinea, Brit | Oceania | Ex-Germ'n; now Brit. Mandate | 70,000 | 200,000 | 3.57 | Rabaul. |
| New Guinea, Danish | Oceania | Denmark | | | | |
| New Hebrides (Isl.) | Australasia | France | 5,500 | 60,000 | 10.90 | |
| New South Wales | Oceania | Britain | 309,432 | 2,100,000 | 6.78 | Sydney. |
| New Zealand | Oceania | Britain | 103,581 | 1,274,001 | 11.79 | Wellington. |
| Nicaragua | C. Amer | Republic | 51,700 | 639,000 | 12.98 | Managua. |
| Niger Territory | Africa | France | 349,400 | 1,100,000 | 3.10 | Zungeru. |
| Nigeria, Northern / Nigeria, Southern | Africa | Britain | 490,734 | 16,300,000 | 49.98 | Lagos. |
| Northern Territory | Australia | British | 523,620 | 3,870 | | |
| N. W. Territories | No. Amer | Britain | 1,242,224 | 7,988 | .005 | Regina. |
| Norway | Europe | Kingdom | 124,964 | 2,646,306 | 21.60 | Christiania. |
| Nova Scotia with Cape Breton | No. Amer | Britain | 21,428 | 523,837 | 20.24 | Halifax. |
| Nyassaland Protect | Africa | Britain | 39,573 | 1,201,519 | 4.41 | Berbera. |
| Oldenburg | Europe | Germany | 2,482 | 518,200 | 208.78 | Oldenburg. |
| Oman | Asia | Kingdom | 82,000 | 500,000 | 6.09 | Muscat. |
| Ontario | No. Amer | Britain | 407,262 | 2,933,662 | 7.19 | Toronto. |
| Orange Free State | Africa | Britain | 50,389 | 629,000 | 12.28 | Bloemfontein. |
| Orkney Isles | Europe | Britain | 376 | 25,986 | 68.87 | Kirkwall. |
| Palestine | Asia | Brit. Mandate | 9,000 | 770,000 | 85.55 | Jerusalem. |
| Panama | S. Amer | Republic | 31,890 | 401,428 | 13.29 | Panama. |
| Papua | Oceania | Britain | 90,540 | 251,392 | .04 | Darwin. |
| Paraguay | S. Amer | Republic | 75,673 | 700,000 | 9.6 | Asuncion. |
| Persia | Asia | Kingdom | 628,000 | 10,000,000 | 14.33 | Teheran. |
| Peru | S. Amer | Republic | 722,461 | 3,500,000 | 6.91 | Lima. |
| Poland | Europe | Republic | 124,097 | 26,376,103 | 181.00 | Warsaw. |
| Portugal | Europe | Republic | 35,490 | 5,960,056 | 169.06 | Lisbon. |
| Prince Edward Is | No. Amer | Britain | 2,184 | 88,615 | 40.58 | Charlottetown. |
| Principe & St. Thos | Africa | Portugal | 360 | | | |
| Prussia | Europe | Germany | 113,852 | 37,100,000 | 342.98 | Berlin. |
| Punjab, India | Asia | Semi-Britain / Semi-Kingdom | 99,222 | 20,700,000 | 208.12 | Lahore. |
| Quebec | No. Amer | Britain | 706,834 | 2,361,199 | 3.33 | Quebec. |
| Queensland | Oceania | Britain | 670,500 | 758,000 | 1.12 | Brisbane. |
| Rajputana | Asia | British | 128,987 | 10,530,432 | 81.67 | Jaipur. |
| Reunion | Ind. Ocean | France | 970 | 173,190 | | |
| Rhodesia (Southern) | Africa | Britain | 149,000 | 803,000 | 5.06 | Salisbury. |
| Rhodesia (Northern) | Africa | Britain | 291,000 | 932,000 | 3.22 | Livingston. |
| Rian-Lingga (Isl.) | Asia | Holland | 16,301 | | | |
| Roumania | Europe | Kingdom | 122,282 | 17,393,149 | 142.21 | Bucharest. |
| Russia (Europe) | Europe | Soviet Republic | 1,900,000 | 103,000,000 | 142.29 | Moscow. |
| Russia (Asia) | Asia | Soviet Republic | 5,600,000 | 22,000,000 | 575.21 | Moscow. |
| Sahara Desert | Africa | | 2,000,000 | | | |
| Sahara, French | | | 924,160 | 450,000 | | |
| St. Helena (Isl.) | Africa | Britain | 47 | 3,800 | 80.85 | Jamestown. |
| St. Pierre, Mique'n | W. Indies | France | 93 | 3,918 | 40.00 | St. Pierre. |
| Sakhalin Island | Asia | Japan | 29,400 | 105,765 | 3.93 | |
| Salvador | C. Amer | Republic | 7,225 | 1,500,000 | 75.86 | San Salvador. |
| Samoa (Western) | Oceania | Ex-Germ'n; now British. | 1,260 | 37,000 | 28.46 | Apia. |
| San Marino | Europe | Republic | 38 | 12,100 | 318.42 | San Marino. |
| Santo Domingo | W. Indies | Republic | 18,750 | 700,000 | 37.33 | San Domingo. |
| Sarawak | Asia | Britain | 42,000 | 600,000 | 14.28 | Kirching. |
| Sardinia | Europe | Italy | 9,299 | 880,863 | 94.72 | Cagliari. |

| COUNTRY. | Continent. | Owning or Ruling Power. | Area, Sq. Miles. | Population. | Pop. Per Square Mile. | Capital or Chief City. |
|---|---|---|---|---|---|---|
| Saskatchewan | No. Amer. | Britain | 251,700 | 757,510 | 2.66 | Regina. |
| Saxe-Altenburg | Europe | Germany | 511 | 216,128 | 422.95 | Altenburg. |
| Saxe-Cob'g-Gotha | Europe | Germany | 764 | 257,177 | 336.62 | Cob'g-Gotha. |
| Saxe-Meiningen | Europe | Germany | 953 | 278,762 | 287.26 | Meiningen. |
| Saxe-Weimar | Europe | Germany | 1,388 | 417,149 | 300.54 | Weimar. |
| Saxony | Europe | Germany | 5,787 | 4,670,000 | 808.55 | Dresden. |
| Schaumb'g Lippe | Europe | Germany | 131 | 46,400 | 354.19 | Buckeburg. |
| Schleswig-Holstein | Europe | Germany | 7,340 | 1,621,004 | 220.84 | Schleswig. |
| Schw'zb'g-Rudol'dt | Europe | Germany | 363 | 100,702 | 277.41 | Rudolstadt. |
| Schw'zb'g-Sonders | Europe | Germany | 333 | 89,917 | 270.02 | Sond'hausen. |
| Scilly Isles | Europe | Britain | 9 | 2,096 | 232.88 | Hugh Town. |
| Scotland | Europe | Britain | 30,405 | 4,882,288 | 127.68 | Glasgow. |
| Senegal | Africa | France | 74,112 | 1,250,000 | 15.65 | St. Louis. |
| Serbia (old) | Europe | Jugo-Slavia | 42,098 | 4,956,000 | 117.48 | Belgrade. |
| Serbs, Croats, Slov | Europe | Kingdom | | | | |
| Shetland Isles | Europe | Britain | 550 | 26,410 | 48.01 | Lerwick. |
| Siam | Asia | Kingdom | 198,900 | 9,022,000 | 46.25 | Bangkok. |
| Siberia | Asia | Russia | 4,210,420 | 9,257,825 | 2.14 | Omsk. |
| Sicily | Europe | Italy | 9,935 | 1,400,000 | 140.90 | Palermo. |
| Sierra Leone Colony | Africa | British | 31,000 | 1,327,560 | 44.00 | Freetown. |
| Sikkim (India) | Asia | Semi-Britain / Semi-Kingdom | 2,818 | 82,000 | 29.09 | Tumlong. |
| Silesia (pre-war) | Europe | Ger.-Austr | 17,545 | 6,000,000 | 335.70 | Breslau and Tischen. |
| Sinkiang | Asia | China | 550,340 | 1,200,000 | 2.17 | Ili. |
| Slovakia | Europe | Jugo-Slavia | 6,790 | 875,000 | 127.39 | Erseg. |
| Society Isles | Australasia | France | 7,650 | 51,000 | 6.66 | Moumea. |
| Solomon Islands | Australasia | Brit. Protect | 3,800 | 17,000 | | |
| Somaliland Br. | Africa | Britain | 68,000 | 300,000 | 4.41 | Berbera. |
| Somaliland Fr. | Africa | France | 5,790 | 65,000 | 11.83 | Jibuti. |
| Somaliland It. | Africa | Italy | 139,431 | 650,000 | 5.66 | Mogadisho. |
| Sonora | No. Amer | Mexico | 76,633 | 265,383 | 5.88 | Hermosillo. |
| Soudan, Ang-Egypt | Africa | Britain | 1,014,000 | 4,000,000 | 3.46 | Khartoum. |
| South Australia | Australia | British | 380,070 | 493,336 | 1.5 | |
| Southwest Africa | Africa | British | 322,400 | 237,237 | .8 | |
| Spain | Europe | Kingdom | 194,783 | 20,783,841 | 107.81 | Madrid. |
| Spitzbergen (Isles) | Europe | Norway | 25,000 | 1,500 | .06 | |
| Steppes | Asia | Russia | 710,905 | 4,017,020 | 5.67 | Omsk. |
| Straits Settlements | Asia | Britain | 1,600 | 882,000 | 531.32 | Singapore. |
| Sudan (French) | Africa | France | 617,600 | 2,500,000 | 4.04 | Bamako. |
| Sumatra (Isles) | Asia | Holland | 160,000 | 5,848,858 | 37.50 | Batavia. |
| Surinam, D. Gui'a | Asia | Holland | 46,060 | 91,622 | 1.77 | Paramaribo. |
| Swaziland | Africa | Britain | 6,678 | 134,000 | 20.06 | Mbabane. |
| Sweden | Europe | Kingdom | 173,035 | 5,904,000 | 34.12 | Stockholm. |
| Switzerland | Europe | Republic | 15,976 | 3,881,000 | 242.86 | Geneva. |
| Syria | Asia | French Mandate | 60,000 | 3,000,000 | 50.00 | Damascus. |
| Tahiti | Australasia | France | 600 | 11,600 | 19.33 | Papeete. |
| Talwan (Formosa) | Asia | Japan | 13,944 | 3,655,000 | 261.99 | Taikoku. |
| Tanganyika | Africa | Ex-Ger.; Br. Pro. | 265,000 | 7,700,000 | 23.83 | Dar-es-Salam. |
| Tangier | Africa | Internationalized | 140 | 52,000 | 371.00 | Tangier. |
| Tasmania | Oceania | Britain | 26,215 | 214,000 | 8.16 | Hobart. |
| Tartar Republic | Europe | Soviet Russia | 25,960 | 2,852,135 | 114.40 | Kazan. |
| Tibet | Asia | China | 463,200 | 2,000,000 | 5.39 | Lhasa. |
| Timor | Asia | Holl.-Portg | 17,698 | 950,067 | 53.68 | Dilli. |
| Togoland | Africa | France | 33,700 | 1,100,000 | 42.00 | Tunis. |
| Togoland | Africa | Brit. Protect | 12,600 | 350,000 | | |
| Tonga (Friendly) Is. | Oceania | Brit. Protect | 385 | 23,600 | 61.32 | Nukualofa. |
| Tonkin | Asia | Fr. Protect | 40,530 | 6,500,000 | 160.37 | Hanoi. |
| Trans-Caucasia | Asia | Russia | 95,405 | 7,509,500 | 87.70 | |
| Transvaal | Africa | Britain | 110,450 | 2,100,000 | 10.88 | Pretoria. |
| Trinidad | W. Indies | Britain | 1,833 | 391,300 | 21.03 | Trinidad. |
| Tripoli, Cyrenaica | Africa | Italy | 406,000 | 1,000,000 | 2.46 | Tripoli. |
| Tunis | Africa | France | 50,000 | 2,100,000 | 42.00 | Tunis. |
| Turkestan | Asia | Russia | 577,460 | 7,201,551 | 13.00 | Khami. |
| Turkey (Europe) | Europe | Kingdom | 10,882 | 1,900,000 | 174.58 | Constantinople. |
| Turkey (Asia) | Asia | Kingdom | 199,272 | 10,200,000 | 51.18 | Angora. |
| Tyrol & Vorariberg | Europe | Germany | 11,312 | 1,130,534 | 99.85 | Innsbruck. |
| Uganda Prot | Africa | Britain | 110,300 | 3,100,000 | 28.15 | Entebbe. |
| Ukrainia | Europe | Soviet Republic | 174,510 | 26,000,000 | 148.93 | Lemberg. |
| Union of So. Africa | Africa | Britain | 473,089 | 6,729,382 | 12.53 | Pretoria. |
| United Kingdom | Europe | Brit. Kingdom | 121,633 | 47,307,601 | 388.90 | London. |
| United States (Con.) | No. Amer | Republic | 3,026,789 | 105,710,620 | 35.50 | Washington. |
| Uruguay | So. Amer | Republic | 72,153 | 1,494,953 | 20.78 | Montevideo. |
| Venezuela | So. Amer | Republic | 363,728 | 2,412,000 | 6.05 | Caracas. |
| Victoria | Oceania | Britain | 87,884 | 1,532,000 | 17.43 | Melbourne. |
| Waldeck | Europe | Germany | 433 | 66,500 | 153.57 | Arolsen. |
| Wales | Europe | Britain | 7,466 | 2,206,712 | 295.70 | Cardiff. |
| Weihaiwei | Asia | China | 285 | 147,177 | 533.33 | Weihaiwei. |
| Western Australia | Australia | British | 975,920 | 332,213 | | |
| White Russia | Europe | Soviet Russia | 23,290 | 1,634,223 | 71.00 | Minsk. |
| Windward Isles | W. Indies | Britain | 516 | 171,985 | 319.76 | |
| Wurttemberg | Europe | Germany | 7,534 | 2,530,000 | 335.81 | Stuttgart. |
| Yucatan | No. Amer | Mexico | 35,200 | 314,087 | | Merida. |
| Yukon Territory | No. Amer | Britain | 207,076 | 4,157 | .02 | Dawson. |
| Zanzibar (Isl.) | Africa | Britain | 640 | 114,000 | 178.12 | Zanzibar. |

## GROWTH OF POPULATION OF LONDON.

| | Area, Acres. | Population 1891. | Population 1901. | Population 1911. | Population 1921. |
|---|---|---|---|---|---|
| Registration London | 74,850 | 4,227,954 | 4,536,267 | 4,521,685 | 4,483,249 |
| "Outer Ring" | 368,599 | 1,405,852 | 2,045,135 | 2,729,673 | 2,992,919 |
| "Greater London" | 443,449 | 5,633,806 | 6,581,402 | 7,251,358 | 7,476,168 |

"Registration" London is the County of London, with an area of 74,850 acres.

# The British Empire.

## AREA AND POPULATION.

| | Area, Square Miles. | Population, Census 1921. |
|---|---|---|
| UNITED KINGDOM | *121,633* | *47,307,601* |
| England | 50,874 | 35,678,530 |
| Wales | 7,466 | 2,206,712 |
| Scotland | 30,405 | 4,882,288 |
| Ireland | 32,586 | (a)4,390,219 |
| Isle of Man | 227 | 60,238 |
| Channel Islands | 75 | 89,614 |
| *Europe* | *120* | *242,549* |
| Gibraltar | 2 | 17,690 |
| Malta | 118 | 224,859 |
| ASIA | *1,972,635* | *329,073,300* |
| *India* | *1,802,629* | *319,075,132* |
| British Provinces | 1,093,074 | 247,138,396 |
| Native States, etc | 709,555 | 71,936,736 |
| Ceylon | 25,481 | 4,504,283 |
| Maldive Islands | 115 | (e) 70,000 |
| Cyprus | 3,584 | 310,808 |
| Aden, Perim, Sokotra and Bahrein Isls | 10,387 | 176,923 |
| Straits Settlements | 1,600 | 881,939 |
| Keeling Islands | 5 | 832 |
| Christmas and Labuan | 110 | 9,028 |
| Federated Malay States | 27,506 | (e)1,315,700 |
| Other Malay States | 23,486 | 1,123,175 |
| British North Borneo | 31,106 | (a)208,183 |
| Brunei | 4,000 | 25,454 |
| Sarawak | 42,500 | (e)600,000 |
| Hongkong and ter | 391 | 625,166 |
| Weihalwei | 285 | (a)147,177 |
| AFRICA | *4,021,804* | *45,900,897* |
| *Union of South Africa* | *472,089* | *6,729,382* |
| Cape of Good Hope | 276,966 | 2,781,185 |
| Natal | 35,284 | (e)1,234,000 |
| Orange Free State | 50,389 | 628,360 |
| The Transvaal | 110,450 | 2,085,837 |
| S. W. Africa (m) | 322,400 | (e)237,237 |
| *West Africa* | 485,834 | 20,605,310 |
| Nigeria | 490,734 | (e)16,250,000 |
| Gold Coast, Ashanti and North. Ter | 80,000 | 2,029,750 |
| Sierra Leone and Protectorate | 31,000 | 1,327,560 |
| Gambia and Protectorate | 4,134 | (e)248,000 |
| Togoland (m) | 12,600 | (e)350,000 |
| Cameroon | 31,000 | (e)400,000 |
| *British East Africa* | *721,320* | *9,900,828* |
| Kenya and Protectorate | 245,000 | (e)2,630,000 |
| Tanganyika | 365,000 | (e)4,002,487 |
| Uganda | 110,300 | (e)3,071,608 |
| Zanzibar and Pemba | 1,020 | (a)196,733 |
| *South Africa* | *726,716* | *2,388,037* |
| Basutoland | 11,716 | 500,554 |
| Bechuanaland | 275,000 | 152,983 |
| North Rhodesia | 291,000 | 931,500 |
| South Rhodesia | 149,000 | (e)803,000 |
| Swaziland | 6,678 | 133,563 |
| Nyassaland | 39,573 | 1,201,519 |
| The Sudan | 1,014,600 | (e)4,000,000 |
| AFRICA (*Continued*). | | |
| Somaliland | 68,000 | (e)300,000 |
| Ascension Island | 34 | (e)250 |
| St. Helena Island | 47 | 3,747 |
| Tristan da Cunha | 3 | (b)105 |
| Mauritius Island | 720 | 376,108 |
| Seychelles Island | 156 | 24,811 |
| NORTH AMERICA | *3,892,399* | *9,055,813* |
| *Canada* | *3,729,665* | *8,788,483* |
| Alberta | 255,285 | 588,454 |
| British Columbia | 355,855 | 524,528 |
| Manitoba | 251,832 | 610,118 |
| New Brunswick | 27,985 | 387,876 |
| Nova Scotia | 21,428 | 523,837 |
| Ontario | 407,262 | 2,933,662 |
| Prince Edward Island | 2,184 | 88,615 |
| Quebec | 706,834 | 2,361,199 |
| Saskatchewan | 251,700 | 757,510 |
| Yukon | 207,076 | 4,157 |
| Northwest Territory | 1,242,224 | 7,988 |
| Newfoundland | 42,734 | 263,683 |
| Labrador | 120,000 | 3,647 |
| CENTRAL AMERICA | *8,592* | *45,317* |
| British Honduras | 8,592 | 45,317 |
| WEST INDIES | *12,258* | *1,831,384* |
| Bermudas | 19 | 21,987 |
| The Bahamas | 4,404 | 53,031 |
| Barbados | 166 | 198,336 |
| Jamaica | 4,207 | 857,921 |
| Turks and Caicos Isl'ds | 165 | 5,707 |
| Cayman Islands | 89 | 3,945 |
| Leeward Islands | 715 | (a)127,193 |
| Windward Islands | 516 | 171,985 |
| Trinidad and Tobago | 1,977 | 391,279 |
| SOUTH AMERICA | *96,980* | *300,946* |
| British Guiana | 89,480 | 297,691 |
| Falkland Island and Georgia | 7,500 | 3,255 |
| AUSTRALASIA | *3,260,512* | *7,479,492* |
| *Australia* | *2,974,581* | (c)*5,496,704* |
| New South Wales | 309,432 | 2,099,763 |
| Victoria | 87,884 | 1,531,529 |
| Queensland | 670,500 | 757,634 |
| South Australia | 380,070 | 495,336 |
| Western Australia | 975,920 | 332,213 |
| Northern Territory | 523,620 | 3,870 |
| Tasmania | 26,215 | 213,877 |
| Federal Territory | 940 | 2,572 |
| Papua | 90,540 | (e)251,392 |
| New Guinea (m) | 70,000 | (e)200,000 |
| Bismarck Islands | 15,752 | (e)188,000 |
| Solomon Islands | 3,800 | (e)17,000 |
| New Zealand | 103,581 | (d)1,274,001 |
| Western Samoa (m) | 1,260 | 37,051 |
| Nauru (m) | 8 | 1,985 |
| Cook Island, etc | 990 | 13,269 |
| OCEANIA | *19,120* | *268,166* |
| Fiji Islands | 7,435 | 162,604 |
| Tonga Islands | 385 | 23,562 |
| Other Pacific Islands | 11,300 | (e)182,000 |

(m) indicates mandate from League of Nations.

The returns of population are for censuses of 1921 and 1920 except where marked: (a) census of 1911; (b) census of 1916; (c) includes in total for Australia an estimate of 60,000 full-blood aborigines not enumerated in its separate returns of the states; (d) includes 52,554 Maoris enumerated, but not included in the census return; (e) estimated and in instances where exact figures are given these are returns for Europeans added to a large indefinite estimate of native population unenumerated.

### RECAPITULATION.

| | Square Miles. | Population. |
|---|---|---|
| BRITISH EMPIRE | *13,406,103* | *441,595,965* |
| United Kingdom | 121,633 | 47,307,601 |
| Europe | 120 | 242,549 |
| India | 1,802,629 | 319,075,132 |
| Other Asiatic Possessions | 170,056 | 9,998,668 |
| Union of South Africa | 472,089 | 6,729,382 |
| The Soudan | 1,014,600 | 4,000,000 |
| Other African Possessions | 2,535,115 | 35,171,515 |
| Canada | 3,729,665 | 8,788,483 |
| Other American Possessions | 280,564 | 2,434,977 |
| Australia | 2,974,581 | 5,496,794 |
| New Zealand | 103,581 | 1,274,001 |
| Other Australasian Possessions | 182,350 | 708,697 |
| Oceania | 19,120 | 368,166 |

### GOVERNMENT OF THE BRITISH EMPIRE.

**The British Empire** covers about one-fourth (13,406,103 square miles) of the world's habitable land surface; this excludes the Arctic regions. Its population in the aggregate, according to the best obtainable estimates, is some fifteen millions more than one-fourth of the inhabitants of the world—a total of 441,595,965.

**The Capital** of this vast empire is London, the largest city in the world—the "Greater London" population, census of 1921, being 7,476,168.

**The Ruling Sovereign** is George V., the first of the House of Windsor, whose title is "by the Grace of God of the United Kingdom of Great Britain and Ireland and of the British Dominions Beyond the Seas, King, Defender of the Faith, Emperor of India." He was born June 3, 1865, the second son of King Edward VII. and Queen

Alexandra, daughter of King Christian IX. of Denmark, and he succeeded to the throne on the death of his father May 6, 1910 and was crowned, June 22, 1911. He married, on July 6, 1893, Princess Victoria Mary, born May 26, 1867, daughter of the late H. S. H. Duke of Teck and H. R. H. Princess Mary of Cambridge. They have five living children. *His Heir*, H. R. H. Edward, Prince of Wales, born June 23, 1894; H. R. H. Prince Albert, Duke of York, born Dec. 14, 1895; H. R. H. Princess Mary, born April 25, 1897, married Viscount Lascelles, K. G., son of the Earl of Harewood, Feb. 28, 1922; H. R. H. Prince Henry, born March 31, 1900; and H. R. H. Prince George, born Dec. 20, 1902.

The **Premier** is the Rt. Hon. Andrew Bonar Law, took office Oct. 25, 1922 on the resignation of David Lloyd George (1916-22). His Ministry and that of Mr. Lloyd George, follow:

## THE NEW AND OLD MINISTRY.

Mr. Lloyd George and his Ministers turned in their seals of office on Oct. 25, 1922, and Mr. Bonar Law's Ministers were sworn in and received them from King George that day. The Ministry was finally completed Oct. 31.

| Office. | New Minister. | Former Minister. |
|---|---|---|
| Prime Minister | A. Bonar Law | D. Lloyd George. |
| Lord President of the Council | Marquis of Salisbury | Earl of Balfour. |
| Lord Chancellor | Viscount Cave | Viscount Birkenhead. |
| Chancellor of the Exchequer | Stanley Baldwin | Sir Robert Horne. |
| Home Secretary | W. C. Bridgeman | E. Shortt. |
| Foreign Secretary | Marquis Curzon | Marquis Curzon. |
| Colonial Secretary | Duke of Devonshire | Winston Churchill. |
| India Secretary | Viscount Peel | Viscount Peel. |
| War Secretary | Earl of Derby | Sir L. Worthington-Evans. |
| First Lord of the Admiralty | Col. L. C. M. S. Amery | Lord Lee of Fareham. |
| President Board of Trade | Sir P. Lloyd-Greame | Stanley Baldwin. |
| Minister of Health | Sir A. G. Boscawen | Sir A. Mond. |
| President Board of Education | Hon. E. F. L. Wood | H. A. L. Fisher. |
| Minister of Agriculture | Sir R. Sanders | Sir A. G. Boscawen. |
| Secretary for Scotland | Viscount Novar | (vacant.) |
| Attorney General | Douglas M. Hogg, K. C. | Sir Ernest Pollock, K. C. |
| Lord Advocate | William Watson, K. C. | C. D. Murray, K. C. |
| Air Minister | Sir Samuel Hoare | Capt. F. E. Guest |
| Minister of Labor | Sir Montague Barlow | T. J. Macnamara. |
| Minister of Pensions | Major G. C. Tryon | J. I. Macpherson. |
| First Commissioner of Works | Sir John Baird | Earl of Crawford and Balcarres. |
| Solicitor General | T. W. H. Inskip, K. C. | Leslie Scott, K. C. |
| Postmaster General | Neville Chamberlain | F. W. Kelloway. |
| Civil Lord of the Admiralty | Marquis of Linlithgow | B. M. Eyres-Monsell. |

The new Under Secretaries are: Home, G. F. Stanley; Foreign, Ronald McNeill; Colonies, W. Ormsby-Gore; War, Walter Guinness; Air, The Duke of Sutherland; India, Earl Winterton. Parliamentary: Overseas Trade, Sir W. Joynson-Hicks; Board of Trade, Lord Wolmer; Works and Transport, Col. Wilfred Ashley; Health, Earl of Onslow; Fisheries, Earl of Ancaster; Treasury, Col. Leslie Wilson.

**The British Minister to the United States** is Sir Auckland Geddes, G. C. M. G., K. C. B., etc., born 1879, appointed May 26, 1920. The diplomatic affairs of the entire British Empire in the United States are cared for by the Embassy at Washington.

**British Consuls General in the United States** are, at New York, H. Gloster Armstrong; at Boston, Thomas Parker Porter; at Philadelphia, vacant; at Chicago, Horace Dickinson Nugent; at New Orleans, Charles Braithwaite Wallis; at San Francisco, Gerald Campbell; at Manila, P. I., Thomas Joseph Harrington.

**British Consuls** are, at Jacksonville, Fla., Walter Mucklow; at Savannah, Arthur Montague Brookfield; at Honolulu, H. I., William Massy Royds; at Portland, Me., John Bernard Keating; at Baltimore, Hugh Alexander Ford; at Detroit, Howard G. Meredith; at St. Louis, Godfrey Procter Hertslet; at Portland, Ore., John Philip Traut; at Pittsburgh, Charles E. E. Childers; at Galveston, John Elliott Bell; at Norfolk, Barton Myers; at St. Thomas, V. I., Charles Bertram Stewart; at Seattle, Bernard Pelly; at San Juan, P. R., Arthur H. Noble. There are also Vice Consuls at Birmingham, Mobile, Skagway, Douglas, Ariz.; Los Angeles, San Diego, Denver, Hartford, Washington, D. C.; Key West, Miami, Pensacola, Tampa, Brunswick, Darien, Ga.; Duluth, Minneapolis, Gulfport, Kansas City, Mo.; Omaha, Wilmington, Cincinnati, Cleveland, Iloilo, P. I.; Providence, Charleston, El Paso, Laredo, Port Arthur, Newport News, Richmond, Gray's Harbor, Wash.; and Tacoma.

**The United States Minister to Great Britain** is Col. George Harvey, born Feb. 16, 1864, appointed April 16, 1921.

**The United States Consuls General and Consuls** will be found listed under the various subdivisions of the British Empire, which follow, according to their stations.

**Parliament** is the legislative governing body for the empire. It consists of two Houses; the House of Lords, made up of the Peers of the United Kingdom, to wit: the Royal Dukes, the Archbishops, the Dukes, the Marquises, the Earls, the Viscounts, 36 Bishops, and the Barons; also 28 Irish peers elected for life, and 16 Scottish peers elected for the duration of Parliament. The full membership of the House of Lords consists of about 730 members. There are about 30 women who are peeresses in their own right, but their status as sitting and voting members of the House, though claimed by some, is still unsettled. The House of Lords has a limited veto power only in legislation. A peer of the United Kingdom is ineligible to a seat in the House of Commons, but a non-representative Irish Peer may be elected.

**The House of Commons**, elected in December, 1918, and which met Feb. 4, 1919 and was prorogued Oct. 2, 1922, consisted of 707 members elected by direct ballot in the several constituencies for the duration of Parliament. Of this House England had 492 members; Wales, 36; Scotland, 74; and Ireland, 105. On the opening day the Coalition Government of David Lloyd George, the Prime Minister, had 478 supporters, a majority over all others of 249. Clergymen of the Church of England, ministers of the Church of Scotland and Roman Catholic clergymen are disqualified from sitting as members, also certain Government officers, Sheriffs, and Government contractors. Members of the House of Commons are paid, since 1911, £400 a year. The franchise was extended to women by the Act of 1918. There are certain qualifications. The total number of persons qualified for registration in 1920 was estimated at 21,776,000, of which 8,856,000 were women.

**The House of Commons elected Nov. 15, 1922**, numbers 615. It contains on the first announcement of the balloting: Conservatives, 346; Laborites, 142; Asquith Liberals, 64; Lloyd George Liberals, 53; others, 10. Bonar Law thus has a Conservative majority of 75 over all.

The British Empire has six members of the League of Nations. To wit: United Kingdom, Commonwealth of Australia, Dominion of Canada, India, New Zealand and the Union of South Africa.

## BRITISH PRIME MINISTERS SINCE 1801.

| | | | | | |
|---|---|---|---|---|---|
| Mr. Addington | 1801 | Sir Robert Peel | 1841 | Marquis of Salisbury | 1885 |
| Mr. Pitt | 1804 | Lord John Russell | 1846 | Mr. Gladstone | 1886 |
| Lord Granville | 1806 | Earl of Derby | 1852 | Marquis of Salisbury | 1886 |
| Duke of Portland | 1807 | Earl of Aberdeen | 1852 | Mr. Gladstone | 1892 |
| Mr. Percival | 1810 | Viscount Palmerston | 1855 | Earl of Rosebery | 1894 |
| Lord Liverpool | 1812 | Earl of Derby | 1858 | Marquis of Salisbury | 1895 |
| Mr. Canning | 1827 | Viscount Palmerston | 1859 | A. J. Balfour | 1902 |
| Lord Goderich | 1827 | Earl Russell | 1865 | Sir H. Campbell-Bannerman | 1905 |
| Duke of Wellington | 1828 | Earl of Derby | 1866 | H. H. Asquith | 1908 |
| Earl Grey | 1830 | Mr. Disraeli | 1868 | H. H. Asquith | 1915 |
| Viscount of Melbourne | 1834 | Mr. Gladstone | 1868 | D. Lloyd George | 1916 |
| Sir Robert Peel | 1834 | Earl of Beaconsfield | 1874 | D. Lloyd George | 1919 |
| Viscount Melbourne | 1835 | Mr. Gladstone | 1880 | Bonar Law | 1922 |

REVENUES AND EXPENDITURES OF GREAT BRITAIN.
(Years ended March 31.)

| Year. | Revenues. | Expenditures | Year. | Revenues. | Expenditures | Year. | Revenues. | Expenditures |
|---|---|---|---|---|---|---|---|---|
| | £. | £. | | £. | £. | | £. | £. |
| 1903.. | 161,894,000 | 194,251,081 | 1910.. | 131,696,456 | 157,944,611 | 1917.. | 573,427,582 | 2,198,112,710 |
| 1904.. | 151,340,652 | 156,756,209 | 1911.. | 203,850,588 | 171,995,667 | 1918.. | 707,234,565 | 2,696,221,405 |
| 1905.. | 153,182,782 | 151,768,875 | 1912.. | 185,090,286 | 178,545,100 | 1919.. | 889,020,825 | 2,579,301,188 |
| 1906.. | 153,878,865 | 150,413,528 | 1913.. | 188,801,999 | 188,621,930 | 1920.. | 1,339,571,381 | 1,665,772,928 |
| 1907.. | 155,036,486 | 149,637,664 | 1914.. | 198,242,897 | 197,492,969 | 1921.. | 1,425,984,666 | 1,195,427,877 |
| 1908.. | 156,537,690 | 151,812,094 | 1915.. | 226,694,080 | 560,473,533 | 1922.. | 1,124,879,873 | 1,079,186,627 |
| 1909.. | 151,578,295 | 152,292,395 | 1916.. | 336,766,825 | 1,559,158,377 | | | |

PUBLIC DEBT OF GREAT BRITAIN.

| March 31. | £. | March 31. | £. | March 31. | £. | March 31. | £. |
|---|---|---|---|---|---|---|---|
| 1902..... | 765,215,653 | 1908..... | 762,326,051 | 1913..... | 716,288,421 | 1918..... | 5,871,850,637 |
| 1903..... | 798,349,190 | 1909..... | 754,121,309 | 1914..... | 707,654,110 | 1919..... | 7,434,949,429 |
| 1904..... | 794,498,100 | 1910..... | 762,463,625 | 1915..... | 1,165,801,702 | 1920..... | 7,828,779,095 |
| 1905..... | 796,736,382 | 1911..... | 733,072,610 | 1916..... | 2,197,439,245 | 1921..... | 7,574,358,486 |
| 1906..... | 788,990,187 | 1912..... | 724,806,428 | 1917..... | 4,063,644,981 | 1922..... | 7,654,301,176 |
| 1907..... | 779,164,704 | | | | | | |

GREAT BRITAIN'S TRADE AND COMMERCE.

| Year. (Calendar.) | Total Imports. | Exports. | | | Total Trade. |
|---|---|---|---|---|---|
| | | Produce and Manufacture of Unit'd Kingdom. | Foreign and Colonial Merchandise. | Total. | |
| 1913..... | £768,734,739 | £525,253,595 | £109,566,731 | £634,820,326 | £1,403,555,065 |
| 1914..... | 696,635,113 | 430,721,357 | 95,474,166 | 526,195,523 | 1,222,830,636 |
| 1915..... | 851,893,350 | 384,868,448 | 99,062,181 | 483,930,629 | 1,335,823,979 |
| 1916..... | 948,506,492 | 506,279,707 | 97,566,178 | 603,845,885 | 1,552,352,377 |
| 1917..... | 1,064,164,678 | 527,079,746 | 69,677,461 | 596,757,207 | 1,660,921,885 |
| 1918..... | 1,316,150,903 | 501,418,997 | 30,945,081 | 532,364,078 | 1,848,514,981 |
| 1919..... | 1,626,156,212 | 798,638,362 | 164,746,315 | 963,384,677 | 2,589,540,889 |
| 1920..... | 1,932,648,881 | 1,334,469,269 | 222,753,331 | 1,557,222,600 | 3,489,871,481 |
| 1921..... | 1,086,687,213 | 703,196,282 | 107,052,072 | 810,248,354 | 1,896,935,567 |

In the calendar year 1921 customs duties on imports totalled £138,937,867, of which £61,837,525 were from unmanufactured tobacco, £33,068,759 from sugar, £17,437,308 from tea, £13,084,643 from spirits, and the rest from cocoa, sugar derivatives, wine, coffee, etc.

TONNAGE AT BRITAIN'S HOME PORTS.

The tonnage of the British and foreign vessels in foreign trade that entered and cleared with cargoes at the ports of the United Kingdom during nine years was:

| Year. | Entered with Cargoes. | | | Cleared with Cargoes. | | |
|---|---|---|---|---|---|---|
| | British. | Foreign. | Total. | British. | Foreign. | Total. |
| | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* |
| 1913..... | 32,292,343 | 16,771,890 | 49,064,233 | 40,101,232 | 27,718,469 | 67,819,701 |
| 1914..... | 28,928,893 | 14,131,890 | 43,060,783 | 32,515,814 | 23,452,755 | 55,968,569 |
| 1915..... | 22,861,738 | 10,862,166 | 33,723,904 | 20,380,530 | 19,148,832 | 39,529,362 |
| 1916..... | 20,217,334 | 9,842,214 | 30,059,548 | 17,751,953 | 17,843,941 | 35,595,894 |
| 1917..... | 18,795,045 | 4,433,501 | 23,228,546 | 16,926,662 | 9,149,162 | 26,075,824 |
| 1918..... | 19,819,519 | 3,414,145 | 23,233,664 | 14,965,692 | 7,771,639 | 22,737,331 |
| 1919..... | 22,064,874 | 7,491,078 | 29,555,952 | 21,962,895 | 12,599,212 | 34,562,107 |
| 1920..... | 25,506,999 | 10,986,320 | 36,493,319 | 23,532,459 | 13,193,076 | 36,725,535 |
| 1921..... | 25,118,063 | 12,000,303 | 37,118,366 | 24,282,304 | 12,115,137 | 36,397,441 |

United States ships with cargoes entering British ports totalled 486,897 tons in 1918, 1,625,498 tons in 1919, 2,366,123 tons in 1920, and 2,750,739 tons in 1921.

POPULATION OF THE BRITISH ISLES.

| Census Year. | England and Wales. | Scotland. | Ireland. | Total for United Kingdom. | | |
|---|---|---|---|---|---|---|
| | | | | Males. | Females. | Total. |
| 1801..... | 8,892,536 | 1,608,420 | ..... | ..... | ..... | ..... |
| 1811..... | 10,164,256 | 1,805,864 | ..... | ..... | ..... | ..... |
| 1821..... | 12,000,236 | 2,091,521 | 6,801,827 | 10,174,868 | 10,718,716 | 20,893,584 |
| 1831..... | 13,896,797 | 2,364,386 | 7,767,401 | 11,680,532 | 12,348,052 | 24,028,584 |
| 1841..... | 15,914,148 | 2,620,184 | 8,196,597 | 13,060,497 | 13,670,432 | 26,730,929 |
| 1851..... | 17,927,609 | 2,888,742 | 6,574,278 | 13,369,227 | 14,021,402 | 27,390,629 |
| 1861..... | 20,066,224 | 3,062,294 | 5,798,967 | 14,063,477 | 14,864,008 | 28,927,485 |
| 1871..... | 22,712,266 | 3,360,018 | 5,412,377 | 15,301,830 | 16,182,831 | 31,484,661 |
| 1881..... | 25,974,439 | 3,735,573 | 5,174,836 | 16,972,654 | 17,912,194 | 34,884,848 |
| 1891..... | 29,002,525 | 4,025,647 | 4,704,750 | 18,314,571 | 19,418,351 | 37,732,922 |
| 1901..... | 32,527,843 | 4,472,103 | 4,458,775 | 20,102,408 | 21,356,313 | 41,458,721 |
| 1911..... | 36,070,492 | 4,760,904 | 4,390,219 | 21,946,495 | 23,275,120 | 45,221,615 |
| 1921..... | 37,885,242 | 4,882,288 | No census. | *20,430,623 | *22,336,907 | *42,767,530 |

Of the Jan. 19, 1921 (census) population of England and Wales there were 18,082,220 males and 19,803,022 females. In Scotland there were 2,348,403 males and 2,533,885 females.

England (1921) 35,678,530; Wales (1921) 2,206,712.

*The 1921 figures for males and females and total (last 3 columns), exclude Ireland.

The census of Ireland in 1821 is the first which was made on such a basis as to afford a comparison with those of subsequent decades.

Since 1831 the total included army, navy and merchant service at home.

POPULATION OF CITIES IN ENGLAND AND WALES.

| Cities. | Population, Census of 1921. | Cities. | Population, Census of 1921. | Cities. | Population, Census of 1921. |
|---|---|---|---|---|---|
| London (Greater) | 7,476,168 | Leicester | 234,190 | Derby | 129,836 |
| Birmingham | 919,438 | Salford | 234,150 | Coventry | 128,205 |
| Liverpool | 803,118 | Plymouth | 209,857 | Blackburn | 126,630 |
| Manchester | 730,551 | Cardiff | 200,262 | Gateshead | 124,514 |
| Sheffield | 490,724 | Bolton | 178,678 | Stockport | 123,315 |
| Leeds | 458,320 | Rhondda | 162,729 | Norwich | 120,653 |
| Bristol | 377,061 | Southampton | 160,997 | Preston | 117,426 |
| Hull | 287,013 | Sunderland | 159,100 | South Shields | 116,667 |
| Bradford | 285,979 | Swansea | 157,561 | Huddersfield | 110,120 |
| Newcastle-on-Tyne | 274,955 | Oldham | 145,001 | Southend-on-Sea | 106,021 |
| Nottingham | 262,658 | Birkenhead | 145,592 | Burnley | 103,175 |
| Portsmouth | 247,343 | Brighton | 142,427 | St. Helen's | 102,675 |
| Stoke-on-Trent | 240,440 | Middlesborough | 131,103 | Wolverhampton | 102,373 |

POPULATION OF CITIES IN SCOTLAND.

| | | | | | |
|---|---|---|---|---|---|
| Glasgow | 1,034,069 | Aberdeen | 158,969 | Greenock | 81,120 |
| Edinburgh | 420,281 | Paisley | 84,837 | Motherwell and Wishaw | 68,869 |
| Dundee | 168,217 | | | | |

And nine between 30,000 and 50,000.

POPULATION OF CITIES IN IRELAND.

| | | | | | |
|---|---|---|---|---|---|
| Dublin | 309,272 | Belfast | 385,492 | Londonderry | 40,799 |
| Dublin and suburbs | 403,030 | Cork | 76,632 | Limerick | 38,403 |

POPULATION OF IRELAND—CATHOLIC AND PROTESTANT, 1911.

| County. | Roman Catholic Pop. | Per Cent. R. C. | Non-R. Catholic Pop. | County. | Roman Catholic Pop. | Per Cent. R. C. | Non-R. Catholic Pop. |
|---|---|---|---|---|---|---|---|
| LEINSTER. | | | | ULSTER. | | | |
| Carlow | 32,317 | 89.15 | 3,935 | Antrim | 39,751 | 20.50 | 154,113 |
| Dublin | 122,372 | 70.99 | 50,022 | Belfast Co. Bor. | 93,243 | 24.10 | 293,704 |
| Dublin Co. Bor. | 253,730 | 83.13 | 51,432 | Armagh | 54,526 | 45.33 | 65,765 |
| Kildare | 54,684 | 82.07 | 11,943 | Cavan | 74,271 | 81.46 | 16,902 |
| Kilkenny | 71,193 | 94.97 | 3,769 | Donegal | 133,021 | 78.93 | 35,516 |
| King's | 51,178 | 90.05 | 5,654 | Down | 64,485 | 31.56 | 139,818 |
| Longford | 40,297 | 91.96 | 3,523 | Fermanagh | 34,740 | 56.18 | 27,096 |
| Louth | 58,303 | 91.58 | 5,362 | Londonderry | 41,478 | 41.54 | 58,367 |
| Meath | 60,660 | 93.19 | 4,431 | Londonderry Co. Bor. | 22,923 | 56.21 | 17,857 |
| Queen's | 48,480 | 88.74 | 6,149 | Monaghan | 53,363 | 74.68 | 18,092 |
| Westmeath | 54,779 | 91.32 | 5,207 | Tyrone | 79,015 | 51.39 | 63,650 |
| Wexford | 94,413 | 92.31 | 7,860 | | | | |
| Wicklow | 47,999 | 79.06 | 12,712 | Total | 690,816 | 43.67 | 890,880 |
| Total | 990,045 | 85.20 | 171,999 | | | | |
| MUNSTER. | | | | CONNAUGHT. | | | |
| Clare | 102,300 | 98.14 | 1,932 | Galway | 177,920 | 97.64 | 4,304 |
| Cork | 288,455 | 91.45 | 26,976 | Leitrim | 58,159 | 91.47 | 5,423 |
| Cork Co. Bor. | 67,814 | 88.44 | 8,859 | Mayo | 188,069 | 97.86 | 4,108 |
| Kerry | 155,322 | 97.26 | 4,362 | Roscommon | 91,731 | 97.63 | 2,225 |
| Limerick | 101,502 | 97.08 | 3,049 | Sligo | 72,125 | 91.24 | 6,920 |
| Limerick Co. Bor. | 34,865 | 90.52 | 3,653 | | | | |
| Tipperary | 144,156 | 94.57 | 8,277 | Total | 588,004 | 96.24 | 22,980 |
| Waterford | 54,060 | 95.68 | 2,442 | | | | |
| Waterford Co. Bor. | 25,331 | 92.23 | 2,133 | Total of Ireland | 3,242,670 | 73.86 | 1,147,549 |
| Total | 973,805 | 94.04 | 61,690 | | | | |

## THE UNITED KINGDOM.

AREA, 121,633 square miles.

POPULATION, census of 1921, 47,307,601.

*United States Consul General*, at London, Robert P. Skinner. *Consuls*, at Belfast, William P. Kent; at Birmingham, John F. Jewell; at Bradford, Wallace J. Young; at Bristol, Robertson Honey; at Cardiff, John R. Bradley; at Dublin, Charles M. Hathaway, Jr.; at Dundee, Henry A. Johnson; at Dunfermline, Howard D. Van Sant; at Edinburgh, Hunter Sharp; at Glasgow, George E. Chamberlain; at Hull, John H. Grout; at Leeds, Percival Gassett; at Liverpool, Horace Lee Washington; at Manchester, Ross E. Holaday; at Newcastle-on-Tyne, Fred C. Slater; at Nottingham, Calvin M. Hitch; at Plymouth, Ralph C. Busser; at Queenstown (Cobh), John A. Gamon; at Sheffield, William J. Grace; at Southampton, John M. Savage; at Stoke-on-Trent, William F. Doty; at Swansea, Arthur B. Cooke.

The United Kingdom, or British Isles, lie off the northwest corner of Europe, with the North Atlantic Ocean on the north and the North Sea on the east and the English Channel separating it from the mainland on the south. The Straits of Dover, 18 miles wide, divide it from France. The northern end of Scotland lies due west from the southern end of Norway.

The climate of the British Isles is equable, mild and somewhat warmer than that of the continent opposite, because of the Gulf Stream modifying the temperature of the Isles, which is mean at 49 degrees. Rainfall is abundant, averaging 34 inches annually, but is seldom heavy at a given time, so that the precipitation covers longer periods, and often fogs prevail in many parts, "London Fog," holding much soot in suspension, being peculiarly dense at times.

The coastline is tortuous, giving very many harbors for shipping, and numerous rivers up which deep sea craft may go. The northern ends are more rugged than the southern. Peculiar geological features are the chalk formation along the English Channel, the chalk stratum running under the waters of the channel into France; and the same "hardpan" sub-stratum recurring as in many parts of France; which prevents the super-imposition of modern "skyscrapers" such as geologically are permitted in American cities, where usually rock strata afford a firm foundation.

The soil is of varied natural fertility. It is more sterile in the north, notwithstanding the figures show that the Scotch have attained a relatively high per acre production by intensive cultivation. But centuries of tillage have rendered necessary the elaborate and large use of artificial fertilizers. The coastlines are generally of bluff formation.

The prevalent precipitation of moisture, together with the mild climate, has induced profuse growth of vegetation of all sorts. The Isles were naturally covered with forests, which have been largely cut off to accommodate so large a population on so small area, a total less than the American State of New Mexico, and only about twice that of all New England.

## AGRICULTURE A GREAT INDUSTRY.

The last census showed Great Britain (excluding waters) with 76,639,000 acres, of which 3,037,600 were woods and plantations, 13,333,000 mountain and heath grazing lands, 24,995,000 permanent pastures, and 20,764,000 arable lands. This was divided, England, 32,386,000 acres, with woods and plantations, 1,697,000; grazing, 2,732,000; pastures, 12,667,000; arable, 11,181,000; Wales, 4,751,000 acres, with woods and plantations, 187,000; grazing, 1,400,000; pastures, 1,820,000; arable, 839,000; Scotland, 19,070,000 acres, with woods and plantations, 852,000; grazing, 9,134.000; pastures, 1,359,-000; arable, 5,271,000; Ireland, 20,247,000 acres with woods and plantations, 296,000; grazing (figures not available); pastures, 9,122,000; arable, 5,271,000; Isle of Man, 141,000 acres, with woods and plantations, 1,400; grazing, 35,000; pastures, 17,000; arable, 72,000; Channel Islands, 44,000 acres, with woods and plantations, 200; grazing, 2,000; pastures, 10,000: arable, 21,000.

Prewar and postwar areas, under cultivation for the Kingdom, were: 1913, corn (meaning wheat, barley, oats, rye, beans and peas), 8,211,641 acres; 1918, 10,950,985 acres: 1921, 8,902,301.

Green crops (meaning potatoes, turnips, mangold, cabbage, kohlrabi, rape and vetch): 1913, 3,984,-734 acres; 1918, 4,065,164; 1921, 3,779,958.

Flax: 1913, 59,953 acres; 1918, 163,093; 1921, 48,097.

Hops: 1913, 35,676 acres; 1918, 15,666; 1921, 25,133.

Small fruits: 1913, 100,094 acres; 1918, 90,939; 1921, 100,751.

Fallow lands: 1913, 396,472 acres; 1918, 414,124; 1921, 512,910.

Clover, grasses and permanent pastures: 1913, 27,309,188 acres; 1920, 31,774,000 acres.

Total areas under cultivation for the Kingdom: 1913, 46,740,904 acres; 1918, 46,266,748; 1920, 46,073,000 acres.

Taking these figures together with those to follow as to crop yields, it is apparent that the increased intrawar food production of the British Isles was due, not to larger cultivated areas, but to larger per acre yields and to more thorough utilization of lands hitherto in agricultural industry.

Crop yields in England and Wales, were in 1913, wheat, 26,568,000 tons; 1918, 42,120,000 tons; 1921, 34,892,000 tons; potatoes, 1913, 2,895,000 tons; 1918, 4,209,000 tons; 1921, 2,958,000 tons; barley, 1913, 25,292,000 tons; 1918, 24,320,000 tons; oats, 1913, 37,512,000 tons; 1918, 57,356,000 tons; hay, 1913, 9,052,000 tons; 1918, 6,786,000 tons; 1921, 5,339,000 tons.

Scotland crops were, wheat, 1913, 1,052,000 tons; 1921, 1,284,000 tons; hay, 1913, 3,788,000 tons; 1918, 3,272,000 tons; 1921, 3,144,000 tons.

Ireland, 1913, wheat, 648,000 tons; 1918, 2,844,-000 tons; 1919, 1,224,000 tons; 1920, 700,000 tons; 1921, 724,000 tons. The immense relative increase of wheat production in Ireland, accompanied by increases of other production, indicates the potential capacity for food output when Ireland applies herself to production; and the heavy and sudden decreases, after the unity of the World War had ceased, indicate also how disastrous to Ireland's economic agricultural life internal disturbances have been.

The total crops for the United Kingdom were, 1913, wheat, 28,348,000 tons; 1918, 46,572,000 tons; 1919, 34,660,000 tons; 1920, 28,416,000 tons; 1921, 37,356,000 tons.

Barley: 1913, 32,816,000 tons; 1918, 31,040,000 tons; 1919, 28,852,000 tons; 1920, 32,844,000 tons; 1921, 27,048,000 tons.

Oats: 1913, 82,640,000 tons; 1918, 124,784,000 tons; 1919, 101,980,000 tons; 1920, 90,436,000 tons; 1921, 82,332,000 tons.

Potatoes: 1913, 7,605,000 tons; 1918, 9,223,000 tons; 1919, 6,312,000 tons; 1920, 6,374,000 tons; 1921, 6,554,000 tons.

Hay: 1913, 15,395,000 tons; 1918, 12,372,000 tons; 1919, 10,708,000 tons; 1920, 14,700,000 tons; 1921, 9,383,000 tons.

Yields per acre for the Kingdom averaged in 1913 31.67 bushels of wheat, twice that of the United States; barley, 34.01; oats, 41.72, all far above the American averages; and potatoes, 215.78 bushels, against about 95 for the United States.

Hay averages about 1.57 tons to the acre.

Great Britain had in 1913, 1,874,264 horses; 1918, 1,916,347; 1921, 2,137,200.

Cattle, 1913, 11,936,600; 1918, 12,311,149; 1921, 11,887,000.

Sheep, 1913, 27,629,206; 1918, 27,062,681; 1921, 23,749,000.

Swine, 1913, 3,305,771; 1918, 2,809,215; 1921, 3,116,500.

## IMPORTS OF FOOD.

The per capita share in each head of domestic animals is of course far less than that in the United States, necessitating the importation of much meat food, on that account as well as the general condition of large population—45 per cent. of that of the United States—confined on so limited an area.

It comes about, therefore, that Great Britain has intensively developed her manufacturing industries, and derives from exports the profits with which to buy what foodstuffs she must have, which is about 65 to 70 per cent. of her consumption. This imported food is also largely paid for by what is known as "invisible imports"—profits on shipping, insurance laid abroad by British capital, and investments abroad which return annual interest, etc., all of which enables the Isles to pay for the food surplus bought.

Imports of food, drink and tobacco, for 1913, were $1,475,745,000; in 1921, $2,836,235,000, expressed in dollar values, against raw materials, etc., 1913, $1,349,695,000; in 1921, $1,355,880,000; and manufactured articles, including "manufactured fuel": 1913, $1,005,195,000; in 1921, $1,225,225,000. In other words, of a total of $3,843,675,000 imported in 1913, food, drink and tobacco represented more than 40 per cent. In 1921, the food, drink and tobacco importations were more than 50 per cent. of all importations, expressed in current dollar values.

Economically, the three factors—foods imported, raw materials imported and manufactures exported—constitute the cycle of national life on the British Isles, the three being absolutely essential to the continued existence of the British people according to existing standards of living.

The raw materials importations cover the needs of the extensive manufacturing industries of the Isles, developed very highly in England, parts of Scotland and in the north of Ireland, centring in Belfast—textile mills, steel and iron mills wood working mills, chemical factories, earthenware works, cutlery, hardware, electrical goods, leather, and all important modern industrial products which go to the ends of the earth, output by industrial leaders and mechanics acknowledged as efficient parts of a remarkably complete industrial development, wrought by the force of the necessity to buy abroad so much food.

The prevailing policy of the British Empire for the greater part of the last century has been not to impose trade barriers on entrance of goods in o the British Isles or the outlying holdings of the empire. This free trade policy has been modified by certain attached countries, which at times have even imposed import duties on stuff from the mother country. And since the World War, under the dislocation of world industry and commerce and the unsettlement of the fiscal affairs of the Allies and their enemy countries, certain preferential arrangements have been made, and some barriers have been erected.

In so far as there has been a degree of change of policy in the British Isles, it has been done by Parliament. But all such changes in the dominions and most of the colonies and dependencies have been by the local legislatures. The changes in the British Isles, were, according to the proponents of the newer policy, by reason of the necessity of preventing dumping of goods from European countries the currency of which is considerably depreciated.

## MINES AND MINING.

By and large, the mineral resources of the British Empire comprehend the gamut of the earth's varieties, in varying quantities. In the British Isles the total mineral output in 1920 was 275,-384,743 tons, and in 1921 it was 284,601,174 tons, the value being $1,676,923,755 in 1913, and $2,-137,244,420 in 1921.

Every gallon of oil or other petroleum product must be imported, and that necessity has shaped in considerable degree the foreign policy of the British. British capital has gone extensively into foreign oil fields, with Far Eastern holdings of importance, and also participation in the Dutch oil interests and in the United States and Mexico through the Pearson and other oil companies. The urgent necessity in these days of obtaining oil for power on land and at sea has apparently induced British statesmen to incorporate the interests of the oil companies in their national procedure, as in the United States and elsewhere.

There is, however, much natural resource mineral wealth on the British Isles, coal of excellent grades, iron ores and tin ore. Coal in 1921 furnished more than 75 per cent. of the total product of minerals. British export of coal has been for years a vital factor in keeping the economic craft of Britain afloat.

Iron ore comes next in importance, and is vital on account of the industries. Chalk alone contributes about 3 per cent. of the mineral output, and is about 8 per cent. of that which remains after coal is eliminated. The minerals otherwise are varied, and include most of the base materials for building and manufacturing.

## SHIPPING AND RAILWAYS.

Since the United States dissipated its "Clipper Fleets" in the last century, the British have been masters of the world's commercial shipping. The British merchant marine exceeds in tonnage and number of vessels that of any other people. The United States since the World War is second, and far in advance of the rest.

The profits from her shipping have been a heavy factor in the "invisible imports," with which she pays for her food surplus bought abroad. In the latest decade British sh pbu lding yards gained not only in magnitude but skill. The present tonnage (figures in detail of which appear elsewhere in The Almanac) is greater than that of pre-war, the deadweight tonnage sunk in the war already having been replaced.

The railway mileage of the United Kingdom is slightly more than 23,000 miles. In late years several important railway and electric tram lines in city and country of the Kingdom have been placed in the hands of American railway experts for management.

The roads are privately owned, and were returned from Government control and guarantee of interest on Aug. 15, 1921.

The British Isles have many canals — total mileage 4,673, of which 3,641 are in England and Wales, 184 in Scotland, and 848 in Ireland.

In 1921 tonnage originating on the principal canals of the United Kingdom totalled 11,893,000 tons.

In harbor development, the United Kingdom has made broad strides. The improvement of the banks of the Thames River, which flows through London, has been extensive and some very new ideas of navigation inland for deep sea coming and going have been introduced.

Probably the tidal gates for the Liverpool docks and piers are not duplicated. They enable the accommodation of deep draught craft regardless of the stages of the tides, which, at Liverpool, on the northwest side of the Isles, are very high at certain phases of the moon.

A ship canal makes Manchester the third seaport of the Kingdom. Constructed in 1887-94, at a cost of £17,000,000, it accommodates steamers up to 12,850 tons. But all along the coastline, at Plymouth, Southampton, the Thames, at Hull, and at scores of other coast indentations the provisions for shipping large and small are extensive, and their use constant and for the transfer of enormous traffic in people and goods.

Normally, there are no immigration restrictions in the British Isles.

The number of Irish who emigrated from Ireland was, in 1913, 30,967; 1914, 20,314; 1915, 10,659; 1916, 7,302; 1917, 2,129; 1918, 980; 1919, 2,975; 1920, 15,585. The total number from May 1, 1851, to the end of 1920, was 4,338,199.

## OLD AGE PENSIONS.

Every British subject and resident of the United Kingdom over 70 years of age, under certain qualifications, whose yearly means do not exceed £50 (broadly speaking $250) is entitled to a pension. The weekly amount is 10 shillings if the pensioner's yearly means do not exceed £26 5s.; above that sum the pension decreases by 2s. for every £5 5s. until at £47 5s. it becomes 1s. a week. On March 25, 1921, there were 1,002,342 pensions payable in the United Kingdom (353,794 to men, 648,548 to women). Total amount paid out in 1920-21 was £25,097,000.

The estimated cost of war pensions and allowances in 1921-22 was £107,000,000, which was exclusive of £4,000,000 cost of administration.

The total amount of unemployment benefit paid out from the Armistice to June 30, 1922, was approximately £88,700,000; of this £27,000,000 was paid out in the last fiscal year 1921-22.

In religion, absolute freedom of conscience is guaranteed throughout the empire. The state relig on in the Kingdom is that of the Church of England, and for the Imperial Army and Navy, and for all phases of imperial representation and activity abroad.

The inclusion of so many Mohammedans under the British flag abroad nevertheless constitutes a a vital factor in the determination of current imperial policies, especially in the Near East; as do the vast numbers of Buddhists and other Oriental religious cults affect Far Eastern British policies.

The most celebrated of British universities are Oxford and Cambridge, each with colleges founded in the thirteenth century, and inextricably intertwined in the fabric of British history. But there are many others in England, London, Durham, Manchester, Birmingham, Liverpool, Leeds, Sheffield, and Bristol; in Scotland, St. Andrews, Edinburgh, Glasgow and Aberdeen; in Ireland, two in Dublin and one in Belfast, and one in Wales.

At these eighteen universities there were, in 1922, 4,433 professors, and 50,870 students.

The system of instruction also includes elementary, special and certified schools, in which in the Kingdom the enrolment is about 8,500,000 pupils, besides very many technical, art, professional and scientific institutions along all lines incident to modern civilized needs. An exhaustive survey has just been completed to prepare the ground for a complete readjustment of educational methods to conform to modern needs.

The trade with the United States as reported by the United States Department of Commerce for the last two years has been as follows:

**England and Wales.**

| | | |
|---|---|---|
| Imports, | 1920-21 | $1,205,259,154 |
| " | 1921-22 | 771,201,137 |
| Exports, | 1920-21 | 271,726,066 |
| " | 1921-22 | 213,910,230 |

**Scotland.**

| | | |
|---|---|---|
| Imports, | 1920-21 | $82,452,731 |
| " | 1921-22 | 47,054,920 |
| Exports, | 1920-21 | 29,789,051 |
| " | 1921-22 | 28,563,555 |

**Ireland.**

| | | |
|---|---|---|
| Imports, | 1920-21 | $38,675,932 |
| | 1921-22 | 25,641,257 |
| Exports, | 1920-21 | 26,271,357 |
| " | 1921-22 | 27,879,868 |

**Total for the United Kingdom.**

| | | |
|---|---|---|
| Imports, | 1920-21 | $1,326,387,817 |
| " | 1921-22 | 843,897,314 |
| Exports, | 1920-21 | 327,786,474 |
| " | 1921-22 | 270,353,653 |

## THE ARMY.

The army on peace strength numbers 183,000 men, with 205,000 in the trained reserve.

The United Kingdom is a member of the League of Nations.

**Gibraltar**, the rock at the southernmost point of the Iberian Peninsula, guards the entrance to the Mediterranean. The width of the strait dividing Europe from Africa is fourteen miles. The Rock has been in British possession since 1713. It has been elaborated, tunnelled, and armed until it is considered impregnable. A large and secure harbor has been constructed at its foot. As a naval base its position is of the greatest strategic importance. The Rock is 2¼ miles long, ¾ of a mile wide and 1,396 feet in height; the area is nearly 2 square miles; a narrow isthmus connects it with the Spanish mainland. Its population, census of 1921, was 17,690. The military establishment numbers about 6,000 men. Gibraltar is a crown colony and the Governor and Commander-in-Chief, at present Gen. Sir Horace L. Smith-Dorrien, G. C. B., G. C. M. G., exercises all the governmental functions. The revenue for 1920 was £287,051 and the expenditures £372,994. In 1920 there entered 6,496 vessels of 11,614,187 tonnage.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $21,466,475 |
| " | 1921-22 | 4,514,326 |
| Exports, | 1920-21 | 409,379 |
| " | 1921-22 | 10,005 |

*The United States Consul* at Gibraltar is Richard L. Sprague.

**Malta**, an island 17 miles long by 8 wide and 58 miles due south of Sicily in the Mediterranean Sea and about 180 miles from the African coast, has had centuries of stormy history. It was annexed to the British Empire in 1814 following the Napoleonic wars and has been greatly strengthened and made into a base for repair and refitment for the British fleet. The harbor of Valletta (population 24,189) has been improved with a breakwater, but it is not large. The area of the island is 92 square miles, and the total area, including the neighboring islands of Gozo and Comino, is 118 square miles. The civil population, by census of 1921, was 211,864. The land under cultivation amounts to 42,891 acres, mostly in small holdings. Some cotton is grown, and manufactures include lace filigree, cotton and cigarettes. Fishing is important. Wheat, flour, sugar, edible oils, tobacco, textiles, wines, cattle food, petroleum, and coal are the chief imports. There are eight miles of railroads and in 1919-20 there entered the port 1,519 vessels of 1,893,850 tons.

The Governor, at present Field Marshal Lord Plumer, G. C. B., G. C. M. G., G. C. V. O., has an elected Legislature to care for purely local affairs. The revenue of the colony in 1919-20 was £650,489; expenditures, £632,233. Imports in 1920 were valued at £5,789,426 and exports at £1,602,294.

*The United States Consul* at Malta is Mason Mitchell.

# Statistics of the Dominion of Canada.

(From data compiled by R. H. Coats, Dominion Statistician.)

## LAND AND WATER AREA, BY PROVINCES.

| Provinces. | Land. | Water. | T'l Land & Water. | Provinces. | Land. | Water. | T'l Land & Water. |
|---|---|---|---|---|---|---|---|
| | *Sq. miles.* | *Sq. miles.* | *Sq. miles.* | | *Sq. miles.* | *Sq. miles.* | *Sq. miles.* |
| Prince Edward Island. | 2,184 | ..... | 2,184 | Alberta..... | 252,925 | 2,360 | 255,285 |
| Nova Scotia..... | 21,068 | 360 | 21,428 | British Columbia..... | 353,416 | 2,439 | 355,855 |
| New Brunswick..... | 27,911 | 74 | 27,985 | Yukon..... | 206,427 | 649 | 207,076 |
| Quebec..... | 690,835 | 15,969 | 706,834 | Northwest Territories.. | 1,207,926 | 34,298 | 1,242,224 |
| Ontario..... | 365,880 | 41,382 | 407,262 | | | | |
| Manitoba..... | 231,926 | 19,906 | 251,832 | Total..... | 3,603,910 | 125,755 | 3,729,665 |
| Saskatchewan..... | 243,382 | 8,318 | 251,700 | | | | |

## POPULATION OF CANADA, BY PROVINCES.

| Provinces. | 1901. | 1911. | 1921. | Provinces. | 1901. | 1911. | 1921. |
|---|---|---|---|---|---|---|---|
| Prince Edward Island. | 103,259 | 93,728 | 88,615 | Alberta..... | 73,022 | 374,295 | 588,454 |
| Nova Scotia..... | 459,574 | 492,338 | 523,837 | British Columbia..... | 178,657 | 392,480 | 524,582 |
| New Brunswick..... | 331,120 | 351,889 | 387,876 | Yukon..... | 27,219 | 8,512 | 4,157 |
| Quebec..... | 1,648,898 | 2,005,776 | 2,361,199 | Northwest Territories.. | 20,129 | 6,507 | 7,988 |
| Ontario..... | 2,182,947 | 2,527,292 | 2,933,662 | Royal Canadian Navy. | ..... | ..... | 485 |
| Manitoba..... | 255,211 | 461,394 | 610,118 | | | | |
| Saskatchewan..... | 91,279 | 492,432 | 757,510 | Total..... | 5,371,315 | 7,206,643 | 8,788,483 |

NOTE.—Revised figures are given for 1911 to agree with boundary changes made in 1912.

The special census of the Prairie Provinces (1916) showed—Manitoba, 553,860; Saskatchewan, 647,835; Alberta, 496,525.

Of the population in 1911 there were 3,821,995 males and 3,384,648 females; population per square mile, 1.93. The densest average per square mile was 141.47, in Beauharnois, Quebec. Of the males, 2,369,766 were single, 1,331,853 were married, 89,154 were widowed, 839 were divorced, and 1,286 were legally separated. Of the females, 1,941,886 were single, 1,251,468 were married, 179,656 were widowed, 691 were divorced, and 1,584 were legally separated.

Foreign-born population of Canada (1911), 752,732; males, 470,927; females, 281,805. Of the foreign-born 303,680 were from the United States, 121,430 from Austria-Hungary, 89,984 from Russia, 49,194 from Norway and Sweden, 39,577 from Germany, 34,739 from Italy, 27,083 from China, 8,425 from Japan.

## CANADIAN IMMIGRATION.

| Year (Fiscal.) | From United Kingd'm | From United States. | From Other Co'ntries | Total. | Year (Fiscal.) | From United Kingd'm | From United States. | From Other Co'ntries | Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1899..... | 10,660 | 11,945 | 21,938 | 44,543 | 1912..... | 138,121 | 133,710 | 82,406 | 354,237 |
| 1900..... | 5,141 | 8,543 | 10,211 | 23,895 | 1913..... | 150,542 | 139,009 | 112,881 | 402,432 |
| 1901..... | 11,810 | 17,987 | 19,352 | 49,149 | 1914..... | 142,622 | 107,530 | 134,726 | 384,878 |
| 1902..... | 17,259 | 26,388 | 23,732 | 67,379 | 1915..... | 43,276 | 59,779 | 41,734 | 144,789 |
| 1903..... | 41,792 | 49,473 | 37,099 | 128,364 | 1916..... | 8,664 | 36,937 | 2,936 | 48,537 |
| 1904..... | 50,374 | 45,171 | 34,786 | 130,331 | 1917..... | 8,282 | 61,389 | 5,703 | 75,374 |
| 1905..... | 65,359 | 43,543 | 37,364 | 146,266 | 1918..... | 3,178 | 71,314 | 4,582 | 79,074 |
| 1906..... | 86,796 | 57,796 | 44,472 | 189,064 | 1919..... | 9,914 | 40,715 | 7,073 | 57,702 |
| 1907..... | 55,791 | 34,659 | 34,217 | 124,667 | 1920..... | 59,603 | 49,656 | 8,077 | 117,336 |
| 1908..... | 120,182 | 58,312 | 83,975 | 262,469 | 1921..... | 74,262 | 48,059 | 26,156 | 148,477 |
| 1909..... | 52,901 | 59,832 | 34,175 | 146,908 | 1922..... | 39,020 | 29,345 | 21,634 | 89,999 |
| 1910..... | 59,790 | 103,798 | 45,206 | 208,794 | | | | | |
| 1911..... | 123,013 | 121,451 | 66,620 | 311,084 | Total..... | 1,389,525 | 1,425,460 | 952,663 | 3,767,648 |

Figures for 1897-'8-'9 cover calendar years; those for 1900 cover 6 months; those for 1907 cover 9 months, ended March 31. Since then the fiscal year has ended March 31.

## FOREIGN TRADE OF CANADA SINCE 1868.

| Year (Fisc.) | Total Imports. | Total Exports. | Year (Fisc.) | Total Imports. | Total Exports. | Year (Fisc.) | Total Imports. | Total Exports. |
|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* |
| 1868.. | 67,090,159 | 52,701,720 | 1887.. | 105,107,210 | 89,510,242 | 1905.. | 251,964,214 | 201,472,061 |
| 1869.. | 63,154,941 | 56,256,573 | 1888.. | 100,671,628 | 90,185,466 | 1906.. | 283,740,280 | 246,657,802 |
| 1870.. | 66,902,074 | 65,571,212 | 1889.. | 109,098,196 | 87,210,911 | 1907.. | 250,225,835 | 192,087,233 |
| 1871.. | 84,214,388 | 67,483,268 | 1890.. | 111,682,573 | 94,309,367 | 1908.. | 352,540,879 | 263,368,952 |
| 1872.. | 104,955,367 | 78,629,265 | 1891.. | 111,533,954 | 97,470,369 | 1909.. | 288,594,196 | 259,922,366 |
| 1873.. | 124,509,129 | 85,943,935 | 1892.. | 115,160,413 | 112,154,257 | 1910.. | 370,318,199 | 298,763,993 |
| 1874.. | 123,180,887 | 87,356,093 | 1893.. | 115,170,830 | 114,430,654 | 1911.. | 452,724,603 | 290,000,210 |
| 1875.. | 117,408,568 | 76,847,142 | 1894.. | 109,070,911 | 115,685,569 | 1912.. | 522,404,675 | 307,716,151 |
| 1876.. | 92,513,107 | 79,726,398 | 1895.. | 100,675,891 | 109,313,484 | 1913.. | 671,207,234 | 377,068,355 |
| 1877.. | 94,126,394 | 75,141,654 | 1896.. | 105,361,161 | 116,314,543 | 1914.. | 619,193,998 | 455,437,224 |
| 1878.. | 90,395,851 | 79,154,678 | 1897.. | 106,617,827 | 134,457,703 | 1915.. | 455,955,908 | 461,442,509 |
| 1879.. | 78,702,519 | 70,786,669 | 1898.. | 126,307,162 | 159,529,545 | 1916.. | 508,201,134 | 779,300,070 |
| 1880.. | 69,900,542 | 86,139,703 | 1899.. | 149,422,416 | 154,880,880 | 1917.. | 846,450,878 | 1,179,211,100 |
| 1881.. | 90,488,329 | 97,319,818 | 1900.. | 172,651,676 | 183,237,555 | 1918.. | 963,532,578 | 1,586,169,792 |
| 1882.. | 111,145,184 | 101,766,110 | 1901.. | 177,930,919 | 194,509,143 | 1919.. | 919,711,705 | 1,268,765,285 |
| 1883.. | 121,861,496 | 97,454,204 | 1902.. | 196,737,804 | 209,970,864 | 1920.. | 1,064,528,123 | 1,286,658,709 |
| 1884.. | 105,972,978 | 89,222,204 | 1903.. | 225,094,809 | 225,229,761 | 1921.. | 1,240,158,882 | 1,210,428,119 |
| 1885.. | 99,755,775 | 87,211,381 | 1904.. | 243,909,415 | 211,055,678 | 1922.. | 747,804,332 | 753,927,009 |
| 1886.. | 95,992,137 | 85,194,783 | | | | | | |

The imports are of merchandise for home consumption. The exports include foreign as well as domestic produce, the total of foreign for 1922 being $13,686,329. In 1922 the dutiable merchandise in the imports was valued at $495,620,744, the free at $252,183,588. The table does not include gold or silver imports or exports.

Merchandise imports from U. S.—(1921 revised), $856,176,820; 1922, $516,105,107.

Merchandise exports to U. S.—(1921 revised), $561,701,936; 1922, $305,422,177.

Merchandise imports from United Kingdom—(1921 revised), $213,973,562; 1922, $117,134,576.

Merchandise exports to United Kingdom—(1921 revised), $314,228,671; 1922, $300,363,193.

ASSETS AND NET DEBT OF CANADA.

| Year (Fiscal.) | Total Assets. | Net Debt. | Year (Fiscal.) | Total Assets. | Net Debt. |
|---|---|---|---|---|---|
| 1903 | $99,737,109 | $261,606,989 | 1913 | $168,930,930 | $314,301,625 |
| 1904 | 104,094,793 | 260,867,719 | 1914 | 208,394,519 | 335,996,850 |
| 1905 | 111,454,413 | 266,224,167 | 1915 | 251,097,731 | 449,376,083 |
| 1906 | 125,226,703 | 267,042,977 | 1916 | 321,831,631 | 615,156,171 |
| 1907 (9 months) | 116,294,966 | 263,671,860 | 1917 | 502,816,970 | 879,186,298 |
| 1908 | 130,246,298 | 277,960,860 | 1918 | 671,451,836 | 1,191,884,063 |
| 1909 | 154,605,148 | 323,930,279 | 1919 | 647,598,202 | 1,812,584,819 |
| 1910 | 134,394,500 | 336,268,546 | 1920 | 792,660,963 | 2,248,868,624 |
| 1911 | 134,899,435 | 340,042,052 | 1921 | 561,603,133 | 2,340,878,984 |
| 1912 | 168,419,131 | 339,919,461 | | | |

Canadian Government revenues (1916), $172,147,838; (1917), $232,601,294; (1918), $260,778,953; (1919), $312,946,747; (1920), $349,746,335; (1921), $434,386,537.

Canadian Government expenditures (1916), $339,702,502; (1917), $498,342,388; (1918), $576,660,210; (1919), $697,042,212, of which war expenditures were $446,519,439; (1920), $740,088,921 (includes $346,612,955 war expenditures); (1921), $418,620,544* (includes $16,997,544 war and demobilization expenditures).

Post Office and Government savings banks' deposits, as of June 30—(1917), $56,216,089; (1918), $53,330,090; (1919), $53,057,018; (1920), $42,334,812; (1921), $39,160,808.

Canadian chartered banks—Total on deposit (1917), $1,643,203,020; (1918), $1,339,660,669; (1919), $2,189,428,885; (1920), $2,438,079,792; (1921), $2,052,471,297. Capital paid up (1917), $111,637,755; (1918), $110,618,504; (1919), $115,004,960; (1920) $123,617,120; (1921), $129,317,086. Assets (1917), $2,111,559,555; (1918), $2,432,331,418; (1919), $2,754,538,118; (1920) $3,064,133,843; (1921), $2,743,736,605. Liabilities (1917), $1,866,228,235; (1918), $2,184,359,820; (1919), $2,495,582,568; (1920), $2,784,068,698; (1921), $2,472,350,424.†

Life insurance in force in Canada (1917), $1,585,042,563; (1918), $1,785,061,273; (1919), $2,176,326,067 (1920), $2,580,100,007; (1921), $2,858,499,929.

Fire insurance at risk in Canada (1917), $3,986,197,514; (1918), $4,523,514,841; (1919), $4,923,024,381; (1920), $5,969,872,278; (1921), $5,995,928,802.†

*Exclusive of $109,052,655 advanced to railways.
†Subject to revision.

CHIEF SOURCES OF CANADA'S REVENUES.

| Year (Fiscal). | Customs. | Excise. | Post Office. | Pub. Works (Incl. R'ys and Canals). | Dominion Lands. | Other and Total Receipts. |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 1904 | 40,461,591 | 12,958,708 | 4,652,325 | 6,972,219 | 1,443,023 | 70,669,817 |
| 1905 | 41,437,569 | 12,586,475 | 5,125,373 | 7,395,377 | 1,292,301 | 71,182,773 |
| 1906 | 46,053,377 | 14,010,220 | 5,933,343 | 8,310,267 | 1,668,162 | 80,139,360 |
| 1907 (9 months) | 39,717,079 | 11,805,413 | 5,061,728 | 6,839,586 | 1,443,632 | 67,969,328 |
| 1908 | 57,200,276 | 15,782,152 | 7,107,887 | 9,973,523 | 1,883,620 | 96,054,506 |
| 1909 | 47,088,444 | 14,937,768 | 7,401,624 | 9,362,272 | 2,153,255 | 85,093,404 |
| 1910 | 59,767,681 | 15,253,353 | 7,958,548 | 10,114,990 | 2,886,000 | 101,503,711 |
| 1911 | 71,838,089 | 16,869,837 | 9,143,952 | 10,818,834 | 3,108,736 | 117,780,409 |
| 1912 | 85,051,872 | 19,261,662 | 10,492,394 | 11,651,947 | 3,775,857 | 136,108,217 |
| 1913 | 111,764,699 | 21,447,445 | 12,051,729 | 13,158,078 | 3,402,027 | 168,689,903 |
| 1914 | 104,691,238 | 21,452,037 | 12,954,530 | 14,197,053 | 3,036,030 | 163,174,395 |
| 1915 | 75,941,220 | 21,479,731 | 13,046,665 | 12,953,487 | 2,859,715 | 133,073,482 |
| 1916 | 98,649,409 | 23,428,492 | 18,858,690 | 19,296,418 | 2,299,550 | 172,147,838 |
| 1917 | 134,043,842 | 24,412,348 | 20,102,384 | 24,440,840 | 4,055,662 | 232,601,294 |
| 1918 | 144,172,630 | 27,163,445 | 21,345,394 | 27,971,098 | 4,443,758 | 260,778,953 |
| 1919 | 147,169,188 | 30,342,034 | 21,603,542 | 38,751,870 | 3,539,927 | 312,946,747 |
| 1920 | 168,796,823 | 42,698,082 | 24,471,709 | 9,210,152 | 4,622,592 | 349,746,335 |
| 1921 | 163,266,804 | 37,113,367 | 26,706,198 | 2,980,507 | 3,955,326 | 436,292,184 |

War tax revenue (1918), $25,379,901; (1919), $56,177,508; (1920), $82,079,802; (1921), $168,385,327.

Active assets only. In calculating the net debt for 1920, $284,015,005 was deducted from the assets as non-active, and for 1921, $393,937,318.96 was deducted.

CANADIAN RAILWAY STATISTICS.

| Year (Fiscal). | Trackage. | Capital. | Passengers. | Freight. | Gross Earnings. | Gross Operating Expenses. |
|---|---|---|---|---|---|---|
| | *Miles.* | *Dollars.* | *Number.* | *Short Tons.* | *Dollars.* | *Dollars.* |
| 1910 | 31,386 | 1,410,297,687 | 35,894,575 | 74,482,866 | 173,956,217 | 120,305,440 |
| 1911 | 32,511 | 1,528,689,201 | 37,097,718 | 79,884,282 | 188,733,494 | 131,034,785 |
| 1912 | 34,582 | 1,588,937,526 | 41,124,181 | 89,444,331 | 219,403,753 | 150,726,540 |
| 1913 | 38,210 | 1,531,830,692 | 46,203,765 | 106,992,710 | 256,702,703 | 182,011,690 |
| 1914 | 40,600 | 1,808,820,761 | 46,702,280 | 106,393,989 | 243,083,539 | 178,975,259 |
| 1915 | 45,833 | 1,875,810,888 | 49,322,035 | 87,204,833 | 199,843,072 | 147,731,099 |
| 1913 | 48,319 | 1,893,877,819 | 43,503,459 | 109,659,088 | 261,888,654 | 180,542,259 |
| 1917 | 50,254 | 1,985,119,991 | 48,106,530 | 121,916,272 | 310,771,479 | 222,890,637 |
| 1918 | 50,640 | 1,999,880,494 | 44,948,638 | 127,543,687 | 330,220,150 | 273,955,436 |
| 1919 | 50,615 | 2,009,209,510 | 43,754,194 | 116,699,572 | 382,976,901 | 341,866,509 |
| 1919 Revised (calendar) | 51,086 | 2,036,165,606 | 47,940,456 | 111,487,780 | 408,598,360 | 376,789,093 |
| 1920 (Calendar) | 51,582 | 2,170,030,128 | 51,318,422 | 127,429,154 | 492,101,104 | 478,248,154 |

Mileage of chief Canadian railways: Intercolonial—1919, 2,243; Transcontinental—1919, 2,479; Canadian Northern—1919, 10,744; 1920, 11,046; Canadian Pacific—1919, 18,652; 1920, 18,697; Grand Trunk—1919, 5,693; 1920, 5,754; Grand Trunk Pacific—1919, 3,244; 1920, 3,269.

The figures for 1919 as given in last edition were for single track only. They have been changed to agree with the trackage figures in the table above. No separate figures for Intercolonial and Transcontinental are given for 1920. The mileage of these roads is included in the figures for the Canadian Government Railways—5,469.

TOTAL NUMBER AND LIABILITIES OF CANADIAN FAILURES FROM 1872 TO 1894.

| Year. | No. | Liabilities. | Year. | No. | Liabilities. | Year. | No. | Liabilities. | Year. | No. | Liabilities. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Dollars.* | | | *Dollars.* | | | *Dollars.* | | | *Dollars.* |
| 1894 | 1,863 | 17,710,215 | 1888 | 1,677 | 14,081,169 | 1882 | 787 | 8,587,657 | 1876 | 1,728 | 25,517,991 |
| 1893 | 1,344 | 12,689,794 | 1887 | 1,252 | 10,386,884 | 1881 | 635 | 5,751,207 | 1875 | 1,968 | 28,843,967 |
| 1892 | 1,688 | 13,766,191 | 1886 | 1,256 | 8,861,609 | 1880 | 907 | 7,988,077 | 1874 | 966 | 7,696,765 |
| 1891 | 1,889 | 17,100,649 | 1885 | 1,327 | 19,191,306 | 1879 | 1,902 | 29,347,937 | 1873 | 994 | 12,334,192 |
| 1890 | 1,847 | 18,289,935 | 1884 | 1,382 | 16,311,745 | 1878 | 1,697 | 23,908,677 | 1872 | 726 | 6,454,525 |
| 1889 | 1,777 | 14,713,223 | 1883 | 1,384 | 15,949,361 | 1877 | 1,892 | 25,523,903 | | | |

## CANADIAN FAILURES, 1921.

| Provinces. | Total Commercial. | | | Manufacturing. | | Trading. | | Other Com'l. | |
|---|---|---|---|---|---|---|---|---|---|
| | No. | Assets. | Liabilities. | No. | Liabilities. | No. | Liabilities. | No. | Liabilities. |
| | | *Dollars.* | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| Ontario | 579 | 25,526,625 | 24,798,148 | 180 | 19,707,200 | 374 | 4,633,548 | 25 | 457,400 |
| Quebec | 1,015 | 18,567,364 | 29,206,412 | 258 | 11,873,661 | 701 | 11,530,411 | 56 | 5,802,340 |
| British Columbia | 125 | 2,991,749 | 3,945,186 | 38 | 658,096 | 75 | 933,534 | 12 | 2,353,156 |
| Nova Scotia | 116 | 1,300,511 | 3,290,508 | 23 | 626,827 | 86 | 2,388,431 | 7 | 275,250 |
| Newfoundland | 72 | 2,043,910 | 4,351,971 | 4 | 101,500 | 65 | 4,235,289 | 3 | 15,182 |
| Manitoba | 159 | 2,560,460 | 3,064,174 | 23 | 602,337 | 115 | 2,257,855 | 21 | 203,982 |
| New Brunswick | 51 | 578,605 | 685,351 | 11 | 280,372 | 36 | 380,979 | 4 | 24,000 |
| Prince Edw. Isl'd. | 7 | 26,300 | 79,888 | .... | ..... | 7 | 79,888 | .... | ..... |
| Alberta | 135 | 1,731,378 | 1,646,743 | 13 | 41,700 | 111 | 1,363,749 | 11 | 240,794 |
| Saskatchewan | 192 | 1,831,495 | 2,231,230 | 9 | 85,097 | 169 | 2,082,485 | 14 | 63,648 |
| Total 1895 | 1,891 | 11,500,242 | 15,802,989 | 441 | 5,872,502 | 1,439 | 9,788,932 | 11 | 141,555 |
| " 1896 | 2,118 | 12,656,837 | 17,169,683 | 590 | 5,692,977 | 1,503 | 11,381,482 | 25 | 95,224 |
| " 1897 | 1,809 | 10,574,529 | 14,157,498 | 459 | 3,659,135 | 1,315 | 9,931,806 | 35 | 566,557 |
| " 1898 | 1,300 | 7,692,094 | 9,821,323 | 303 | 2,229,083 | 964 | 7,412,240 | 33 | 180,000 |
| " 1899 | 1,287 | 7,674,673 | 10,658,675 | 318 | 4,594,153 | 950 | 5,953,138 | 19 | 111,384 |
| " 1900 | 1,355 | 8,202,898 | 11,613,208 | 308 | 3,201,665 | 1,010 | 7,252,340 | 37 | 1,159,203 |
| " 1901 | 1,341 | 7,686,823 | 10,811,671 | 289 | 3,595,095 | 1,029 | 6,845,329 | 23 | 371,247 |
| " 1902 | 1,101 | 7,772,418 | 10,934,777 | 209 | 4,247,723 | 874 | 6,221,017 | 18 | 466,037 |
| " 1903 | 978 | 4,872,422 | 7,552,724 | 227 | 3,043,298 | 725 | 4,243,548 | 26 | 265,933 |
| " 1904 | 1,246 | 8,555,875 | 11,394,117 | 307 | 4,138,908 | 914 | 6,577,783 | 25 | 679,421 |
| " 1905 | 1,347 | 6,882,005 | 9,854,659 | 289 | 3,129,262 | 1,039 | 6,552,821 | 19 | 172,576 |
| " 1906 | 1,184 | 6,499,052 | 9,085,773 | 293 | 3,482,511 | 863 | 5,145,142 | 28 | 458,120 |
| " 1907 | 1,278 | 9,443,227 | 13,221,250 | 393 | 6,667,452 | 847 | 5,756,651 | 38 | 797,156 |
| " 1908 | 1,640 | 12,008,113 | 14,931,790 | 426 | 5,967,498 | 1,171 | 8,242,436 | 43 | 712,856 |
| " 1909 | 1,442 | 10,318,571 | 12,982,800 | 354 | 3,933,938 | 1,059 | 7,867,287 | 29 | 1,181,575 |
| " 1910 | 1,262 | 11,013,396 | 14,514,650 | 292 | 7,030,227 | 947 | 6,943,579 | 23 | 540,850 |
| " 1911 | 1,332 | 9,964,604 | 13,491,196 | 321 | 4,760,016 | 986 | 7,606,891 | 5 | 1,124,289 |
| " 1912 | 1,357 | 8,783,409 | 12,316,936 | 323 | 4,556,615 | 975 | 6,906,665 | 59 | 853,656 |
| " 1913 | 1,719 | 12,658,979 | 16,979,406 | 452 | 6,792,763 | 1,216 | 8,681,419 | 51 | 1,505,224 |
| " 1914 | 2,898 | 30,909,563 | 35,045,095 | 614 | 11,063,191 | 2,164 | 18,677,935 | 120 | 5,303,968 |
| " 1915 | 2,661 | 39,526,358 | 41,162,321 | 655 | 13,877,414 | 1,888 | 21,696,890 | 118 | 5,558,017 |
| " 1916 | 1,685 | 19,670,542 | 25,069,534 | 363 | 8,796,646 | 1,237 | 12,290,368 | 85 | 3,982,520 |
| " 1917 | 1,097 | 13,051,900 | 18,241,465 | 261 | 7,455,094 | 777 | 8,417,239 | 59 | 2,369,132 |
| " 1918 | 873 | 11,251,341 | 14,502,477 | 232 | 8,248,807 | 590 | 5,142,397 | 51 | 1,111,273 |
| " 1919 | 755 | 10,741,441 | 16,256,259 | 213 | 10,234,477 | 494 | 4,475,628 | 48 | 1,546,154 |
| " 1920 | 1,078 | 18,569,516 | 26,494,301 | 255 | 15,871,216 | 771 | 7,704,505 | 52 | 2,918,580 |
| " 1921 | 2,452 | 57,158,397 | 73,299,111 | 559 | 33,976,790 | 1,739 | 29,886,569 | 153 | 9,435,752 |

## CANADA'S GOLD OUTPUT.

| Year. | Dollars. | Ozs. Fine | Year. | Dollars. | Ozs. Fine | Year. | Dollars. | Ozs. Fine |
|---|---|---|---|---|---|---|---|---|
| 1891 | 930,614 | 45,018 | 1902 | 21,336,667 | 1,032,161 | 1912 | 12,648,794 | 611.885 |
| 1892 | 907,601 | 43,905 | 1903 | 18,843,590 | 911,539 | 1913 | 16,598,923 | 802,973 |
| 1893 | 976,603 | 47,243 | 1904 | 16,462,517 | 796,374 | 1914 | 15,983,007 | 773,178 |
| 1894 | 1,128,688 | 54,600 | 1905 | 14,159,195 | 684,951 | 1915 | 18,977,901 | 918,056 |
| 1895 | 2,083,674 | 100,795 | 1906 | 11,502,120 | 556,415 | 1916 | 19,234,976 | 930,492 |
| 1896 | 2,754,777 | 133,262 | 1907 | 8,382,780 | 405,517 | 1917 | 15,272,992 | 738,831 |
| 1897 | 6,027,016 | 291,557 | 1908 | 9,842,105 | 476,112 | 1918 | 14,463,689 | 699,681 |
| 1898 | 13,775,420 | 666,386 | 1909 | 9,382,230 | 453,865 | 1919 | 15,850,423 | 766,764 |
| 1899 | 21,261,584 | 1,028,529 | 1910 | 10,205,835 | 493,707 | 1920 | 15,814,098 | 765,007 |
| 1900 | 27,908,153 | 1,350,057 | 1911 | 9,781,077 | 473,159 | 1921 | 21,327,000 | 924,374 |
| 1901 | 24,128,503 | 1,167,216 | | | | | | |

The gold production, 1862-1875, is valued at about $39,000,000.

## GOLD PRODUCTION, BY PROVINCES.

| Year. | Nova Scotia. | Quebec. | Ontario. | Alberta. | British Columbia. | Yukon Territory. | Total. |
|---|---|---|---|---|---|---|---|
| 1910 | $163,891 | $2,565 | $63,849 | $1,850 | $5,403,318 | $4,570,362 | $10.205,835 |
| 1911 | 160,854 | 12,672 | 42,625 | 207 | 4,930,145 | 4,634,574 | 9.781.077 |
| 1912 | 90,638 | 13,270 | 1,788,596 | 1,509 | 5,205,485 | 5,549,296 | 12,648,794 |
| 1913 | 44,935 | 14,491 | 4,543,690 | ..... | 6,149,027 | 5,846,780 | 16.598.923 |
| 1914 | 60,031 | 26,708 | 5,545,509 | 992 | 5,224,393 | 5,125,374 | 15,983.007 |
| 1915 | 137,180 | 22,720 | 8,404,693 | 4,026 | 5,651,184 | 4,758,098 | 18,977,901 |
| 1916 | 94,305 | 21,375 | 10,180,485 | 1,695 | 4,540,216 | 4,396,900 | 19.234,976 |
| 1917 | 45,685 | 31,235 | 8,749,581 | ..... | 2,764,693 | 3,672,703 | 15,272.992 |
| 1918 | 24,310 | 40,083 | 8,516,299 | 558 | 3,624,476 | 2,118,325 | 14,463,689 |
| 1919 | 17,571 | 30,388 | 10,454,553 | 500 | 3,457,406 | 1,875,039 | 15,850,423 |
| 1920 | 14,263 | 19,742 | 11,679,483 | ..... | 2,580,010 | 1,504,455 | 15,814,098 |
| 1920—Revised | 16,013 | 22,164 | 13,112,555 | ..... | 2,896,577 | 1,689,051 | 17,754,485 |
| 1921 | 8,652 | 21,064 | 16,322,629 | 1,269 | 3,446,862 | 1,522,533 | 21,327,000 |

Note—In 1918, 1919 and 1920 totals include $139,638, $14,966 and $16,145 in gold from Manitoba.

## CANADA'S SILVER PRODUCTION.

| Year. | Ounces. | Year. | Ounces. | Year. | Ounces. | Year. | Ounces. |
|---|---|---|---|---|---|---|---|
| 1889 | 383,318 | 1898 | 4,452,333 | 1906 | 8,473,379 | 1914 | 28,449,821 |
| 1890 | 400,687 | 1899 | 3,411,644 | 1907 | 12,779,799 | 1915 | 26,625,960 |
| 1891 | 414,523 | 1900 | 4,468,225 | 1908 | 22,106,223 | 1916 | 25,459,741 |
| 1892 | 310,651 | 1901 | 5,539,192 | 1909 | 27,529,473 | 1917 | 22,221,274 |
| 1893 | ..... | 1902 | 4,291,317 | 1910 | 32,869,264 | 1918 | 21,383,979 |
| 1894 | 847,697 | 1903 | 3,198,581 | 1911 | 32,559,044 | 1919 | 16,020,657 |
| 1895 | 1,578,275 | 1904 | 3,577,526 | 1912 | 31,955,560 | 1920 | 13,330,357 |
| 1896 | 3,205,343 | 1905 | 6,000,023 | 1913 | 31,845,803 | 1921 | 13,134,926 |
| 1897 | 5,558,456 | | | | | | |

The production, in ounces, by provinces, in 1921, was: Ontario, 9,877,465; Quebec, 57,737; British Columbia, 2,806,079; Yukon Territory, 393,617; and Manitoba, 15,280.

CANADIAN COPPER PRODUCTION.

| Year. | Pounds | Year. | Pounds. | Year. | Pounds. | Year. | Pounds. |
|---|---|---|---|---|---|---|---|
| 1890 | 6,013,671 | 1898 | 17,747,136 | 1906 | 55,609,888 | 1914 | 75,735,960 |
| 1891 | 9,529,401 | 1899 | 15,078,475 | 1907 | 56,455,047 | 1915 | 100,785,150 |
| 1892 | 7,087,275 | 1900 | 18,937,138 | 1908 | 63,561,899 | 1916 | 117,150,028 |
| 1893 | 8,109,856 | 1901 | 37,827,019 | 1909 | 52,493,833 | 1917 | 109,227,332 |
| 1894 | 7,708,789 | 1902 | 38,684,259 | 1910 | 55,692,369 | 1918 | 118,769,434 |
| 1895 | 7,771,639 | 1903 | 42,684,454 | 1911 | 55,648,011 | 1919 | 75,053,581 |
| 1896 | 9,393,112 | 1904 | 41,383,722 | 1912 | 77,832,127 | 1920 | 81,600,691 |
| 1897 | 13,300,802 | 1905 | 48,092,753 | 1913 | 76,976,925 | 1921 | 53,461,795 |

NICKEL PRODUCTION IN CANADA.

| Year. | Pounds. | Dollars. | Year. | Pounds. | Dollars. | Year. | Pounds. | Dollars. |
|---|---|---|---|---|---|---|---|---|
| 1892 | 2,413,717 | 1,399,956 | 1902 | 10,693,410 | 5,025,903 | 1912 | 44,841,542 | 13,452,463 |
| 1893 | 3,982,982 | 2,071,151 | 1903 | 12,505,510 | 5,002,204 | 1913 | 49,676,772 | 14,903,032 |
| 1894 | 4,907,430 | 1,870,958 | 1904 | 10,547,883 | 4,219,153 | 1914 | 45,517,937 | 13,655,381 |
| 1895 | 3,888,525 | 1,360,984 | 1905 | 18,876,315 | 7,550,526 | 1915 | 68,308,657 | 20,492,597 |
| 1896 | 3,397,113 | 1,188,990 | 1906 | 21,490,955 | 8,948,834 | 1916 | 82,958,564 | 29,035,498 |
| 1897 | 3,997,647 | 1,399,176 | 1907 | 21,189,793 | 9,535,407 | 1917 | 84,330,280 | 33,732,112 |
| 1898 | 5,517,690 | 1,820,838 | 1908 | 19,143,111 | 8,231,538 | 1918 | 92,507,293 | 37,002,917 |
| 1899 | 5,744,000 | 2,067,840 | 1909 | 26,282,991 | 9,461,877 | 1919 | 44,544,883 | 17,817,953 |
| 1900 | 7,080,227 | 3,327,707 | 1910 | 37,271,033 | 11,181,310 | 1920 | 61,335,706 | 24,534,282 |
| 1901 | 9,189,047 | 4,594,523 | 1911 | 34,098,744 | 10,229,623 | 1921 | 19,293,183 | 6,752,615 |

LEAD, IRON ORE, AND ZINC ORE PRODUCTION.

| Year. | Lead. | | Iron Ore Shipments. | | Zinc Production. | |
|---|---|---|---|---|---|---|
| | *Pounds.* | *Dollars.* | *Tons* | *Dollars.* | *Tons.* | *Dollars.* |
| 1908 | 43,195,733 | 1,814,221 | 238,082 | 568,189 | ..... | ..... |
| 1909 | 45,857,424 | 1,692,139 | 268,043 | 659,316 | ..... | ..... |
| 1910 | 32,987,508 | 1,216,249 | 259,418 | 574,362 | ..... | ..... |
| 1911 | 23,784,969 | 827,717 | 210,344 | 522,319 | ..... | ..... |
| 1912 | 35,763,476 | 1,597,554 | 315,883 | 523,315 | ..... | ..... |
| 1913 | 37,662,703 | 1,754,705 | 307,634 | 629,843 | ..... | ..... |
| 1914 | 36,337,765 | 1,627,568 | 244,854 | 542,041 | ..... | ..... |
| 1915 | 46,313,450 | 2,593,721 | 398,112 | 774,427 | ..... | ..... |
| 1916 | 41,497,615 | 3,532,692 | 275,176 | 715,107 | 11,682 | 2,991,623 |
| 1917 | 32,576,281 | 3,628,020 | 215,302 | 758,261 | 14,834 | 2,640,817 |
| 1918 | 51,398,002 | 4,754,315 | 211,608 | 885,893 | 17,542 | 2,862,436 |
| 1919 | 43,827,699 | 3,053,037 | 195,970 | 686,386 | 16,097 | 2,362,448 |
| 1920 | 35,953,717 | 3,214,262 | 127,826 | 510,525 | 19,932 | 3,335,496 |
| 1921 | 67,146,011 | 3,855,524 | 59,408 | 229,354 | 26,548 | 2,758,552 |

The 1918 figures are for refined zinc.

CANADA'S PIG IRON PRODUCTION.

| Year. | Nova Scotia. | | Quebec. | | Ontario. | | Totals. | |
|---|---|---|---|---|---|---|---|---|
| | *Tons.* | *Dollars.* | *Tons.* | *Dollars.* | *Tons.* | *Dollars.* | *Tons.* | *Dollars.* |
| 1910 | 350,287 | 4,203,444 | 3,237 | 85,255 | 447,273 | 6,956,923 | 800,797 | 11,245,622 |
| 1911 | 390,242 | 4,682,904 | 658 | 17,282 | 526,635 | 7,606,939 | 917,535 | 12,307,125 |
| 1912 | 424,994 | 6,374,910 | ..... | ..... | 589,593 | 8,176,089 | 1,014,587 | 14,550,999 |
| 1913 | 480,008 | 7,201,020 | ..... | ..... | 648,899 | 9,338,992 | 1,128,957 | 16,540,012 |
| 1914 | 227,052 | 2,951,676 | ..... | ..... | 556,112 | 7,051,180 | 783,164 | 10,002,856 |
| 1915 | 420,275 | 5,462,847 | ..... | ..... | 493,500 | 6,129,972 | 913,775 | 11,374,199 |
| 1916 | 470,055 | 7,050,825 | ..... | ..... | 699,202 | 9,700,073 | 1,169,257 | 16,750,898 |
| 1917 | 472,147 | 10,387,234 | ..... | ..... | 698,333 | 14,638,726 | 1,170,480 | 25,025,960 |
| 1918 | 415,870 | 10,451,400 | 7,449 | 419,521 | 772,232 | 22,624,250 | 1,195,551 | 33,495,171 |
| 1919 | 285,087 | 7,141,641 | 7,701 | 331,797 | 624,993 | 17,104,151 | 917,346 | 24,577,589 |
| 1920 | 332,493 | 7,587,614 | 8,944 | 379,348 | 748,881 | 22,252,062 | 1,090,318 | 30,578,253 |
| 1921 | 169,504 | 3,633,516 | 683 | 15,283 | 520,154 | 11,800,355 | 690,341 | 15,449,154 |

COAL PRODUCTION OF CANADA.

| Year. | Nova Scotia. | New Brunsw'k. | Saskat-chewan. | Alberta. | British Columbia. | Yukon Territory. | Total Production | Total Value. |
|---|---|---|---|---|---|---|---|---|
| | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Dollars.* |
| 1910 | 6,431,142 | 55,455 | 181,156 | 2,894,469 | 3,330,745 | 16,185 | 12,909,152 | 30,909,779 |
| 1911 | 7,004,420 | 55,781 | 206,779 | 1,511,036 | 2,542,532 | 2,840 | 11,323,388 | 23,467,646 |
| 1912 | 7,783,888 | 44,780 | 225,342 | 3,240,577 | 3,208,997 | 9,245 | 14,512,829 | 33,019,044 |
| 1913 | 7,980,073 | 70,311 | 212,897 | 4,014,755 | 2,714,420 | 19,722 | 15,012,178 | 37,334,940 |
| 1914 | 7,370,924 | 98,849 | 232,299 | 3,683,015 | 2,239,799 | 13,443 | 13,637,529 | 33,471,801 |
| 1915 | 7,463,370 | 127,391 | 240,107 | 3,330,818 | 2,065,613 | 9,724 | 13,267,023 | 32,111,182 |
| 1916 | 6,912,140 | 143,540 | 281,300 | 4,559,054 | 2,584,061 | 3,300 | 14,483,395 | 38,817,481 |
| 1917 | 6,327,091 | 189,095 | 355,445 | 4,736,368 | 2,433,888 | 4,872 | 14,046,759 | 43,199,831 |
| 1918 | 5,818,562 | 238,312 | 346,847 | 5,972,816 | 2,568,591 | 2,900 | 14,977,926 | 55,192,896 |
| 1919 Revised | 5,790,193 | 166,377 | 379,347 | 4,933,660 | 2,549,516 | ..... | 13,919,096 | 54,413,349 |
| 1920 Revised | 6,437,156 | 171,685 | 335,222 | 6,907,765 | 3,095,011 | ..... | 16,946,839 | 80,693,723 |
| 1921 | 5,734,653 | 180,358 | 332,117 | 5,854,420 | 2,840,870 | ..... | 14,942,418 | 74,273,000 |

WOOD PULP PRODUCTION, 1920, IN CANADA.

| Province. | Cords. | Value. | Ave. Val. | Pulp Prod. | Kinds of Wood. | Cords. | Value. |
|---|---|---|---|---|---|---|---|
| | | *Dollars.* | *Dollars.* | *Tons.* | | | *Dollars.* |
| Quebec | 1,333,815 | 20,628,246 | 15.46 | 974,766 | Spruce | 1,873,024 | 31,653,419 |
| Ontario | 942,672 | 17,131,849 | 18.17 | 654,401 | Balsam Fir | 687,519 | 10,504,538 |
| New Brunswick | 180,723 | 2,553,613 | 14.13 | 89,069 | Hemlock | 176,029 | 2,668,630 |
| Nova Scotia | 24,595 | 301,161 | 12.24 | 23,384 | Poplar | 5,732 | 75,417 |
| British Columbia | 295,617 | 4,790,020 | 16.20 | 218,482 | Jack Pine | 15,743 | 168,400 |
| | | | | | All other | 19,375 | 334,485 |
| Total | 2,777,422 | 45,404,889 | 16.34 | 1,960,102 | Total | 2,796,797 | 45,739,374 |

In 1919 the capital invested in the Canadian wood pulp industry was $275,767,364; value of 1919 output, $139,925,001; number of concerns, 99; number of employees, 26,647; 1919 wage total, $32,264,208; value of pulp exports, $72,000,000 in 1921.

CROP YIELDS OF CANADA.

| Year (Calendar.) | Wheat. | | | Oats. | | |
|---|---|---|---|---|---|---|
| | *Acres.* | *Bushels.* | *Dollars.* | *Acres.* | *Bushels.* | *Dollars.* |
| 1890 | 2,701,246 | 42,223,372 | Not taken. | 3,961,348 | 83,428,202 | Not taken. |
| 1900 | 4,224,542 | 55,572,368 | Not taken. | 5,367,655 | 151,497,407 | Not taken. |
| 1910 | 8,834,752 | 132,075,082 | 104,816,825 | 8,652,015 | 243,506,292 | 86,796,130 |
| 1911 | 11,100,673 | 230,924,000 | 148,123,000 | 9,630,760 | 365,179,000 | 132,949,000 |
| 1912 | 10,996,700 | 224,159,000 | 139,090,000 | 9,966,000 | 391,629,000 | 126,304,000 |
| 1913 | 11,015,000 | 231,717,000 | 156,462,000 | 10,434,000 | 404,669,000 | 128,893,000 |
| 1914 | 10,293,900 | 161,280,000 | 196,418,000 | 10,061,500 | 313,078,000 | 151,811,000 |
| 1915 | 15,109,415 | 393,542,600 | 356,816,900 | 11,555,681 | 464,954,400 | 171,009,100 |
| 1916 | 15,369,709 | 262,781,000 | 344,096,400 | 10,996,487 | 410,211,000 | 210,957,500 |
| 1917 | 14,755,850 | 233,742,850 | 453,038,600 | 13,313,400 | 403,009,800 | 277,065,300 |
| 1918 | 17,353,902 | 189,075,350 | 381,677,700 | 14,790,336 | 426,312,500 | 331,357,400 |
| 1919 | 10,125,968 | 193,260,400 | 457,722,000 | 14,952,114 | 394,387,000 | 317,097,000 |
| 1920 | 18,232,374 | 263,189,300 | 427,357,300 | 15,849,928 | 530,709,700 | 280,115,400 |
| 1921 | 23,261,224 | 300,858,100 | 242,936,000 | 16,949,029 | 426,232,900 | 146,395,300 |

| Year (Cal.) | Corn for Husking. | | | Barley. | | | Rye. | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Acres.* | *Bushels.* | *Dollars.* | *Acres.* | *Bushels.* | *Dollars* | *Acres.* | *Bushels.* | *Dollars.* |
| 1890 | ..... | 10,711,380 | Not taken | 858,464 | 17,222,795 | Not taken | ..... | 1,341,324 | Not taken |
| 1900 | 360,758 | 25,875,919 | Not taken | 871,800 | 22,224,366 | Not taken | 176,679 | 2,316,793 | Not taken |
| 1910 | 294,223 | 14,329,215 | 5,774,039 | 1,286,611 | 28,846,425 | 14,653,697 | 114,741 | 1,542,694 | 1,037,899 |
| 1911 | 321,375 | 19,185,000 | 12,357,000 | 1,521,694 | 44,415,000 | 24,704,000 | 131,240 | 2,492,000 | 1,899,700 |
| 1912 | 298,190 | 16,949,700 | 10,540,700 | 1,581,300 | 49,398,000 | 22,354,000 | 127,000 | 2,428,000 | 1,755,000 |
| 1913 | 278,140 | 16,772,600 | 10,784,300 | 1,613,000 | 48,319,000 | 20,144,000 | 119,300 | 2,300,000 | 1,524,000 |
| 1914 | 256,000 | 13,924,000 | 9,808,000 | 1,495,600 | 36,201,000 | 21,557,000 | 111,280 | 2,016,800 | 1,679,300 |
| 1915 | 253,300 | 14,368,000 | 10,243,000 | 1,718,432 | 54,017,100 | 27,985,000 | 121,677 | 2,486,200 | 1,921,900 |
| 1916 | 173,000 | 6,282,000 | 6,747,000 | 1,802,996 | 42,770,000 | 35,024,000 | 148,404 | 2,876,400 | 3,196,000 |
| 1917 | 234,339 | 7,762,700 | 14,307,200 | 2,392,200 | 55,057,750 | 59,654,400 | 211,880 | 3,857,200 | 6,267,200 |
| 1918 | 250,000 | 14,214,200 | 24,902,800 | 3,153,711 | 77,287,240 | 77,378,670 | 555,294 | 8,504,400 | 12,728,600 |
| 1919 | 264,607 | 16,940,500 | 22,080,000 | 2,645,509 | 56,389,400 | 69,330,300 | 753,081 | 10,207,400 | 14,240,000 |
| 1920 | 291,650 | 14,334,800 | 16,593,400 | 2,551,919 | 63,310,550 | 52,821,400 | 649,654 | 11,306,400 | 15,085,650 |
| 1921 | 296,866 | 14,904,000 | 12,317,000 | 2,795,665 | 59,709,100 | 28,254,150 | 1,842,498 | 21,455,260 | 15,399,300 |

Other 1921 yields—Beans, 1,472,396 bushels; buckwheat, 8,583,520 bushels; mixed grains, 21,554,696 bushels; flaxseed, 6,367,340 bushels; hay and clover, 13,988,800 tons; potatoes, white, 86,692,620 bushels; peas, 3,285,678 bushels.

Of the 1921 Canadian grain crop the three Prairie Provinces of Manitoba, Saskatchewan, and Alberta, raised 280,098,000 bushels of wheat, 284,147,500 bushels of oats, 44,681,600 bushels of barley, and 3,945,700 bushels of flax.

Canadian grain exports in the year ended March 31, 1922, were, in bushels—Wheat, 136,489,238; oats, 36,195,127; barley, 12,580,979; rye, 3,180,502; peas, 26,973; beans, 11,634; buckwheat, 403,306; corn, 25,278.

## CANADA, DOMINION OF.

AREA, 3,729,665 square miles (see tables).

POPULATION, census of 1921, 8,788,483 (see tables).

CAPITAL, Ottawa; population 1921, 107,137; other cities, Montreal, population 1921, 607,063; Toronto, 376,538; Winnipeg, 178,364; Vancouver, 100,401; Hamilton, 81,969; Quebec, 78,710; Halifax, 70,203; Victoria, 38,775; Edmonton, 58,627.

An unofficial announcement was made on Nov. 2, 1922, following a conference held in Ottawa between Premier Mackenzie King and Sir Auckland Geddes, British Ambassador at Washington, whereat it was decided a Canadian representative, either as a Minister or as a High Commissioner, will be appointed to serve at Washington in connection with the British Empire, and would be charged especially with responsibility for Anglo-Canadian relations.

*Governor General*—General Lord Byng of Vimy, G. C. B., G. C. M. G., M. V. O., appointed by the British Crown, Aug. 2, 1921.

*Prime Minister*—W. L. Mackenzie King, (Foreign Affairs.)

*Minister of Militia or Minister of Naval Service*—George Perry Graham.

*Postmaster General*—Charles Murphy.

*Minister of Railways and Canals*—William Costello Kennedy.

*Minister of Justice*—Sir Lomer Gouin, K. C. M. G.

*Minister of Labor*—James Murdoch.

*Minister of Trade and Commerce*—James Alexander Robb.

*Minister of Customs*—Jacques Bureau.

*Minister of Marine and Fisheries*—Ernest Lapointe.

*Secretary of State*—Arthur Bliss Copp.

*Minister of Finance*—William Stevens Fielding.

*Minister of Soldiers' Civil Re-establishment and Minister of Health*—Henri Severin Beland, M. D.

*Minister of Agriculture*—W. R. Motherwell.

*Minister of the Interior and Mines*—Charles Stewart.

*Minister of Public Works*—Dr. J. H. King.

*Solicitor General*—Daniel D. Mackenzie.

*Ministers Without Portfolios*—John Ewen Sinclair, Senator Raoul Dondurand, LL. D., Thomas Low.

*United States Consuls General*, at Ottawa, Ont., John G. Foster; at Montreal, Que., Albert Halstead; at Halifax, Edwin N. Gunsaulus; at Winnipeg, Man., Joseph I. Brittain; at Vancouver, Frederick M. Ryder. *Consuls*, at Calgary, Alberta, Samuel C. Rest; at Campbelltown, N. B., G. Carlton Woodward; at Charlottetown, P. E. I., George J. Crosby; at Cornwall, Ont., Thomas D. Edwards; at Fernie, B. C., Norton F. Brand; at Fort William and Port Arthur, Ont., Dudley G. Dwyre; at Hamilton, Ont., Jose de Olivares; at Kingston, Ont., Felix S. S. Johnson; at London, Ont., G. Russell Taggart; at Moncton, N. B., Bertil M. Rasmusen; at Niagara Falls, Ont., James B. Milner; at Prescott, Ont., Frank C. Denison; at Prince Rupert, B. C., Ernest A. Wakefield; at Quebec, E. Halderman Dennison; at Regina, Sask., Jesse H. Johnson; at Riviere du Loup, Que., Lawrence P. Briggs; at St. John, N. B., Henry S. Culver; at St. Stephen, N. B., Alonzo B. Garrett; at Sarnia, Ont., Henry W. Diederich; at Sault Ste. Marie, Ont., George W. Shotts; at Sherbrooke, Que., Edward L. Adams; at Sydney, Nova Scotia, Charles M. Freeman; at Toronto, Ont., Chester W. Martin; at Victoria, B. C., Robert Brent Mosher; at Windsor, Ont., vacant; at Yarmouth, N. S., John N. McCunn.

Canada occupies the entire northern half of the continent of North America, excepting the United States Territory of Alaska in the northwest. It is bounded on the north by the Arctic Ocean, and the many indentations of the northeastern waters, including Baffin Bay; on the east by Baffin Bay and the Atlantic Ocean, on the south by the United States, and on the west by the Pacific Ocean and Alaska.

It has 24,500 miles of coastline, and its frontier along the United States, about 3,000 miles, is a unique example of non-fortification. For more than 100 years, under treaty agreements, neither the United States nor Canada has maintained a soldier, fort, or other means of defense, at any point along this long border. Only two or three light-draft vessels, carrying a gun or two, ply the boundary waters, on customs duty for each country.

Canada is penetrated from the north in the eastern half by Hudson Bay, a body of salt water which, with the connecting strait, is about 1,000 miles long. Numerous rivers of navigable size flow into the several oceans—the St. Lawrence, dividing Canada and the United States for many miles on the eastern side, flows into the Atlantic, and in its lower reaches is very wide and accommodates the deepest draught craft; the Yukon, which rises in Canadian territory close to Alaska, then flows across Alaska into the Bering Sea to the northwest; the Mackenzie, which drains into the Arctic Ocean; and others of lesser size but of important commercial and power values.

In area Canada is larger than the United States, but is vastly less developed. The world-wide idea

that Canada is in all parts very cold and arctic in its physical characteristics is erroneous. The southern parts have a climate which corresponds with that of the northern tier of States of this country. Gradually it shades off into the severe weathers which are found in the northern regions. The climate varies, therefore, all the way from the north temperate to the very frigid Arctic.

Canada has every sort of topography—mountainous in the west and northwest, and, like the United States, gradually attaining sea levels toward the east, excepting that there is not, as in the United States, a series of ranges of mountain height in the eastern half. In the west, the Rocky Mountain range crosses from north to south, with the lower coast range which characterizes the entire Pacific regions of both North and South America. There is, however, a remnant of the Laurentian range in the east beyond Quebec reaching into Labrador.

The influence of the Japan Current modifies the temperature of the west coast as it does that of South Alaska, lesser degrees of cold being experienced than in the east. The variation of cold, therefore, is from a mean of 78 degrees in British Columbia, to Arctic low levels in the far north.

Of the total area, about one-seventh is covered by forests, of which something like one-half is merchantable timber according to existing conceptions thereof, and which, as North American timber supplies are further exhausted, will become more valuable. In the extreme north the timber growths are stunted and of local value only.

It is in the southern parts that the present potential and actual timber values are found. Lumbering in British Columbia proceeds in forests of magnificent fir, trees as in the United States rising 300 feet in places. Other varieties also are in the west, and in the east the spruce, becoming the object of great competition as supply for paper pulp, is of heavy stand. Much of the cut comes to the United States, which must in the future depend on Canada for the bulk of its supplies.

In soil, Canada has all the varieties known to the north temperate zone, with vast areas toward the north which, by constant experiment and perfection of new methods, are coming more and more into agricultural uses. In the southern half at this time vast plains are available for settlement and immediate tillage, awaiting only the plough and seeder. Large numbers of citizens of the United States in the past 20 years have gone to occupy those cheaper lands, selling their more highly capitalized farms in this country and taking advantage of the liberal provisions of the Canadian Government for homesteaders.

Fine fruits are produced in the west, such as are grown in Oregon and Washington, in many valleys. In the east the fruits are similar to those raised across the line in the United States.

Wheat and all the cereals are grown extensively, the production being on the constant increase. The production now is far beyond domestic needs, and the exports to Europe are heavy.

In minerals Canada possesses resources which are constantly being explored and developed, and which will be a source of vast wealth. All of the principal baser metals and other minerals abound, gold being abundant in the west, northwest, and south.

Agriculturally, Canada takes a promising position, and livestock is a source of large revenue. Up to this time, agriculture and livestock are the chief interests, and will be until there is the same industrial development as in this country, with domestic demand for industrial workers taking up more of the food surplus.

Wheat crops run at about one-third of those of the United States, the 1920 census reporting 263,198,300 bushels, with other cereals close in proportion, and dairying grows rapidly in relative importance.

Fisheries are of very large importance on both the Pacific and Atlantic sides, as well as in interior waters, with salmon, cod, sardines, principal catches, the value in 1919 being more than $50,000,000.

During the past two decades, manufacturing industry has advanced enormously. Not only have Canadians developed important factories, but also many American manufacturers have established Canadian plants. The plenitude of water power sites has accelerated this progress, there having been heavy utilization under both governmental investment therein, as well as private.

The latest reliable figures are that about 2,400,000 horse power have been developed of the total minimum capacity estimated at 18,000,000 horse power.

In 1918, it was reported that Canada had invested in manufacturing in 35,797 establishments $3,034,301,915 capital; employing 678,337 persons, paying $629,790,644 in wages and salaries, using $1,900,252,314 of materials, and outputting $3,458,036,975 of products. They include food products, textiles, iron and steel, timber and lumber, leather, paper, chemicals, glass, vehicles, ships and other things.

Canada has been rapidly developing its foreign trade with the United States and Europe, and is making a vigorous invasion of the Central and South American markets. It is following the sea traditions of the mother country, and has already a considerable merchant marine on both ocean fronts. In 1920, there was reported tonnage aggregating 1,091,895, inland and seagoing. Seagoing and coastwise clearances in that year were more than 42,500,000 tons.

A feature of railway development has been the governmental encouragement of transcontinental lines, the Canadian Pacific being one of the great systems of the world; others are the Grand Trunk, the Grand Trunk Pacific, the Canadian Northern. Transcontinental traffic, passenger and freight, is increasingly heavy.

Canada maintains its own army, and is in fact and law independent of the imperial authority in London in its use, as well as in the beginning of a navy. It has, however, loyally sustained the empire in its military and naval undertakings, especially in the late war, when Canadian troops won unusual distinction.

The Dominion of Canada is a member of the League of Nations.

Although the Church of England is the state religious authority, complete freedom of worship is guaranteed, and on account of the prevalence of French in the eastern provinces, there are more Roman Catholics than any other faith. The 1911 figures showed 2,833,041 Catholics, 1,115,324 Presbyterians, mostly Scots, 1,043,017 Church of England, 1,079,892 Methodists, 382,666 Baptists, 229,864 Lutherans, and other creeds represented.

In later decades, many Slavs have taken up Canadian farm lands and have gone into the factories, which swells the Catholic population.

Canada has well defined provincial local governments, under a Federal plan not dissimilar to that of the United States. The money system is a duplicate of that of this country.

There are 22 universities, with 2,998 professors and 28,486 students. The University of Toronto has the largest matriculation of any university under the British flag. The secondary and elementary schools numbered, in 1919, 27,968, with 53,990 teachers, and 1,738,977 pupils.

More and more, social custom and development on both sides of the boundary line cause mutual action and reaction between the United States and Canada. The social institutions are most similar, and there is an economic interchange as well which accelerates this process.

New York City, as the financial capital of much of the world, becomes more and more the financial resort for Canada, especially in the east, and Chicago, Detroit, Buffalo and other cities along the border grow constantly into closer relations with Canadian interests.

Canada is now finding her chief market in the United States, and the reciprocal relations become apparent on this side, until as matters stand, economically the two countries find each other their principal field of outside operation.

Interflow of tourist travel aids this process. Citizens of the United States go in increasing numbers to summer in Canada, east and west—the west affording scenic beauties in the famed Canadian Rockies not excelled anywhere.

## NEWFOUNDLAND.

AREA, 42,734 square miles. Dependency, Labrador, 120,000 square miles.

POPULATION, census of Dec. 31, 1920, 263,383. Labrador, population, 1919, 3,647.

CAPITAL, St. John's; population, 34,045 (in 1918); other cities, Harbour Grace, 4,279; Bonavista, 3,911.

*Governor General*, Sir C. A. Harris, K. C. M. G.
*Premier*, Sir R. A. Squires, K. C., K. C. M. G.
*United States Consul*, at St. John's, James S. Benedict.

Newfoundland, at the eastern end of British America, in the Atlantic Ocean, is the island and main part, governing Labrador, which is on the mainland.

Newfoundland is the oldest English colony. Discovered by John Cabot, June 24, 1497 (Cape Bonavista), it was, in August, 1583, formally occupied by Sir Humphrey Gilbert, and by the Treaty of Utrecht, 1713, acknowledged to be British. A Governor was appointed in 1728, and in 1855 "responsible government" was accorded to the island. It is administered by an appointed Governor, aided by an Executive Council, with a Legislature of two Houses, the Assembly elected by manhood suffrage. Newfoundland has steadfastly refused to join the Dominion of Canada. Labrador is a dependency; it has 850 miles of coastline, and is chiefly inhabited by Eskimos engaged in fishing and hunting.

Newfoundland is rugged in topography, climate and the stern and peculiarly serious character of the

people, whose employment is mostly fishing and sealing, next to agriculture and livestock. The colony contributed 11,922 men to the British armies in the World War, and 3,000 others enlisted in the Canadian contingent.

Besides the foodstuffs producible in that northern latitude, there are resources of minerals which are not yet much developed, including iron ores, copper and gold. The forests are a great source of revenue. Paper pulp is taken from there to England. It had, in 1919, 904 miles of railroad.

Imports in 1921 totalled nearly $30,000,000, and exports more than $23,000,000.

Foreign trade is heaviest with Canada, the United States following, Britain being next.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $9,698,622 |
| " | 1921-22 | 5,874,984 |
| Exports, | 1920-21 | 1,758,934 |
| " | 1921-22 | 1,921,151 |

## BRITISH WEST INDIES.

### *JAMAICA.*

AREA, 4,431 square miles.

POPULATION, census of 1921, 867,021.

CAPITAL, Kingston; population, 1921, 62,562. Other cities: Spanish Town, 8,694; Port Antonio, 7,074; Montego Bay, 6,616.

*Governor*, Sir Leslie Probyn, K. C. M. G.

*United States Consul*, at Kingston, Charles L. Latham.

Jamaica is situate in the Caribbean Sea, 90 miles south of Cuba, and is the largest and most valuable of the British West Indies. It is about the size of the State of Connecticut. It has a rather mixed population, West Indians predominating. In 1921, there were 1,074,703 acres cared for, of which 302,125 were tilled, and 772,578 pasture. Products are tropical. Imports from the United States are larger than from any other country, and exports to this country second to those to Britain.

The climate has attractions for winter tourists, and many citizens of this country visit the island. The island figures largely in the history of the Buccaneers of the West Indies before and during the time of Sir Henry Morgan, once its Governor. The old haunt of the pirate, Port Royal, at the entrance of the harbor, was destroyed and sunk under the sea by an earthquake.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $15,524,778 |
| " | 1921-22 | 8,238,928 |
| Exports, | 1920-21 | 6,294,991 |
| " | 1921-22 | 7,128,854 |

### *BERMUDA.*

AREA, 19 square miles.

POPULATION, census of 1920, 219,987.

CAPITAL, Hamilton; population, 2,627.

*United States Consul*, vacant.

Bermuda, a crown colony, is a group of 360 small islands of coral formation, about 20 inhabited, in mid-Atlantic, 677 miles southeast of New York and 580 miles east of North Carolina. To Americans, the main island, capital Hamilton, population 2,627, is a favorite winter resort, fully 25,000 visiting it annually. It ships to New York quantities of Easter lilies, early potatoes and onions. Of its 12,360 acres 4,000 are under cultivation. The population, by census of 1920, numbered 21,987, of which 7,509 were whites.

The Governor, Gen. Sir James Willcocks, is aided by two Councils and an elected House of Assembly of 36 members.

Bermuda is an important naval base with a well equipped dockyard. Food supplies are mostly imported from the United States and Canada. The imports in 1920 were valued at £1,414,250, and exports at £265,868. The revenue in 1920 was £219,753; expenditures, £186,470; debt, £85,000. Tonnage entering the port in 1920 amounted to 2,371,064 tons.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $4,311,331 |
| " | 1921-22 | 3,352,762 |
| Exports, | 1920-21 | 1,098,682 |
| " | 1921-22 | 1,092,054 |

### *THE BARBADOS.*

AREA, 166 square miles.

POPULATION, 1920, estimated, 198,366

CAPITAL, Bridgetown; population, 16,648.

*Governor*, Lieut. Col. Sir C. R. M. O'Brien, K. C. M. G.

*United States Consul*, John J. C. Watson.

The Barbados are the most eastern of the Windward Islands, in the West Indies, lying out in the Atlantic at 13° north latitude.

Of the total 106,470 acres, 74,000 are tilled, producing chiefly sugar and cotton. Imports are heaviest from the United States, and exports heaviest to Canada. Tonnage entered in 1920 was 3,201,535.

These islands, together with others in the Caribbean Sea, were factors in the celebrated freebooting days of Morgan and other notorious pirates.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $3,912,907 |
| " | 1921-22 | 1,617,203 |
| Exports, | 1920-21 | 1,945,816 |
| " | 1921-22 | 211,807 |

### *TRINIDAD AND TOBAGO.*

AREA, 1,863 square miles. Tobago, 114 square miles.

POPULATION, census of 1920, 391,279.

CAPITAL, Port au Spain; population, 70,146.

*Governor*, Col. Sir S. H. W son, C. B., C. M. G., R. E.

*United States Consul*, Henry D. Baker.

Trinidad, the most southerly of the West Indies, lies off the north coast of South America. Trade is heaviest, both import and export, with the United States. Total areas are 1,191,678 acres, of which 517,538 are cultivated. Products are mostly asphalt, oil with derivatives therefrom. The great asphalt lake, 110 acres in extent, on the island is immensely valuable, and seems inexhaustible.

There are 12 miles of railroad in operation.

Port au Spain is one of the finest towns in the West Indies.

Toboga is an island governed by Trinidad.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $14,238,171 |
| " | 1921-22 | 4,882,268 |
| Exports, | 1920-21 | 7,295,120 |
| " | 1921-22 | 4,565,575 |

### *THE BAHAMAS.*

AREA, 4,404 square miles.

POPULATION, census of 1921, 50,031.

CAPITAL, Nassau; population, about 12,000.

*Governor General*, Major Sir H. E. S. Cordeaux, K. C. M. G., G. B.

*United States Consul*, Lorin A. Lathrop.

The Bahama Islands number twenty, part of them uninhabited, and are in the Atlantic Ocean, off the coast of America. Nassau, on the Island of New Providence, near the Florida coast, is an attractive winter resort for Americans.

Sponges and sisal are the chief sources of revenue. Fruit growing is being developed. Trade with the United States is three times as heavy as with any other country.

### *WINDWARD ISLANDS.*

AREA, 133 square miles

POPULATION, census of 1911, 66,750.

CAPITAL, St. George's, on Grenada Island.

*Governor*, Sir G. B. Haddon-Smith, K. C. M. G.

The Windward Islands lie at the eastern side of the Caribbean Sea, west from Martinique. They are Grenada and the Grenadines, St. Vincent and St. Lucia. Each has its own local government.

In 1916 there were under cultivation 30,200 acres. Products mostly are sugar, cocoa, nutmegs, cotton, mace and fruits.

### *LEEWARD ISLANDS.*

AREA, 715 square miles.

POPULATION, census of 1911, 127,103.

CAPITAL, Antigua.

*Governor*, Sir Eustace Fiennes, Bart.

The Leeward Islands, of the West Indies, are part of the Lesser Antilles, forming Froude's "Bow of Ulysses." They comprise in one administration five Presidencies, and include the Islands of Antigua, Barbuda, Redonda, St. Christopher, Nevis, Anguilla. Dominica, Montserrat, and the (British) Virgin Islands, with Sombrero, under Commissioners, and all except the latter having their own local Legislature.

Their chief products are sugar, molasses, cocoa and tropical growths. Trade with the United States is growing.

The trade of the Bahamas, the Windward Islands and the Leeward Islands with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $6,124,861 |
| " | 1921-22 | 4,620,375 |
| Exports, | 1920-21 | 4,013,120 |
| " | 1921-22 | 1,690,929 |

*BRITISH HONDURAS.*

AREA, 8,592 square miles.
POPULATION, census of 1921, 45,317.
CAPITAL, Belize, population, 12,660.
*Governor General* Sir E. Hutson, K. C. M. G.
*United S ates Consul*, William W. Early.

British Honduras is situate on the Caribbean Sea, south of Yucatan, and produces chiefly tropical fruits, mahogany, logwood, seashell, and cedar, much of which comes to the United States. Of the imports, a considerable trade is with this country and Canada, and comprehends things produced both in this country and Britain.

Imports in 1921 were valued at $6,000,000, and exports at $5,130,000.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $2,622,217 |
| " | 1921-22 | 1,823,553 |
| Exports, | 1920-21 | 3,720,142 |
| " | 1921-22 | 2,309,003 |

*BRITISH GUIANA.*

AREA, 89,480 square miles.
POPULATION, census of 1921, 297,691.
CAPITAL, Georgetown; population, 53,422.
*Governor*, Sir W. Collet, K. C. M. G.
*United States Consul*, Chester W. Davis.

British Guiana is on the north shore of South America, with Venezuela on the west, Dutch Guiana on the east, and Brazil on the south. It is administered by a Governor, assisted by a Court of Policy, seven appointed and eight elected, these with six others constituting the Combined Court that rules. Areas tilled are 177,000 acres, producing in 1920 sugar cane from 69,530 acres, rice from 55,250 acres, cocoanuts from 24,450 acres, coffee from 5,050 acres, rubber from 2,800 acres.

Livestock numbered 111,940 cattle, 1,420 horses, 22,250 sheep, 17,000 swine.

The placer gold mining industry is important, the 1920 production being $430,000.

Ores from which aluminum is made are abundant, and it is believed that there will be development of the oil, manganese and mica resources.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $6,246,348 |
| " | 1921-22 | 1,956,532 |
| Exports, | 1920-21 | 2,369,877 |
| " | 1921-22 | 301,201 |

*FALKLAND ISLANDS AND SOUTH GEORGIA.*

AREA, 6,500 square miles, including more than 100 islands. South Georgia, estimated, 1,000 square miles.

POPULATION, Falkland Island, census of 1919, 3,255 (2,271 males, 984 females). South Georgia, estimated, 1,000; only 3 females.

The Falkland Islands lie 300 miles east from the Strait of Magellan, at the southern end of South America. Their main value is in their strategic location, although there are domestic animals and whaling interests. It was off the Falkland Islands the British war fleet under Admiral Sturdee defeated the troublesome German fleet in the late war, completing the elimination of the naval force of the Central Powers in the South Pacific.

## BRITISH PROVINCES AND NATIVE STATES IN INDIA.

| British Provinces. | Area in Sq. Miles. | Population, 1921. | Native State or Agency. | Area in Sq. Miles. | Population, 1921. |
|---|---|---|---|---|---|
| Ajmer-Merwara | 2,711 | 495,899 | Assam State (Manipur) | 8,456 | 383,672 |
| Andamans and Nicobars | 3,143 | 26,833 | Beluchistan States | 80,410 | 378,999 |
| Assam | 53,015 | 7,598,861 | Baroda State | 8,182 | 2,121,875 |
| Beluchistan | 54,228 | 421,679 | Bengal States | 5,393 | 896,173 |
| Bengal | 78,699 | 46,653,177 | Bihar and Orissa States | 28,648 | 3,965,431 |
| Bihar and Orissa | 83,181 | 33,998,778 | Bombay States | 63,864 | 7,412,341 |
| Bihar | *42,361* | *23,378,758* | Central India Agency | 52,260 | 6,004,581 |
| Orissa | *13,743* | *4,968,406* | Central Provinces States | 31,174 | 2,068,482 |
| Chota Nagpur | *27,077* | *5,651,614* | Gwalior State | 25,107 | 3,175,822 |
| Bombay (Presidency) | 123,059 | 19,338,586 | Hyderabad State | 82,698 | 12,453,627 |
| Bombay | *75,993* | *16,005,170* | Kashmir State | 84,432 | 3,322,030 |
| Sind | *46,986* | *3,278,493* | Madras States | 10,549 | 5,460,029 |
| Aden | *80* | *54,923* | Cochin | *1,361* | *979,019* |
| Burma | 230,839 | 13,205,564 | Travancore | *7,594* | *4,006,849* |
| Central Provinces and Berar | 99,823 | 13,908,514 | Mysore State | 29,475 | 5,976,660 |
| Central Provinces | *82,057* | *10,827,302* | N. W. Frontier Province (agencies and tribal areas) | 25,472 | 2,828,055 |
| Berar | *17,766* | *3,081,212* | Punjab States | 36,551 | 4,415,401 |
| Coorg | 1,582 | 164,459 | Rajputana Agency | 128,987 | 9,857,012 |
| Delhi | 557 | 486,741 | Sikkim State | 2,818 | 81,722 |
| Madras | 142,330 | 42,322,270 | United Provinces States | 5,079 | 1,134,824 |
| Northwest Frontier Province | 13,418 | 2,247,696 | | | |
| Punjab | 99,222 | 20,678,393 | Total States | 709,555 | 71,936,736 |
| United Provinces | 107,267 | 45,590,946 | | | |
| Agra | *83,109* | *33,430,638* | Total Provinces | 1,093,074 | 247,138,396 |
| Oudh | *24,158* | *12,170,308* | | | |
| Total Provinces | 1,093,074 | 247,138,396 | Total India | 1,802,629 | 319,075,132 |

NOTE.—Figures in Italics are included in the totals just preceding them.

### INDIA.

AREA, of British provinces, 1,093,074 square miles; area of protected native states or agencies 709,555 square miles. Total India, 1,802,629 square miles.

POPULATION, of British provinces, census of 1921, 247,138,396; native states and agencies, 71,936,736; total India, 319,075,132.

CAPITAL, Delhi; population, 303,148.

*Viceroy and Governor General*, The Earl of Reading, P. C., G. C. B., G. M. S. I., G. M. I. E., K. C. V. O.

*United States Consul General*—At Calcutta, Alexander W. Weddell. *Consuls*, at Bombay, North Winship; at Karachi, Avra M. Warren; at Madras, Thomas M. Wilson; at Rangoon, James P. Moffatt.

India is bounded on the north by Afghanistan and China; on the east by China, Siam and the Bay of Bengal; on the south by the Bay of Bengal, the Indian Ocean and the Arabian Sea; on the west by the Indian Ocean, the Arabian Sea, Persia and Afghanistan. Its territory is as large as that of the United States east of the Rocky Mountain States.

The climate ranges from the extremely hot in the southeast to cooler elevations of the northwest mountains, the whole being tropical in general character.

Approximately 25 per cent. of the area is forested, among the timber products being sandalwood, teak, ironwood, deodar, sissu, satinwood, date palm, cocoanut, sago, banyan and acacia.

The country is essentially agricultural 70 per cent. of the people living therefrom. By the 1911 figures, there were in all of India, British India and the native states, 313,000,000 persons, of which about 225,000,000 were supported by soil tillage, forestry and livestock husbandry. Agriculture is crude, although improvement of method is being attained through the efforts of the British Department of Agriculture, which maintains staffs of experts to inculcate modernity among the natives. They also teach better ways of caring for domestic animals, and encourage the introduction of high-bred grades.

In 1920 there were 254,990,536 acres in crops in British India, with 23,197,000 acres irrigated by canals, 7,337,000 by tanks, 12,692,000 by wells and 5,737,000 by various other ways. About $460,000,000 of crops were taken from irrigated lands in the crop year of 1919-20.

In 1921 rice on 78,023,000 acres yielded 28,033,000 tons; wheat, 6,709,000 tons from 25,722,000 acres; cotton, 3,556,000 bales from 21,016,000 acres—an exceedingly low per acre yield.

Other important products were linseed, rape, mustard, jute, indigo, sugar cane and tea.

Livestock in 1920 numbered 117,000,000 oxen,

28,493,000 buffalo, 21,984,000 sheep, 24,134,000 goats, 1,698,000 horses, 75,000 mules, 1,372,000 donkeys and 408,000 camels.

The cotton industry is the most important next to agriculture, there being 284 spinning and weaving mills, employing 282,297 persons. Jute mills come next, with 75 establishments employing 264,373 persons; cotton ginning and baling, 1,775 establishments employing 133,323 persons. Other important industries employing 11,000 or more persons are transport, rice mills, engineering, manufacture of arms and ammunition, machinery, lumber, woollen goods, sugar, oil, tobacco, lace, rubber and other things.

Industry has 4,827 establishments and employs 1,238,410 persons.

In minerals, India has an unusually wide range of products, gold, silver, petroleum, manganese, salt, saltpetre, lead, tungsten, mica, tin, jadestone, precious stones, iron ore, coal, copper, alum, potash, and a dozen other minerals valuable in the modern processes of manufacture.

Coal, with about $50,000,000 output in 1919, led all others in value.

The 1919 figures showed coal, 22,628,037 tons; manganese ore, 537,995 tons; wolfram, 3,577 tons; mica, 45,784 hundredweight; copper, 32,759 tons; gold, 507,261 ounces, and of precious stones, 158,577 carats. About 250,000 work in the mines. Manganese, without which modern steelmaking is impossible, formerly came to the United States entirely from India. In the past ten years this country has drawn most of its supply from South America.

Imports in 1920-21 into India totalled in value $1,608,012,406, of which nearly two-thirds came from the United Kingdom, the United States following with slightly more than 10 per cent., Japan coming next with 7 per cent., Java, Sumatra and Borneo next with 5 per cent., and no other of 20 countries selling to India more than 2 per cent. of the total.

India exported in 1920-21 a total of $1,191,017,009, of which slightly more than 20 per cent. went to the United Kingdom, 15 per cent. to the United States, 17 per cent. to China, 10 per cent. to Japan, 5 per cent. to Ceylon, nearly 5 per cent. to Belgium, and not more than 3 per cent. to any other of seventeen countries.

Jute led in value of exports, cotton, raw and manufactured, coming next, while cotton manufactures exceeded all other importations, being half the total.

In 1920-21 there were 4,331 vessels entered Indian ports, of a total tonnage of 8,046,475, of which 2,444 vessels were British, with 6,113,299 tonnage, and 332 British Indian, with 144,638 tonnage. The British and British Indian ships were about 60 per cent. of the total.

India has 55,000 miles of railways and about 150,000 miles of highways. Transport is aided also by the use of irrigation canals for freight moving, there being navigable waterways inland totalling about 3,300 miles. Railway development is not modern, three gauges being employed, preventing interchange of cars from one line to another.

Great Britain officially defines British India as that part of the Indian peninsula which is directly under British rule, but the technical delimitation of British India shades off into other areas, where British influence predominates and is virtually complete. The British imperial status was given when Queen Victoria was proclaimed Empress of India in 1876.

Government there by Britain is declared to be based on the principle which has obtained in other colonies and dominions since the time the United States separated from the mother country—that of advancing the people as far as possible along the pathway toward autonomy and complete self-government. The ultimate objective is said to be that absolute self-government which the Dominion of Canada, the Commonwealth of Australia, the Union of South Africa and other areas have. The backward status of the people has prevented the realization of such an end so far, according to British authoritative statements.

India is a member of the League of Nations.

It is said that there are 45 races, speaking 170 languages, and 2,400 castes and tribes, divided, 217,000,000 Hindus, 60,000,000 descendants of Turanian tribes, 66,000,000 Mohammedans, and there are 700 feudatory states. Each cult, caste and tribe adheres fiercely to its religious beliefs and social rules, many of them with fanaticism, especially the Mohammedans, who even in far-off India look quite as faithfully toward Mecca each sundown as do those nearer to the capital of Islam for 1,000 years. The stability of these conditions, touching all classes, is probably the more assured because of all the population only about 10 per cent. is urban.

POPULATION OF CITIES OF INDIA.

The population (1921) of the cities of India of above 100,000 inhabitants was as follows:

| | | | |
|---|---|---|---|
| Greater Calcutta | 1,263,292 | Amritsar | 160,409 |
| Bombay | 1,172,953 | Allahabad | 155,970 |
| Madras | 522,951 | Nagpur | 149,522 |
| Hyderabad | 404,225 | Mandalay | 147,429 |
| Rangoon | 339,527 | Srinagar | 141,631 |
| Delhi | 303,148 | Madura | 138,894 |
| Lahore | 279,558 | Bareilly | 127,939 |
| Ahmedabad | 274,202 | Meerut | 122,567 |
| Lucknow | 243,553 | Jaipur | 120,196 |
| Bangalore | 238,111 | Patna | 120,109 |
| Karachi | 215,781 | Trichinopoly | 119,521 |
| Cawnpore | 213,044 | Surat | 118,299 |
| Benares | 199,493 | Dacca | 117,304 |
| Agra | 185,946 | Ajmer | 114,196 |
| Poona | 176,671 | Jubbulpore | 108,973 |

There are also 54 cities with a population of more than 30,000 and less than 100,000.

RELIGIOUS STATISTICS OF INDIA.

(Census of 1911.)

| Sects. | Number. |
|---|---|
| Total population | 313,547,840 |
| Hindus | 217,586,892 |
| Sikhs | 3,014,466 |
| Buddhists | 10,721,453 |
| Parsees | 100,096 |
| Mohammedans | 66,647,299 |
| Christians | 3,876,203 |
| Roman Catholics | 1,490,863 |
| Anglicans | 492,752 |
| Presbyterians | 181,130 |
| Baptists | 337,226 |
| Lutherans | 218,500 |
| Methodists | 171,844 |
| Congregationalists | 135,265 |
| Salvationists | 52,407 |
| Other Protestants | 45,894 |
| Syrian (Romo-Syrian) | 413,142 |
| Syrian (others) | 315,162 |
| Armenians, Greeks, etc. | 4,064 |
| Jews | 20,980 |
| Animistic | 10,295,168 |
| Others | 37,101 |

ILLITERACY IN INDIA.

The following statistics of illiteracy are those of the census of 1911.

| | Able to Read and Write. | Unable to Read and Write. | Total. |
|---|---|---|---|
| Males | 16,938,668 | 143,480,620 | 160,419,288 |
| Females | 1,600,763 | 151,397,030 | 152,997,793 |
| Total | 18,539,431 | 294,877,650 | 313,417,081 |

The problem in India is always how to get enough food for the people; that is, enough to stave off starvation. Famines and scourges are frequent, and obstacles to efficient use of the natural resources are ever present in the conservatism of the people and disinclination to change.

Although the efforts of Britain to introduce better methods have accomplished much and have held loyal a large proportion of the people, there has lately been an arousal of extreme nationalism, with resistance by the agitators and their followers to British rule, taking under the leadership of Gandhi the form of non-co-operation.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $92,549,584 |
| " 1921-22 | 35,723,466 |
| Exports, 1920-21 | 122,850,161 |
| " 1921-22 | 78,560,413 |

**Beluchistan** is in the extreme western part of the Indian Empire, with 54,228 square miles of area, and, in 1921, 421,679 of population, practically all Musulmans or Hindus. It is governed by British Residents under long-standing agreements.

Barren mountains and deserts render it comparatively unimportant economically, with some cereals produced, and little development of any kind. Minerals have been explored, and will some time afford wealth. Foreign trade totals about $1,000,000.

**Sikkim** is a state of India in the Himalayas, south from Thibet. The area is 2,818 square miles, and population in 1921 was 81,722, composed of Bhutias, Lepchas and Nepalese. It is governed by a Maharajah, H. H. Tashi Namgyal, under a British protectorate.

Cereals, fruits and woolen cloth are the products. The country is undeveloped.

**The Andaman Islands** are in the Bay of Bengal, 120 miles from the mainland of Burma. Area is 2,260 square miles, and population, 26,833. Timber wealth is large, but the use of the islands for a penal settlement is the chief interest.

**The Nicobar Islands,** 75 miles from Andaman Islands, have 635 square miles of area, and population of 10,000.

## OTHER BRITISH ASIATIC POSSESSIONS.

*ADEN, PERIM, SOKOTRA, AND BAHREIN ISLANDS.*

*United States Consul* at Aden, Cecil M. P. Cross.

**Aden**, a peninsula on the Arabian coast, is on the southern end of the Suez Canal, and has 75 square miles of area, in Aden proper, and 9,000 square miles including protectorate areas. The population, including Perim, in 1921 was 54,923, mostly Mohammedans. Foreign trade is indicated by about $25,000,000 in 1921 of imports—cotton goods, grains, coal, sugar, and foods; exports being coffee, gum, hides, cotton goods, and foods.

Manufacturing is chiefly of cigarettes and salt.

There are about 30 miles of narrow gauge railways.

**Sokotra** is an island off the African coast under British protection, and the Kuria Muria Islands, off the Arabian coast—all attached to Aden. Area in all is 1,382 square miles, and population 12,000, mostly engaged in livestock husbandry.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $1,221,230 |
| " 1921-22 | 1,584,376 |
| Exports, 1920-21 | 1,696,940 |
| " 1921-22 | 1,541,368 |

**The Bahrein Islands** lie off the Arabian coast, in the Persian Gulf, the total area being 280 square miles, and the population 110,000, mostly Mohammedans. Pearl fishing is the chief interest. The foreign trade in 1920-21 totalled about $5,900,000 of imports, chiefly rice, coffee, sugar, tea, and cotton piece goods; and exports about $6,250,000, being about $750,000,000, and exports $600,000,000, mostly rice, coffee, sugar.

*CEYLON.*

*United States Consul*, at Colombo, Marshall M. Vance.

Ceylon is an island as large as the State of West Virginia, off the southern tip of India, in the Indian Ocean, with 25,481 square miles of area and 4,497,599 of population, divided: Buddhists, 2,770,000; Hindus, 982,000; Mohammedans, 302,000; Christians, 444,000. Colombo (population 1921, 244,110), is the chief city.

Of the total 16,212,000 acres, 3,106,000 are tilled, and 1,000,000 pastureland. Products are cocoanuts, rubber, cinnamon, tea and grains. Tea is the most important, 185,000,000 pounds being exported in 1920, 120,000,000 to the United Kingdom. Rubber exportations in 1920 were more than 88,000,000 pounds, half going to the United Kingdom, and 39,368,000 to the United States. Total imports in 1920 were about $125,000,000; exports, about $95,000,000.

Trade with the United States for the fiscal year 1921-22 was: imports, $411,108; exports, $9,723,851.

**The Maldive Islands** are 400 miles west from Ceylon, with 70,000 population, almost all Mohammedans. Cocoanuts, millet, palms, fruit and nuts are the products.

*CYPRUS.*

Cyprus is an island, third largest in the Mediterranean Sea, 40 miles from Asia Minor and 60 from Syria. Its area is 3,584 square miles, and population in 1921 was 274,108 Mohammedans (Ottoman Turks), 56,428; Christians, 214,480.

Nicosa is the capital, population 18,461; other towns, Larnaca, 10,652; Linasol, 11,843.

The island is agricultural, with wheat, barley, vetches, oats, olives and cotton chief products. 30 per cent. of the land area is cultivated.

*STRAITS SETTLEMENT.*

AREA, Singapore Island, 217 square miles; Penang Island, 108 square miles; Wellesley, 280 square miles; Malacca, 840 square miles; Pangkor, 155 square miles; total, 1,600 square miles.

POPULATION, estimated, 1921, 882,000.

CAPITAL, Singapore, population, 423,768.

*Governor*, Sir Lawrence N. Guillemard, K. C. B., K. C. M. G., also *High Commissioner* for the Federated Malay States; *High Commissioner* for Brunei, and *British Agent* for North Borneo and Sarawak.

*United States Consul General*, at Singapore, Ernest L. Harris; *Consul* at Penang, Renwick S. McNeice.

The Straits Settlement is a crown colony in which Singapore, an island of 217 square miles area, just off the coast of the Malay Peninsula, is the chief part. The population in 1921 was about 890,000 Products are typical of that zone, total imports being about $750,000,000, and exports $600,000,000, two-thirds of each with British countries.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $14,927,449 |
| " 1921-22 | 4,545,796 |
| Exports, 1920-21 | 107,504,102 |
| " 1921-22 | 71,819,493 |

**The Federated Malay States** lie in the Malay Peninsula, and have 27,506 square miles, and population in 1919 was about 1,315,000. Products are cocoanuts, rice, rubber, tapioca, pepper, gambier, and nipah palms. In 1920 imports were about $100,000,000, and exports about $165,000,000.

**The Unfederated Malay States**, area, 23,486 square miles, and estimated population, all Mohammedans, of about 1,123,000, are five in number, each under a native Sultan and with a British adviser.

**British North Borneo** has 31,106 square miles area, with 208,183 population in 1911, chiefly Mohammedans on the seacoast and aboriginal tribes inland.

A. C. Pearson is Governor General, and the British North Borneo Company has jurisdiction.

Exports are mainly timber, sago, rice, gum, and the tropical products.

**Brunei** has been since 1888 a protected sultanate on the north side of the Island of Borneo, between Sarawak and British North Borneo. Its area is about 4,000 square miles, and population, census of 1921, 25,454, of which 35 were Europeans. The revenue for 1920 was about £23,500 and expenditures about £26,000; debt £50,100. A British Resident is in control.

**Sarawak**, the land of the white Rajah, is along the northwest coast of Borneo, between the mountains and the China Sea. Its coast line is 400 miles long and its area 42,000 square miles. Its population is estimated at about 600,000. The chief towns are the capital, Kuching, 23 miles up the Sarawak River, and Sibu, 60 miles up the Rejang River, which is navigable for large steamers. The chief exports are sago, pepper, gold, plantation rubber, gutta percha, gutta jelutong, cutch, petroleum, birds' nests, fish, oil nuts and sugar. The Rajah is H. H. Charles Vyner Brooke, great-nephew of James Brooke, the Englishman to whom the Sultan of Brunei gave the Government in 1842.

*HONG KONG.*

*Governor General*, Sir R. E Stubbs, K. C. M. G.
*United States Consul General*, William H. Gale.

British Hong Kong is a crown colony acquired in 1841, and lies at the mouth of the Canton River 60 miles from Canton. It is 11 miles long by from two to three wide. The population in 1920 was estimated at 625,166, non-Chinese being 14,000.

Hong Kong is an important British station of great strategic value commercially as well as naval as to China. Foreign trade in 1920 was: imports about $650,000,000; exports, about $765,000,000; of the imports 32 per cent. was from the British Empire; of the exports, 18 per cent. to British areas.

Much of the trade with the United Kingdom is for articles for re-exportation, the trade comprising exports of the simpler products of the areas tributary to Hong Kong, and imports the manufactures and other things of more advanced countries.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $22,042,197 |
| " 1921-22 | 19,569,408 |
| Exports, 1920-21 | 28,210,902 |
| " 1921-22 | 11,036,422 |

*WEIHAIWEI.*

Weihaiwei is in the Chinese Province of Shantung, and includes islands and the bay, which were leased in 1898. The area is 285 square miles, and the population was 147,177 in 1911. Under agreement made at the Shantung Settlement at the Washington Conference, January, 1922, Great Britain will restore the territory to China.

## UNION OF SOUTH AFRICA.

AREA, 473,089 square miles; divided, Cape of Good Hope, 276,966; Natal, 35,284; Orange Free State, 50,389; the Transvaal, 110,450.

POPULATION, census of 1921, 6,922,813; divided, Cape of Good Hope, 2,781,185; Natal, 1,234,000; Orange Free State, 628,360; the Transvaal, 2,085,837.

CAPITALS, Cape Town (seat of Legislature), population, census of 1921, 206,558; Pretoria (seat of Government), 73,770; other cities, Johannesburg, population, 284,191; Durban, 140,324; Port Elizabeth, 45,927; Kimberley, 39,320; Bloemfontein, 38,865, and six others having more than 10,000 but less than 21,000 whites.

*Governor General*, H. R. H. Prince Arthur of Connaught, K. G.

*Premier*, Gen. the Rt. Hon. J. C. Smuts (Native Affairs).
*United States Consul General*, at Cape Town, Alfred A. Winslow; *Consuls*, at Durban, Natal, Lewis V. Boyle; at Port Elizabeth, Monnett B. Davis; at Johannesburg, vacant.

The Union of South Africa, referred to by some Britons as "The flower of British democratic development," includes the former colonies of the Cape of Good Hope and Natal, and the one-time Boer republics, the Transvaal and the Orange Free State. These were all united May 31, 1910, under self-governing privileges. Legislative power rests with a Senate of 40 members, each with a £500 property qualification, eight appointed and 32 elected; and a House of Assembly of 134 elected members.

The Government, to which the British Parliament granted broadest powers, is on a very advanced platform of expression of the people's will. There is an elected provisional council in each state with an administration appointed by the Governor General which deals with local matters.

The Union of South Africa is a member of the League of Nations.

The census of 1921 returned 1,522,924 whites and 5,399,889 colored; of the 4,697,152 colored returned in the 1911 census, 4,019,006 were Bantu natives, 152,309 Asiatics and 525,837 of other races. Of the cities, Johannesburg, Cape Town, Pretoria, Port Elizabeth and East London alone returned a majority of white inhabitants.

The defense force of the Union has been entirely responsible for the military administration since Dec. 1, 1921, and the imperial soldiers have been withdrawn.

The railways owned by the several colonies prior to the Union were in May, 1919, merged into one system, the South African Railways, under control of the Union Government. The total mileage in operation March 31, 1920, was 9,542 (Cape, 4,252; Natal, 1,302; Orange Free State, 1,342; and the Transvaal, 2,644). The capital expenditure up to March 31, 1921, was £99,321,886; gross earnings, 1920-21, were £23,618,457; expenditures, £18,646,912. The mileage of privately-owned lines was 507 (Cape, 453; Natal, 50; Orange Free State, 4).

The overseas shipping entering the ports in 1920 was 1,200 vessels of 4,085,000 tons; coastwise, 2,532 vessels of 5,698,000 tons.

The output of gold and diamonds from South Africa from the earliest dates of discovery to Dec. 31, 1920, is given in the following table, the value of gold being calculated at £4.2477 per ounce.

| Province. | Gold. | Diamonds. |
|---|---|---|
| Cape of Good Hope..... | £21,847 | £169,832,477 |
| Natal..... | 83,678 | ..... |
| Transvaal..... | 673,809,271 | 28,979,807 |
| Orange Free State..... | ..... | 18,984,856 |
| Total..... | £673,914,796 | £216,797,140 |

The value of the coal output for the Union in the same time was £48,871,775, in all provinces; of copper, £22,917,558, chiefly from the Cape; and of tin, £4,440,170, chiefly from the Transvaal.

The agricultural and dairying industries have been well developed for African areas, and such produce is even shipped to the London market.

Progress is being made in development of manufacturing to use the country's raw materials, more than $200,000,000 being already invested therein.

The Union of South Africa spent out of its loan funds for war services in the six fiscal years, 1915-21, £22,940,555.

Budget, 1921-22—Revenue..... £29,150,000
Expenditure..... 24,900,538
Expenditure, loan account..... 11,731,800
Debt, March 31, 1921..... 178,607,939

Imports for 1920 were £101,827,104; exports, £87,667,516.

Trade with the United States was:
Imports, 1920-21..... $46,925,067
" 1921-22..... 18,059,700
Exports, 1920-21..... 10,838,040
" 1921-22..... 5,282,140

**Southwest Africa**, formerly German territory, annexed 1884, occupies the Atlantic Coast from the Orange River to Angola. It was conquered by the armed forces of the Union in the World War, and surrendered on July 9, 1915, at Khorab. It is now administered by the Union under a mandate from the League of Nations, dated Dec. 17, 1920. It covers about 322,400 square miles and the native population is estimated at 218,000 with 19,000 Europeans, between 7,000 and 8,000 of whom are Germans and the rest South African farmers.

It has a very healthful climate, dry and temperate with variety, as the country rises to mountainous elevations inland. It is essentially a stock-raising country.

Budget, 1921-22—Revenue..... £806,800
Expenditures..... 894,644

*SOUTH AFRICA.*

**Basutoland**, with 11,716 square miles, and, by the census of 1921, 500.554 population, of which 1,396 were Europeans, lies in South Africa northeast from the Cape of Good Hope Province on an elevated plateau. It is well watered and has a fine climate. Stock-raising is most important. Products are wool, wheat, cereals, with beginning of iron workings, and coal production promised. The territory is governed by a resident Commissioner under the High Commissioner for South Africa.

**Bechuanaland**, area, 275,000 square miles and population, by the census of 1921, 152,983, is in the middle of Southern Africa between Southwest Africa and the Union of South Africa and Rhodesia. It is utterly undeveloped, but cattle growing and agriculture have gained momentum, and the livestock already totals more than 600,000 head. Gold is mined, the 1921 output being in excess of $100,000. It is a protectorate governed by a resident Commissioner.

**Rhodesia**, with 440,000 square miles, and 1,728,000 population, estimated, and divided by the Zambesi River into Northern and Southern Rhodesia, about of equal size and importance, lies in Central South Africa, extending from the Transvaal to Belgian Congo and Tanganyika. The people are progressive, women voting, and good beginnings have been made in agriculture and cattle raising. Gold and silver are mined. The total output of gold from 1890 to Jan. 1, 1922, was £51,401,615.

The territory is under the administration of the British South Africa Company, who secured a royal charter Oct. 29, 1898. There is a Legislative Council of 19, of whom 12 are elected by direct, vote, women voting.

In a referendum held Nov. 6, 1922, the people of Rhodesia cast 5,989 votes in favor of incorporation with the Union of South Africa and 8,774 against, being a majority of 2,785 against.

**Swaziland**, with 6,678 square miles, and a population, by census of 1921, of 133,563, lies at the southeast side of the Transvaal in South Africa, and produces chiefly tobacco, corn, vegetables, sweet potatoes, and livestock. Some gold is yielded. The country is undeveloped. It is governed by a resident Commissioner under the authority of the High Commissioner of South Africa.

*BRITISH WEST AFRICA.*

NIGERIA.

AREA, estimated, 332,000 square miles.
POPULATION, estimated, 16,250,000.
CAPITAL, Lagos.
*Governor*, Sir Hugh Clifford, G. C. M. G.

Nigeria lies in Western Africa, between Cameroon and Dahomey (French) on the Gulf of Guinea. The hinterland stretches back 600 miles to French West Africa. The tin, lead and iron ore industries are old and valuable. Other products are palm oil, rubber, nuts, ivory, hides, livestock, ostrich feathers, drugs and tobacco.

Nigeria is a country, like most of Africa, of vast natural resources, with barely initial exploration done up to this time. The people, as in all Mohammedan countries, are backward, but Europeans with capital have gone in and are bringing resources into play. Slavery was abolished by ordinance in 1917, and slave-dealing suppressed.

Commerce is mostly by the trading stations common to such lands, at which simple manufactures are exchanged for native products. There are (1920) 1,126 miles of railroad.

The value of the imports in 1920 was £25,216,507 and of exports, £16,987,018.

**Cameroon**, 31,000 square miles, and 400,000 population, lies between British Nigeria and the French Congo in Western Africa. It is part of the former German colony Kamerun, the eastern and larger part of which went to France (which see). It is a region of fertile soils, and progress is rapid toward building up valuable agricultural production—cloves, vanilla, ginger, pepper and palm oil Ivory is a large product.

The seat of Government is Buea and the administrator is the Governor of Nigeria.

**Gambia**, area, 4,130 square miles, and population, estimated at 240,000, is an independent West African British crown colony, from which nuts, hides and palm kernels are exported, and the usual supply of manufactures imported from developed countries.

Its imports in 1920 were valued at £2,711,880 and exports at £2,466,145. The tonnage of vessels entering the ports in 1920 was 796,920.

It is administered by a Governor as a crown colony.

The trade of all British West Africa with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $9,300,348 |
| " | 1921-22 | 6,077,715 |
| Exports, | 1920-21 | 7,051,365 |
| " | 1921-22 | 9,338,098 |

*THE GOLD COAST.*

(The Gold Coast, Ashanti and the Northern Territories and mandate for Togoland.)

AREA—about 80,000 square miles; area of that part of Togoland under British mandate, 12,600 square miles.

POPULATION, census of 1921, 2,029,750; of Togoland, estimated, 350,000.

CAPITAL—Accra; population, estimated, 20,000.

*Governor*—Brig. Gen. Sir F. G. Guggesberg, K. C. M. G.

The Gold Coast lies along the Gulf of Guinea for 334 miles. The French Ivory Coast is on the west, and on the east is Togoland, formerly a German colony, and now divided by mandate of the League of Nations between Great Britain and France. The French portion, about 21,100 square miles, is attached for administrative purposes to Dahomey, in the east (which see), and the British, about 12,600 square miles, is administered by the Governor of the Gold Coast.

Under his administration also falls Ashanti, due north of the Gold Coast, and the Northern Territories, due north of Ashanti. These countries have enormous wealth in their forests, and the cultivation of cacao and rubber is being fostered. Palm kernels and oil are among the chief products.

There is a Government railway, 168 miles, from Seccondee to Kumasi, and a line from Accra to Anyinam (85 miles), the extension of which to Kumasi was to be pushed in 1922.

*SIERRA LEONE.*

AREA of colony, 4,000 square miles; of protectorate, 27,000 square miles; total, 31,000 square miles.

POPULATION of colony, estimated, 1920, 80,000 (European, 1,028); of Protectorate, census of 1911, 1,327,560.

CAPITAL—Freetown; population, 1911, 34,090.

*Governor*—Richard J. Wilkinson, C. M. G.

Sierra Leone lies on the west coast of Africa for 180 miles, between French Guinea and Liberia. In its capital, Freetown, it has the greatest seaport in West Africa, with an excellent harbor and a naval coaling station. The colony has been in British possession since 1767. The hinterland forms the protectorate, which extends inland about 180 miles. The chief exports are palm kernels, kola nuts and palm oil; the chief imports, textiles, spirits, tobacco and hardware.

The tonnage entering Freetown in 1920 was 2,428,337; the value of the imports was £3,548,478, of exports, £2,949,380.

*BRITISH EAST AFRICA.*

**Kenya**, colony and protectorate, extends from the Indian Ocean northeast to Italian Somaliland and north to Abyssinia, west to Uganda, and south to Tanganyika. Its boundaries are the Umba, Juba and Uganda Rivers. It has 245,060 square miles of area, and estimated population of 2,630,000. On the coast the people are Mohammedans, and inland of crude tribal religions. Nairobi, a famous centre for big game hunting, is the capital; population about 25,000. A Government railroad runs from Mombasa on the coast through Nairobi to the lake Victoria Nyanza, 618 miles.

The country, of course, is undeveloped, but what developing has been done is in mining and agriculture, with rice, cocoanuts, cotton, simsin, nuts, cassava, sugar cane, fruits, some cereals, and some gold, graphite, marble, manganese, opals, copper, bitumen and kaolin produced, and with large possibilities for mineral development.

**Tanganyika** was formerly German East Africa, and was taken by the British in 1918, the Urundi and Ruanda districts going to Belgium, and the "Kionga Triangle" to Mozambique (Portuguese East Africa). It reaches from the coast to Lake Tanganyika and from Lake Nyassa to Victoria Nyanza. It is administered under a mandate from the League of Nations, by a Governor, with headquarters at Dar-es-Salaam.

The area is 365,000 square miles, estimated, and the population 7,659,000, estimated. Whites are negligible, numbering less than 2,500.

Forest wealth is large, and there is much land susceptible of agricultural development for the production of tropical fruits and other foodstuffs. Domestic animals figure in the wealth of the people, who are extremely crude and uncivilized.

**The Uganda Protectorate**, in East Africa, has 110,000 square miles, and the population in 1921 was estimated at 3,200,000. The country is well advanced in civilization, 750,000 of the people belonging to the intelligent class. Cotton is the chief product. Since the British took it over there has been expansion of foreign trade by 200 per cent.

The trade of all British East Africa with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $2,600,642 |
| " | 1921-22 | 1,487,399 |
| Exports, | 1920-21 | 4,340,333 |
| " | 1921-22 | 1,204,997 |

**Nyassaland**, formerly known as British Central Africa, is situate on the southern and western shores of Lake Nya sa, and extends as far as Zambesi. It has 39,573 square miles, and in 1921 had 1,200,000 population, estimated. Coffee, tobacco, cotton, tea and livestock are the principal industries, foreign trade, imports and exports, totalling about $4,500,000 in 1921.

*ZANZIBAR.*

Zanzibar is an island of 1,020 square miles, 23 miles off the eastern coast of Africa, having 196,733 population in 1910. Lord Salisbury, in 1890, traded Heligoland in the North Sea with Germany for it.

It is governed by a Sultan, Seyyid Khalifa bin Harub, K. C. M. G. (succeeded Dec. 9 1911), but is administered by a British High Commissioner, Major Gen. Sir Edward Northey, K. C. M. G., and a British Resident, J. H. Sinclair. The Island of Pemba, 30 miles to the northeast, area 380 square miles, is included in the government.

The people are Mohammedans, and their clove industry yields the bulk of the world's supply, there being, estimated, 48,000 acres, with 4,750,000 trees devoted to that product, with nearly $15,000,000 in annual exports to all parts of the world. The copra industry is next, with 55,000 acres, on which 2,500,000 cocoanut trees produce.

Manufactures are pottery, rope, soap, oil, jewelry and mats.

Imports in 1920 were valued at £2,738,025; and exports at £3,011,180.

The revenue in 1920 was £330,212, and the expenditures £403,808.

Zanzibar, population, 35,000, has one of the finest ports in Africa. In 1920 there entered the port 335 vessels of 1,027,563 tons.

*MINOR AFRICAN POSSESSIONS.*

**Mauritius**, an island in the Indian Ocean, 500 miles east from Madagascar, has 720 square miles, and in 1921, 377,108 population, of which 122,424 were Roman Catholics, and most of the others Hindus. Port Louis, population 39,900, is the capital and chief seaport.

Of the total of about $42,000,000 exports in 1920, all but about $1,000,000 was sugar, it being one of the world's important sugar sources.

**Seychelles** and tributary dependencies include 90 islands of 156 square miles, and a 1920 population of 24,500, estimated, lying in the Indian Ocean near Mauritius. The capital is Victoria, a port with an important coaling station. From 23,000 acres, in 1920, there were 23,000,000 cocoanuts produced, other products being phosphates, mangrove bark, livestock and fish.

**Somaliland**, a protectorate, with 68,000 square miles, and 300,000 population, all Mohammedans, is in Northeast Africa, on the Gulf of Aden, with Abyssinia to the south and west and Italian Somaliland on the east. The chief town is Berbera, population 30,000, and the products skins, resin, gum, cattle and sheep.

**St. Helena**, the island made famous by the exile of the Emperor Napoleon, is 1,200 miles off the west coast of Africa, has 47 square miles, and about 3,800 population. Fruits, nuts, timber, flax, lace making, flax the chief, are the industries. It is an important naval coaling station, and, although volcanic and small, has large strategic value.

**Ascension Island** is in the South Atlantic off the coast of Africa, containing 34 square miles and 250 population.

## AUSTRALIA, COMMONWEALTH OF.

AREA, 2,974,581 square miles, divided: New South Wales, 309,432; Victoria, 87,884; Queensland, 670,500; South Australia, 380,070; West Australia, 975,920; Tasmania, 26,215; North Territory, 523,620; Federal Territory, 940.

POPULATION, census of April, 1921, 5,496,794, divided: New South Wales, 2,099,703; Victoria, 1,531,529; Queensland, 757,634; South Australia, 495,336; West Australia, 332,213; Tasmania, 213,877; North Territory, 3,870; Federal District, 2,572; full blooded aborigines, not enumerated, estimated, at 60,000.

CAPITAL, Melbourne; population, 1921, 784,000; chief cities, Sydney, population, 897,640; Brisbane, 209,699; Adelaide, 255,318; Perth, 155,129; Hobart, Tasmania, 52,163.

*Governor General*, Lord Forster of Lepe, P. C., G. C. M. G.

*Prime Minister*, the Rt. Hon. W. M. Hughes (Foreign Affairs). Australasian diplomatic interests are represented in Washington by the British Ambassador.

*United States Consul General* at Melbourne, Thomas Sammons; *Consuls*, at Sydney, Henry P. Starrett; at Newcastle, N. S. W., Romeyn Wormuth; at Adelaide, Henry H. Balch.

Australia, itself a continent, is situate between 10° and 40° south latitude and 113° to 153° 40′ east longitude in the Pacific Ocean, with the Indian Ocean on the west. The states of the Commonwealth are: New South Wales, Victoria, Queensland, South Australia, West Australia, the North Territory, and Tasmania, formerly known as Van Dieman's Land, an island the size of the States of Vermont, New Hampshire and Massachusetts, which lies off the southeast corner of the mainland.

Australia is one of the important parts of the British Empire, with that complete self-government that obtains in Canada. In the east mountains rise to about 7,000 feet altitude; the central portion extends westward in rolling plains, becoming sandy and in places desert, until higher elevations are reached along the west coast. The Murray River, rising on the slopes of the mountains, is navigable inland for 2,000 miles.

The climate, being in the South Hemisphere, is of the south temperate in the south, and in the north tropical. The interior portions are subject to high temperature, and in all parts the climate is regarded as healthful, being dry. Rainfall is normal only on the north, northeast and southeast coasts.

Australia is governed on the Federal plan, with a Parliament, of Senate and House of Representatives. Like Canada, it accedes to imperial requests voluntarily in all economic matters, as well as military and naval, has been loyal but, "with a mind of its own." Australian troops in the late war served with distinction.

The Commonwealth of Australia is a member of the League of Nations.

Products are not dissimilar to those of the United States, the 1920 reports showing a total tilled area of 13,299,000 acres producing 45,970,000 bushels of wheat, 12,559,000 of oats, 4,288,000 of barley, 6,764,000 of corn, 2,989,000 tons of hay, 294,000 tons of potatoes, 1,350,000 tons of sugar cane, 13,000 tons of beet sugar, 139,000 tons of grapes, from which 7,649,000 gallons of wine was made, and about $25,000,000 values from orchards and fruit gardens. Total value of all agricultural production was $360,765,000.

Forests cover 92,500,000 acres, of which 17,670,000 has been reserved for timber. In 1919 there were 2,421,000 horses, 12,711,000 cattle, 75,554,000 sheep, and 696,000 swine. Wool product in 1920 was 663,249,000 pounds, of which 652,334,000 were exported, much of it coming to the United States. Butter produced was 165,648,000 pounds, 39,006,000 being exported.

Minerals abound and are growing in importance of development. The 1919 mineral production was valued at $98,625,000, consisting of gold, $27,275,000; silver and lead, $9,610,000; copper, $9,460,000; tin, $5,250,000; coal, $33,355,000; others, $18,225,000. Total mineral production up to the end of 1919 had been $4,986,995,000. In 1851, there was a spectacular rush to newly discovered gold fields, similar to that of California.

Manufacturing production in 1920 was valued at $490,000,000, forest and fisheries products at $95,000,000. Manufactures are not yet greatly developed, but capital is entering in ever larger volume to erect and maintain works for the utilization of the resources. Most of it has come from England, but considerable is now going from the United States, and negotiations are making for the entrance of larger consignments of capital from this country.

Free trade rules between the states of the Commonwealth, but customs duties aggregating more than $100,000,000 were collected in 1920-21, in which fiscal year imports were valued at $816,667,520, and exports at $660,146,900. Imports were varied—textiles, metal manufactures, and most of the commercial articles of modern civilized life.

Next to Great Britain, the United States took the largest proportion of the exports, and more than half as much was imported from the United States as from Britain.

The net tonnage of the 2,247 registered vessels in 1920 was 345,159, and entrances of all vessels in ocean commerce at the ports numbered 2,981, with 8,086,507 tonnage.

Railway mileage in 1921 was 23,295, state owned, and of all gauges known to railroading.

In 1918 there were 3,424 public schools, and there are several technical schools and universities.

As in all parts of the Empire, there is religious freedom, and the Church of England predominates.

Australia is insufficiently explored, and is expected to develop rapidly in the ensuing years. Its possibilities seem boundless.

Its economic life is tied with the distant North Hemisphere, and its political life with Britain; and its prevailing policy appears to be to erect barriers to the entrance of Asiatics.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $120,985,720 |
| " 1921-22 | 64,776,548 |
| Exports, 1920-21 | 31,461,017 |
| " 1921-22 | 19,193,614 |

## NEW ZEALAND, DOMINION OF.

AREA, 103,581 square miles, divided, Auckland Province, 25,364; Taranaki, 3,732; Hawke's Bay, 4,241; Wellington, 10,807; Marlborough, 4,225; Nelson, 10,875; Westland, 4,881; Canterbury, 13,858; Otago, 13,957; Southland, 11,355.

POPULATION, census of 1921, 1,218,913, divided, Auckland, 369,618; Taranaki, 61,911; Hawke's Bay, 60,925; Wellington, 248,801; Marlborough, 17,788; Nelson, 47,628; Westland, 14,181; Canterbury, 199,034; Otago, 137,038; Southland, 61,989.

CAPITAL, Wellington; population, 95,235. Chief cities, Auckland, population, 157,757; Christchurch, 105,670; Dunedin, 72,225.

*Governor General*, Viscount Jellicoe of Scapa, G. C. B., O. M., G. C. W. O., G. C. V. O.

*Prime Minister*, the Rt. Hon. W. E. Massey (Finance, Railways, Mines, Stamp Duties, Land and Income Tax, State Advances and Imperial Supplies).

*United States Consul General*, at Wellington, David F. Wilber; *Consul*, at Auckland, Karl de G. MacVitty.

New Zealand lies 1,200 miles east from Australia, in the Pacific Ocean, and consists of South Island and North Island, extending north and south from 35° of southern latitude to 46°. There are numerous outlying islands under the New Zealand flag.

The agricultural possibilities are very great, two-thirds of the area being tillable, with 17,000,000 acres forested. Actually tilled area in 1920 was 18,004,776 acres, with large areas being surveyed for settlement by farmers.

In 1921 production was 6,872,000 bushels of wheat, 5,225,000 of oats, 1,587,000 of barley. Wheat averages were twice per acre that of the United States, and the other crops on a relatively high level of area productivity.

In 1921 there were 334,000 horses, 3,113,000 cattle, 23,236,000 sheep, and 342,000 swine. Wool production in 1919 was 265,683,924 pounds, of which more than two-thirds is normally exported.

In 1920 the value of the manufactured products was $348,900,000, in 4,357 establishments, employing 64,951 persons, with $164,000,000 wages and salaries.

Mineral production in 1920 was gold, $4,415,000; silver, $435,000; tungsten, $6,200; coal, exported, $642,000; consumed, $8,815,000.

In 1920 total imports were valued at $307,975,000; exports, $232,205,000; the foreign trade being heaviest with the United States next to Great Britain.

In 1920 there were 548 vessels of 86,060 tonnage net registered. Total entrances of vessels in 1920 were 744 of 2,062,370 tonnage net. In 1921 there were 1,282 miles of railways Government owned, and 138 privately owned.

New Zealand is politically organized along very broadly democratic lines, with tendency to advance rather rapidly into the realm of economic and sociological experiment.

Its Government is by Legislative Council of 41 members, shortly to be enlarged by popular election to 64.

The Dominion of New Zealand is a member of the League of Nations.

Trade with the United States was:

| | |
|---|---|
| Imports 1920-21 | $47,605,552 |
| " 1921-22 | 17,419,616 |
| Exports 1920-21 | 22,237,914 |
| " 1921-22 | 9,896,813 |

### *WESTERN SAMOA.*

German Samoa, which included Savaii and Upolu, the largest of the Samoan Islands in the Western Pacific, were occupied by the British on Aug. 29, 1914, immediately on the outbreak of the World War. This territory was assigned as a mandate

from the League of Nations to New Zealand under date of Dec. 17, 1920, and is now called Western Samoa.

Savaii is 48 miles by 25 and has an area of about 660 square miles. Upolu has an area of about 600 square miles. Both are mountainous, fertile and well watered. The population of the two aggregated by the census of April, 1921, 37,051, of which 1,035 were British and 292 Americans. The chief product is copra.

*AUSTRALASIAN POSSESSIONS.*

In the Pacific reaches of Australasia, of the other areas under the British Empire these are the most important:

**Papua**, or British New Guinea, on the Island of New Guinea north from Australia, with 250,000 estimated population, and 90,540 square miles, the people being crude tribes. The interior of the great island is unexplored.

**New Guinea**, formerly German New Guinea, has been mandated by the League of Nations to Britain.

**Bismarck Archipelago**, 15,752 square miles, and with a native population of about 188,000, and the **Solomon Islands**, 3,800 square miles, and with a population of about 17,000, both formerly German possessions, have been placed under Britain by the League of Nations.

**Nauru Island**, formerly German, mandated by the League of Nations to Britain. It has valuable guano deposits.

**Fiji Islands**, 250 in number, area, 7,083 square miles, population, estimated, 1919, 163,416; products, tropical fruits, vegetables, sisal, hemp, domestic animals. Civilization, barely in the beginnings.

**Tonga Islands**, or Friendly Islands, about 385 square miles, with a population of 23,562, export copra and livestock.

**The New Hebrides**, area, 5,500 square miles; population about 60,000, are under the joint administration of Great Britain and France.

The trade of British Oceania with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $841,701 |
| " 1921-22 | 355,192 |
| Exports, 1920-21 | 2,131,849 |
| " 1921-22 | 635,584 |

## FOREIGN CITIES OF 200,000 POPULATION AND OVER.

| Cities. | Country | Pop'lat'n | Cities. | Country. | Pop'lat'n | Cities. | Country. | Pop'lat'n |
|---|---|---|---|---|---|---|---|---|
| Adelaide | Australia | 255,000 | Foochow | China | 1,492,000 | Newcastle | England | 275,000 |
| Ahmedabad | India | 274,000 | Frankfort | Germany | 433,000 | Nice | France | 200,000 |
| Aleppo | Syria | 250,000 | Genoa | Italy | 326,000 | Ningpo | China | 2,173,000 |
| Alexandria | Egypt | 450,000 | Glasgow | Scotland | 1,034,000 | Nottingham | England | 263,000 |
| Algiers | Algeria | 207,000 | Goteborg | Sweden | 203,000 | Nurnberg | Germany | 353,000 |
| Amoy | China | 400,000 | The Hague | Holland | 353,000 | Odessa | Russia | 600,000 |
| Amsterdam | Holland | 642,000 | Hamburg | Germany | 1,025,502 | Oporto | Portugal | 204,000 |
| Antwerp | Belgium | 334,000 | Hangchow | China | 730,000 | Osaka | Japan | 1,253,000 |
| Athens | Greece | 300,701 | Hankow | China | 290,000 | Ottawa | Canada | 113,000 |
| Bagdad | Mesopot'a. | 200,000 | Hanover | Germany | 393,000 | Palermo | Italy | 360,000 |
| Bahia | Brazil | 348,000 | Harbin | China | 365,000 | Paris | France | 2,907,000 |
| Baku | Russia | 250,000 | Havana | Cuba | 364,000 | Peking | China | 1,200,000 |
| Bangkok | Siam | 550,000 | Havre | France | 261,000 | Pern'mbuco | Brazil | 250,000 |
| Bangalore | India | 238,000 | Helsingfors | Finland | 201,000 | Petrograd | Russia | 710,000 |
| Barcelona | Spain | 582,000 | Hongkong | China | 625,200 | Portsmouth | England | 247,400 |
| Batavia | Java | 243,000 | Hull | England | 287,000 | Prague | Bohemia | 676,500 |
| Belem | Brazil | 305,000 | Hyderabad | India | 405,000 | Rangoon | India | 340,000 |
| Belfast | Ireland | 395,000 | Ichang | China | 449,000 | Riga | Latvia | 570,000 |
| Benares | India | 200,000 | Johan'sb'g | U. of So. Af. | 284,000 | Rio Janeiro | Brazil | 1,225,000 |
| Berlin, Gr'ter | Germany | 3,804,000 | Karachi | India | 216,000 | Rome | Italy | 591,000 |
| Birmingh'm | England | 920,000 | Kazan | Russia | 200,000 | Rosario | Argentina | 224,000 |
| Bologna | Italy | 205,000 | Kharkov | Russia | 250,000 | Rostov | Russia | 200,000 |
| Bombay | India | 1 173,000 | Kiel | Germany | 206,000 | Rotterdam | Holland | 510,000 |
| Bordeaux | France | 268,000 | Kiev | Russia | 600,000 | Samshui | China | 200,000 |
| Bradford | England | 286,000 | Kiungkiang | China | 381,000 | Santiago | Chili | 508,000 |
| Bremen | Germany | 280,000 | Kiungchow | China | 587,000 | Sao Paulo | Brazil | 515,000 |
| Breslau | Germany | 528,000 | Kobe | Japan | 609,000 | Saratov | Russia | 230,000 |
| Brisbane | Australia | 210,000 | Konigsberg | Germany | 261,000 | Seoul | Korea | 315,000 |
| Bristol | England | 377,000 | Kyoto | Japan | 592,000 | Shanghai | China | 1,539,000 |
| Brno | Cz'cho-Slv. | 222,000 | Lahore | India | 280,000 | Sheffield | England | 491,000 |
| Brussels | Belgium | 685,000 | Leeds | England | 458,320 | Singapore | Straits Set. | 424,000 |
| Bucharest | Roumania | 350,000 | Leicester | England | 234,190 | Soochow | China | 1,028,000 |
| Budapest | Hungary | 1,200,000 | Leipsic | Germany | 605,000 | Stettin | Germany | 233,000 |
| BuenosAyres | Argentina | 1,674,000 | Lemberg | Poland | 219,000 | Stockholm | Sweden | 420,000 |
| Cairo | Egypt | 795,000 | Lille | France | 201,000 | Strassbourg | France | 225,000 |
| Calcutta | India | 1,264,000 | Lima | Peru | 280,000 | Stuttgart | Germany | 309,200 |
| Cape Town | U. of So. Af. | 207,000 | Lisbon | Portugal | 490,000 | Sydney | Australia | 897,700 |
| Canton | China | 1,367,000 | Liverpool | England | 804,000 | Tabriz | Persia | 200,000 |
| Catania | Italy | 225,000 | Lodz | Poland | 452,000 | Tashkent | Siberia | 275,000 |
| Cawnpore | India | 213,000 | London, grtr | England | 7,476,168 | Teheran | Persia | 225,000 |
| Changsha | China | 1,272,000 | Lucknow | India | 244,000 | Tientsin | China | 839,000 |
| Chemnitz | Germany | 305,000 | Lungchow | China | 200,000 | Tiflis | Georgia, R. | 350,000 |
| Cholon | Fr Indo-Ch | 200,000 | Lyons | France | 562,000 | Tokio, Gr't'r | Japan | 5,164,000 |
| Chinkiang | China | 478,000 | Madras | India | 523,000 | Toronto | Canada | 376,600 |
| Christiania | Norway | 259,000 | Madrid | Spain | 609,000 | Tsingtau | China | 309,000 |
| Chungking | China | 1,100,000 | Magdeburg | Germany | 285,000 | Tunis | Africa | 200,000 |
| Cologne | Germany | 634,000 | Manchester | England | 730 550 | Turin | Italy | 460,000 |
| Colombo | Ceylon | 244,000 | Mannheim | Germany | 230,000 | Valencia | Spain | 236,000 |
| Const'nople | Turkey | 1,000,000 | Marseilles | France | 587,000 | Valparaiso | Chili | 200,000 |
| Copenhagen | Denmark | 561,000 | Melbourne | Australia | 784,000 | Vancouver | Canada | 200,000 |
| Damascus | Syria | 250,000 | Mexico City | Mexico | 1,000,000 | Venice | Italy | 200,000 |
| Danzig | Baltic | 352,000 | Milan | Italy | 664,000 | Victoria | Hongkong | 343,000 |
| Delhi | India | 303,000 | Montevideo | Uruguay | 363,000 | Vienna | Austria | 1,850,000 |
| Dortmund | Germany | 296,000 | Montreal | Canada | 607,000 | Vilna | Lithuania | 215,000 |
| Dresden | Germany | 588,000 | Moscow | Russia | 1,100,000 | Wanhsien | China | 752,000 |
| Dublin | Ireland | 399,000 | Munich | Germany | 631,000 | Warsaw | Poland | 932,000 |
| Duisburg | Germany | 245,000 | Nagoya | Japan | 430,000 | Wenchow | China | 1,739,000 |
| Dusseldorf | Germany | 408,000 | Nanking | China | 903,000 | Wuchow | China | 349,000 |
| Edinburgh | Scotland | 420,000 | Nanning | China | 300,000 | Wuhu | China | 236,000 |
| Ek'terin'slav | Russia | 200,000 | Nantes | France | 220,000 | Yokohama | Japan | 423,000 |
| Essen | Germany | 440,000 | Naples | Italy | 700.000 | Zurich | Switzerl'd | 207,000 |
| Florence | Italy | 250,000 | | | | | | |

Berlin figures cover Greater Berlin as officially counted in 1921. The old City of Berlin has about 2,000,000 inhabitants.

The figures for the cities in the above table are from the very latest official censuses and estimates.

There are 27 cities of the world with 1,000,000 or more population, of which China has 9; the United States, 3; India, 2; Japan, 2; and Argentina, Austria, Brazil, England, France, Germany, Hungary, Mexico, Russia, Scotland, and Turkey, 1 each.

# Other Foreign Countries.

## ABYSSINIA KINGDOM OF.

AREA, estimated, 350,000 square miles.
POPULATION, estimated, 10,000,000.
CAPITAL, Addis Abeba; pop., estimated, 50,000.
*Empress*, Waizeru Zauditu, daughter of the late Emperor Menelek, born in 1876; elected Empress Sept. 27, 1916 after her nephew Lij Yaser was deposed.

Abyssinia is a mountainous, volcanic country in northeast Africa, bounded by Eritrea (Italian) on the north, British Somaliland (Berbera) and Italian Somaliland on the east, British East Africa on the south and the Sudan on the west. The agricultural and mineral resources of the country are comparatively undeveloped, and its wealth of water power is unused. In the lower country and deep valleys, which are very hot, sugar cane, cotton, coffee and rubber are produced, while grain, fruit, tobacco, potatoes, etc., are grown in the higher temperate country. The upper slopes are given over to cattle raising. Hides, skins, coffee and beeswax are the chief exports, and cotton goods the chief imports. The total trade is estimated at about $12,000,000. A railroad 495 miles long, built under French auspices, runs from Jibuti to the capital. Slavery is prevalent. The royal family claims descent from Menelek, the son of King Solomon and the Queen of Sheba. Abyssinia is the only country in Africa that was neutral in the World War. It is not a member of the League of Nations.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $19,477 |
| " 1921-22 | 2,051 |
| Exports, 1920-21 | 336 |
| " 1921-22 | 9,500 |

## AFGHANISTAN.

AREA, estimated, 245,000 square miles.
POPULATION, estimated, 6,330,500.
CAPITAL, Kabul; population, estimated, 150,000; other cities, Kandahar, population 50,000, and Herat, 20,000.
*Amir*, Amanullah Khan, born June 1, 1892, succeeded on the assassination of his father, Amir Habibullah Khan, Feb. 20, 1919. *Heir*, his son, born June 5, 1921.

Afghanistan occupies a mountainous country in Asia between 61° and 72° east longitude and 29° and 38° 20′ north latitude. Its extreme breadth northeast to southeast is about 700 miles, and from the Herat frontier on the west to the Khyber Pass on the east it is 600 miles. It is bounded on the north by Transcaspia (Russia) and Bokhara, on the east by British India, on the south by Beluchistan (British India) and on the west by Persia. The elevation is generally over 4,000 feet. There are three great river basins, the Oxus and the Kabul in the northeast and the Helmand, which runs southwest through the middle of the country.

Afghanistan has been called "the land of rocks and stones and sanguinary feuds." Its people are nearly all Mohammedans. The Afghans have been the dominant race for 200 years, the Tajiks, aborigines, being cultivators and traders. Along the frontier are warlike and independent tribes of Pathans and others with a fixed habit of raiding across the border and receiving punishment. Disturbances have been frequent. The language spoken is Pushtu.

There are many fertile plains and valleys in the mountains and good irrigation makes available all profitable soil. There are two harvests a year, one of wheat, barley or lentils, and the other of rice, millet, maize and dal. Fruits of the temperate zone are plentiful. Sheep and transport animals are raised. The fat-tailed sheep is native to the country. Its tail is of immense weight and size, formed of masses of fat, a store of nourishment drawn on by the animal in winter. These sheep furnish the Afghans their chief meat diet and the fat of the tail is a substitute for butter. Wool and skins are the main articles of export together with fruits, nuts and ghi. The imports are textiles, metals and hardware, leather goods, tea and sugar. Transfrontier trade with India amounts to about $15,000,000 annually. Copper, lead and iron are found.

There are no railroads in the country, but plans have been developing looking toward the building of railroads across the country in the northeast to connect Termez, the rail head of the road from Bokhara, with Peshawur in British India, via Kabul, and another to connect with the railroad from Merv at its rail head at Kuska, via Herat, in the west, and Kandahar in the south, to New Chaman and Quetta in Beluchistan. Merchandise is now transported on camel or ponyback along the seven important trade routes.

The Government is monarchical and the laws and customs those of Islam. The late Amir was recipient of a subsidy from the British Government but that was ended by a new treaty signed on Nov. 22, 1921, in which Great Britain recognized the complete independence of Afghanistan, established the frontiers, and withdrew the privilege Afghanistan had enjoyed of importing arms and ammunition through India. The Afghan army was reported to number 100,000 well armed men.

## ALBANIA.

AREA, estimated, 11,000 square miles.
POPULATION, estimated 1921, 1,700,000.
CAPITAL, Durazzo; pop., estimated, 5,000; chief city, Scutari, pop. 32,000.
*United States Minister*, Ulysses Grant-Smith.

Albania, after centuries of Turkish domination and of contention between its Balkan neighbors and Italy during and after the World War, has had its independence assured under a treaty with Italy, Aug. 2, 1920, and was formally admitted into the League of Nations in January, 1921.

The country is mountainous, bounded by Jugo-Slavia on the north and east, Greece on the south and the Adriatic Sea on the west. It is an agricultural and cattle and sheep raising state. There are no railroads, banks or currency and few schools. Two-thirds of the population are Mohammedans, the rest Christians.

Legislative power rests in a Diet of 77 members, elected in February, 1921. At the head of the state is a Council of Regents composed of a representative of each of the four religious bodies of the country, a Bektashi Moslem, a Sunni Moslem, a Greek Catholic and a Roman Catholic. In December, 1921, these Regents were Omer Pasha Vrioni, Refik Toptani, Sotir Peci and Antoine Pistuli.

The executive power was in the hands of a Cabinet, the latest being that headed by Djaffer Ypi, which assumed office Dec. 22, 1921.

## ANDORRA, REPUBLIC OF.

AREA, 191 square miles.
POPULATION, 1921, 5,231, scattered in 30 villages.

Andorra is a republic in a valley of the Pyrenees under the suzerainty of France and the Spanish Bishop of Urgel. It is governed by a Council of 24, elected for 4 years by heads of families in each of the six parishes. The inhabitants speak Catalan and are Roman Catholics. Sheep raising is the chief industry. Andorra is not a member of the League of Nations.

## ARABIA.

AREA, estimated, 1,200,000 square miles.
POPULATION, estimated, 5,000,000.

The Arabians occupy a peninsula in the southwest corner of Asia between Palestine on the west, Syria on the north and Mesopotamia on the northeast (an indeterminate line), the Persian Gulf, the Gulf of Oman, the Arabian Sea and the Red Sea, with the exception of Aden, a strongly fortified coaling station of 75 square miles with a protectorate of adjacent territory of 9,000 square miles, pop. 54,923, held by Great Britain. Nearly one-half of Arabia is desert. It is roughly as large as that portion of the United States stretching east of California to the Mississippi and north from Texas to the Canadian line. Maps are very deficient. The boundaries of the native states of Arabia are undefined. Turkey, in the treaty of peace, renounced all rights to Arabia. The organization of the native states is to be developed under British auspices, the principal rulers (the King of the Hejaz and the Iman of Yemen) being subsidized on condition that they maintain internal peace and place the control of foreign affairs in the hands of British advisers. These states are:

### *THE KINGDOM OF THE HEJAZ.*

*King of the Hejaz*, El Husein ibn Ali, so proclaimed Dec. 1916 (Grand Sherif of Mecca.)

The Hejaz was represented at the Peace Conference by the Emir Feisal, third son of Husein, now King of Iraq, and was admitted to the League of Nations in 1920. Its area is about 112,500 square

miles and population (estimated) of about 900,000.

The importance of the Hejaz is due to its possession of the holy cities of Islam, Medina, where the Mosque of the Prophet enshrines the tomb of Mohamet who died in the city June 7, 632, and Mecca, his birthplace, containing a great mosque sheltering the sacred shrine, the Kaaba, in which is the black stone given by Gabriel to Abraham. As many as 200,000 of the faithful have made the pilgrimage in a year. Medina (pop. 10,000) is 820 miles from Damascus, and is the terminus of the Hejaz railroad. Mecca (pop. 60,000), the capital, is 200 miles further south, and is 55 miles from Jiddah (pop. 20,000), the chief port on the Red Sea. The chief product is dates. Some hides, wool and gum are exported.

*THE EMIRATE OF NEJD AND HASA.*

*Emir*, Abd-el-Aziz es Saud.

Known as "the true home of the Arabs," this province stretches east from the Hejaz across the oases of Central Arabia to the Persian Gulf. Its estimated population is 300,000, mostly nomadic Bedouins, and its capital is Ridyaoh.

*THE EMIRATE OF JEBEL SHAMMAR.*

*Emir*, Abdullah ibn Mitah, born 1907, succeeded his father Saud ibn Rashid, assassinated May, 1920.

A Bedouin desert country to the north of Nejd, with an estimated population of 200,000. Capital, Hail; population 12,000.

*THE PRINCIPATE OF ASIR.*

*Imam*, Mohammed ibn Ali el-Idrisi.

Asir is on the west coast of Arabia, south of the Hejaz and north of Yemen, with a population of about 1,000,000; capital, Sabia. Hides and livestock are exported.

*THE IMAMATE OF YEMEN.*

*Imam*, Yahya Mohammed ed-Din.

Yemen is in the southwest part of the peninsula between Asir and the British protectorate Aden. Its area is estimated at 75,000 square miles and population 750,000. Capital Sanaa (pop. 20,000); chief port Hodeida (pop. 40,000). On the plateau of El Jebel, the most fertile part of Arabia, grain and coffee are grown. Hides and coffee are exported. Mocha, once a flourishing coffee port, no longer counts.

*THE SULTANATE OF KUWEIT.*

*Sultan*, Hamed ibn Jobar succeeded March 1921.

Kuweit (pop. est., 50,000), extends along the Persian Gulf from Mesopotamia to Nejd. Its capital, Kuweit (pop. 25,000), is an important port on the Persian Gulf, and had been selected as the seaport terminal of the German Berlin to Bagdad railroad. Horses, wool, dates and pearls are exported.

*THE SULTANATE OF OMAN.*

*Sultan*, Seyyid Taimur ibn Faisal, born 1886; succeeded 1913.

Oman occupies the southeast portion of the Arabian peninsula with a coast line about 1,000 miles long, extending from El Katar on the Persian Gulf to Ras Sajir on the Arabian Sea. It has an estimated area of 82,000 square miles and a population estimated at 500,000, chiefly Arabs. The nomadic tribes of the interior after seven years of rebellion have completely thrown off the control of the Sultan and by an agreement October, 1920, have entire home rule and freedom of trade. The Sultan has for years been subsidized by the Government of India which maintains there a political agent, Major M. E. Rae (1921). The capital is Muscat (pop. estimated, 20,000). The best camels in Arabia are bred in the interior. The chief exports are dates.

Food supplies and textiles are imported. Trade is mostly with India.

The trade of the Hejaz, Arabia and Mesopotamia with the United States is returned by the United States Department of Commerce collectively for the fiscal year 1921-22:

| | |
|---|---|
| Imports, 1921-22 | $291,229 |
| Exports, 1921-22 | 734,523 |

## ARGENTINA, REPUBLIC OF.

AREA, 1,153,119 square miles.

POPULATION, 1921, 8,698,516.

CAPITAL, Buenos Aires, pop. estd., 1920, 1,674,000, Chief cities, Rosario, pop. 222,592; Cordoba. 156,000; La Plata, 90,435; Tucuman, 91,216; Santa Fe, 59,574; Mendoza, 58,790; Avellande, 46,277; Bahia Blanca, 44,143.

*President*, Dr. Marcelo T. de Alvear (1922-1928). Inaugurated Oct., 1922.

*Premier*, Sr. Ramon Gomez (Interior).

*Ambassador to the United States*, Tomas A. LeBreton.

*Consuls General*, at New York, Ernesto C. Perez; at San Francisco, Santos Goni. Consulates also at Mobile, Los Angeles, Apalachicola, Fla., Pensacola, Savannah, Chicago, New Orleans, Baltimore, Boston, Pascagoula, Miss., St. Louis, Philadelphia, Port Arthur and Norfolk.

*U. S. Ambassador*, John W. Riddle.

*U. S. Consul General*, at Buenos Aires, William H. Robertson; *Consul*, at Rosario, Wilber Z. Bonney.

Argentina extends from Bolivia 2,300 miles to Cape Horn and from the ridge of the Andes to the South Atlantic, occupying the greater part of southern South America. Its greatest breadth is about 930 miles. In area it is about equal to the eleven mountain and Pacific States of the United States. It is bounded by Bolivia on the north, Paraguay on the northeast, Brazil, Uruguay and the South Atlantic ocean on the east and Chile on the west.

East of the Andes are great plains, heavily wooded and called the Gran Chaco in the north, and vast treeless pampas, given over to wheat and cattle raising, stretching south down to the plains of Patagonia. Vast tracts of land amounting to 237,768,000 acres are public domain land, opened by the Federal Government to colonization. In the years 1857-1920 the number of immigrants by sea was 5,121,958. Immigration comes principally from Spain and Italy. A law passed in 1919 requires each intending immigrant to produce a certificate of good character and ability to work.

Wheat, maize, flax and oats are the principal crops. The sugar and wine industries are making great progress. Sheep, cattle, horses, goats and pigs form the chief wealth on the ranches. Packing houses have been established and the export of frozen beef and mutton and other livestock products has become a great industry.

There is little mining, but some petroleum is produced. Textiles, oils and chemicals, iron, agricultural implements and machinery, glassware and crockery, and foodstuffs are the principal imports. Manufacturing is on the increase.

In 1919 there were entered at all Argentine ports 36,356 vessels with a tonnage of 17,043,869. Argentina has 22,500 miles of railroads of which 3,816 are owned by the state; the privately owned railroads are almost entirely in the hands of English companies.

Argentina proclaimed its independence of Spain July 8, 1816, and the years until 1852 were years of disturbance and civil war. The Constitution then adopted and under which, somewhat amended, the republic is governed to-day is modelled closely after that of the United States. There are 14 provinces, with a very high measure of home rule, electing their own Governors and Legislatures, and 10 territories administered by Governors appointed by the President, also a Federal District (Buenos Aires, area 72 square miles) whose Mayor is appointed by the President and who is assisted by a deliberative council elected by the tax-paying inhabitants.

The President of the republic, who must be a Roman Catholic and Argentine by birth, is elected by an Electoral College for a six-year term and is ineligible for re-election. Congress consists of a Senate of 30 members, chosen by a special body of electors for six years, one-third retiring each two years; and a House of Deputies, numbering 158, elected by direct vote for four years, one-half retiring every two years. The Roman Catholic religion is supported by the state, but all creeds are tolerated. Primary education is free, secular and compulsory, but the percentage of illiteracy is still high. There are national universities at Cordoba, founded in 1613, with 1,603 students in 1920; Buenos Aires, with 10,404 students; La Plata, 2,979, and Rosario. There are also three provincial universities.

Service in the national militia is compulsory, the peace strength of the army being 1,750 officers and 25,600 men, with a reserve of 759,000. The navy consists of two dreadnoughts of 27,940 tons each, mounting twelve 12-inch guns; two pre-dreadnoughts, four armored cruisers and one light cruiser.

Argentina is a member of the League of Nations.

Par of exchange, peso, paper, 42.44 cents.

Rate of exchange, Nov. 1, 1922, 35.51 cents.

Units of Currency { pesos, paper 42.44 cents. pesos, gold 96.48 cents.

| | |
|---|---|
| Imports, 1921 | $615,950,000 |
| Exports, 1921 | 651,840,000 |
| Budget—Receipts | 205,304,101 |
| Expenditures | 217,986,782 |
| Debt—Internal (pesos, gold) | 196,215,100 |
| Internal (pesos, paper) | 214,239,700 |
| External (sterling) | £137,517,230 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $200,890,985 |
| " 1921-22 | 80,495,060 |
| Exports, 1920-21 | 124,299,424 |
| " 1921-22 | 60,767,964 |

## ARMENIA.

(See under Russia.)

## AUSTRIA, REPUBLIC OF.

AREA, 30,766 square miles.
POPULATION, census of 1920, 6,131,715.
CAPITAL, Vienna; population, 1920, 1,841,326; other cities, Graz, population, 157,644; Linz, 94,072; Innsbruck, 55,650; and seven others of more than 10,000.
*President*, Dr. Michael Hainisch.
*Chancellor*, Mgr. Ignatz Seipel.
*Minister to the United States*, vacant; Edgar L. G. Prochnik, Counsellor and Charge d'Affaires.
*Consuls General in the United States*, at New York, Friedrich Fischerauer; at Chicago, Ludwig Kleinwachter.
*United States Minister*, Albert Henry Washburn.
*United States Consul*, at Vienna, Carol H. Foster.

The Austria of to-day—mere remnant of the former Austrian Empire—is now a republic in Central Europe, with Germany its neighbor to the west and the north, Czechoslovakia on the north and east, Hungary on the east, and Serbia and Italy on the south. It is slightly smaller than the four New England States of Vermont, New Hampshire, Massachusetts and Connecticut, and has only about 100,000 more inhabitants than the four together.

Austria is not only vastly reduced in area and population, but is in an economic plight equalled by few countries in world history. In the prewar days of Emperor Francis Joseph of the Hapsburg dynasty the Austrio-Hungarian Empire had 261,259 square miles and about 51,000,000 population. The Dual Monarchy included Austria proper, with Vienna one of the brilliant political, commercial, industrial, financial and art centres of the world; Hungary, Transylvania, Czechoslovakia, Polish Galicia, the Trentino, Slavonia, Croatia, Bosnia, Herzegovina, the Banat, territories which gave it access to the Adriatic, and control of practically all the Danube River. Next to Russia, it was the most populous in Europe. Hungary is an independent republic now. All the provinces mentioned have gone and Austrian territory reduced from her prewar 115,822 square miles to 30,766.

The ill-fated Hapsburgs—Francis Joseph and then Charles, his successor—maintained a court in Vienna which was in some respects the most inaccessible socially of any in the world.

Although politically held together by the bonds of empire, Austria-Hungary and the very many components contained so many diverse racial strains with such tenacious nationalistic tendencies that the non-progressive policies of the imperial rulers finally released centrifugal forces which tore the empire apart.

The World War was precipitated by the assassination of the heir presumptive to the throne, the Archduke Franz Ferdinand, by a Serbian in Bosnia in 1914.

Austria was proclaimed a republic on Nov. 12, 1918, the day after the armistice, a National Assembly assumed the government and appointed a Cabinet. On Feb. 16, 1919, the National Constitutional Assembly, consisting of one Chamber, was elected by the direct vote of all men and women over 20 years of age.

A Constitution was adopted Oct. 1, 1920, which provides for a Parliament of two Houses, a Bundesrat of 46 members, chosen indirectly, and a Nationalrat, elected by direct vote for four years. These two Houses elect a President to serve for four years. All special privileges are abolished. There are seven provinces and the city of Vienna, each with a large measure of home rule on local affairs, by elected Provincial Assemblies. The army is limited to 30,000 men.

The lands lost to Austria were those from which the capital city and the manufacturing towns drew their food supply, and held the seaports and much of the railroads and the Danube River. Only the German Atlantic port of Hamburg, via the Elbe River, is left.

To-day, with so greatly reduced areas, with no seaport, with one city, Vienna, comprising about 30 per cent. of the whole national population, rendering the distribution of the population unbalanced and difficult of economic adjustment, with immense industrial production and vast and fertile areas of foodlands taken away, and with a depreciated currency and dislocation of every economic function to degrees far greater than in other countries, Austria is one of the problems of the day in Europe, and stands with hat in hand, asking the powers to find help for her, lest she perish as a national entity.

This plea has been listened to with sober realization by the other powers, and late in 1922 there were proposals seriously entertained to advance sums—from $100,000,000 up and down, according to the source of the proposal—that the currency be stabilized and the economic status rebuilt toward ultimate resumption of normal functioning.

The depreciation of the currency has been so heavy that living costs have risen enormously, leaving especially the middle classes, salaried and those living from investments, in a sorry plight.

Amid this apparently hopeless tangle of destructive currents there has appeared a trend toward resumption of industrial production, and it has been believed that, with some help from other nations in the form of long-term loans, Austria will weather the storm and emerge finally able to steer its so much smaller national ship of state into safe waters.

In the first two years of its existence as a republic it did receive a total of $72,000,000 of credits from other countries, but it was mostly for food for actually starving people. The inhabitants had been reduced to positive want, and it is probable that only this relief prevented anarchy and the virtual wiping out of the people as a national entity.

The United States, through the Hoover Food Relief agencies, was exceedingly active in that relief, feeding stations being maintained in Vienna and elsewhere.

These conditions of then and now transcend in importance any schedule of existing assets and liabilities, material and economic. It is an utterly abnormal status, unprecedented and with nonbalance of urban and rural interests, with which the other interested powers are striving to deal. The League of Nations is working on the problem, and financiers in the world capitals are taking part in the discussion.

The unit of the currency is the crown, worth at par of exchange 20.26 cents. The rate of exchange on Nov. 1, 1922, was .000014 cents. In 1921, the deficit of the republic was 50,000,000,000 crowns, so rapid had been depreciation. Hence, figures avail little in showing the fiscal and economic situation.

For 1922, budget estimates showed an apparent prospect for a deficit of from 130,000,000,000 to 160,000,000,000 crowns.

However, state expenditures have lately shown a tendency to decline, and that was regarded as a hopeful sign.

One element of aid is the pre-eminent position which was held by the Viennese banks, in the empire and in the Balkan states. There has been a gradual resumption of these functions, and it is believed that Austria will readjust its affairs so as to obtain much of its future strength from such financial operations. Also Vienna was a great commercial centre, and it is believed that, after the animosities of the war and post-war periods shall have died down, Vienna will again transact large business in movement of freight and money and credit.

Agriculture showed improvement in the years 1919, 1920 and 1921, but more than 25 per cent. of the arable lands are not yet producing food, and the total amount produced in 1921 of all crops was less than half that of 1913 on the lands now included in the republic.

The hamper on agricultural resumption has been the inability of the people of the cities to pay for the food. All sorts of Government remedies for the distress have been tried, but the situation has been so serious that they only slightly helped.

It is proposed to harness more of the 1,700,000 water horse power in the Austrian Alps and the Danube, 170,000 being already in use.

In 1921 there was quite a boom in manufacturing, which did not last. Yet strangely the reports in May, 1922, showed only 60,000 unemployed of a population of more than 6,000,000.

The main industries are the making of machinery, agricultural and industrial, with considerable making of automobiles; textiles, cotton and wool, which are exporting yarns to Germany; leather and fancy goods, which have always had world-wide repute, woodwork, furniture and paper.

As a means of stabilizing matters internally, the Government lately has regulated wages on a sliding scale gauged by the value of the crown, wages rising and falling—mostly rising of course—as the crown fluctuates.

Labor conditions peculiarly have not been bad, compared with some other countries, the people as a mass having apparently fully realized the extreme seriousness of the situation, and therefore standing closer together.

At times during 1920 and 1921 there have been heard suggestions that Austria's only hope was to join with Germany. But that course has not been acceptable to the Allies.

From 1910 to 1920 the population decreased 3.8 per cent., the men decreasing 6.53 per cent. in the war losses.

In 1910 the present Austrian territory had 5,979,667 Roman Catholics, the Austrian Empire being

the most powerful Catholic unit in Europe. The Catholics were 94.11 per cent. of all; Jews, 2.99 per cent.; and Protestants, 2.60 per cent.

The Austrian Tyrol is one of the most beautiful mountain regions in the world, and a source of much revenue from tourists. Musical art is highly developed, and Austrian composers and players have always produced some of the world's best music, and are doing so to-day, while the literature has been accounted high by world scholarship.

The recent conference of representatives of the other Central European countries on transport, and the agreement reached to pool equipment and facilitate shipments will help Austria much. The war-destroyed railways have been somewhat improved, and work proceeds.

Cataclysmic as were the effects of the war on the former empire, the removal of the discordant racial elements, leaving a virtually homogeneous people, is expected to yield at least social and political peace; so, that, if industrial peace be maintained, and the immediate perils be passed safely, what remains of Austria probably, almost certainly, will slowly emerge into relative prosperity.

In 1921 imports were valued at $314,000,000, and exports at $175,000,000. Foodstuffs led the imports with $73,500,000, and textiles followed with $44,400,000. Exports were principally wooden goods, $11,750,000; machinery, $6,300,000; vehicles, $12,500,000; with eight other lines.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $8,168,485 |
| " | 1921-22 | 1,317,628 |
| Exports, | 1920-21 | 2,085,040 |
| " | 1921-22 | 2,603,807 |

## AZERBAIJAN

(See under Russia.)

## BELGIUM

AREA, 11,744 square miles.

POPULATION, census of 1921, 7,684,272 (670 to the square mile).

CAPITAL, Brussels, pop., 1921, with suburbs, 684,870. Chief port, Antwerp; pop., with suburbs, 333,882. Important cities, Ghent, pop., 165,910; Liege, 165,117; Malines, 60,118; Bruges, 54,308; Ostend, 48,073.

*King of the Belgians*, Albert, born April 8, 1875, succeeded his uncle Leopold II. Dec. 17, 1909; married Oct. 2, 1900, the Duchess Elizabeth of Bavaria. *Heir Apparent*, Prince Leopold, Duke of Brabant, born Nov. 3, 1901; other children, Prince Charles Theodore, Count of Flanders, born Oct. 10, 1903; Princess Marie-Jose, born Aug. 4, 1906.

*Premier*, Col. Georges Theunis (Finance).

*Ambassador to the United States*, Baron de Cartier de Marchienne.

*Consuls General* at New York, P. Mali; at Portland, Ore., S. Hill; at Philadelphia, Paul Hagemans.

*Consuls*, at Boston, R. Fiske; at Baltimore, J. G. Whitely; at Pittsburgh, P. Didier; at Norfolk, P. J. Andre Mottu; at Richmond, Va., Fred E. Nolting; at Charleston, S. C., B. Rutledge; at New Orleans, M. Ulser; at Galveston, M. H. Royston; at Memphis, P. S. McDonald; at St. Louis, G. Mignolet; at Birmingham, Ala., V. G. Nesbit; at Atlanta, H. L. DeQuie; at Savannah, E. W. Rosenthal; at Chicago, C. Vermeren; at Dubuque, X. Brüm; at Detroit, P. Boeye; at Omaha, T. J. Nolan; at Kansas City, M. Seguin; at Cincinnati, L. A. Ault; at Cleveland, Homer McKeehan; at Green Bay, M. J. Heynen; at Minneapolis, O. E. Safford; at Seattle, J. Auzias de Turenne; at San Francisco, J. Simon; at Denver, J. Mignolet. Consulates also at Los Angeles, Jacksonville, Pensacola, Moline, Louisville, Oklahoma City.

*United States Ambassador*, Henry P. Fletcher.

*United States Consul General*, at Brussels, Henry H. Morgan. *Consuls*, at Antwerp, George S. Messersmith; at Ghent, Charles Ray Nasmith; at Liege, George M. Hanson.

Belgium is bounded on the north by the Netherlands, on the east by Germany and Luxemburg, on the south by France, and on the west by the North Sea. It has a frontier of 831 miles and a seaboard of 62 miles. It is not quite as large as the State of Maryland. The Scheldt and the Meuse are the principal rivers. Below Antwerp the Scheldt flows to the North Sea through the Netherlands and negotiations are in progress between the two countries aiming to make navigation as far as Antwerp free to both countries. The western part is low, level and fertile; the eastern, the tableland of the Ardennes, has a poor soil.

Belgium formed part of the Low Countries from the readjustment of Europe in 1815 following Napoleon's downfall, until Oct. 14, 1830 when, following a revolution which broke out Aug. 25, a National Congress proclaimed its independence. The Constitution of 1831 proclaimed it a "Constitutional, representative and hereditary monarchy," and the National Congress elected Prince Leopold of Saxe-Coburg, King of the Belgians on June 4 of that year. He died in 1865 and was succeeded by his son, Leopold II., who died in 1909. By the Treaty of London, April 19, 1839, the famous "scrap of paper," separation from the Netherlands and the neutrality and inviolability of Belgium were guaranteed by Austria, France, Great Britain, the Netherlands, Prussia and Russia. The Germans invaded the kingdom on Aug. 2, 1914, and held nearly all of Belgium throughout the war, evacuating it immediately after the armistice. Under the Treaty of Versailles, Eupen and Malmedy and Moresnet were ceded by Germany, adding 371 square miles and 64,520 inhabitants to the kingdom.

Belgium is the most densely populated country in Europe, having 670 inhabitants to the square mile. In the province of Brabant the ratio is 1,237. In 1920 the excess of births over deaths was 61,435, and there were 2,195 divorces to 106,514 marriages.

The population is divided into two well defined groups, the Flemish and the Walloons. The former, who speak Dutch, are somewhat in the majority, preponderating in Flanders, Limburg and Brabant, including Antwerp. French and Flemish are joint official languages. The Roman Catholic is the religion of the great majority, but complete religious toleration prevails. The state does not interfere with the intimate affairs of the churches and part of the income of the ministers of all denominations is paid from the national treasury.

Belgium has four universities; those of Ghent (1,006 students in 1920) and Liege (2,656) are state institutions, and those of Brussels (1,643) and Louvain (2,783) are free. Attached to them are various technical schools with 3,034 students. There are 134 state high schools, 44 of which are for girls, and many private schools are under ecclesiastical control. Schools are supported by local taxation and each commune must have at least one primary school. The percentage of illiteracy has been decreasing rapidly.

Belgium has 4,649 miles of railways, of which 2,759 are state-owned. The damage done by the war has been almost entirely made good. Plans for the electrification of the whole system are under consideration. The country has 6,177 miles of roads, the majority paved with stone (Belgian blocks), and 1,231 of navigable waterways—rivers and canals. The number of vessels entering Belgian ports in 1920 was 7,698; tonnage, 10,852,341; of this tonnage 10,419,051 entered at Antwerp. Of the vessels entered, Belgian were 949; British, 4,081; Norwegian, 525; French, 390; American, 362; Dutch, 354; German, 239.

The chief imports in 1920 were wool, cotton, flax, hides, building wood, iron and steel, machinery, coal, chemical products, bitumen, zinc ore, wheat and wine. The chief exports were manufactures of wool, cotton, flax, leather and glassware, iron, steel and zinc products and sugar. Agriculture and forestry are important industries, the chief crops being wheat, oats, rye, potatoes and sugar beets, yet it is eminently a manufacturing country and is dependent on foreign supplies for its food. The coal, iron and quarry industries are very valuable, as are the glass, textile and sugar, and the lace of Brussels, Malines and Bruges is famous.

Parliament consists of a Senate of 120 and a House of Representatives numbering 186, all of whom are directly elected by the people (except 27 Senators who are elected by provincial councils). Senators for 8 years and Representatives for 4. Universal male suffrage with plural voting up to three by property and educational qualification was introduced in 1894. Proportional representation was introduced in 1900. By an emergency measure the present Parliament was elected in 1919 on a one-man-one-vote basis and the law was revised to establish that franchise in 1921. Parliament must meet annually in November, and must sit for at least 40 days. The party strength of the present Parliament is:

Senate—Catholic 73, Socialists 52, Liberals 28.
House—Catholics 80, Socialists 67, Liberals 33, miscellaneous 6.

Belgium is a member of the League of Nations.

Par of exchange, franc..... 19.3 cents
Rate of exchange, Nov. 1, 1922, franc.. 6.51 cents

The budget estimates for 1921 and 1922 were:

| | 1921, Francs. | 1922, Francs. |
|---|---|---|
| Revenue | 4,329,405,000 | 2,573,178,913 |
| Expenditure | 4,791,970,000 | 3,468,143,961 |

The ordinary estimates for 1921 were:

RECEIPTS.

| | Francs. |
|---|---|
| Income tax | 305,000,000 |
| Supertax | 140,000,000 |
| Customs | 194,965,000 |
| Excise | 183,080,000 |
| Public domains | 304,150,000 |
| Capital revenues | 72,536,000 |
| Repayments | 231,103,000 |
| Special receipts | 642,500,000 |
| Total (including all items) | 2,101 443,000 |
| Railways, posts and telephones | 1,077,562,000 |
| Food supplies | 1,150,400,000 |
| Grand total | 4,329,405,000 |

EXPENDITURES.

| | Francs. |
|---|---|
| Public debt | 890,160,000 |
| National defense | 525,093,000 |
| Education, arts and science | 261,570,000 |
| Industry and labor | 150,738,000 |
| Finance | 112,644,000 |
| Justice | 102,574,000 |
| Public works | 91,616,000 |
| Interior | 34,638,000 |
| Total (including all items) | 2,310,685,000 |
| Railways, posts and telephones | 1,284,365,000 |
| Food supplies | 1,196,920,000 |
| Grand total | 4,791,970,000 |

Extraordinary receipts in 1921 amounted to 26,550,000 francs (in 1922, 2,600,000 francs) and extraordinary expenditures to 946,010,893 francs (in 1922 to 866,293,527 francs).

The Belgian public debt on Jan. 1, 1921, amounted to 25,236,941,690 francs (at par of exchange, the Belgian franc equal to 19.3 cents. The exchange rate on Oct. 15, 1922 was 7.06 cents). The debt was made up as follows:

*a* Consolidated debt: (1) internal, 7,746,826,938 francs; (2) external, 554,291,377 francs.

*b* Floating debt: (1) internal, 7,536,650,700 francs; external, 601,449,933 francs; of which 180,-323,000 are from British credits; 23,466,705 francs for the purchase of horses and mules, besides 9,712,-500 francs due to the Government of Canada, and 151,525,290 francs due to the Government of the United States.

*c* Indirect debt: 807,724,251 francs.

*d* Claims of 5 per cent. war losses, 1,187,879,800 francs.

*e* Advances from the Allied Powers since the armistice, 1,302,118,690 francs, of which 191,754,080 francs are from England, 191,305,866 francs are from France, and 919,058,743 francs from the United States.

*f* Advances from the National Bank (withdrawal of German money) 5,500,000,000 francs.

The debt charge is 1,216,787,601 francs.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $184,472,230 |
| " | 1921-22 | 103,449,034 |
| Exports, | 1920-21 | 42,464,701 |
| " | 1921-22 | 42,792,800 |

## *BELGIAN CONGO.*

AREA, 909,654 square miles.

POPULATION, estimated, 1921, 10,000,000.

CAPITAL, Kinshasa (replaced Boma as capital December, 1921). Provincial capitals, Elizabethville (Katanga), Leopoldville (Congo-Kasai), Coquilhatville (Equator), and Stanleyville (Eastern).

*Governor General*, Maurice Lippens, appointed Jan. 25, 1921.

The Congo Free State had its origin in the vision of King Leopold II. of Belgium, who, roused by Stanley's discoveries, realized the great economic possibilities in the development of the vast territory reached by the Congo. The International Association of the Congo, which he founded and largely financed, sent Stanley back in 1879. He founded the first station, Vivi, in February, 1880, and in all twenty-four before he returned in 1884. Leopold pushed the work with the aid of a handful of men, mostly officers, and in 1885 the powers, in convention at Berlin recognized the Association as an independent state under his sovereignty—"the trade of all nations to enjoy complete freedom." The indeterminate boundaries were held to include the basin of the Congo and Lake Tanganyika, with its eastern tributaries. From 1895 the Belgian Government associated itself with this work, opening credits, although Parliament was hostile. The administration of affairs later provoked violent agitation to secure the amelioration of the condition of the natives. The Congo Free State was ceded to Belgium by the treaty of 1907, becoming by the law of Oct. 18, 1909, Belgian Congo under control of the newly created Ministry of the Colonies.

Belgian Congo has a short coast line on the South Atlantic at the mouth of the Congo, where is situated the village of Banana on a fine natural harbor. Equatorial French Africa lies to the north and west, and Angola (Portuguese) to the south, beyond which and to the east is North Rhodesia; to the east Tanganyika, now British, but formerly German East Africa, and Uganda (British); to the north it also touches the Soudan. Vast, sunless and well-nigh impenetrable tropical forests fill the upper reaches of the river, covering about 25,000 square miles. The lianas yield 3,000 to 4,000 tons of rubber yearly. The oil-palm is cultivated, and palm kernels and palm oil to the value of 77,000,-000 francs were exported in 1920. The export of copal in 1920 was about 6,000,000 pounds, valued at 40,305,021 francs. Ivory exports amounted to about 150,000 pounds, valued at 35,860,023 francs. Coffee, cocoa, rice, cotton and tobacco grow freely. Cattle thrive where there is no tse tse fly.

The chief industry is copper mining in Katanga, where the copper bearing belt is 250 miles long by 25 to 50 miles wide. The output in 1920 was 18,924 tons. Placer mining in Welle produced gold in 1920 to the amount of 3,324 kilograms, valued at 24,088,430 francs. Small diamonds are found in the Vasai Basin, the export in 1920 being 274,103 carats. Coal, iron and tin are present, but are undeveloped.

The Congo is navigable for large vessels for 95 miles to Matadi. A railroad 249 miles long transships freight around the series of falls and rapids to Leopoldville on Stanley Pool. From here the river and its branches are navigable for about 5,000 miles. Railroads have been built around the falls on the upper river, and to connect important points. The total mileage in 1921 was 2,663. There are 5,609 miles of roads, partly suitable for automobiles. At Boma, the former capital, 60 miles up the Congo from its mouth, 53 seagoing vessels of 160,374 tonnage entered in 1920.

Belgian Congo's territory was increased as a consequence of the war by the transfer of 19,000 square miles, the Ruanda and Urundi territories, from the former German East Africa. Both are in the high plateau region, are rich in cattle and of great economic value.

The European population, census of 1921, was 8,221, of which 293 were American. The country greatly needs white colonists to develop its resources.

Budget, 1921—Receipts, francs,.....67,510,635
Expenditures, francs.....82,610,525

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $521,647 |
| " | 1921-22 | 343,378 |
| Exports, | 1920-21 | 427,736 |
| " | 1921-22 | 174,893 |

## BHUTAN, KINGDOM OF.

AREA, about 20,000 square miles.

POPULATION, estimated 250,000.

CAPITAL, Punakha (a strong natural fortress).

*Ruler*, Maharajah Sir Ugyen Wangchuk, chosen hereditary Maharajah 1907.

Bhutan is a semi-independent native state having control of its internal affairs (treaty of 1910), lying on the southern slope of the Himalayas between Thibet on the north and British India on the south with Sikkam on the west. It is 190 miles long from east to west and 90 miles extreme breadth. The people are Mongolians, the original inhabitants having been subjugated about two centuries ago by Thibetans. Their religion is Buddhism of the Thibetan form. Agriculture and stock raising (sturdy ponies especially) are the chief industries. Trade with India in 1920-21 amounted to £129,474.

## BOLIVIA, REPUBLIC OF.

AREA, 597,460 square miles.

POPULATION, estimated, 1920, 2,820,074.

CAPITAL, La Paz, pop., 1920, 107,252.

*President*, Bautista Saavedra, 1921-25.

*Premier*, Dr. Severo Fernando Alonso (Foreign).

*Minister to the United States*, Adolfo Ballivian.

*Consul General*, at New York, Carlos Gumucio.

*Consuls*, at Boston, Arthur P. Cushing; at Baltimore, Raymond M. Glacken; at New Orleans, Georgio Garret; at San Francisco, Alberto Palacios; at Seattle, Nemesio Menacho; at San Diego, Philip Morse.

*United States Minister*, Jesse S. Cottrell.

*United States Consul*, at La Paz, Doyle C. McDonough.

Bolivia, the only country in South America without a seaport, lies between Peru and Chile in the west, Brazil on the north and east, Paraguay on the east and Argentina on the south. It lies across the Andes, and its chief topographical feature is the great central plateau at an altitude of 12,000 feet, over 500 miles long, lying between two great cordilleras having three of the highest peaks in America. Its area equals that of Oregon, California, Nevada, Arizona and New Mexico together. Over 50 per cent. of the population are Indians speaking their own dialects only and 25 per cent. are of mixed blood. The percentage of illiteracy is very high. Farming, grazing and mining are the chief occupations. The chief exports are tin, copper, antimony, bismuth, silver, lead, tungsten, rubber, cocoa, hides and alpaca wool.

La Paz is connected by a railroad (264 miles) with Arico on the Pacific. The principal railroad line runs from Antofagasta to La Paz (735 miles).

Bolivia is vitally interested in the disputes submitted in 1922 to arbitration by Secretary Hughes in Washington, between Peru and Chile over the provinces of Tacna and Arica on the Pacific, seized by Chile during the war of the Pacific, 1879-83, for she claims a commercial outlet at the port of Arica. She has also a serious boundary dispute with Paraguay over Gran Chaco, a potential valuable grassland. The peace strength of the army is 7,100 with reserves of 230,000. Bolivia is a member of the League of Nations.

| | |
|---|---|
| Par of exchange, boliviano | 38.9 cents |
| Rate of exchange, Nov. 1, 1922 | 29.4 cents |
| Imports, 1921 | $30,162,340 |
| Exports, 1921 | $29,647,310 |
| Budget—Receipts | $21,409,586 |
| Expenditures | $18,486,106 |
| Debt—Internal Bonds, bolivianos | 19,456,165 |
| Internal floating, bolivianos | 10,477,471 |
| External, U. S. gold | $26,307,000 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $4,592,307 |
| " 1921-22 | 2,250,486 |
| Exports, 1920-21 | 6,324.192 |
| " 1921-22 | 734,137 |

## BRAZIL, UNITED STATES OF.

AREA, 3,275,510 square miles.
POPULATION, Census of Sept. 1, 1920, 30,635,605.
CAPITAL, Rio de Janeiro, pop., 1920, 1,157,873; Chief Cities, Sao Paulo, pop. 579,033; San Salvador, 283,422; Recife, 238,843; Belem, 236,402; Porto Alegre, 179,263; Campos, 175,250; Theophile Ottori, 163,199; Caratinga, 137,017; Rio Preto, 126,796; Juiz de Fera, 118,166; Campinas, 115,602; Santos, 102,589; Nictheroy, 86,238.
*President,* Arturo Bernardes (1922-26), inaugurated Nov. 15, 1922.
*Premier,* J. Luis Alvez (Justice).
*Ambassador to the United States,* Augusto Cochrane de Alencar.
*Consuls General,* at New York, Helio Lobo; at Norfolk, Francisco Garcia Pereira Leao. *Consuls,* at New Orleans, Victor Ferreira da Cunha; at St. Louis, A. M. Torres; at Chicago, Petro Nunes de Sa; at Baltimore, Luiz Magalhaes Tavares; at Richmond, Va., Fitzhugh Carter Lafferty.
*United States Ambassador,* Edwin V. Morgan.
*United States Consul General,* at Rio de Janeiro, Alphonse Gaulin. *Consuls,* at Bahia, Thomas H. Bevan; at Para, George H. Pickerell; at Pernambuco, Charles R. Cameron; at Porto Alegre, Samuel T. Lee; at Sao Paulo, Ezra M. Lawton; at Santos, vacant.

Brazil is the largest state in South America, exceeding the size of continental United States (exclusive of Alaska), by 250,000 square miles. It has a coast line on the Atlantic Ocean of 4,106 miles and extends 2,600 miles from north to south and 2,500 miles east to west. It is bounded on the north by Colombia, Venezuela, the Guianas and the Atlantic Ocean, on the east by the Atlantic, on the south by Uruguay, Paraguay and Bolivia, and on the west by Argentina, Paraguay, Bolivia and Peru. The northern half is the great heavily wooded basin of the Amazon (about 4,000 miles long, the longest river in the world), which rises in the Peruvian Andes, and with its tributaries drains 2,000,000 square miles and empties into the Atlantic at the Equator. It is navigable in Brazil for vessels of deep draft for 2,400 miles; and in all its rivers Brazil possesses 40,000 miles of navigable waterways. Mountain ranges, interspersed with fertile valleys, traverse the eastern and southern states. The majestic falls of the Iguassu, one of the natural wonders of the world, are in the southernmost state, Rio Grande do Sul.

The mineral wealth of Brazil is vast and but little developed. Manganese is exported (450,000 tons in 1920), also the greater part of the world supply of monozite. The gold production is $3,000,000 a year. Coal deposits are extensive but of inferior quality. But a small part of the rich agricultural land has been brought under cultivation. Four-fifths of the world's coffee supply is grown in the states of Sao Paulo, Rio de Janeiro, Espirite Santo and Minas Geraes. The average annual crop is about 12,000,000 sacks of 132 pounds each; the produce 1921-22 was 8,030,000 sacks; in 1920 there were exported 11,523,000 sacks, valued at $237,676,500. Other chief exports are rubber (over half of the world supply), about 23,531 metric tons being exported in 1920, cocoa, tobacco, sugar, yerba, cotton, leather, hides and meat.

Manufacturing of all kinds is being fostered. In 1921 there were 242 cotton factories with 1,521,500 spindles in operation. The census returns of 1920 showed there were in all 11,335 factories with 151,841 employees, capital of 665,676,000 milreis, and an annual output of 741,536,000 milreis. The vast forests are practically untouched. Stock raising is important. The chief imports are textiles, hardware, machinery, crockery and glassware, etc.

In 1921 there entered the ports of Brazil 24,829 steam and sailing vessels, of 24,941,829 tonnage. Brazil on Jan. 1, 1921, had 17,847 miles of railroads in operation. Of this 9,455 miles were owned by the Federal Government (3,980 of which were Government operated); 1,527 owned by the states and 6,231 miles privately owned. The principal system, the Central Brazil Railway (1,563 miles), is Government owned. The system is joined up with the railroads of Paraguay, Argentina, and Uruguay.

Brazil, discovered in 1500 by Cabral, a Portuguese navigator, was developed as a colony of Portugal until the royal house of Braganza, fleeing from Lisbon before Napoleon's army in November, 1807, transferred the seat of Government to Rio de Janeiro in March, 1808. In 1815 Brazil was proclaimed a kingdom, and in 1822 Dom Pedro, son of King John VI., who had been left as Regent on his father's return to Portugal, was crowned Constitutional Emperor and Brazil freed from Portugal. He abdicated in 1831 in favor of his son Dom Pedro II. who was then five years old. Crowned in 1841 he ruled with varying fortunes until Nov. 15, 1889, when he was driven from the throne into exile by a revolution which established a republic, the United States of Brazil. The Constitution was adopted July 24, 1891, and is modelled largely on that of the United States. There are 20 states, largely autonomous, one territory (Acre), bought from Bolivia in 1902 and a Federal District. All males over 21 who can read and write have the franchise. The President is elected by direct vote for four years. Congress consists of a Senate of 63 members chosen by direct vote for nine years, one-third retiring every three years, and a Chamber of Deputies, of 212 members, elected by direct vote for three years, representation of the minority being provided for. The Cabinet is responsible to the President only.

All but 100,000 of the inhabitants are Roman Catholics, but religious toleration is guaranteed. Education is free in the primary grades but not compulsory save in some progressive cities. In recent years, however, great progress has been made. The University of Rio de Janeiro was founded Sept. 7, 1920. Military service is compulsory. The standing army numbers 35,000, with a reserve of 560,000. The navy has two dreadnoughts and in 1918 a personnel of 693 officers and 9,650 men. Brazil declared war against Germany on Oct. 26, 1917, following the torpedoing of three merchant ships.

On receipt of an invitation in 1922 from the Government of Brazil, the United States Navy Department assigned Rear Admiral Vogelgesang, with a staff of sixteen commissioned officers and twenty petty officers of the navy, to undertake the task of reorganizing and expanding the Brazilian Navy.

Brazil opened on Sept. 7, 1922, an exposition at Rio de Janeiro in commemoration of the centennial of the Brazilian nation. It was attended officially by Secretary of State Charles E. Hughes and a mission from the United States.

Brazil is a member of the League of Nations.

| | |
|---|---|
| Par of exchange, milreis (paper) | 32.45 cents |
| Rate of exchange, Nov. 1, 1922 | 11.50 cents |
| Imports, 1921 | $219,679,070 |
| Exports, 1921 | $222,263,860 |
| Budget—Receipts | $136,932,960 |
| Expenditures | $133,013,836 |
| Debt—Internal (Federal) milreis | 1,521,434,266 |
| External, U. S. gold | $1,145,380,000 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $128,746,345 |
| " 1921-22 | 38,330,449 |
| Exports, 1920-21 | 147,520,940 |
| " 1921-22 | 100,435,733 |

## BULGARIA, KINGDOM OF.

AREA, 40,656 square miles.
POPULATION, census of 1920, 4,337,513, of which 3,203,000 were Bulgarians, Turks about 400,000.
CAPITAL, Sofia, pop., 154,431; other cities, Philippopolis, pop., 63,418; Warna, 50,819; Ruschuk, 41,574; Slivno, 28,695; Plevne, 27,779; Stava Zagore, 25,491, and ten of more than 15,000 population.
*King* (sometimes known as Czar), Boris III,, born Jan. 30, 1894, succeeded on abdication of his father, Ferdinand, Oct. 3, 1918.
*Premier*, Alexander Stambuliski (Foreign Affairs).
*Minister to the United States*, Stephan Panaretoff.
*Consuls in the United States*—Consular affairs in charge of the Bulgarian Legation at Washington.
*United States Minister*, Charles S. Wilson.
*United States Consul*, at Sofia, Graham H. Kemper.

The Principality of Bulgaria was created by the Treaty of Berlin on July 13, 1878, as an autonomous and tributary principality under the suzerainty of the Sultan of Turkey. Bulgaria declared its independence on Oct. 5, 1908. Eastern Rumelia joined Bulgaria on Sept. 18, 1885, after revolution against the Sultan.

In the first Balkan War, Bulgaria, with Serbia, Greece and Montenegro fought Turkey, the war ending in the Treaty of London on March 30, 1913, when Turkey ceded to the allied Balkan nations all territory west of the line from Midia on the Black Sea to Enos on the Aegean Sea, and also Crete. The Balkan League broke up soon after the treaty was signed, war breaking out between the allies—the second Balkan War. Roumania intervened and procured an extension (part of the Dobrudja) of her frontier at Bulgaria's expense. Peace came again with the Treaty of Bucharest on July 26, 1913, all signing.

Bulgaria was an ally of the Central Powers in the World War. By the Peace Treaty of Neuilly (Paris) of Nov. 27, 1919, Bulgaria ceded Thrace to Greece and the "Strumnitza Line" and a strip of territory on the northwest to Serbia. The treaty deprived Bulgaria of the Aegean Sea front, but provided that which was alleged to be an efficient economic outlet thereto.

It leaves Bulgaria bounded on the north by Roumania, on the west by Serbia, on the south by Greece, and on the east and southeast by the Black Sea. It is about the size of the State of Kentucky.

Bulgaria's language is Slavonic of Indo-European influence, allied to the Russian. The state church, Orthodox Greek, is governed by a Synod of Bishops, the clergy being paid by the state.

Two-thirds of the people are engaged in agriculture. Although lands are held in fee, pastures and woodlands are held in perpetuity by the communes. Small holdings run from one to six acres. Methods are very primitive, although gradually machinery is being brought in.

The cultivated area is 9,290,175 acres of the total of 18,019,840 of the country. Production is low because of crude methods. The annual production of 2,867,06C tons from 5 426,102 acres (census of 1921) indicates slightly more than one-half ton to the acre. Domestic animals number 10,100,000. There is little other industry. Although there are coal deposits, 1920 production was only 748,085 tons. Iron, lead, copper, gold, silver and manganese are found.

Forests cover 30 per cent. of the total area—fir, beech, oak and pine.

Bulgaria had in 1921, 1,581 miles of railroads owned and operated by the state. River navigation giving access to the Danube—a great traffic route—is important. In 1920, 2,724 vessels of 278,353 tons entered Danube ports and 2,112 vessels of 833,162 tons, Black Sea ports.

By the Constitution, adopted in 1870 and amended in 1893 and 1911, legislative authority is vested in a single chamber, the Sobranje or National Assembly, of 227 members, elected for four years by universal suffrage. The King must give assent to all laws enacted before they become effective. Executive power is vested in the Council of Ten Ministers nominated by the King.

Elementary education is obligatory for children from 7 to 14 years of age. The state maintains 5,400 schools with about 680,000 pupils, besides 33 special state institutions and other private schools. Illiteracy is indicated by the 17.3 per cent. of it in the Bulgarian Army.

Pre-war Bulgaria's army was composed of 3,900 officers and 56,000 men, with a war mobilization strength of 500,000. The Treaty of Neuilly limits it to 20,000 men, who must be volunteers, obligatory military service having been abolished. Bulgaria is a member of the League of Nations.

The leva is the unit of currency, its gold par being $0.195. Imports (census of 1920) were 2,214,080,225 leva, and exports 1,642,771,900; textiles, metals, oils, skins and machinery going in, and tobacco, maize, hides, wheat, barley, and attar of roses going out. The public debt (budget of 1922) is 3,209,035,035 leva, foreign, and 3,399,190,960 internal; receipts, 55,518,000 leva; expenditures, 88,687,025.

Trade with the United States was:

| | | |
|---|---|---|
| Imports | 1920-21 | $1,312,526 |
| " | 1921-22 | 1 242,992 |
| Exports | 1920-21 | 3,014,386 |
| " | 1921-22 | 1,144,868 |

## CHILE, REPUBLIC OF.

AREA, 289,829 square miles.
POPULATION, census of Aug. 1, 1921, 3,774,485.
CAPITAL, Santiago, pop. 1920, 507,296; chief port, Valparaiso, pop. 182,242; other cities, Concepcion, pop. 66,074; Antofagasta, 51,531; Iquique, 37,421; Talca, 36,079; Vina del Mar, 33,441; Orillan, 30,881.
*President*, Arturo Allesandri, 1920-25, born Dec. 21, 1869, inaugurated Dec. 23, 1920.
*Prime Minister*, Antonio Huneus (Interior).
*Ambassador to the United States*, Beltran Mathieu.
*Consul General*, at New York, Gustavo Munizaga Varela. *Consuls*, at Boston, Eugenio Vial Correa; at Baltimore, Augusto Evrazuriz O.; at Philadelphia, Reeves K. Johnson; at San Francisco, Marcos Garcia Hindobro; at Chicago, M. H. Ebert; at Detroit, L. G. Aguirre; at Newark, Federico Tonkin; at Buffalo, Alfredo von der Heyde; at Cincinnati, Tomas Alfredo Page; at Portland, Ore., Antonio R. Vejar; at Seattle, Lucio Alberto Villegas; at Norfolk, Domingo Pena Toro.
*United States Ambassador*, William M. Collier.
*United States Consul General*, at Valparaiso, Carl F. Deschman. *Consuls*, at Antofagasta, vacant; at Arica, E. C. von Tresckow; Concepcion, S. Reid Thompson; at Iquique, Homer Brett; at Punta Arenas, A. C. Brady.

Chile lies on the west coast of South America, occupying the strip of land between the Andes and the South Pacific, from Peru to Cape Horn, having an extreme length of about 2,800 miles with a coast line of 2,485 miles. The average breadth north of 40° is 100 miles. Its area is slightly greater than that of the eight South Atlantic States of the United States. The Andes have many lofty peaks, notably Corcoputi (alt. 22,162 feet), El Muerto (21,227 feet), the Baya (19,993 feet), the Guallatiri (19,882 feet.) The land in the north part is arid, but the two provinces Tacna and Arica, taken from Peru in the war of the Pacific 1879-82, produced 95 per cent. of the world's supply of nitrates until the process of producing nitrate from the air was made commercially profitable. The production of nitrate in 1920 was 2,606,571 metric tons, valued at $172,800,000, but was stagnant in 1921. Agriculture is flourishing but the wealth of the country is chiefly in minerals.

Chile is the world's second largest producer of copper, the amount in 1920 being 91,226 metric tons; there are also enormous iron ore deposits in the provinces of Atocama and Coquimbo, estimated at a billion tons. Much gold and silver is produced. There are large deposits of coal south of Valparaiso, over a million tons being mined in 1920.

The chief exports are nitrates, iodine, copper, silver, cereals, flour, hides and wool; the chief imports are textiles, food products, agricultural and mining machinery.

The population is almost entirely of European origin; there are about 100,000 Araucans (natives) in the Andes and an indeterminate number of nomadic Fuegans in Terra del Fuego.

Chile has 5,403 miles of railroads, of which 2,270 are privately owned. The state owns the longitudinal railroad traversing the republic from north to south for a distance of 2,862 miles; with spurs its mileage is 3,133. Electrification of the railroad between Valparaiso and Santiago, 117 miles, was begun in 1920. At the ports in 1920 there entered 14,666 vessels of 14,925,601 tons.

Chile threw off the Spanish yoke in 1810-18, and in 1833 adopted the Constitution under which the people are now governed. Electors must be able to read and write. The President is elected for 5 years, Congress is composed of a Senate with 37 members, elected by popular vote for six years, and a Chamber of Deputies, with 118 members, elected for three years. Education is free, supported by the state, and since 1920 is compulsory. The percentage of illiteracy is high. The University of Chile (state) at Santiago had 4,502 students in 1920 and the Catholic University, 614. The Roman Catholic religion is maintained by the

state, but by the Constitution all religions are protected.

All able-bodied citizens are liable for service in the state militia. The peace strength of the army is 23,782, with 609,734 in the reserve. In the navy are one dreadnought—the Almirante Latorre (formerly H. B. M. S. Canada), 28,000 tons, mounting 10 14-inch guns, one pre-dreadnought, the Capitan Prat, 6,966 tons, two armored cruisers and four protected cruisers. The strength of the navy is 6,000 men. An air force was formed in 1918 under British instruction, with a nucleus of 14 seaplanes and 80 aeroplanes, bought in Great Britain.

Chile was neutral during the World War; on specific invitation she joined the League of Nations Nov. 4, 1919.

(See Peru for boundary dispute.)

Par of exchange (peso, paper)..... 36.5 cents
Rate of exchange, Nov. 1, 1922..... 13.65 cents
Imports, (1921)..... $139,175,414
Exports, (1921)..... $161,969,895
Budget—Receipts..... $61,181,929
Expenditures..... $60,653,700
Debt—Internal (pesos, paper)..... 95,149,690
External, United States gold.... $228,377,000

Trade with the United States was:

Imports, 1920-21..... $49,715,357
" 1921-22..... 16,716,462
Exports, 1920-21..... 77,854,552
" 1921-22..... 38,912,591

## CHINA, REPUBLIC OF.

AREA, 4,277,170 square miles; divided, China Proper, 1,532,420; Sinkiang (Eastern Turkestan), 550,340; Manchuria, 363,610; Mongolia, 1,367,600; Thibet, 463,200.

POPULATION. Figures vary widely. W. W. Rockhill, United States Minister to China, in 1911, after much technical studying, gave China Proper 302,110,000; other parts, 18,540,000; total, 320,650,000. The Chinese Maritime Customs in 1920 gave all China the total of 440,934,000; and the Chinese Post Office in 1919 estimated all China at 427,679,314, and in 1920 at 436,094,954.

CAPITAL, Peking, pop. (estd.) 1,200,000; Peking metropolitan area, 4,200 000; other cities, Canton, pop. (estd.), 950,000; Changsha, 550,000; Chungking, 440,000; Foochow, 650,000; Hanchow, 700,000; Hankow, 1,500,000; Hongkong (British Crown colony), 561,000; Nanking 390,000; Ningpo, 700,000; Shanghai, 1,100,000; Soochow, 550,000.

*President*, Hsu Shih-Chang; born 1853; elected Aug. 10, 1918; inaugurated October, 1918.

*Premier*, Wang Chung-hui.

*Minister to the United States*, Sao-Ke Alfred Sze.

*Consuls in the United States*, at New York, Ziangling Chang; at San Francisco, Chu Chao-Hsin (C. G.); at Panama for the Canal Zone, Juming C. Suez (C. G.); Honorary Consuls at Portland and Seattle.

*United States Minister*, Dr Jacob Gould Schurman.

*United States Consuls General*, at Shanghai, Edwin S. Cunningham; at Hankow, F. Stewart Heintzleman; at Mukden, Albert W Pontius; at Canton, vacant; at Tientsin, Stuart J. Fuller. *Consuls*, at Amoy, Algar E. Carleton; at Antung, vacant; at Changsha, vacant; at Chungking, vacant; at Harbin. George C. Hanson; at Chefoo, Stuart K. Lupton; at Nanking, John K. Davis; at Foochow, Ernest B. Price; at Tsinan. Clarence E. Gouss; at Yunanfu, Myrl S. Myers; at Swatow, Lester L. Schnare; at Kolgan, vacant.

China, the home of a highly civilized nation when Europeans were still in the bronze age, and with a history reaching back to 2205 B. C., occupies a territory in the eastern part of Asia about one-third larger than continental United States. To the north and northeast lies Siberia; to the west Russian Turkestan, to the southwest and south the well-nigh impassable barrier of the Himalayas form the Thibetan-Indian frontier. French Indo-China borders it on the south; and the China Sea and Yellow Sea on the east separate it from the Philippines, Formosa (now Japanese), the Japanese Empire and Korea. The country is of rolling topography, rising to high elevations in the north in the Kinghan and Tarbagatal Mountains in Mongolia; the Himalayan and Kwenlun Mountains in the southwest, in Thibet, and the Hinghan Mountains of Manchuria.

China Proper—China of the 18 Provinces—occupies the rich fertile southeastern part of the country, an area nearly twice the size of the United States east of the Mississippi. There the population on the generally accepted estimates has a density of 174 to the square mile. China Proper is one of the best watered countries of the world. From the mountains on the west four great rivers run in general course eastward to the sea, through great alluvial plains stretching for hundreds of miles along the ocean and inland to a depth of 300 miles. These rivers drain four-fifths of the country. The Yangtsekiang, 3,158 miles long, rises in the centre of the high plateau of Thibet, 16,000 feet in altitude. At Pingshenhsien, 1,215 miles from its source, it becomes in part navigable, but with dangerous rapids, to the vicinity of Ichang, 2,193 miles from its source. From Ichang to Hankow it is navigable by small river steamers and from Hankow to its mouth, 595 miles, by sea-going vessels. The Hanho, a tributary from the north at Hankow, is navigable for 600 miles. The Yellow River (Hwang-ho), 2,700 miles long, and also rising in Thibet, is navigable only in part. It is called "China's Sorrow" because of the devastation it causes in flood time, when it overflows its banks, bursts its dikes and sweeps over the farm lands. In 1898, when a disastrous flood occurred, salt and sand were deposited over an area of 200 square miles, below Lokow, to a depth of 2 to 10 feet, amounting to over sixteen billion cubic feet. The Sikiang River, 1,250 miles long, waters South China, its branches reaching the sea in the Canton delta from Hongkong to the west of Macao. It is navigable for steamers for 200 miles, and for smaller craft for another 100 miles. The Paiho waters the plain of north China, and empties into the Gulf of Chihli at Taku. The Amur River, 2,920 miles long, and navigable for 1,500 miles, which forms the boundary between Manchuria and Siberia; the Yalu, navigable for 600 miles, the boundary between Manchuria and Korea, and the Liao in Manchuria are also highly important. A network of canals helps to care for the inland navigation.

China's coast line is 2,150 miles long, or with indentations about 5,000. Along the coast are 56 treaty ports, 8 voluntarily opened ports, and 25 ports of call. The climate compares favorably with that of countries in similar latitudes.

China is essentially agricultural, and intensively so. The average holdings are small, and the implements are crude, but there is much irrigation, crops are rotated, and fruit, cereal and vegetable production is regarded by scientists as relatively efficient, food values having for many years been replaced in the soils regularly. Deforestation of the mountain slopes and hills have resulted in great erosions. Large forests are rare. Bamboo is widely used. The amount of cultivated land is estimated at 341,163,500 acres. Cotton is produced chiefly in the Yangtsekiang valley, the 1920 yield having been estimated by the China Cotton Association as 6,696,612 picu's (picul = 133 1-3 lbs.). Tea is produced exclusively in the west and south, the tea area being about 520,000 acres. Production is not officially indicated, but exportation is said to have declined from 1,576,136 piculs in 1908 to 1,305,906 in 1920, competition of Ceylon and Indian teas and the cessation of Russian purchases in late years being responsible.

The silk industry has flourished for 4,000 years. China is now producing 27 per cent. of the world's supply, having in this century yielded first place to Japan. In 1919 production was 73,078,709 piculs, valued at $139,624,755. Wheat, barley, corn, millet, peas and beans are chiefly cultivated in the north, and sugar, indigo and several cereals in the south. Rice, the staple food of the Chinese, is grown in all but three provinces, the average annual production being 3,750,000 tons. Besides the thousands of looms in private dwellings, in 1921 there were 17 silk filatures, 57 cotton mills, with 1,747,312 spindles, 4 woolen mills, 125 modern flour mills, 445 glass factories, and developing iron and steel works. American cotton is bought by China; and in 1921 considerable wheat, owing to crop failures.

Practically all of the 18 provinces of China Proper and 3 in Manchuria contain immense stores of coal, China being one of the world's chief coal countries. The known fields cover 133,500 acres, annual production running now at about 25,000,000 tons, of which 8,000,000 is from modern mines.

Iron ores are abundant near the anthracite coal fields of Shansi, where, it is asserted, is the oldest iron industry in the world; and in Chihli, Shantung and Manchuria. There is estimated to be in China 600,000,000 tons of the ore, annual production being about 1,500,000, of which nearly two-thirds are smelted in China.

Petroleum also is abundant, but the industry has not been developed. American oil interests have done much exploration there, and driven many wells, most of which are not active. Copper ore abounds, the Yunnan deposits being of the world's richest. Tin, antimony, gold, silver, lead, mercury, tungsten, bismuth and molybdenum are also present.

In 1920, 210,609 vessels entered Chinese ports: American, 818, of 1,616,197 tonnage; 4,242 British, of 4,761,060 tons; 225 French, of 334,041; 24 Italian,

of 88,402; 4,065 Japanese, of 4,974,957 tons; 274 Portuguese, of 48,160 tons; 264 Russian, of 117,636 tons, and 21,503 Chinese, of 2,277,364 tons; total entrances, 31,667 of 14,584,856 tons.

The first railway was opened in 1876. At present there are more than 7,000 miles, including 1,857 miles in Manchuria, with 2,000 under construction. About one-half are under the Government.

Up to Feb. 12, 1912, when China became a republic, it was one of the most ancient monarchies. According to the Provisional Constitution the Government comprises a President, Vice President and a two House legislative body—the Senate of 264 members and the House of 596. The Central Government has not yet obtained full control, there being military governors in several provinces who refuse to obey. The executive authority is in a Premier named by the President, and nine Ministers nominated by the Premier, all to be confirmed by the Parliament. The Parliament, however, had failed to function up to late 1922, owing to the disturbed state of the country.

A Southern Government was formed at Canton, its authority being recognized in Kwangtung and Kwangsi.

Confucianism, Buddhism and Taoism are the religions of China, although there are also between 5,000,000 and 10,000,000 Moslems in the country, about 1,994,000 Catholics and 618,600 Protestant Christians.

In 1905 there began the new movement toward education of the masses, and since then progress has been marked. While the number of schools, 135,000, and pupils, 4,500,000, is small relative to the total population, the number is growing rapidly. There are seven universities and many technical institutions of learning.

The army numbers between 1,400,000 to 1,800,000 men, and is being wrought into a more modern organization. The navy is negligible—a protected cruiser of 4,300 tons, two cruisers of 2,600 tons and three 3,000-ton cruisers, with auxiliary vessel complement. The whole tonnage is about 40,000, with 8,000 men. China is a member of the League of Nations.

There is "unparalleled currency confusion" says an authority. The unit is the tael, which varies in gold par value from 67.08 cents in Shanghai to 74.86 in Taku. Mexican dollars are used in all the treaty ports. Imports in 1920 were 1,848,910,500 taels; exports, 1,313,778,300. China's foreign trade is but one-fiftieth of that of the United States per capita. The last budget was in 1919, when receipts were estimated at 490,419,786 "Kuping" taels; expenditures, 495,762,888; deficit, 5,343,102.

China's national debt as compiled by the Government Bureau of Economic Information in 1922 is as follows, amounts being stated in Mexican dollars: $1 Mexican is worth about $0.57 United States currency at present rate of exchange:

| | *Dollars Mex.* |
|---|---|
| General foreign loans | 268,979,252 |
| Foreign railway loans | 334,802,631 |
| Foreign indemnities | 482,841,744 |
| Internal long-term loans | 275,226,738 |
| Internal short-term loans | 69,101,978 |
| Treasury notes, etc | 18,640,000 |
| Total | 1,449,592,343 |

The last items do not contain all the short-term loans and treasury notes issues, as the amounts of some of these cannot be ascertained.

The reorganization of the Chinese finances and debt is a pressing necessity although the difficulties in the way are well-nigh insurmountable.

The chief exports of China are silk, beans and products, tea, skins and furs, cotton, sesamum seed, tin, cereals, medicines, peanuts and peanut oil, animals, wool, antimony and copper.

China's trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $138,455,178 |
| " 1921-22 | 100,853,052 |
| Exports, 1920-21 | 113,185,707 |
| " 1921-22 | 109,410,796 |

### *MANCHURIA.*

AREA, 382,630 square miles.
POPULATION, 1916, estimate of the Southern Manchurian railway, 20,112,100.
CAPITALS, Mukden, of Shengking Province; Kirin of Kirin; Tsitsihar, of Amur.

Manchuria is the extreme northeast territory of China, with Siberia on the northwest, north and east, Korea, on the southeast and Mongolia on the west. The Amur River flows along the northern border, the Ussuri on the east, and the Yalu forms the boundary with Korea.

Its topography is extremely varied. Much of the eastern portion is intensively agricultural. The soya bean, cultivated on about 5,000,000 acres, is a source of enormous wealth. The Chamber of Commerce at Dairen estimates that 22,744,000 acres are cultivated for all crops, 19,460,000 persons being employed. Wheat, beans, millet, rice and products of the soya bean are the chief crops. There are 50 flouring mills. Forests are extensive. There are rich deposits of coal, iron, lead, gold, silver and asbestos.

The Trans-Siberian railroad runs through Manchuria from Lake Kulun to Suirenko the border for about 100 miles northwest of Vladivostok. From Harbin the railroad runs to Mukden and branches to Peking on the west, Port Arthur and Dairen on the south, and through Korea to Uokpo and Fusan on the southeast. Railway mileage is about 1,000.

In 1920, direct imports were about 290,000,000 taels; exports, about 350,000,000 taels. In 1920, 5,300 vessels entered Dairen, of 5,509,314 tonnage.

### *MONGOLIA.*

AREA, 1,369,600 square miles.
POPULATION, estimated, 2,600,000.
CAPITAL, Urga.

Mongolia, although nominally of China, was somewhat shaken loose from Chinese adherence during the late war, the status of Outer Mongolia being now that its autonomy is recognized by China, and it is recognized by Russia as under Chinese suzerainty. It is bounded on the north by Siberia, on the south by Sinkiang, on the southwest by Turkestan, on the east by China Proper and Manchuria.

There is little agriculture, the great plains between the Tarbagatai and Kinghan Mountains being desert, with camels, horses and sheep as principal interests. The religion of the people is Buddhist Lamaism.

Motor transportation from Kalgan on the Great Wall of China, northwest of Peking, and at the terminus of the Kalgan-Peking railroad, with Urga, the capital of Mongolia, a distance of 650 miles across the plains, was established in 1921. In the last three months of the year goods to the value of $2,000,000 silver were taken to Urga. The trip takes three to four days.

Mongolia has its own legal currency, adopted in 1915, equal to the gold par of the Russian ruble—50 cents.

### *SINKIANG (Chinese Turkestan).*

AREA, 550,340 square miles.
POPULATION, estimated, 1,200,000.
CAPITAL, Ili.

Sinkiang, known as the New Dominion, comprises Chinese Turkestan, Kulja and Kashgaria, and includes all Chinese dependencies between Mongolia on the north and Thibet on the south. There are Turki, Mohammedan and Chinese people resident there. Along the Kashgar and Yarkand Rivers there is much irrigation, and cereals, fruits and vegetables are grown, with wool, cotton and silk production.

It is from Sinkiang that much of the jade comes.

### *THIBET.*

AREA, 463,200 square miles.
POPULATION, estimated, 2,000,000.
CAPITAL, Lhasa; pop. 15,000 to 20,000.

Thibet, in Western China, is a country little known, situated between the Himalaya and Kwenlun Mountains, and hitherto practically shut to strangers. The trade is with India mostly, being carried on through lofty passes, some of which are 14,000 to 18,000 feet high, which are impassable in winter. China's hold on Thibet was visibly loosened when the 1911 revolution broke in China. The Thibetans expelled the Chinese garrisons, and the status of that country is more or less indeterminate, although nominally part of the Chinese Republic.

The religion is Lamaism, a modified form of Buddhism, and also a faith known as Shamanistic. All economic phases are affected by the non-progressive character of the people, who are immersed in their religious traditions. Some agriculture is carried on, and livestock husbandry.

## COLOMBIA, REPUBLIC OF.

AREA, 461,606 square miles.
POPULATION, census of 1918, 5,855,077.
CAPITAL, Bogota, pop. (estimated, 1921), 160,000; chief cities, Medellin, pop. 79,146; Barranquilla, 64,543; Cartagena, 51,382; Cali, 45,825; Cucuta, 29,490; Bucaramanga, 24,919.
*President*, Dr. Pedro Nel Ospina, Conservative (1922-26). Inaugurated Aug. 7, 1922.
*Premier*, Jimenez Lopez (Interior).
*Minister to the United States*, Dr. Enrique Olaya.

*Consul General* at New York, J. M. Arango G.
*Consuls*, at Boston, Enrique Naranjo M.; at Philadelphia, Ricardo Galvis; at Newark, Alfonso Sanchez S.; at Chattanooga, John L. Newkirk, Jr.; at Mobile, Juan Llorca Marti; at Baltimore, Roberto F. Velez; at New Orleans, Diego Jose Fallon; at Detroit, William J. Griffiths; at Chicago, Jorge E. Cavelier; at San Francisco, Alvaro Robolledo; at Los Angeles, Fortunato Pereira Gamba; at Seattle, Escipion Canal; at St. Louis, vacant; at Norfolk, vacant.
*United States Minister*, Samuel H. Piles.
*United States Consuls*, at Barranquilla, Maurice L. Stafford; at Cartagena, Leroy R. Sawyer.

The Republic of Colombia, situated in the extreme northwest of South America, extends up the Isthmus of Panama to the Republic of Panama—boundary line undetermined. It has a coast line of 465 miles on the Pacific Ocean, and 640 miles on the Caribbean Sea. It has as neighbors Venezuela and Brazil on the east, and Ecuador and Peru on the south. Its area is estimated at 461,606 square miles, which is equal to that of California, Oregon, Washington and Montana combined.

Three great ranges of the Andes, the Western, Central and Eastern Cordilleras, run through the country from north to south. The eastern range consists mostly of high table lands, cool and healthy, the most densely populated part of the country. The Magdalena River, in the east, rises in the high Andes and flows north into the Caribbean Sea, 18 miles from Barranquilla. It is navigable for river steamers for 900 miles, as far as Jirardot. Steamers ascend to La Dorado, 590 miles. Railroads serve to transport freight and passengers around the rapids and from Jirardot to Bogota. The total mileage of railroads is 891, and the bulk of the transportation in the interior is on mule back.

The population, according to the census of 1918, is 5,855,077, almost entirely whites and half castes, only 158,428 Indians being returned. Bogota, the capital, situated 8,600 feet above the sea, has a university, founded in 1572, a large library, a museum and observatory. The Roman Catholic is the prevailing religion, but all are tolerated. The standing army consists of about 6,000 men, with a reserve of 362,700. Military service is compulsory. There is no navy.

The country is divided into 14 departments, 2 intendencias and 7 comisarias, with Governors appointed by the President. The Federal Congress consists of a Senate of 34 members, elected for a term of 4 years, and a House of Representatives of 92, elected directly by the people every 2 years.

The forests are extensive, much mahogany, cedar and dyewood being exported. Colombia contains the great emerald mines of the world, the chief mines being owned by the state. The country is rich in minerals—gold, silver, platinum, copper, iron, lead and coal are mined. The Government owned salt mines at Zipaquira are a great source of revenue. Coffee, cotton, bananas, cocoa, vegetables, ivory, tobacco, and wheat are the chief agricultural products. Cattle raising is extensive. Some woolen and cotton stuff is manufactured for home consumption, also iron. The chief exports are coffee, hides, bananas, Panama hats, rubber, and precious metals.

The country, originally conquered by Spain and ruled by her for 300 years, won its freedom in the revolt of the Spanish-American colonies in 1811-24, the liberator, Simon Bolivar, establishing the Republic of Colombia in 1819. Venezuela and Ecuador withdrew in 1829-30, and there were frequent uprisings during the century, culminating in the secession of Panama in 1903, since which the republic has been tranquil. Under the treaty with the United States adjusting the loss of Panama (ratified by the United States Senate April 20, 1921, and by the Colombian Congress Dec. 24, 1921), Colombia is to receive in compensation $25,000,000 from the United States, to be paid in yearly instalments of $5,000,000. This sum of money it is planned to use in stabilizing the currency of the country, and in improving its transportation facilities.

A loan of $5,000,000 5-year 6½ per cent. bonds was floated on the New York market on Nov. 1, 1922.

Colombia is a member of the League of Nations.

| | |
|---|---|
| Par of exchange, peso | 97.3 cents |
| Rate of exchange, Nov. 1, 1922 | 97.12 cents |
| Imports (1921) | $33,068,317 |
| Exports (1921) | $63,042,132 |
| Budget—Receipts | $25,235,841 |
| Expenditures | $33,818,334 |
| Debt—Internal, pesos | 11,104,428 |
| External, sterling | £4,048,540 |

Trade with the United States was:

| | | |
|---|---|---|
| Imports | 1920-21 | $32,639,388 |
| " | 1921-22 | 15,988,805 |
| Exports | 1920-21 | 45,808,589 |
| " | 1921-22 | 41,049,460 |

## COSTA RICA, REPUBLIC OF.

AREA, estimated, 23,000 square miles.
POPULATION, estimated, 1922, 576,581.
CAPITAL, San Jose, pop., 38,930. Other cities, Cartago, 17,402; Limon, 10,231.
*President*, Sr. Don Julio Acosta Garcia (1920–24). Inaugurated May 8, 1920.
*Premier*, Sr. Don Jose Andres Coronado Alvarado (Foreign, Justice, Worship and Charities).
*Minister to the United States*, Sr. Dr. Don Octavio Beeche.
*Consuls General*, at New York, J. Rafael Oreamuno; at San Francisco, Jorge Orozco Casorla; *Consuls*, at Boston, Mario Sancho Jimenez; at New Orleans, Julio Aguilai Soto; at Baltimore, William A. Riordan; at Chicago, Berthold Singer; at Mobile, Truman McGonigal; at Milwaukee, Eduardo Azuola Aubert.
*United States Minister*, Roy T. Davis (also accredited to Guatemala).
*United States Consuls*, at San Jose, Henry S. Waterman; at Port Limon, Stewart E. McMillin.

Costa Rica, the southern state of Central America, has Nicaragua for its neighbor on the north and Panama on the south. The latter boundary has been a subject of arbitration and was fixed in 1900 by decision of President Loubet of France—a decision that by mutual consent was interpreted by the late Chief Justice White of the United States in 1914. Panama objected strenuously to this decision and in 1921 started troops to occupy the territory she claimed and which Costa Rica had occupied; but yielded to diplomatic pressure from the United States.

The lowlands by the Caribbean have a tropical climate. Bananas are cultivated, 8,652,473 bunches being exported in 1920. The interior plateau, with an altitude of about 4,000 feet, has a temperate climate. Coffee is the chief crop. The forests are extensive but little lumbering is done. Agriculture and stock raising are the chief industries. Gold and silver mining is an important industry on the Pacific slope. Port Limon is the centre of the banana trade. In 1920 532 vessels, tonnage 760,801, entered the ports. There are 402 miles of railroads; the line from Port Limon to San Jose, 103 miles, has unusual scenic charm.

The Constitution, adopted Dec. 7, 1871, has been many times modified. The legislative power is vested in a Chamber of Deputies, 43 in number, with four-year terms, one-half elected directly every two years by manhood suffrage. The President, elected for 4 years, appoints a Ministry of six. The Roman Catholic is the religion of the state. Primary education is compulsory and free. The National Police have taken over the duties of the army.

Costa Rica is a member of the League of Nations.

| | |
|---|---|
| Par of exchange, colon | 46.5 cents |
| Imports, 1921 | $ 9,177,802 |
| Exports, 1921 | $11,883,971 |
| Budget—Receipts | $ 8,314,419 |
| Expenditures | $ 8,619,974 |
| Debt—Interna[1], colones | 38,924,830 |
| External, sterling | £38,924,830 |

Trade with the United States was:

| | | |
|---|---|---|
| Imports | 1920-21 | $6,746,507 |
| " | 1921-22 | 3,736,951 |
| Exports | 1920-21 | 7,257,138 |
| " | 1921-22 | 5,641,596 |

## CUBA, REPUBLIC OF.

AREA, 41,634 square miles; including the Isle of Pines (1,180 square miles) and surrounding keys, about 44,164 square miles.
POPULATION, census of 1919, 2,889,004; including the Isle of Pines, 2,898,905.
CAPITAL and chief port, Havana, population, 1919, 363,506; other cities, Camaguey, population, 98,193; Cienfuegos, 95,865; Santiago, 70,232; Guantanamo, 68,883; Santa Clara, 63,151; Matanzas, 62,638; Sancti Spiritus, 58,843; Manzanillo, 56,570; Pinar del Rio, 47,858; Trinidad, 40,602.
*President*, Dr. Alfredo Zayas, 1921-25, born Feb. 21, 1861; inaugurated May 20, 1921.
*Premier*, Dr. Carlos Manuel de Cespedes (State).
*Minister to the United States*, Dr. Carlos Manuel de Cespedes.
*Consul General*, at New York, Felipe Taboada y Ponce de Leon; at Boston, Federico Sanchez y Guerra; at Philadelphia, Jacinto J. Luis; at Baltimore, Eduardo L. Desvernine; at Norfolk, Jose A. Munoz y Riera; at Newport News, Pedro Fermat y Cabrero; at Charleston, Jose M. Gonzales y Rodriguez del Rey; at New Orleans, Jose R. Cabrera y Zunzunegui; at Mobile, Andres Jimenez y Ruz; at Jacksonville, Julio Rodriguez Embil; at Key West, Domingo J. Milord y Vazquez; at

Tampa, Angel A. Solano y Garcia; at Pensacola, Gabriel A. Amenabar y Cabello; at Galveston, Eduardo Patterson y Jauregui; at St. Louis, Luis Sturla y Cambiaso; at Chicago, Francisco P. Caballero y Tapany; at Detroit, vacant; at San Francisco, vacant.

*United States Minister*, vacant.

*United States Consul General*, at Havana, Carlton Bailey Hurst *Consuls*, at Antilla, Horace J. Dickinson; at Cienfuegos, Frank Bohr; at Nuevitas, George G. Duffee; at Santiago, Harold D. Clum; at Nueva Gerona, Isle of Pines, Charles Forman.

Cuba, the "Pearl of the Antilles," largest island of the West Indies, lies between the Gulf of Mexico, the Straits of Florida and the Atlantic Ocean on the north and the Caribbean Sea on the south. Key West, Fla., is about 100 miles a little to the east of north of Havana. The Windward Passage, 50 miles wide, separates it from Haiti to the east, and Jamaica (British) lies 85 miles to the south. Yucatan is 130 miles to the west. From San Antonio, the western extremity, to Cape Maysi, the eastern, the length is 730 miles, and the breadth averages 50 miles, with a maximum of 160 miles. Its area nearly equals that of Pennsylvania. The coast line, including the larger keys, is about 2,500 miles in length. It has numerous safe and commodious harbors, notably that of Havana, one of the finest and safest in the world. Other first-class harbors are Bahia Honda, Matanzas, Cardenas, Nuevitas and Nipe on the north shore, and Santiago and Cienfuegos on the south; also Guantanamo, now a United States naval station.

Mountains rise in Pinar del Rio province in the west, and in Camaguey and Oriente in the east, where they reach a general elevation of about 3,000 feet, with Monte Turquino (8,320 feet) as the highest point. Santa Clara is rough and broken, but Matanzas and Havana are flat and rolling. The uplands and mountains are covered with magnificent forests, the scenery is wild and very beautiful, and many points are inaccessible. Broad intervals of low upland are frequent. Near the coast runs a continual belt of plantations. Grazing, tobacco and general farm lands cover the lower slopes of the hills.

The soil is alluvial, and under the tropical heat and humidity the vegetation is of rare richness. It is estimated officially that 3,628,434 acres are covered with dense forest, mostly primeval. The royal palm is the most characteristic tree, rising to 75 feet, sometimes 100 feet in height, dominating every landscape. All tropical fruits and vegetables flourish. At Havana the mean temperature is 76° and the mean rainfall 40.6 inches. Hardly a decade passes without a destructive hurricane. The population is about 60 per cent. native white, 30 per cent. Negro, and 10 per cent. foreign white.

Sugar has been the dominant crop for 150 years and its price is the barometer of prosperity for the island. Cuba exported to the United States, which takes about 98 per cent. of her total product, in the fiscal year 1920-21, 4,925,630,505 pounds, valued at $378,209,386; and in 1921-22, 7,720,255,237 pounds, valued at $171,300,590. About 1,375,000 acres are occupied by the sugar plantations. Rum, molasses and alcohol are important by-products.

Tobacco raising and the manufacture of cigars and cigarettes is the second industry of the island. The total value of the crop is between $40,000,000 and $50,000,000 annually; the tobacco manufactured in Cuba in 1919-20 was valued at $2,373,966. Cuba's exports of tobacco to the United States in the year 1920-21 were 18,292,521 pounds, valued at $22,278,840; and in the year 1921-22 were 21,401,159 pounds, valued at $20,578,009; the value of cigars exported to the United States for the same periods were $4,000,000 and $3,214,000 respectively. Banana raising is increasing in importance.

Stock raising is an important industry, though proportionally less so than in previous years. Mahogany and other valuable cabinet woods are produced and much cedar for the manufacture of cigar boxes. From the iron mines 50,000 tons of ore are exported monthly to the United States. Copper is a valuable product, also asphalt.

Cuba had in 1919, 3,200 miles of railroads, including the private lines connecting the sugar plantations with the trunk lines. In 1919, 89,436 vessels with a tonnage of 203,975,959 entered the ports of the republic in the foreign trade. In the coastwise trade 14,684 vessels of 2,582,829 tons entered. The island has over 1,500 miles of splendid automobile roads.

Cuba, discovered by Columbus in 1492, and first settled by the Spanish in 1511, attained independence of Spain by the Treaty of Paris, Dec. 1, 1898, which ended the Spanish-American War. A Constitution, modeled after that of the United States, was adopted Feb. 21, 1901. It provides for a President and Vice President, elected for four years by direct vote; a Senate of 24 members (four from each of the six provinces) and a House of Representatives of 118 members. The provinces and municipalities have a large measure of home rule. The Congress of the United States authorized the President to hand over the government to the Cuban people on the condition that the so-called Platt amendment, adopted by Congress March 2, 1901, be accepted. This provided that the Cuban republic should never enter into any compact with a foreign power that would impair her independence; that she would contract no excessive debt; that the acts of the United States in Cuba during and after the war be validated; that the Cuban Government should carry out certain plans for the sanitation of the island; that certain lands necessary for coaling or naval stations be leased to the United States, and "that the Cuban Government consents that the United States may exercise the right to intervene for the preservation of Cuban independence and to maintain a government capable of protecting life, property and individual liberty, and for discharging the obligations with respect to Cuba imposed by the treaty of peace on the United States, now to be assumed and undertaken by the Government of Cuba." This was made, on June 12, 1901, a part of the Constitution. On Feb. 24, 1902, the election of President (Tomas Estrada Palma) took place and the United States formally transferred control of the island to the National Government. The coaling stations, Guantanamo Bay and Bahia Honda, were leased to the United States on July 2, 1903, at an annual rental of $2,000,000.

Political disturbances occasioned intervention by the United States in August, 1906, which continued until Jan. 28, 1909, when the National Government was resumed after the institution of electoral reforms, and the last American soldiers left the island April 1, 1909. A new electoral law, drawn with the assistance of Major Gen. Enoch H. Crowder, U. S. A., was passed in August, 1919. The election of Nov. 1, 1920, was very stormy and interpretations put on the new laws brought about a deadlock. Gen. Crowder was sent to Cuba in January, 1921, again as personal representative of President Wilson to straighten matters out, the result being the inauguration of Dr. Alfredo Zayas on May 20, 1921.

Under the influence of Gen. Crowder the Congress has passed during the summer session of 1922 five reform measures—the reorganization of the Federal system of accounting, the suspension of certain provisions of the civil service law to permit the President to shift the personnel of various Government departments in the interest of economy and efficiency, certain judiciary reforms, the clearing up of current indebtedness, and the flotation of a foreign loan of $50,000,000, the latter authorized Oct. 7.

Cuba is a member of the League of Nations.

Notable work had been accomplished by the United States Military Government under Gens. Brooks and Wood, especially the stamping out of yellow fever.

The Education Act of 1899 established a system of primary and secondary schools, with compulsory attendance, under which education has progressed greatly. A wide system of kindergartens and night schools has been added. In 1919, 334,671 children were enrolled, with 6,151 teachers. In that year 223 new schools were established. The University of Havana (founded 1721) in 1919 had 2,272 students. The Roman Catholic religion is dominant.

Cuba's army numbers 12,500 men, with a reserve of 300,000.

| | |
|---|---|
| Par of exchange, peso | $1.00 |
| Par of exchange, Nov. 1, 1922 | .999 |
| Imports, 1921 | $356,435,099 |
| Exports, 1921 | 278,130,740 |
| Budget, 1922—Receipts | 72,000,000 |
| Expenditures | 64,422,665 |
| Debt, 1920—Internal, U. S. gold | 38,662,100 |
| External, U. S. gold | 65,923,000 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $403,720,541 |
| " 1921-22 | 114,799,891 |
| Exports, 1920-21 | 420,399,940 |
| " 1921-22 | 210,585,780 |

## CZECHOSLOVAKIA REPUBLIC OF.

AREA, 54,264 square miles; viz: Bohemia, 20,106; Moravia, 8,615; Silesia, 1,767; Slovakia, 18,933; Ruthenia, 4,903.

POPULATION, census of 1921, 13,595,818; viz: 6,000,000 Czechs; 3,700,000 Germans; 1,700,000 Slovaks; 1,200,000 Magyars; 300,000 Ruthenians; 250,000 Poles.

CAPITAL, Praha (Prague); pop., 676,476; other cities, Brno (Brunn), pop., 221,422; Pizen (Pilsen), 88,447; Bratislava (Pressburg), 93,329; Kosice, 52,699; ten others from 10,000 up.

*President*, Dr. Thomas G. Mazaryk; born 1850; took office, Nov. 14, 1918; re-elected May 28, 1920.

*Premier*, Antonin Svehla.

*Minister to the United States*, Dr. Bedrich Stepanek.

*Consuls in the United States*, at New York, Borivoj Prusik; at Chicago, Jaroslav Smetanka; at Cleveland, Bohuslav Barlosovsky; at Pittsburgh, Albert Mamatey; at Omaha, Stanley Serpan.
*United States Minister*, Lewis Einstein.
*United States Consul*, at Prague, Charles S. Winans.

Czechoslovakia is a Central European republic, about the size of the State of Illinois, bounded on the north by Germany and Poland, and on the south by Roumania, Hungary and Austria. Its extreme length from east to west is 600 miles and its width varies from 50 to 100 miles.

Czechoslovakia is one of Europe's richest countries agriculturally. It is becoming a land of peasant holdings, the number of farms being 3,791,621. Farming is unusually highly developed and is intensive, as indicated by the production of about 14,500,000 short tons of wheat, oats, barley, rye, potatoes and sugar beets from about 900,000,000 acres. Beet sugar produced annually is about 530,000 short tons, of which 280,000 are exported; 600 breweries output 5,700,000 hectolitres of beer, and 413 distilleries 27,500,000 hectolitres of spirits. Livestock number 9,000,000.

Forests cover 32 per cent. of the total 34,560,000 acres in Czechoslovakia, the annual lumber yield being 6,200,000,000 board feet. Immense quantities of foodstuffs are exported, the net food surplus being larger than for any other country in Europe. Agriculture has been restored to almost normal.

Mineral wealth is great—coal, iron, graphite, copper, lead, gold, silver and garnets being abundant. Coal production runs at about 33,500,000 short tons from 366 mines employing 120,000 men.

Factories number 8,800—textile, 2,000; glass and precious stones, 1,700; foodstuffs, 1,350; furniture and wood, 674; machinery, 595; metal, 590; paper, 300; chemicals, 450.

The railroad mileage is 8,497; 5,105 state owned, 3,320 privately owned; 1,000 miles are double-tracked. The peace treaty gave Czechoslovakia, which has no outlet to the sea 200 miles distant, the right to certain wharves in Hamburg and Stettin; the Danube is the principal waterway, its chief port being Bratislava (Pressburg). On the Elbe, which flows from Czechoslovakia through Germany, the main ports are Usti (Aussig) and Decon (Teschen).

The Czechoslovaks, two branches of the same Slav nation, formed the independent Kingdom of Bohemia in Central Europe in the fifth century. In 1526 the Hapsburgs were elected to the throne of Bohemia, which thus became united through a common dynasty to Austria and Hungary. Religious persecution in the seventeenth century led to unsuccessful rebellions, leaving great bitterness. In its present form Czechoslovakia is a creation of the war, coming into existence Oct. 28, 1918, on the break-up of the Austro-Hungarian Empire, of which it was the northwest portion, bordering on Germany and Poland. The Constitution of the republic was adopted by the National Assembly on Feb. 29, 1920, providing for a National Assembly with legislative authority over the whole country, Carpathian Ruthenia to have autonomy. The Assembly, elected by universal suffrage, and with proportional representation, is composed of a Chamber of Deputies, six-year tenure, 300 members; and a Senate, eight-year tenure, 150 members, both in joint session to elect the President of the republic for a seven-year term; the President to be the head of the army, authorized to declare war with consent of the Assembly, and appoint Ministers and officials. Freedom of speech and religion are guaranteed.

There are 11,675,187 Roman Catholics, 592,699 Greek Catholics, 929,203 Protestants, 361,000 Jews. In 1920 the Reformed Clergy of Czechoslovakia decided to withdraw from the jurisdiction of the Pope and found a national church.

Education is compulsory between the ages of 6 and 14. Literacy is almost universal, excepting in Slovakia. There are 13,417 elementary schools, with 1,900,000 pupils, and 1,411 advanced schools with 255,000 students. The Czech University of Prague is celebrated. Founded in 1348, students number 10,300; the German University at Prague having 4,000 and two other universities 2,300.

Universal military service for men between 20 and 50 was enacted in 1920, service to be for 14 months. When mobilization is decreed, all from 17 to 60 are liable for service. Later a system of militia will be adopted. Peacetime army strength is 147,000 men. Reserve number 1,524,000. Czechoslovakia is a member of the League of Nations.

With Jugo-Slavia and Roumania, Czechoslovakia formed the "Little Entente," designed for protection against Hungarian aggression, as a defense against Bolshevism should the Soviet armies pass the Russian frontier, and to promote trade on the Danube.

The budgets for the last two years follow:

| | |
|---|---|
| Par of exchange, crown | 20.3 cents |
| Rate of exchange, Nov. 1, 1922 | 3.17 cents |

| | 1921, Crowns. | 1922, Crowns |
|---|---|---|
| Receipts | 14,129,919,000 | 18,884,209,000 |
| Expenditures | 13,841,738,000 | 19,671,970,000 |

The total indebtedness of the republic on Jan. 1, 1921, was given as follows:

| | |
|---|---|
| Debt—Internal, crowns | 25,000,000,000 |
| External, francs | 3,500,000,000 |

Trade with the United States was:

| | |
|---|---|
| Imports 1920-21 | $1,988,340 |
| " 1921-22 | 824,789 |
| Exports 1920-21 | 11,213,512 |
| " 1921-22 | 12,501,554 |

## DANZIG, FREE CITY OF.

AREA, 709 square miles.
POPULATION, 1919, 351,380; 93 per cent. German, 7 per cent. Poles.
*High Commissioner*, Gen. Sir Richard Haking, appointed by the League of Nations; assumed office Jan. 24, 1921.
*United States Consul*, Charles L. Hoover. Diplomatic and consular representatives of Poland have charge of the interests of the Free City of Danzig in the United States.

The Treaty of Versailles set Danzig (Gdansk) apart as a free city, taking it from the former German Empire, giving all nations equal access, and to Poland certain especial privileges appertaining to public utilities. Danzig proper (the administrative district has 194,953 inhabitants), lying at the entrance of the (Polish) Vistula River to the Baltic Sea, with an ocean frontage of 35 miles, is an important seaport and grain market, and was governed after the war by an inter-Allied commission, to be gradually taken over by the citizens. A treaty was drawn between Danzig and Poland, under instructions from the Paris Peace Conference, which came in force with the proclaiming of the freedom of the city on Nov. 15, 1920. There are storage capacities in warehouses for 50,000 freight tons, and plans for ultimate extensions of facilities to handle 8,000,000 tons of shipping annually. There are forty banks, half of them Polish. The German mark is the currency.

In 1913 5,765 ships of 1,861,691 tonnage, entered Danzig; in 1921, 3,836 ships of 1,967,000 tonnage. In 1913, no American ships made Danzig. In 1921 American tonnage was 233,403; British, 256,464; German, 204,958; German tonnage in 1913, 526,489.

Danzig dates from before 997 A. D., was once Polish, became German, is the world's greatest amber source, has predominant German population, with Poles increasing, and, when the Vistula-Dnieper trans-European route is perfected will be the most important Baltic port.

Danzig has many cherished historic treasures in cathedrals, notably St. Marian, abbeys, notably Oliwia, and other architectural attractions much admired. Zoppot, six miles out, is the fashionable summer resort on the Baltic.

Development of Hamburg and Bremen by Germany as chief ports pressed Danzig down to relative insignificance; but its creation as a free city has reinvigorated it, rational development now being in progress, following the disorders, immediately post-war, which interfered seriously with its prosperity.

Poland's especial privileges under the Treaty of Versailles include predominant influence in control of waterways, docks, basins, traffic on the Vistula, railways, posts, telephones and telegraphs, "the General Commission of the Polish Republic in Danzig" administering Polish Treaty rights, as intermediary between foreign representatives and the municipal government. For the Danzig and Polish trade with the United States see Poland.

The Constitution, approved by the League of Nations, Nov. 17, 1920, provides for a Volkstag or Diet of 120 members, elected by direct vote, suffrage being exercised by all men and women over twenty, and by a Senate, President, Vice-President and 20 Senators, elected by the Volkstag. The Senate is the highest state authority and meets in secret. The President of the Senate directs the administration.

The funded debt of the Free City on Jan. 1, 1921, was 43,034,647 marks.

## DENMARK, KINGDOM OF.

AREA, 16,958 square miles.
POPULATION, census of 1921, 3,283,000. Denmark gained 164,500 of population by the people of Schleswig voting in 1920 in the plebiscite to return from German rule to adherence to Denmark.

CAPITAL, Copenhagen, pop. without suburbs, 561,344.

*King*, Christian X, born Sept. 26, 1870; succeeded his father Frederick VIII, May 14, 1912; married April 26, 1898 Princess Alexandria of Mecklenburg; *Heir*, Crown Prince Christian Frederick, born March 11, 1899. He is also King of Iceland (which see).

*Premier*, Niels Neergaard (Finance).

*Minister to the United States*, Constantin Brun.

*Consuls in the United States*, at New York, George Bech; at Chicago, Redmund Baumann; at Boston, Gustaf Lundberg; at New Orleans, Thorkil Hoffman-Olsen; at Seattle, Henning Plaun; at San Francisco, Fin Lunn.

*United States Minister*, John Dyneley Prince.

*United States Consul General*, at Copenhagen, Marion Letcher.

Denmark occupies the peninsula of Jutland, thrusting out to the north from Germany, which is its only land neighbor, between the North Sea and the Baltic Sea, with the adjacent islands. The Skagerrak separates it from Norway and Cattegat from Sweden. It is a little smaller than the States of Massachusetts and New Hampshire together. The country consists of low undulating plains.

Denmark has attained enormous agricultural productivity, annually (census of 1921) taking 3,527,000 tons of wheat, rye, barley, oats, potatoes and mixed grains from 3,750,000 acres. Eighty per cent. of the whole land is productive; 4.8 per cent. forest covered: and 35 per cent. arable with large supplies of peat. Domestic animals in 1921 numbered 5,191,000. Denmark sends agricultural products all over the world, notably from her dairies.

Normally, there are about 82,000 industrial and shop plants, about 15,000 using power, employing 350,000, of whom 240,000 are skilled. In 1920 beet sugar production was 152,740 tons, and the Danish fishing fleet of 15,350 boats took fish to the value of 2,350,167 kroner.

Danish activity of all kinds has been largely dependent on the purchasing power of the German people, whose normal purchases of 60 per cent. of their foodstuffs afforded Denmark a valuable market. Prostration of German buying power has reduced Denmark to a current governmental budget deficit of the equivalent of about $7,500,000.

Industry is normally stable in Denmark, attributed by many in part to the Permanent Court of Arbitration and the Public Mediation Institution. The first is representative of employers and employees and interprets agreements and legal points involved therein. The second anticipates industrial troubles, and, when stoppage of work such as will affect the whole community is threatened, takes steps to intervene and seeks to prevent it. The Court of Arbitration is national and no appeal lies against its findings to any superior court, being in themselves final and valid in law.

There are 2,662 miles of railroads, of which 1,283 are state-owned. In 1920 Denmark had 1,749 vessels of 592,724 tonnage and 23,038 vessels of 3,269,268 tonnage entered Danish ports.

Denmark is a constitutional monarchy, the succession being hereditary. The King and the Rigsdag (Diet) jointly hold legislative power. Executive authority vests in the King through his ten Ministers. The Rigsdag is of two bodies—the Folketing (House of Commons) with 149 members; and the Landsting (Senate) with 75 members. Men and women of 25 years of age and a fixed abode have the franchise.

The Evangelical Lutheran is the established religion. By the census of 1911 there were 2,732,792 Protestants and 9,821 Catholics. The population is almost entirely Scandinavian.

Education is compulsory between seven and fourteen years of age. Intelligence is widely diffused. By the census of 1920 there were 4,232 lower schools, instruction mostly gratuitous, with 473,310 pupils, and 70,000 students in the higher institutions. The University of Copenhagen, founded 1479, has 3,300 students.

Old age pensions are granted at 60 years of age to persons of good character, the number relieved in 1919-20 being 98,525.

The army is in the form of a national militia, every able-bodied male Dane being liable for service, excepting only those living in the Faroe Islands. Even clergymen must serve. About 11,500 recruits train annually. The effective strength is 60,000, with 55,000 available on mobilization. The navy, for coast defense only, is mostly monitors.

Denmark is a member of the League of Nations.

Par of exchange for the kroner is 26.8 cents; exchange on Nov. 1, 1922, was 20.20 cents.

Imports in 1921 were 1,625,000,000 kroner; exports, 1,484,600,000, mainly beverages, textiles, metals, wood manufactures, animals, cereals, provisions, butter, cheese, eggs.

Budget, 1922-23—Receipts, kroner..329,098,235
Expenditures, kroner.....358,379,142
Debt—Internal, kroner.....664,225,162
External, kroner.....399,597,730

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $63,065,607 |
| " | 1921-22 | 36,453,208 |
| Exports, | 1920-21 | 17,129,151 |
| " | 1921-22 | 3,988,645 |

*GREENLAND—COLONY.*

AREA, 46,740 square miles. Interior a lofty plateau of 9,000 to 10,000 feet altitude, covered with a glacier.

POPULATION, census of 1911, 13,440 (mostly Eskimos).

CAPITAL and largest settlement, Sydproven, population, 789.

Greenland, a huge island between the North Atlantic and the Polar Sea, separated from the North American continent by Davis Strait, Baffin Bay, etc. It reaches from 60° N. lat. to about 86°.

Greenland trade is a state monopoly for Denmark. Imports from Denmark run at about 4,000,000 kroner; exports lately less, about 3,200,000.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $ 20,302 |
| " | 1921-22 | 12,884 |
| Exports, | 1920-21 | 210,000 |
| " | 1921-22 | 294,500 |

## DOMINICAN REPUBLIC.

(SANTO DOMINGO.)

AREA, 18,750 square miles.

POPULATION, estimated, 700,000.

CAPITAL, Santo Domingo (founded 1496), pop. 1921, 45,021. Chief port, Puerto Plata, pop. 26,073; other cities, Santiago de los Caballeros, 71,956; La Vega, 58,041.

*President* (provisional), Juan Bautista y Burgos.

*Secretary of Foreign Relations*, Angel Morales.

*Secretary of Interior and Police*, Jose del Carmenariza.

*Secretary of Justice and Public Instruction*, C. Armando Rodriguez.

*Secretary of Hacienda and Commerce*, Eladio Sanchez.

*Secretary of Fomento and Communication*, Octavio A. Acevedo.

*Secretary of Agriculture and Immigration*, Pedro A. Perez.

*Secretary of Sanitation and Charities*, Licenciado Manuel Maria Sanabia.

*Minister to the United States*, Emilio Joubert.

*Consul General*, at New York, Manuel De J. Camacho. *Consul*, at Philadelphia, Rodman Wanamaker; at Boston, vacant.

*United States Minister*, William W. Russell.

*United States Consuls*, at Santo Domingo, Theodore B. Hogg; at Puerto Plata, William A. Beckers.

The Dominican Republic occupies the eastern portion, about two-thirds, of the Island of Santo Domingo, the second largest of the Greater Antilles, situated between Cuba on the west and Porto Rico on the east. The boundary between it and the Republic of Haiti, which occupies the western part of the island, is 193 miles long. It has a coastline of 1,017 miles. The land is very fertile, about 15,500 square miles being cultivable; agriculture and stock raising are the principal industries. Sugar, cacao, and tobacco are the chief products and exports. The country has gold, copper, iron, salt, coal and petroleum, but the mining industry is little developed. There are 153 miles of railroads, besides 255 of private lines on large estates. In 1920, 714 ships, with a tonnage of 957,826, entered the ports. The population is a race of mixed European, African and Indian blood. Spanish is spoken. The religion of the State is Roman Catholic, but religious toleration prevails. Education is free and compulsory, and great advance in methods of instruction has been made by the Military Government. The Dominican Republic is not a member of the League of Nations.

Continual internal disturbances from the "war of the restoration" (1863-65 to 1904), left the Dominican Republic under a crushing debt of $32,000,000. Her annual revenues were about $1,850,000, and her annual expenditures $3,900,000. Rumors were rife that European nations would intervene to collect debts due their citizens. To forestall armed and indefinite intervention Secretary of State John Hay, in February, 1905, negotiated a protocol with the republic, which provided that the United States should adjust her debts and administer her custom house receipts. Because a clause in the convention was interpreted as establishing a protectorate, the United States Senate refused to ratify the treaty. President

Roosevelt, however, made an executive arrangement with the President of the bankrupt republic essentially on these lines, and on April 1, 1905, put that modus vivendi into force, and placed an agent of the United States in charge of her fiscal administration. Marked improvement followed; her debt was adjusted and credit restored.

A treaty was signed on Feb. 8, 1907, which provided that the United States Government should for fifty years administer the customs of the Dominican Republic for the service of her debt, practically a receivership. Eight years of honest administration reduced the total debt to $21,500,000.

It was inevitable that the administration of the finances of the Dominican Republic by the United States could not proceed without friction and interference with the government of that country. Political troubles and serious disturbances followed, to suppress which the Dominican officials incurred fresh debts without the approval of the United States, which demanded a supplementary convention be arranged. The Dominicans refused to consent. A coup d'etat by Arias, deposing President Jimenez in April, 1916, was followed by disorders. The United States landed a detachment of marines and suppressed the insurrectionists; and on Nov. 29, 1916, Capt. Knapp, U. S. N., issued a proclamation announcing that the Dominican Republic was under the military administration of the United States, and declaring that his Government did not intend to destroy the sovereignty of the republic, but wished to enable her to restore internal order so that she might observe her international obligations.

A Dominican commission, headed by Provisional President Henriques Carvaljal, in 1919 visited Paris and later Washington, seeking the restoration of individual liberty in the republic. Acting under orders from Washington, the Governor, Admiral Snowden, issued a proclamation outlining the plan of the United States Government for the conditional withdrawal of its military forces, the transfer of administrative responsibility to a native government duly elected, and the continuance of the fiscal arrangements of 1907 enlarged so as to include arrangements for a new loan.

Rear Admiral Samuel S. Robison, U. S. N., who has been Military Governor of the Dominican Republic, installed on Oct. 21, 1922, a provisional government as printed above, for the purpose of promulgating legislation, to regulate the holding of elections and to provide for the reorganizing of the provisional and municipal governments. This followed the plan for ultimate evacuation by the American force of occupation, which had been tentatively agreed upon in Washington June 30, 1922, by the Government of the United States and a commission headed by Dr. Adolfo A. Nouel. United States Commissioner Sumner Welles will report on political conditions preliminary to an agreement for the withdrawal of the American Marines who have now been concentrated in two or three points and have turned over the maintenance of peace and order to the Dominican police.

The treaty of 1907 authorized the issue of $20,000,000 5 per cent. bonds secured by a first lien on the customs revenues. Of this issue on July 31, 1920, there remained an unsettled balance of $10,207,029. Of a further issue of $4,161,300, made under authority of Aug. 2, 1918, to settle claims arising before the establishment of the military government there was on July 31, 1920, an unsettled balance of $2,893,757, making a total bonded debt of $13,100,786. Customs collections for the calendar year 1920 amounted to $7,577,244.

| | |
|---|---|
| Par of exchange, peso | $1.00 |
| Imports, 1921 | $24,585,327 |
| Exports, 1921 | 20,614,048 |
| Budget—Receipts | 11,631,400 |
| Expenditures | 11,630,198 |
| Debt—Internal | *(No figures available)* |
| External | 13,358,000 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $32,248,123 |
| " 1921-22 | 10,652,700 |
| Exports, 1920-21 | 19,514,039 |
| " 1921-22 | 7,479,529 |

## ECUADOR, REPUBLIC OF.

AREA, estimated, 276,000 square miles.

POPULATION, about 1,500,000.

CAPITAL, Quito, pop., 70,000; chief port, Guayaquil; population, estimated, 100,000.

*President*, Sr. Dr. Don Jose Luis Tamayo (1920-24), inaugurated Sept. 1, 1920.

*Premier*, Gen. Delfin B. Trevino (Interior and Public Works).

*Minister to the United States*, Sr. Dr. Don Rafael H. Elizalde.

*Consuls General*, at New York, Gustavo R. de Ycaza; at San Francisco, Manuel Cobeza de Vaca. *Consuls*, at Philadelphia, Luis A. Mata; at New Orleans, Ismael Aviles Mejia; at Chicago, vacant.

*United States Minister*, Gerhard A. Boding.

*United States Consul General*, at Guayaquil, Frederic W. Goding.

Ecuador, on the Pacific coast of South America, extends from about 100 miles north of the Equator to 400 miles south of it. It is larger than Texas by 10,000 square miles. It is bounded by Colombia on the north and Peru on the south. The boundary in the east is in dispute, much territory being claimed by each of these three countries. Two cordillera of the Andes cross the country, with a dozen peaks above 16,000 feet in height, of which Chimborazo (alt. 20,702 feet) and Cotopaxi (19,498 feet) are the highest.

Mining has been but little developed, though the country is known to be rich in minerals. Most of the land is covered with virgin forest. Rubber abounds in the upper reaches of the Amazon in the disputed eastern territory. Panama hats are manufactured, cocoa, ivory nuts, coffee, hats, hides and rubber are the chief exports. Textiles, foodstuffs, machinery and clothing are the chief imports.

Guayaquil, the seaport, was long a hotbed of yellow fever. After a survey made by the Rockefeller Foundation in 1916, a scientific fight was made under the direction of Gen. Gorgas and May 27, 1920, the Director General of Public Health announced that the disease had been stamped out. Guayaquil is connected with Quito by a railroad (280 miles), a two-day journey. In all, Ecuador has 413 miles of railroads.

Ecuador's independence dates from the Battle of Pichincha, May 29, 1822, but its history has been stormy even for a Latin-American republic. It is estimated that three-fourths of its population are Indians, one-fifth mixed and only a small fraction white. Education is very backward. Only adults who can read and write can vote. The Constitution now in force was promulgated Dec. 28, 1906, and provides for a President, elected by popular vote for four years, a Senate of 32 members, elected for four years and a House of 48 members, elected for two years.

Ecuador has not joined the League of Nations.

| | |
|---|---|
| Par of exchange, sucre | 48.6 cents |
| Rate of exchange, Nov. 1, 1922 | 22.225 cents |
| Imports, 1920 | $21,138,476 |
| Exports, 1920 | $24,247,476 |
| Budget—Receipts | $8,579,795 |
| Expenditures | $9,893,430 |
| Debt—Internal, sucres | 28,521,573 |
| External, sucres | 36,713,283 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $7,902,876 |
| " 1921-22 | 3,565,326 |
| Exports, 1920-21 | 8,601,577 |
| " 1921-22 | 5,837,682 |

## EGYPT, KINGDOM OF.

AREA, estimated, about 360,000, exclusive of the Soudan (which see). Cultivable land area, 12,226 square miles; Sinai desert, 11,200; Libyan and Arabian deserts, 340,000.

POPULATION, estimated, 1921, 13,387,000.

CAPITAL, Cairo, pop. census of 1917, 790,939; other cities, Alexandria, pop. 444,617; Port Said and Ismailia, 91,090; Suez, 30,996; Damietta, 30,984; Tanta, 74,195; Assiut, 51,431; and thirteen others between 20,000 and 50,000.

*King*, Fuad I., born March 26, 1868, son of the late Khedive Ismail Pasha, succeeded his brother Hussein Kamil on his death as Sultan Oct. 9, 1917, proclaimed King March 16, 1922, on termination of British protectorate and recognition of the independence of Egypt. He married Princess Nazli, May 24, 1919.

*Heir*, his son Prince Farik, born Feb. 11, 1920.

*Premier*, Abdel Khalek Sarwat Pasha (Interior and Foreign Affairs).

*British High Commissioner for Egypt and the Soudan*, Field Marshal Viscount Allenby.

*United States Minister and Consul General*, at Cairo, J. Morton Howell.

*United States Consuls*, at Alexandria, Lester Maynard; at Port Said, Coet du Bois.

Egypt occupies the northeast corner of Africa with the Mediterranean Sea on the north and the Red Sea on the east. Beyond that between the Gulf of Suez and the Canal and the Gulf of Akabahlies the Sinai peninsula, 150 miles long, flat and sandy, on the north, like the Egyptian coast line, but with granitic mountains rising to an altitude of 8,680 feet in the southern third. Along the west coast of the Red Sea is the Eastern or Arabian desert, with a great backbone of rugged mountains

(highest altitude 7,150 feet) reaching to Abyssinia. On the south is the Soudan, the parallel of the 22° north latitude forming the boundary. To the west is the vast Libyan desert, which begins a few miles west of Cairo, where stand the Pyramids of Giza, of which the great pyramid is 451 feet high, and the Sphinx. This desert stretches to Tripoli, a vast monotonous limestone plateau with a few depressions where wells and springs furnish water to irrigate small areas. These oases support a population of several thousands. Egypt is about the size of Arizona, New Mexico and Colorado, but its fertile territory is about the size of Massachusetts and Connecticut.

The Valley of the Nile and the delta are the real Egypt of sixty centuries. Here are 12,226 square miles of cultivated area; 1,900 square miles are taken up by canals, roads, date plantations, etc., and 2,850 by the surface of the Nile, its marshes and lakes. The great river runs between sandstone cliffs from Halfa to Esna, with a stretch of granite near Aswan, where the valley narrows to half a mile, and limestone from there through Luxor to Cairo, the valley widening to over 10 miles. The fertile lands occupy the floor of the valley between the river and the cliffs and north of Cairo they spread out in silt-created delta, forming the richest soil of the country. The Nile has a total length of 3,470 miles from the Victoria Nyanza to the Mediterranean. In the 960 miles of its course through Egypt it receives no tributary stream. The river has a regular yearly rise and fall, attaining its maximum the end of May. The average rise at Cairo is 13 feet. The great dam at Aswan (or Assouan), completed Dec. 10, 1902, and since then raised in height, stores up the surplus water and regulates its flow, a task shared by smaller barrages at Esna, Assiut, Zifta and at the head of the delta. Irrigating canals distribute the silt-laden water to the fields. Sixty miles south of Cairo to the west of the river is the fertile province of Fayum, with an area of 500 square miles, watered by the canal Bahr Yusef (built by Joseph, the son of Jacob), over 100 miles long, which takes its water from the river at Deirut.

The Nile irrigates 5,400,000 acres and this number may be increased to 7,600,000 by engineering improvements. King Mena (circa 4000 B. C.) is credited with being the founder of the first scientific system of using the water of the Nile for irrigation purposes, and that plan, the basin system, is still used for all the land south of Deirut in Upper Egypt.

By this system the land is divided into rectangular areas from 5,000 to 50,000 acres in size and surrounded by banks; water is admitted to these basins during the flood period (August) to an average depth of 3 feet and is left on the land for about forty days; it is then run off and the seed sown broadcast on the uncovered land. A system of perennial irrigation by digging deep canals was introduced in 1820 by Mohammed Ali Pasha, which was restored and greatly improved during the British occupation. Two million acres of cultivable land were added and under the basin system, cereals, beans and lentils are grown; under the new perennial system cotton, cereals, beans, sugar cane, vegetables and fruit are the chief crops. Two and three crops a year are grown. The yield of cotton in 1920-21 was 597,515,391 pounds, the exports for the year 1920 being 396,345,306 pounds, valued at 75,096,026 Egyptian pounds ($260,345,306 at par of exchange, the Egyptian pound equals $4.94). The amount of acres under cotton in 1921 was 1,341,096.

The agricultural population (Fellaheen) forms about 62 per cent. of the whole, a large proportion of them (1,709,983 in 1920) being small land owners holding up to 5 acres each. The total number of land owners in 1920 was 1,866,761, of which only 7,016 were foreigners. In 1920 the amount of sugar exported was 13,795 tons

Petroleum has been found in both the Arabian desert west of the Red Sea, and on the Mt. Sinai peninsula. To what extent, however, no announcement has been made. Drilling is going on. The reports for 1919 showed a production of 224,300 metric tons; 49,000 metric tons of manganese iron ore was produced that year, also 29,000 tons of phosphate rock.

The chief imports are textiles and yarns, machinery and hardware, tobacco (none is allowed to be raised in Egypt), chemicals and perfumes, coal, oil, cereals and animal food products and leather.

Egypt, on March 31, 1921, had 2,311 miles of railroads owned and operated by the state, and 721 miles of light agricultural railroads owned by private companies, mostly in the delta. Cairo was connected by railroad with the Palestine system by the opening of the swing bridge over the Suez Canal. The first train left Jerusalem for Cairo on June 15, 1918. This bridge was removed in 1921 and is to be replaced by a tunnel. Passengers on the through train from Cairo to Jerusalem, "The Milk and Honey Express," now break their journey at Kantara to walk across a floating bridge. The Cape-to-Cairo line is nearly finished.

Commercial steamers entering Egyptian ports of Alexandria in 1920 numbered 1,242, with a tonnage of 2,527,436. Commercial steamers passing through the Suez Canal (103 miles long) in 1920 numbered 3,804 of 16,892,244 net tonnage; also 204 Government vessels, of 678,197 net tonnage (of these 144 were British of 521,118 net tonnage). (For Suez Canal statistics see page 722).

Four-fifths of the people are of the ancient Egyptian stock, whose forbears by their labor built the pyramids for alien Kings, and whose physical characteristics were pictured in the mural paintings of the temples and tombs and on the papyrus scrolls six thousand years ago. The Copts embraced Christianity in the first century of the Christian era, and hold the orthodox Patriarch of Alexandria as the successor of St. Mark. They numbered 854,778 in 1917. There are 155,168 Christians of other sects, and 59,581 Jews. The far larger part of that ancient stock embraced Mohammedanism on the conquest in the seventh century, and speak Arabic to-day. With the 32,663 Bedouins and 107,360 Soudanese and Berberins (of whom one-seventh are nomads), and including also some Nubians, the Mohammedans numbered in 1917 11,658,148. They have a famous seat of Moslem learning in the University at El-Azhar, in Cairo, founded in 972. In 1914 it had 405 professors and 9,749 students, and affiliated with it were the Mosque of El-Ahmed; at Tanta with 2,860 students, the Mosque of Damietta with 411, and the Meshia Khat Olama at Alexandria with 1,854. However, the percentage of illiteracy shown by the census of 1917 was 92 per cent. The Ministry of Education has under its direct management 209 schools of all grades, with 40,471 pupils. The Maktah schools care for about 200,000.

By the census of 1917 the foreign residents numbered 209,998, of whom 30,796 were Turks, 56,735 Greeks, 40,198 Italians, 24,356 British, and 21,270 French and Tunistans.

During the forty-two years of British rule the population has doubled (census of 1882, 6,831,131). The irrigation system has been enormously improved and another great dam is being built far up in the Blue Nile to impound water In the last seven years land has trebled in value. Motor trucks crowd camels from historic caravan trails. "Egypt," says one writer, "waxed fat off the World War. It is said that England paid out over a billion dollars in Egypt for foodstuffs, camels, mules and supplies for use of her armies in the Middle East." Tourist travel up the Nile to the great monuments of ancient Egyptian civilization, interrupted by the war, is heavier than ever.

The present King of Egypt is the eighth of the line founded by Mohammed Ali, who was appointed Governor (Vali) of Egypt by the Sultan of Turkey in 1805, made himself absolute master of the country, and became hereditary Governor by force of arms in 1811. Under the rule of Khedive Ismail revenues were wasted and debts were heaped up until bankruptcy resulted. Great Britain and France in 1879 assumed dual control, forced Ismail (1863-1879) to abdicate and appointed his son Tewfik (1879-92) to succeed him. Reforms were instituted. In 1882 Arabi Pasha headed a military revolt, which was quelled by a British expedition, the French Government declining to intervene. The dual control was abolished by decree Jan. 18, 1883, and Great Brita'n carried on alone, the expeditionary force remaining as an army of occupation, Egypt being technically a semi-independent tributary state of the Ottoman Empire.

In January, 1884, Major Sir Evelyn Baring (created, 1901, Earl of Cromer), who had served as Comptroller-General, was made British Agent and Consul General, a position which he filled with extraordinary ability until he retired in 1907. He was succeeded by Sir John Gorst, and on the latter's death Lord Kitchener filled the post. This period of British occupation lasted until the World War broke out. The Khedive Abbas II. was absent and declared himself for Turkey. He was deposed and his brother, Hussein Kamil Pasha, made Khedive. With a Turkish army headed for Gaza, on Nov. 18, 1914, Great Britain declared a protectorate over Egypt, which was therefore taken from the suzerainty of Turkey, and Hussein assumed the title of Sultan. In the unrest following the war disturbances were many and serious. Great Britain, following a promise of an increased measure of self-government, sent a commission under Lord Milner there in December, 1919, to investigate the reforms needed and the demands of the Nationalists for complete independence. Much negotiation followed, in which the High Commissioner, Lord

Allenby (appointed October, 1919), took a prominent part, and to him is due the credit for effecting the peaceful arrangements announced by Premier Lloyd George in the House of Commons on Feb. 28, 1922, whereby the British protectorate was abolished. The British Government reserved to its discretion four subjects: Safety of the British Empire's communications; defense of Egypt against foreign aggression, direct or indirect; protection of foreign interests in Egypt and of minorities; and guarantees for British interests in the Soudan. The House sustained this policy later by a vote of 202 to 70. A promise was made that martial law would be withdrawn as soon as the Egyptian Government passed an act of indemnity.

On March 27 Marquis Curzon, the British Foreign Secretary, sent despatches to all British Ambassadors saying that the termination of the protectorate involved no change in Egypt's status toward other powers, and the British Government would regard as unfriendly any attempted interference in the affairs of Egypt by another power, and would repel any aggression upon Egyptian territory.

Sarwat Pasha formed a Cabinet on March 1, and Fuad was proclaimed King on March 16. The United States recognized the new Government on April 27, but declined to accept the abolition of the capitulation, and made this refusal a condition of recognition. Dr. J. Morton Howell, the Consul-General, was made Minister to the new court on June 19. Drafting a constitution has been proceeding slowly by a Government Commission headed by Rushdi Pasha, a former Prime Minister. The preliminary draft incorporates the Soudan in Egyptian territory. (See Soudan following). Disturbances continued throughout the summer.

The debt which has been handled by Caisse de la Dette, a body representing the creditors of the Treasury, was as follows on April 1, 1921:

| | |
|---|---|
| Guaranteed loan, 3 per cent. | £5,872,000 |
| Privileged debt, 3½ per cent. | 30,127,780 |
| Unified debt, 4 per cent | 55,971,960 |
| Total | £92,971,740 |

The receipts and expenditures in the fiscal year 1920-21 were: Receipts, £E46,446,921; expenditures, £E62,051,182. The budget for 1921-22 estimates receipts of £E38,682,000, with expenditures to balance.

Imports and exports for 1921, exclusive of re-exports of £E6,527,894, and transit trade of £E7,473,616, were:

| | |
|---|---|
| Imports | £E55,507,984 |
| Exports | £E36,356,062 |

Trade with the United States was:

| | | |
|---|---|---|
| Imports | 1920-21 | $29,530,047 |
| " | 1921-22 | 9,454,116 |
| Exports | 1920-21 | 26,437,350 |
| " | 1921-22 | 32,161,501 |

## ESTHONIA, REPUBLIC OF.

AREA, 18,000 square miles.
POPULATION, 1,250,000; 95 per cent. native.
CAPITAL, Reval; population, 120,000.
*State Head*, Konstantin Pates.
*President of the State Assembly*, John Kukk.
*Consul* at New York, Hans Leoke (acting).
*United States Minister*, Frederick W. B. Coleman, also accredited to Latvia and Lithuania.
*United States Consul*, at Reval, Charles H. Albrecht.

Esthonia, formerly under the Russian Empire, known as the Government of Estland, is situate on the Gulf of Finland, with Russia on the east, Latvia and the Gulf of Riga on the south, and the Baltic Sea on the west. It is about the size of the States of Vermont and New Hampshire.

Of its 11,520,000 acres about 1,300,000 are devoted to agriculture, and 1921 production was: rye, 95,747 tons; barley, 58,400; oats, 76,465; flax, seed, 4,700; fibre, 5,077; potatoes, 570,000; and wheat, 7,370.

Forests cover 1,995,000 acres, and in 1920 there were 164,502 horses, 442,668 cattle, 530,291 sheep and goats, and 260,695 swine.

Esthonia declared her independence Feb. 24, 1918, after the Bolshevist coup d'etat. The republic, on June 15, 1920, adopted its Constitution by which power is vested in the Legislative Assembly of 100 members, chosen for three years with proportional representation by universal direct equal suffrage. The initiative and referendum to the people is an important feature. The State Head and Ministers are chosen by the Assembly and are responsible to it.

Esthonia appears to have settled down to production, with no boundary or other disputes to disturb it. The production of more than 800,000 tons of food, with some auxiliary wealth coming from the beginnings of industry, classes Esthonia as self-supporting.

While Esthonia was adjusting herself to the new regime many American Esthonians went there to assist as well as to Paris, to contribute money and personal effort to the new republic.

Esthonia is a member of the League of Nations.

There is no state religion, and 80 per cent. of the people are Lutherans. In 1919, illiterates above 10 years of age numbered 3 per cent.

Trade with the United States in the fiscal year 1921-22 was: imports, $5,064,091; exports, $494,355.

## FAR EASTERN REPUBLIC.

(See under Russia.)

## FINLAND, REPUBLIC OF.

AREA, 125,689 square miles.
POPULATION, 3,241,000.
CAPITAL, Helsingfors; population, 188,922; other chief cities, Turku, 59,914; Tampere, 46,819; Vilpuri, 30,039; and five others with more than 10,000.
*President*, Dr. Kaarlo Juho Stahlberg.
*Minister to the United States*, Axel Leonard Astrom.
*Consul General in the United States*, at New York, *Vice Consuls* at Boston, Ashtabula Harbor, O.; Calumet, Duluth, Seattle, Portland, and San Francisco.
*United States Consul*, at Helsingfors, Leslie A. Davis.

Finland, formerly an autonomous Grand Duchy of the Russian Empire, is bounded on the north by Norway, a narrow strip of land separating it from the Arctic Ocean, on the east by Russia, on the south by the Gulf of Finland, an arm of the Baltic Sea, and on the west by the Gulf of Bothnia, Sweden, and Norway. In territory it is as large as New England, New York and New Jersey.

Although extending far north into very cold latitudes, with rugged climate and topography Finland has developed considerable agriculture, with 284,000 farms, of which about 130,000 are of less than 30 acres, producing in 1919, 8,465,000 bushels of rye, 4,578,060 of barley, 19,105,000 of oats, 19,531,000 of potatoes, hay, 2,165,000 tons, and 951 tons of flax and hemp. Butter production was about 330,000,000 pounds, butter being a chief article of export. Cattle, 1,100,486; sheep and goats, 827,791; pigs, 110,993, and horses, 273,271, add to the wealth.

Figures for 1918 show a total of 1,458,000,000 marks factory output, iron and machinery with 254,000,000, and textiles with 260,000,000 leading.

Forests cover more than half the total area, and produced 140,000,000 marks, paper with 200,000,000 marks, coming largely from the forests. Leather was important, with 167,000,000 marks.

There were 4,098 large factories employing 82,471 persons, and 8.5 per cent. of the total area was in agriculture.

The Evangelical Lutheran Church is the state religion, although there is absolutely free worship. All but 2 per cent. of the people are Lutherans.

Two universities have 2,700 students, and about 33,000 are in other schools. There were, in December, 1920, 2,685 miles of railroads, all but 186 being owned by the state. Canal transportation is highly developed.

Finland, after the downfall of the Czar, had representative government restored to her by the Provisional Government. Following the Bolshevist coup d'etat the Diet and Senate on Dec. 6, 1917, proclaimed the independence of the republic. Civil war between the "Reds" and "Whites" followed, with German intervention. The "Reds" were defeated and driven back into Russia in two battles at the end of April, 1918, and the German troops went home in December of that year. On July 17, 1919, the Finnish Diet resolved to establish a republic, and a peace treaty acknowledging the independence of Finland was signed with Russia at Dorpat, Oct. 14, 1920.

Finland is governed under the constitutional law of 1906, by a Legislative Chamber of 200 members elected directly on a proportional representative basis. Men and women of 24 years of age have the suffrage. The President is chosen for six years by direct vote and appoints the Cabinet.

A dispute with Sweden over the Aland Islands arose and became acute. By mutual agreement it was referred to the League of Nations, of which both are members, and its adjudication was accepted by both nations, marking the first success of the League in averting war.

The Finnish mark is .193 at par of exchange. Rate of exchange Nov. 1, 1922, was .025.

In 1921, imports were 3,583,000,000 Finnish marks, and exports, 3,385,000,000 Finnish marks, an almost ideal economic balance of trade. Of the 1921 imports about one-third came from Great Britain, and less than 10 per cent. from the United States; Great

Britain sending a third of the imports, and the United States nearly 20 per cent.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $11,969,036 |
| " | 1921-22 | 8,550,155 |
| Exports, | 1920-21 | 7,353,681 |
| " | 1921-22 | 5,226,130 |

## FIUME, FREE STATE OF.

AREA, 11 square miles.

POPULATION, 1921, 53,000.

*United States Consul*, Wilbur Keblinger.

The Free State of Fiume, a former Austrian port on the Adriatic Sea, on the eastern side of the Istrian peninsula, was created by Italy and Jugo-Slavia by the Treaty of Rapallo, Nov. 12, 1920. Each recognizes its independence in perpetuity. Equal rights to the port are guaranteed to all three. The city is Jugo-Slavia's outlet to the sea and is connected by rail with the hinterland.

The suburb of Susak to the east, separated by a narrow stream, remains a part of Jugo-Slavia.

A Government was set up with President Zanella at the head, and an elected Assembly, but in February the city became the scene of much Fascisti violence, and on the March 3, the Government was forcibly ousted from the palace after severe fighting by the Fascisti, led by Deputy Giunta, who declared that the National Committee of Defense had assumed full power. This committee, while Italian carabineers were maintaining order, asked the Italian Government to take over the administration.

President Zanella and 49 other members (a two-thirds majority) of the Fiume Constituent Assembly took refuge in Jugo-Slavia. The Government sent Lieut. Cabruna, who took charge of the city with his troops and organized a provisional government, which was later turned over to Col. Marra. Efforts to arrange the situation diplomatically had no achieved results by Nov. 12, 1922.

## FRANCE, REPUBLIC OF.

AREA, pre-war, 207,054 square miles; present area, including Alsace-Lorraine (5,605), 212,659 square miles. This included the Island of Corsica, 3,367 square miles.

POPULATION, census, March, 1921, 39,209,766, to which should be added 192,973, military, naval forces and seamen abroad. Grand total, 39,402,739.

CAPITAL, Paris, population, census 1921, 2,906,-471; cities above 100,000: Marseilles, 586,341; Lyon, 561,592; Bordeaux, 267,409; Lille, 200,952; Nantes, 183,704; Toulouse, 175,434; St. Etienne, 167,967; Strasbourg, 166,767; Nice, 155,839; Le Havre, 163,374; Rouen, 123,712; Roubaix, 113,265; Nancy, 113,226; Toulon, 106,331; there are 33 cities in addition having a population exceeding 50,000.

*President*, Alexandre Millerand, born Feb. 10, 1859; elected Sept. 23, 1920.

*Premier*, Raymond Poincare (Foreign Affairs).

*Ambassador to the United States*, J. J. Jusserand, appointed Feb. 7, 1903 (Dean of the Diplomatic Corps at Washington).

*Consuls General in the United States*, at New York, Gaston Ernest Liebert; at New Orleans, Charles L. C. M. P. Barret; at San Francisco, Hippolyte Charles Julien Neltner. *Consuls*, at Chicago, Antonin Barthe'lenry; at Philadelphia, Maurice E. A. Paillord (V. C.). There are consular agents at twenty-seven other cities.

*United States Ambassador*, Myron T. Herrick.

*United States Consuls General*, at Paris, Alexander M. Thackara; at Havre, Augustus E. Ingram. *Consuls*, at Bordeaux, Theodore Jaeckel; at Brest, Herbert O. Williams; at Calais, Thomas D. Davis; at Cherbourg, Charles C. Broy; at Dunkirk, John S. Calvert; at La Rochelle, William W. Brunswick; at Lille, Hugh H. Watson; at Limoges, Eugene L. Belisle; at Lyon, vacant; at Marseilles, Wesley Frost; at Nancy, Paul H. Cram; at Nantes, Fred D. Fisher; at Nice, Otis A. Glazebrook; at Rouen, Milton B. Kirk; at St. Etienne, William H. Hunt; at Strasbourg, William J. Pike; at Algiers, Edward A. Dow; at Guadeloupe, W. I., Shelby F. Strother; at Martinique, W. I., Thomas R. Wallace; at Saigon, French Indo-China, Leland L. Smith; at Tahiti, Society Islands, Howard F. Withey; at Tananarivo, Madagascar, James G. Carter; at Tunis, Tunis, Harris N. Cookingham.

France, a republic in Western Europe, is slightly smaller in area than a group of five Middle West States—Illinois, Indiana, Ohio, Kentucky and Tennessee. Belgium and Luxemburg are its neighbors on the north. On the east Germany lies beyond the Rhine, the boundary; the Jura Mountains and Lake Geneva separate it from Switzerland and the Graian Alps and the Maritime Alps from Italy. On the south is the Mediterranean Sea, and Spain with the crest of the Pyrenees for the boundary line. On the west lies the Bay of Biscay and the North Atlantic Ocean and on the north again the English Channel and the Straits of Dover separate it from England. From north to south its length is about 600 miles, and from the western extremity near Brest to Strasbourg on the Rhine it is about 560 miles wide. The coastline on the north is 700 miles long; along the Atlantic and the Bay of Biscay, 865; on the Mediterranean 384 miles.

In the French Alps it has the highest mountain in Europe, Mont Blanc (alt. 15,781 ft.). On the French side of the Pyrenees are several peaks of over 10,000 feet in height. Forming the western border of the Rhone valley rise the Cevennes, highest point being Mont Lozere (alt. 5,584 ft.). The Massif Central continues north as the mountains of Auvergne, where the Plomb du Cantal attains a height of 6,096 feet to the Cote d'Or containing Puy de Sancy (alt. 6,188 ft.). Further north are the Vosges, which run parallel with the Rhine; their crest formed the boundary line between France and Alsace. Thence the wooded highlands of the Argonne and the Ardennes bear off to the frontier. The western and northwestern part of France consists of fertile plains save for the hills of Normandy and the picturesque cliffs of Brittany.

On the North Sea and the Channel are the seaports of Dunkirk, Calais and Boulogne, with the great port of Havre at the mouth of the Seine, and Cherbourg between Cape Hague and Cape Barfleur. In the extreme northwestern projection, sheltered by Cape St. Mathieu, is the roadstead of Brest, the great naval station. Further down the coast is Lorient, St. Nazaire, at the mouth of the Loire, with Nantes further up the river, Rochefort and La Rochelle. Up the estuary of the Garonne is the important port of Bordeaux, fourth city of the republic; and at the mouth of the Adour, in the extreme southwest corner, is Bayonne with its neighboring seaside resort of Biarritz. On the Mediterranean coast, which on the west is low, with lagoons and sand dunes, there is no great port till the mouths of the Rhone are passed and Marseilles, the second city of the country, is reached. Beyond is the great naval base, Toulon, and from there by Nice and Monaco to the Italian frontier and beyond runs the beautiful Riviera—the cote d'Azure.

### USE OF RIVERS.

France has four important rivers, the Seine, the Loire, the Garonne and the Rhone, the left bank of the Rhine from Basle, Switzerland, to Lauterbourg, and a dozen others, some with new fame from World War battles, but all of great value because of canalization, which binds them together. The waterways total 7,543 miles in length, of which canals cover 3,031. They are the property of the state and are free from tolls. The system was of the greatest utility in the north and northeast and suffered great damage during the war but is now almost entirely restored. The principal canals are:

| | *Miles.* |
|---|---|
| Est (uniting Meuse with Moselle and Saone) | 270 |
| From Nantes to Brest | 225 |
| Berry (uniting Monticon with the canalized Cher and the Loire canal) | 163 |
| Midi (Toulouse to Mediterranean via Beziers) | 175 |
| Burgundy (uniting the Yonne and Saone) | 151 |
| Lateral canal of Loire | 137 |
| From Marne to Rhine (on French territory) | 131 |
| Lateral canal of Garonne | 133 |
| Rhone to Rhine (on French territory) | 119 |
| Nivernais (uniting Loire and Yonne) | 111 |
| Canal de la Somme | 97 |
| Centre (uniting Saone and Loire) | 81 |
| Canal de l'Ourcq | 67 |
| Ardennes (uniting Aisne and Canal de l'Est) | 62 |
| From Rhone to Cette | 77 |
| Canal de la Haute Marne | 60 |
| St. Quentin (uniting Scheldt with Somme and Oise) | 58 |

The Seine is navigable for 339 miles, of which 293 miles is first-class navigability, giving Rouen access to the sea. The Aisne is navigable for 37; the Marne 114; the Saone 234; all first-class. The Oise is navigable for 99 (65 first-class); the Rhone 309 (30 first-class); the Loire 452 (35 first-class); the Garonne 289 (96 first-class); and the Dordogne 167 (26 first-class). The river traffic in normal times is 42,000,000 tons a year.

A programme was adopted in 1919 for the extension and improvement of the canal system. There is in process of working out a project for a lateral canal along the Rhine from Strasbourg to

Huningue, near Basle, Switzerland, which will provide for the very heavy river traffic up to Basle and will furnish much hydro-electric power as well. It is proposed to give this canal a breadth of over 86 metres and a depth of between 6 and 7 metres, dimensions not much below those of the Panama Canal, with locks 25 x 170 metres. This would accommodate in 300 days of 12 hours 1,800 strings of barges, each with a capacity of between 2,000 and 2,400 tons yearly, a total of between 3,600,000 and 4,300,000 tons. Night traffic would double this figure.

France has six great railway systems constructed under various concessions which expire at various dates from 1950 to 1960, when they revert to the state. They represent an instalment cost of 25,000,000,000 francs. The deficit in 1920 is estimated as not less than 3,300,000,000 francs. These lines with their mileage in 1919 are:

| *Railroads.* | *Mileage.* |
|---|---|
| Ouest Etat | 5,587 |
| Nord | 2,146 |
| Est | 3,117 |
| Paris to Orleans | 4,781 |
| Paris, Lyon-Mediterranean | 6,064 |
| Midi | 2,516 |
| Total | 24,211 |

Of the main lines, 1,030 miles were destroyed in the war. All had been rebuilt by May 1, 1921; of local lines 1,490 miles were destroyed and 1,262 miles had been rebuilt.

In addition, there were in 1919 the Paris belt line, 20 miles; the Grand belt line, 78 miles; secondary lines, 839 miles; and non-concessionary roads, 20 miles; and 1,083 miles in Alsace-Lorraine, making a grand total of 26,250 miles.

There entered French ports in 1921 22,920 vessels of 27,298,555 tons register, of which 7,776 vessels of 8,595,738 tons were French.

## ALSACE-LORRAINE REDEEMED.

Alsace-Lorraine had been taken from France after the Franco-Prussian War by the Treaty of Frankfurt, May 10, 1871. The reason had been briefly given by Bismarck eight days before, saying: "We could do nothing but take these territories with their powerful fortresses within the framework of Germany, so as to make of them a glacis of Germany against France." The solemn protest which the Deputies of the provinces made then at Bordeaux against separation from France never was stilled. As the "Reichsland" Germany governed the country under a system of dictatorship until 1902, when its weight was lightened. A Constitution was granted in 1911, but it failed to satisfy. By the Treaty of Versailles, June 29, 1919, the provinces were transferred back to France as of Nov. 11, 1918. The day after the armistice the Parliament of Alsace-Loraine, elected by universal suffrage in 1911, had declared itself a National Assembly and greeted with joy the return to France as a "constant and unalterable desire" and an "inviolable right." The entire unanimity of people and parties was brought out in the general elections of Nov. 16, 1919.

Germany, during her occupation of 48 years, had introduced her own administrative methods and laws. France set a High Commission, assisted by a Consultive Council, at work at Strasburg to administer the provinces. The present General Commissioner is M. Gabriel Alapetite, who succeeded M. Millerand in January, 1920. The law of Oct. 17, 1919, maintains in force the legislative arrangements and local regulations until French laws can effectively replace them. The Concordat therefore remains; also denominational schools.

As before 1871, the departments now are Bas-Rhin (lower Alsace, capital Strasbourg), Haut-Rhin (upper Alsace, capital Colmar), and the Moselle (Lorraine, capital Metz). The territory restored to France and its population by the census of 1921 was Lower Alsace (again the Department Bas-Rhin), 1,848 square miles, population 651,586; Upper Alsace (Haut-Rhin), 1,354 square miles, population 468,943; and Lorraine (the Moselle), 2,403 square miles, population 589,120; total, 5,605 square miles; population 1,709,649. By the German census of 1910 the population was 1,874,014; of these the Germans and Austro-Hungarians domiciled there were 301,764. After the war, up to April, 1921, German citizens had left to the number of 76,467. Alsace-Lorraine lost 45,000 men in the war. The pre-war religious figures were: Catholic, 1,428,343; Protestants, 408,274; Jews, 30,483.

Alsace has rich potash fields, discovered in 1904, which gave Germany a monopoly of this product. The output under French hands for 1919 was 512,000 tons, and in 1920 1,222,609. An annual yield of five to six million tons is expected soon. Petroleum output near Woerth is about 50,000 tons a year, and up to 1921 the total yield was 900,000 tons, with over five million tons estimated to be available. The state acquired these deposits in 1921 and turned them over to a private company for exploitation.

Lorraine is rich in iron and coal. The output of each reached its maximum in 1913, with 21,133,676 tons of iron and 3,795,262 tons of coal. The 1920 production was 8,074,989 tons.

France is now the largest European producer of iron ore.

The exclusive rights of exploitation of the coal mines in the Saar Valley were given to France by the Treaty of Versailles as a compensation for the destruction of the coal mines in the north of France. The Saar Valley lies north of Lorraine and contains about 751 square miles and 657,870 population. For 15 years it is to be governed by a commission of five, appointed yearly by the League of Nations. At the end of the period a plebiscite will decide whether it will have a continuance of that rule in a semi-autonomous form, union with France, or union with Germany. Free trade with Germany is assured the district until Jan. 10, 1925. France becomes the sole owner of all the fields and mining concessions and the value of the mines thus ceded were credited to Germany in the reparation account. The average pre-war production of the basin was 12,000,000 tons a year. The output in 1920 was 9,410,433 tons.

Metallurgical industry is highly developed also, there being thirty-one furnaces and steel plants.

## FOREIGN TRADE.

The foreign trade of France for 1921 as compared with 1920 and 1913, the last year before the war, is as follows:

| Imports. | Francs. | Dollars. | Exchange Rates, Francs to Dollars. |
|---|---|---|---|
| 1921 | 23,548,473,000 | 1,744,331,300 | 13.50 |
| 1920 | 49,904,897,000 | 3,441,717 000 | 14.50 |
| 1913 | 8,421,332,000 | 1,625,317,000 | 5.18 |
| Exports. | | | |
| 1921 | 21,553,101,000 | 1,596,526,000 | 13.50 |
| 1920 | 26,894,938,000 | 1,854,823,300 | 14.50 |
| 1913 | 6,880,217,000 | 1,327,881,900 | 5.18 |

The movement of gold, silver, bullion, etc., for these years in francs and in dollars at the gold value of the franc (par of exchange, franc = 19.3 cents; or 5.18 francs to the dollar) was:

| Imports. | Francs. | Dollars. |
|---|---|---|
| 1921 | 363,996,000 | 70,251,200 |
| 1920 | 214,519,000 | 41,402,200 |
| 1913 | 974,981,000 | 188,171,300 |
| Exports. | | |
| 1921 | 555,266,000 | 107,166,300 |
| 1920 | 688,421,000 | 132,865,300 |
| 1913 | 431,360,000 | 83,252,500 |

Considerable progress has been made in opening up the devastated coal mines, as is shown by the output for 1921, which exceeds that of 1920 by over 3,500,000 tons. Total consumption of coal in 1921 was 6,000,000 tons less, due to the industrial depression. The figures for production, imports and exports and consumption are:

| | 1921. *Tons.* | 1920. *Tons.* | 1913. *Tons.* |
|---|---|---|---|
| Production | 28,976,495 | 25,274,304 | 40,000,000 |
| Imports | 22,044 591 | 30 125,774 | 22,866,967 |
| Total supply | 51,021,086 | 55,400,078 | 62,866,967 |
| Less exports | 2,313,265 | 508,267 | 1,742,580 |
| Consumption | 48,707,821 | 54,891,811 | 61,124,387 |

The comparison of imports and exports by weight (metric tons) for the three chief groups for these years follows:

| Imports. | 1921. *Metric tons.* | 1920. *Metric tons.* | 1913. *Metric tons.* |
|---|---|---|---|
| Food products. | 4,066,434 | 6,195,261 | 5,511,932 |
| Industrial materials | 32,448,478 | 41,871,777 | 37,160,735 |
| Manufactures | 1,458,774 | 2,464,888 | 1,547,719 |
| Exports. | | | |
| Food products. | 1,227,133 | 1,257,615 | 1,456,676 |
| Industrial materials | 12,858,481 | 9,709,081 | 18,299,163 |
| Manufactures | 1,890,778 | 1,865,215 | 2,283,324 |
| Postal pkgs | 25,036 | 23,327 | 35,350 |

On merchandise account the excess of imports over exports in 1921 decreased to 1,995,372,000 francs, compared with 23,009,959,000 francs in 1920

and 1,541,115,000 francs in 1913. If the present inflated prices are taken into account the 1921 trade balance was more favorable than the pre-war figure of 1913. In pre-war days France usually had an excess of imports on merchandise accounts which was offset then by income derived from foreign investments.

The import of cereals in 1921 was 1,660,796 metric tons, compared with 3,569,903 in 1920 and 2,929,720 in 1913. The figures for 1921 are the lowest for 10 years, due to an abundant wheat harvest. The imports of meats were indicative of the return of French herds to pre-war conditions. So also that of the beet sugar crop. The figures were:

| Imports of Meats. | 1921. Tons. | 1920. Tons. | 1913. Tons. |
|---|---|---|---|
| Fresh and refrigerated | 65,260 | 153,246 | 3,189 |
| Salted, etc | 12,087 | 41,107 | 6,729 |
| Preserved, etc | 5,519 | 14,694 | 3,633 |
| **Imports of Sugar.** | | | |
| Sugar | 341,787 | 626,337 | 114,957 |

The imports of raw wool, silk, cotton, and copper in 1921 were about one-half the amount of 1913.

Exports of fish, fresh and preserved, reached in 1921 record figures for 10 years at 31,362 tons, as did potatoes and dried vegetables, 282,272 tons. Fresh and preserved vegetables and olive oil increased over 1920, though not reaching pre-war figures. Milk, butter and cheese were down even below the 1920 figures, being 14,933 tons in 1920, as compared with 45,981 tons in 1913. Wine, brandy and liquor exports were:

| Exports. | 1921. Tons. | 1920. Tons. | 1913.. Tons. |
|---|---|---|---|
| Wine | 207,122 | 215,144 | 190,830 |
| Brandy and spirits | 26,790 | 56,987 | 54,523 |
| Liqueurs | 4,862 | 7,792 | 6,103 |

In the export of some manufactured articles and of iron, steel and pig iron these figures were made in 1921, all but two reaching record figures:

| Exports. | 1921. Tons. | 1920. Tons. | 1913. Tons. |
|---|---|---|---|
| Iron, steel and pig iron | 2,091,609 | 1,246,717 | 1,008,327 |
| Machinery | 103,077 | 90,571 | 82,309 |
| Tools and metal goods | 187,867 | 150,877 | 149,249 |
| Cotton goods | 58,646 | 47,870 | 55,355 |
| Woolen goods | 15,554 | 14,272 | 23,408 |
| Prepared hides | 21,366 | 18,764 | 15,420 |
| Chemical products | 963,096 | 919,654 | 1,112,620 |
| Oils, other than olive | 57,578 | 29,112 | 56,414 |

There were decreases over 1920 in the exports of perfumes, soap, pottery and glass, and silk goods.

The United States remained in 1921, as in 1920, France's principal source of supply, with Great Britain a close second, Germany third, and Belgium fourth. Shipments to America, which in 1920 had been only 20 per cent. of purchases there, rose in 1921 to nearly 60 per cent. Belgium was France's best customer in 1921, as in 1920, followed by Great Britain, Germany and the United States in that order.

The prewar figures and those of the last two years of French imports and exports, by countries, are:

IMPORTS.

| Countries of Origin or Destination. | 1921. Thousands of Francs. | 1920. Thousands of Francs. | 1913. Thousands of Francs. |
|---|---|---|---|
| United States | 3,581,789 | 10,866,102 | 894,742 |
| Great Britain | 3,166,585 | 10,318,193 | 1,115,136 |
| Germany | 2,476,446 | 2,667,963 | 1,068,800 |
| Belgium | 1,793,337 | 3,325,484 | 556,277 |
| Argentina | 832,875 | 2,991,686 | 369,268 |
| Italy | 567,657 | 1,282,549 | 240,513 |
| Spain | 509,378 | 1,052,480 | 281,592 |
| Switzerland | 898,493 | 1,043,905 | 135,242 |
| Brazil | 557,065 | 901,107 | 174,273 |
| Algeria | 1,128,753 | 1,053,492 | 330,841 |
| Morocco | 114,033 | 193,396 | 90,429 |
| Other | 8,422,062 | 14,208,340 | 3,234,219 |
| Total imports | 23,548,473 | 49,904,897 | 8,421,332 |
| **EXPORTS.** | | | |
| United States | 2,039,711 | 2,256,515 | 422,623 |
| Great Britain | 3,354,837 | 4,233,267 | 1,453,887 |
| Germany | 2,356,271 | 1,502,118 | 866,766 |
| Belgium | 4,090,876 | 4,473,937 | 1,108,499 |
| Argentina | 249,285 | 445,323 | 199,909 |
| Italy | 771,334 | 1,248,742 | 305,796 |
| Spain | 589,309 | 969,531 | 151,232 |
| Switzerland | 1,169,142 | 1,791,931 | 406,150 |
| Brazil | 129,503 | 362,846 | 86,375 |
| Algeria | 1,447,809 | 2,290,097 | 552,561 |
| Morocco | 455,869 | 649,674 | 78,794 |
| Other | 4,899,155 | 6,665,957 | 1,247,625 |
| Total exports | 21,553,101 | 26,894,938 | 6,880,217 |

It might be noted that American and British purchases of lingerie and wearing apparel in 1921 greatly exceeded normal figures and that the exports of wines to the United States were 6,568 hectolitres (a hectolitre is 26.4 U. S. gallons) in 1921, 4,168 in 1920 and 37,553 in 1913.

"The figures indicate that Germany is steadily regaining its old position as one of France's best customers and principal source of supply," says U. S. Consul General A. M. Thackara, of Paris, reporting the above figures to the United States Department of Commerce, "while France is rapidly becoming not only independent of foreign supplies of metals and metal goods but seems likely to secure markets abroad for these goods in place of its principal competitors."

Agriculture is still the chief occupation of the French. The acreage given over to wheat, rye, barley, oats and corn in 1921 (including Alsace-Lorraine) was 26,881,000; to potatoes, 3,806,900; to sugar beets, 254,500; to tobacco, 35,900; and to hemp and flax, 62,300. The production of apples and pears for cider in 1921 was 3,639,701 tons of fruit and 21,942,850 hectolitres of cider. The crop of table apples was 144,188 tons; of pears, 52,067 tons; of chestnuts, 165,557 tons; of olives, 72,613 tons; all greatly exceeding the 1920 output. Forests cover 25,000,000 acres, over 18 per cent. of the land, and about 10,000,000 acres are returned as moor and uncultivable. Stock raising suffered greatly during the war but is reviving.

## RECONSTRUCTION.

A few figures will set forth the burden the war laid upon France. Her prewar population, census of 1911, was 39,601,509. During the war the birth rate was less than one-half the normal. The number of births in 1913 was 790,355; in 1916, 315,087; in 1917, 343,310; in 1918, 399,041; in 1919, 403,502; and in 1920, 834,411.

The number of men from 19 to 50 mobilized for the defense of France was 8,400,000; the number of men killed, 1,364,000; the number mutilated, 740,000; the number wounded, 3,000,000.

Alsace-Lorraine, redeemed, brought back to the tri-color, as shown by the census of 1921, 1,709,749. Yet this census of 1921 returned the total population of enlarged France as 39,209,766, a loss of 391,743. Moreover, France, always a most attractive country to foreigners, counted as residents in 1911, 1,152,096 foreigners, and in 1921, 1,550,449, an increase of 398,353. This would indicate a net loss of French citizens amounting to 790,696. Moreover, the loss to France was almost wholly of her workers.

The invading German army for nearly five years occupied ten departments in the most populous part of France where industrial plants were most numerous, mines highly important, and fields intensely cultivated. The invaders sent machinery and movables across the Rhine. Battle trenches, high explosive shells, mines, and all the might of war left these regions devastated. But as the invaders were driven back the refugees, stout-hearted and undaunted, returned to what had been their homes, their fields, their factories, and then and there began the work of reconstruction. American visitors travel through these departments in railroads, once ruined, now rebuilt, without a thought of the work that has been done. Statesmen said, and the Peace Conference decreed, that Germany should make reparation for the devastation her armies wrought, should pay for the reconstruction.

France went steadfastly and courageously at work. The Ministry of the Liberated Regions was established. The district covered ten departments: the Aisne, Ardennes, Marne, Meurthe-et-Moselle, Meuse, Nord, Oise, Pas-de-Calais, Somme and Vosges; comprised roughly by a line south from Dunkirk to Senlis, east to St. Die, thence north to the Belgian frontier. The first task of the Government was to restore the ruined railroads and roads, and of the farmers and workmen to clear out cellars and build shacks of any kind out of any materials, mostly the wastage of war that could be found. The Government pledged its credit and issued bonds for this work up to 45,000,000,000 francs. German prisoners were set at work clearing up the battlefields and 300,000 laborers, mostly Poles and Italians, have been brought in to work at wages averaging 20 francs a day. The work done has been enormous. The amount of money spent is the reason for the insistence of the French, demand that Germany shall pay.

In figures the record is:

| | |
|---|---|
| Total amount of damage, francs | 102,000,000,000 |
| Spent by France to September, 1922, francs | 44,000,000,000 |
| Inhabitants driven out | 4,690,183 |
| Returned up to Oct. 1, 1922 | 4,059,470 |
| Municipalities abandoned | 3,256 |
| Re-established by April, 1921 | 3,216 |

| | |
|---|---|
| Houses destroyed or damaged | 741,883 |
| Rebuilt, Oct. 1, 1922 | 5,524 |
| Repaired provisionally | 181,417 |
| Definitely repaired | 221,533 |
| Factories destroyed | 22,167 |
| Rebuilt, Oct. 1, 1922 | 19,923 |
| Railroads (main) destroyed, miles | 1,030 |
| Repaired by May, 1921, miles | 1,030 |
| Railroads (local) destroyed, miles | 1,490 |
| Repaired by May, 1921, miles | 1,262 |
| Roads destroyed, miles | 33,546 |
| Rebuilt, miles | 18,338 |
| Engineering works destroyed | 4,686 |
| Reconstructed, September, 1922 | 4,360 |
| Schools destroyed | 7,271 |
| Re-established | 3,795 |
| Acres of land devastated | 9,116,383 |
| Readapted to cultivation, Sept., 1922 | 4,366,998 |
| Awaiting their turn, acres | 707,141 |
| Trenches to be filled in, cu. yds | 436,232,000 |
| Filled by Jan. 1, 1921, cu. yds | 288,504,578 |
| Filled by Jan. 1, 1922, cu. yds | 340,329,402 |
| Total filled by Sept. 1, 1922, cu. yds | 364,435,450 |
| Barbed wire to be removed, sq. yds | 446,108,000 |
| Removed Jan. 1, 1921, sq. yds | 297,823,105 |
| Removed Jan. 1, 1922, sq. yds | 329,551,357 |
| Total removed Sept. 1, 1922, sq. yds | 340,774,224 |
| Shells destroyed. January, 1921, tons | 21,000 |
| Total Sept. 1, 1922, tons | 1,033,793 |
| Prewar cattle | 892,328 |
| Supplied up to Oct. 1, 1922 | 509,848 |
| Prewar horses | 407,988 |
| Supplied up to Oct. 1, 1922 | 293,190 |
| Prewar sheep | 949,774 |
| Supplied up to Oct. 1, 1922 | 380,782 |
| Prewar pigs | 356,610 |
| Supplied up to Oct. 1, 1922 | 176,051 |

The Ministry for the Liberated Regions, it might be added, as part of the work had furnished, up to January, 1921, the farmers who were putting the land back in order with 15,400 ploughs, 28,733 harrows, 14,935 mowers, 11,680 reapers and binders, 11,353 cream separators and churns, 25,150 carts, 56,638 sets of harness, and 185,865 other machines.

## GOVERNMENT OF FRANCE.

The constitutional law under which France is governed was adopted in 1875 and was partially modified in 1879, 1884, 1885, and 1889. Legislative power rests in a Senate and a Chamber of Deputies. The 610 Deputies are elected by direct vote by manhood suffrage every four years; a form of proportional representation is in effect. The 314 Senators are elected for nine years, one-third retiring every three years; the election is indirect and made by an electoral body in each district made up of delegates chosen by the municipal councils of each commune, and of the Deputies, councillor-generals and district councillors of the department. The two Houses meet yearly on the second Tuesday in January and must remain in session at least five months out of the twelve.

The complexion of the Senate elected Jan. 11, 1920 was: Radicals, 120; Republicans of the Left, 58; Progressives, 23; Conservatives, 20; Liberal Republicans, 14; Socialist Republicans, 2; Unified Socialists, 2.

The Chamber of Deputies, elected Nov. 16, 1919: Republicans of the Left, 133; Progressives, 130; Socialist Radicals, 83; Action Liberale, 72; Unified Socialists, 68; Radicals, 60; Conservatives, 31; Republican Socialists, 27; Dissident Socialists, 6.

The two Houses, united as a National Assembly, elect a President of the Republic to serve seven years, meeting immediately whenever a vacancy occurs. The President selects a Ministry generally from the two Chambers but may go outside the membership. In practice the President summons a leader who can obtain a majority in the Chambers in support of his policies as President of the Council (Premier) and he makes up his list of Ministers and submits it for approval. The number of portfolios varies, numbering in the Ministry of M. Poincare (1922) fourteen, viz.: Foreign Affairs, Justice, Interior, War, Marine, Finance, Colonies, Public Instruction and Fine Arts, Public Works, Commerce, Agriculture, Labor, Liberated Regions, and Hygiene, Assistance and Social Welfare. Each Minister is responsible to the Chambers for his acts and the Ministry as a whole is responsible for the general policy of the Government.

The unit of local government is the commune, of which the 90 departments (excluding the three in Algeria) had, in 1921, in all 37,963. Of these 22,024 have less than 500 inhabitants; 11,962 have between 500 and 1,500; 140 only have more than 20,000. Each commune elects by universal suffrage a municipal council which in turn elects a Mayor, who is both the representative of the commune, the agent of the central government, and the head of the police. Each department has representatives of all the Ministries and is placed under a Prefect nominated by the Government and having wide functions. The elected Conseils d'arrondissement (385 in France) are charged with allotting the direct taxes.

France has not extended the franchise to women, although in May, 1919, the Chamber of Deputies voted a bill recognizing the full political rights of French women.

Diplomatic relations with the Vatican, broken off June 30, 1904, were restored in May, 1921, when M. Jonnart was sent there as Ambassador. No religion is recognized by the state.

France has an act passed in 1905 for the relief of the aged, poor, infirm, and incurable. The age limit, first placed at 70, was five years later reduced to 65. This act was supplemented by the Old Age Pensions act of April 5, 1910, which provides a system by which both employers and workers contribute. On Dec. 31, 1918, 10,475,272 persons were registered under it.

The school system of France is highly developed. Primary instruction is free since 1881 and compulsory since 1882 for all children from 6 to 13. The teachers are, by the law of 1886, lay. The public schools, primary, secondary and superior form the University of France, and are administered by the Ministry of Public Instruction, with the aid of a Superior Council and a force of seven Inspectors-General and Inspectors. There are seventeen circumscriptions called academies, each with a council to deal with instruction. Each department has a council, presided over by the Prefect, for primary school matters with large powers regarding inspection, management and maintenance, and each department must maintain two primary normal schools, one for men and one for women.

The expenditure on the public schools and for technical schools, not including those under the Ministry des Beaux-Arts, was:

| | *Francs.* |
|---|---|
| For public schools, 1921 | 1,261,620,729 |
| For public schools, 1922 | 1,380,472,904 |

## THE BUDGETS.

The normal budgets were:

| | *Francs.* |
|---|---|
| 1921—Revenues | 29,160,155,234 |
| Expenditures | 29,120,541,626 |
| 1922—Revenues | 28,362,328,929 |
| Expenditures | 28,348,952,965 |

To these figures there must be added the extraordinary expenses due to war, military pensions, and reconstruction to be repaid from receipts from Germany on the reparation account, which are provisionally covered in part by loans. The amounts are:

| | *Francs.* |
|---|---|
| 1921—Extraordinary expenditures | 15,317,184,792 |
| 1922—Extraordinary expenditures | 10,558,534,377 |

The cost to France of her army and navy in the last three budgets was:

| | *Francs.* |
|---|---|
| Army, 1920 | 4,236,599,884 |
| " 1921 | 4,462,003,675 |
| " 1922 | 3,426,284,959 |
| Navy, 1920 | 868,224,082 |
| " 1921 | 951,542,607 |
| " 1922 | 797,804,914 |

France officially notified the League of Nations on September 10 that the strength of the French Army, metropolitan and colonial, was 690,000 men, although the new French law provides for 725,000. Of this 690,000 men it is stated that 335,000 are stationed in France proper, 92,000 on the Rhine, 70,000 are used in carrying out treaty stipulations in the Saar, Syria, the Cameroons and Togoland, while the rest are stationed in the French colonies. In the total are 100,000 professional soldiers, 375,000 conscripts, 205,000 colonial natives and 10,000 foreigners. The War Department authorized a statement on September 26 that the Senegalese contingent numbered 48,129 on Jan. 1, 1922, and that not one of these had been on the Rhine since 1920, though 7,903 were quartered at Toulon.

France has not yet ratified the treaties reducing naval armaments, signed at the Washington Peace Conference (which see).

France is a member of the League of Nations.

The debt of France on March 31, 1922 was:

| | *Francs.* |
|---|---|
| Debt—Internal | 155,058,325,853 |
| Floating | 87,050,312,100 |
| Foreign | 74,876,351,000 |
| Total debt | 316,984,988,953 |

*FRENCH COLONIAL POSSESSIONS.*

| | Square Miles. | Population. |
|---|---|---|
| In Asia | 256,196 | 17,268,728 |
| In Africa | 4,820,548 | 35,773,895 |
| In America | 33,200 | 459,082 |
| In Oceania | 9,194 | 81,200 |
| Total | 5,119,138 | 53,582,905 |

*ALGERIA.*

AREA, 222,180 square miles.

POPULATION, census of March 6, 1921: northern territory, 5,253,137; southern territory, 547,837; total, 5,800,974; of which 821,427 were Europeans, mostly French and Spaniards.

CAPITAL, Algiers, population, 1921, 206,595. Other cities: Oran, population 141,156; Constantine, 78,220; Bona, 45,171; Tlemcen, 43,090; Sidi-bel-Abbes, 37,752, and six other cities above 25,000.

*Governor General*, Theodore Steeg, appointed July 29, 1921.

*United States Consul at Algiers*, Edward A. Dow.

Algeria is in the northern part of Africa, extending for 650 miles along the Mediterranean Sea, between Tunis on the east and Morocco on the west. Both neighbors are French protectorates (see following). The northern territory extends inland approximately 350 miles; beyond the four southern territories extend southward indefinitely into the Sahara Desert, merging into French West Africa. The boundaries have not been fixed but the 20° of north latitude may be considered as an approximate divisional line. These four southern territories form a separate colony, are sparsely peopled by nomads, and each is under a military commander.

Algeria had for several centuries been under nominal Turkish sovereignty, but in fact was controlled by the Barbary pirates. England and France were making a half-hearted effort to suppress them, when acts of arrogance by the Dey of Algiers brought from France a punitive force in 1830. The adventure developed into a colonizing undertaking, bitterly opposed by Abd-el-Kader and his fighting men until 1847. Three insurrections later were put down and by 1881 the country was sufficiently quiet to permit the French to push on inland. By 1905 this control was extended over the desert. The help given by the native population to France in the World War resulted in a law, passed Feb. 4, 1919, giving French citizenship to native Algerians who had served in the army or navy, was a landowner, farmer, or been a trader, could read or write French, or held a French decoration. The northern territory is divided into three departments, each of which sends a Senator and two Deputies to Paris; only French citizens being allowed to vote.

The country is governed by a Governor General with the aid of a consultive council and a supreme council and three financial delegations (French colonists, French taxpayers other than colonists, and Mohammedan natives), whose especial care is the budget and the taxes. The Governor prepares the budget, which in 1922 was: Revenues, 604,157,674 francs: expenditures, 603,815,199 francs.

Algeria has prospered greatly under peace and French rule. The country has four marked divisions. On the coast is an area, the Tell, from 50 to 100 miles wide, of very fertile plains with valleys running out from the hills, mainly owned by Europeans, which is cultivated scientifically. Behind the Tell is the tableland of the Shat with an elevation of 3,000 feet, arid, or covered with salt lakes and swamp. The two chains of the Atlas Mountains, reaching to altitudes of 7,000 feet, divide the country from the Sahara.

The French have driven artesian wells and brought scientific irrigation and fertilizer to the land of the Tell. Agriculture has made great strides; wheat, barley and oats grow in abundance. The production of wheat in 1921 was 1,099,300 tons from 2,904,811 acres; barley, 1,099,300 tons from 2,513,943 acres; and oats, 170,650 tons from 573,885 acres. Fruits, olives, and tobacco are grown in the interior valley and about 500,000 acres have been planted to vineyards. The output of wines has increased greatly, 157,136,452 gallons in 1920, and nearly all the product is taken to France. Cattle and sheep are a source of great wealth and hides and wool are exported.

The country is rich in minerals, as yet very little exploited. In 1920, 1,114,438 tons of iron ore were exported and 334,704 tons of phosphates. Copper, zinc, lead and antimony are mined. Coal was discovered during the war, and petroleum in Oran.

The French have improved the ports, built 3,330 miles of excellent roads, and there were, in 1921, 2,228 miles of railroads. The three ports have also been improved; Algiers in 1920 handled 6,264,735 tons of merchandise; Oran, 3,975,762 tons and Bona, 1,106,362 tons. In 1921 11,199 vessels of 9,201,437 tons entered the ports.

*TUNIS.*

(French Protectorate.)

AREA, about 50,000 square miles.

POPULATION, census of 1921, 2,093,939, of which 156,115 were Europeans (54,476 French, 84,799 Italians); and 1,937,824 natives (1,889,388 Arabs and Bedouins, 48,436 Jews).

CAPITAL, Tunis, population, 1921, 170,381, of which 22,206 were French and 42,592 Italians.

*Bey*, Sidi Mohammed el Habib, born 1858, succeeded his cousin, Sidi Mohammed Ben Nasr Bey, who died July 10, 1922.

*French Resident General*, Lucien Saint, appointed Nov. 24, 1920.

*United States Consul* at Tunis, Harris N. Cookingham.

Tunis, one of the former Barbary states under the suzerainty of Turkey, is situate on the northern coast of Africa, with the Mediterranean Sea on the north and east, on the southeast Italian Libya, on the south the Sahara Desert and on the west Algeria.

The French were obliged to send a military force into the country in 1881 to protect Algeria from the raids of the Khroumer tribes, which resulted in a treaty signed May 12, 1881, placing Tunis under the protectorate of France. Most of the tribes have settled down to agriculture and stock raising. Difficulties of administration which followed the old Turkish system have been great but the French have met them admirably and have made the country prosperous.

There are large fertile valleys in the mountainous north, excellent land for fruit culture in the northeast peninsula, high tablelands and pastures in the centre, and famous oases and gardens in the south where dates grow in profusion. The chief industry is agriculture and there are 7,925,000 acres of arable land, 2,740,000 acres of forests, including 12,000,000 olive trees and 2,137,975 date palm trees, 58,835 acres of vineyards and 11,535,000 acres of pasturage. The vineyards produced 11,000,000 gallons of wine in 1920 and the date orchards 87,520,000 pounds of dates.

Iron, zinc, and lead mines are being developed and the output from the very rich phosphate deposits in 1920 reached 1,075,000 tons. The railway mileage was 2,493 on Jan. 1, 1921. There are 2,886 miles of good roads. In 1920 there entered the ports 8,428 vessels of 2,355,319 tons.

The value of the imports in 1919 was 285,761,000 francs and of exports 202,028,000 francs.

The administration is under the French Foreign Office.

*FRENCH WEST AFRICA.*

AREA, about 1,800,566 square miles, exclusive of the Sahara Desert, about 1,500,000 square miles.

POPULATION, census of 1921, 12,283,962, of which 6,829 are French and 1,826 other Europeans.

CAPITAL, Dakar, in Senegal; population, 1918, 25,468, of which 2,791 are French.

*Governor General*, M. Merlin, appointed January, 1918.

French West Africa reaches from the Atlantic Ocean at about 17° west longitude across Africa to the Soudan at about 24° east longitude and from the southern desert boundaries of Morocco, Algeria, Tunis and Italian Libya to the Gulf of Guinea and the indeterminate boundary of French Equatorial Africa. It has been formed by consolidation of existing colonies as follows:

| Colony. | Square miles. | Population. |
|---|---|---|
| Senegal | 74,112 | 1,225,523 |
| Guinea | 95,218 | 1,875,996 |
| Ivory Coast | 121,976 | 1,545,680 |
| Dahomey | 42,460 | 842,243 |
| French Soudan | 617,000 | 2,474,589 |
| Upper Volta | 154,400 | 2,974,142 |
| Mauritania | 345,400 | 261,746 |
| Territory of Niger | 349,400 | 1,084,043 |
| Total | 1,800,566 | 12,283,962 |

Of Togoland, the only German colony that was self-supporting, France received 20,200 square miles, about two-thirds. It is attached to French Dahomey.

The colonies are each under a Lieutenant Governor. There is a general budget for all, that for 1921 balancing at 64,604,240 francs.

The colonies export fruits, palm nuts and oil, rubber, cotton, cacao, and timber. The chief imports are foodstuffs, textiles, machinery and hardware, and spirits. Imports for 1920 were 654,638,301 francs and exports, 589,051,244 francs.

In 1921 the railroad mileage was 1,860 miles

There entered the ports 3,169 vessels of 6,430,949 tons in 1919.

Dakar is the best port on that coast, having modern equipment.

### *FRENCH EQUATORIAL AFRICA.*
(French Congo.)

AREA, 982,049 square miles.

POPULATION, estimated, 1915, 6,370,000.

CAPITAL, Brazzaville, on the Congo.

*Governor-General*, M. Alfassa, appointed 1921.

French Equatorial Africa extends from Spanish Guinea, just south of the Cameroon, to Belgian Congo. Its eastern boundary is the Ubangi and Congo Rivers and the Soudan. On the west is the Cameroon. French acquisition began in 1841 and its territory has since been extended by exploration and occupation, and the limits defined by international convention. That part (107,270 square miles) ceded to Germany as compensation for acknowledgment of the Morocco protectorate in 1911 was restored to France in the Treaty of Versailles and incorporated in this territory. France, on Jan. 15, 1910, renamed the French Congo French Equatorial Africa and subdivided it into three colonies under one administration, subsequently adding Chad as a colony. The four colonies are:

| Colony. | Area, square miles. | Population. |
|---|---|---|
| Gabun | 121,862 | 1,300,000 |
| Middle Congo | 150,292 | 1,390,000 |
| Ubangi-Shari | 208,219 | 1,590,000 |
| Chad | 501,676 | 2,090,000 |

There are 30,000 square miles of tropical forest, rich in timber, but the output as yet is only wild rubber, of which 2,122 tons were exported in 1920. Palm oil output for export was 7,352 tons. Copper, lead and zinc are found. The import figures for 1920 were 18,370,512 francs; exports, 31,246,248 francs. A railroad to connect Brazzaville with Pointe Novie on the Atlantic was begun February, 1921.

### *CAMEROON.*
(French Mandate.)

AREA, 166,489 square miles.

POPULATION, estimated, 1921, 1,750,000.

CAPITAL, Yaounde.

That part of the former German colony Cameroon not returned to France (see French Equatorial Africa) was by the Treaty of Versailles placed under a French mandate and by decree of March 28, 1921, has been constituted an autonomous territory. It has 359 miles of railroad. The products are tobacco, palm oil, coffee, and ivory. The budget for 1921 balanced at 11,715,500 francs with a special railroad budget of 3,115,100 francs.

### *FRENCH SOMALILAND.*

AREA, 5,790 square miles.

POPULATION, 1921, estimated, 65,000.

CAPITAL, Jibuti; population, 1921, 8,366 (190 French).

French Somaliland lies between Eritrea (Italian) Abyssinia and British Somaliland and is separated by the Straits of Bab-el-Mandeb from Aden (British). Its port, Jibuti, is on the Gulf of Aden. A port was acquired by France in 1862, but active occupation did not begin until 1884. It is administered by a Governor. The colony has few industries; hides, coffee and ivory are exported, and textiles, food products, sugar and coal imported. The figures in 1919 were: imports, 106,301,216 francs; exports, 66,816,294 francs, of which 14,990,097 were Abyssinian goods brought down to Jibuti by the railroad (485 miles long) from Addis Abeba. In 1917 272 steam vessels of 643,290 tons entered Jibuti.

### *MADAGASCAR.*

AREA, estimated, 228,000 square miles.

POPULATION, census of 1918, 3,545,575, of which 15,157 were French, and 3,101 other Europeans.

CAPITAL, Tananarivo; population, 63,115. Ports: Tamatave, Diego Suarez, Majunga and Tulear.

*Governor General*, Hubert Garbit, appointed March 14, 1920.

*United States Consul* at Tananarivo, James C. Carter.

Madagascar, an island off the east coast of Africa, from which it is separated by the Mozambique Channel (240 miles wide at its narrowest part), is about 980 miles long and 360 miles wide at its greatest breadth. It is therefore nearly as large as the State of Texas. To it is attached for government the prosperous archipelago of the Comoro Islands, with an area in all of about 790 square miles, and with 97,617 inhabitants; also Nossi Be (130 square miles).

Madagascar came under a French protectorate in 1885. In January, 1896, it became a French possession and on Aug. 6, 1896, it, together with its dependencies, was declared a French colony. It is administered by a Governor General with a consultive council. Over 2,500,000 acres are under cultivation, the chief crops being rice, manioc, beans, coffee, sugar, tobacco, vanilla, cocoa, cloves, mulberry trees and rubber. The forests are rich in cabinet and dye woods, resins and gums.

Agriculture and stock raising are the chief industries; mining is being developed and 35,000 tons of graphite were produced in 1917 and 27,141 ounces of gold in 1918.

The total railroad mileage in the 1919 was 776 miles. In 1918 the tonnage entering the ports was 630,320. The imports for 1919 were 98,972,737 francs and exports 177,167,590 francs. The budget for 1921 balanced at 66,232,500 francs. The debt amounts to about £4,200,000.

Trade with the United States was:

| | |
|---|---|
| Imports 1920-21 | $201,830 |
| " 1921-22 | 158,918 |
| Exports 1920-21 | 365,578 |
| " 1921-22 | 65,025 |

### *REUNION.*

AREA, 970 square miles.

POPULATION, census of 1921, 173,190, of which 167,789 were of French European origin.

Reunion is in fact an integral part of France, as it is represented in Parliament at Paris by a Senator and two Deputies. It is an island in the Indian Ocean, about 240 miles east of Madagascar, and has belonged to France since 1643. It is administered by a Governor and an Elective Council. The chief products are sugar, rum, coffee, manioc tapioca, vanilla, and spices. The chief imports, rice and cereals. Imports for 1920 were 58,541,861 francs; exports 88,980,113 francs. There are 80 miles of railroad, state owned. In 1920, 68 vessels of 133,181 tons entered the ports. The budget for 1920 balanced at 12,170,760 francs. The debt was 1,122,500 francs.

### *FRENCH INDIA.*

AREA, 196 square miles.

POPULATION, census of 1921, 265,200.

CAPITAL, Pondicherry; population 46,849.

The French possessions in India lie along the Coromandel coast, on the Bay of Bengal, in the southeastern part, to the north of the island of Ceylon. The most important is Pondicherry, established by the French East Indian Company in 1674, and after changing hands eight times finally rested in the control of France in 1814. The colonies are divided in five dependencies: Pondicherry, population, 1921, 170,846; Karikal, 53,027; Chandernager, 25,423; Mahe, 11,199; and Yanson, 4,705. The administration is in the hands of a Governor, and there is a general elective council. The colonies send one Senator and one Deputy to Parliament at Paris. Agriculture is the chief industry and oil seed the chief export. Pondicherry has five cotton mills; 71,213 spindles. There are 43 miles of railroad and in 1920 244 vessels entered the ports. The imports in 1920 were valued at 673,076,798 francs and the exports at 23,805,649 francs.

### *FRENCH INDO-CHINA,*

AREA, Cochin-China, estimated, 22,000 square miles; Annam, 39,758; Cambodia, 57,900; Tonkin, 40,530; Laos, 96,500; Kwangchow, 190; total 256,878.

POPULATION, Cochin-China, 1921, 3,795,613; Annam, 1920, 5,731,189; Cambodia, 2,000,000; Tonkin, 1919, 6,470,250; Laos, 800,000; Kwangchow, 168,000; total 18,965,052. Of these about 23,700 were Europeans.

CAPITAL, Hanoi (Tonkin), population, 1921, 90,303. Chief port, Saigon (Cochin-China), population, 72,372, of which 4,601 were Europeans.

*United States Consul*, at Saigon, Leland L. Smith.

French Indo-China, situate in the southeastern part of Asia with China on the north, Siam on the west and the Gulf of Tonkin and the South China Sea on the east and south, comprises five states: the colony of Cochin-China, the protectorates of Annam, Cambodia, Tonkin and Laos, and also Kwangchow, leased from China (1898) and Battambang, ceded by Siam (1907).

The whole country is under a Governor General with a Secretary General and a superior council, and each state has a head, that of the colony being a Governor, and those of the protectorates being

called Residents Superieur. There is a common budget for Indo-China, which in 1921 balanced at 54,878,400 piastres (par of exchange, 49 cents), and in 1920 a debt of 403,000,000 francs. There is a military force of 25,000 men and a small navy for policing the waters.

Cochin-China sends a Deputy to the Chamber of Deputies at Paris. Saigon, population, 1921, 72,372, is its capital and the chief port of Indo-China.

Annam has a King, Khai Dinh, succeeded 1916, who governs the country with the assistance of his Ministers under the guidance of the French Resident Superieur.

Cambodia also has a King, Sisowath, succeeded in 1904 his brother Norodom, who had recognized the French protectorate in 1864. The land is very fertile but only a part is cultivated. Some cotton is grown. Fishing is the principal native industry. The ruins of a former civilization which had developed a strikingly distinctive art, are very extensive; those of Angkor being especially famous.

Tonkin became a French protectorate in 1884. Its chief town, Hanoi, which was made the capital of Indo-China in 1902 instead of Saigon, is a fine, large, well-built modern city. Though its wealth is in agriculture, like the other provinces, it has valuable hard coal deposits, exporting in 1920 501,665 tons. From the rich limestone quarries in 1920 115,984 tons of cement were exported. There are also valuable zinc mines.

Laos, a protectorate since 1893, has extensive teak forests, and gold, tin and lead are being worked. The Mekong River is its great highway.

Kwangchow, leased from China in 1899, has a free port.

The provinces have been a customs union since 1887, and in 1885 when France forced China to give entirely her sovereignty over Annam, agreements were made for a reduction in tariff rates for goods entering China from Tonkin. France in 1895 obtained special privileges for railroads in southern China.

The railroad mileage in 1921 was 1,427, two-thirds of which is Government-owned. In 1920 there entered the port of Saigon 4,698 vessels of 2,166,464 tons. The imports in 1919 were 791,073,000 francs, and the exports 1,050,893,000 francs. Indo-China ranks second to Burma as the greatest rice exporting country in the world.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $1,337,253 |
| " | 1921-22 | 542,871 |
| Exports, | 1920-21 | 311,419 |
| " | 1921-22 | 96,411 |

*GUADELOUPE.*

AREA, entire group of islands, 688 square miles.

POPULATION, census of 1921, 229,822.

CAPITAL, Basse-Terre; population, 1921, 8,318; Port Pointe-a-Pitre, 27,679.

*United States Consul*, Shelby S. Strother.

Guadeloupe, consisting of two large islands, Basse-Terre and Grande-Terre, separated by a narrow channel, and five smaller islands, is a group of the Windward Islands in the West Indies, between Antigua and Dominica. They have been in the possession of France since 1634 and are represented in Parliament at Paris by a Senator and two Deputies. The Government consists of a Governor and an elected Council. The soil is very productive. The chief exports are sugar, 1920, 14,265 tons; coffee, 1,069 tons; rum, 16,615,518 litres; cacao, 666 tons, and vanilla, 26,636 tons. The value of the exports in 1920 was 146,389,180 francs, and of imports 117,858,064 francs. The budget for 1921 balanced at 16,954,562 francs. The debt, Jan. 1, 1921, was 472,254 francs.

The trade of Guadeloupe and Martinique with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $5,997,446 |
| " | 1921-22 | 2,644,317 |
| Exports, | 1920-21 | 126,274 |
| " | 1921-22 | 86,537 |

*MARTINIQUE.*

AREA, 385 square miles.

POPULATION, census of 1921, 244,439.

CAPITAL, Fort-de-France, population 26,399.

*United States Consul*, Thomas R. Wallace.

Martinique, one of the Windward Islands, in the West Indies, has been a possession of France since 1635. It is represented in the French Parliament by a Senator and two Deputies. It is administered by a Governor, a general council, and elective municipal councils. It has the famous volcano Mt. Pelee, which in eruption in May 8, 1902, destroyed the city of St. Pierre with all its 40,000 inhabitants. The island is the birthplace of the Empress Josephine.

Rum, sugar and cacao are the chief productions. The value of the imports in 1920 was 132,186,470 francs, and of exports, 128,953,479 francs. In 1920 there entered the port 643 vessels of 455,561 tons. The budget for 1920 balanced at 16,198,602 francs.

*ST. PIERRE AND MIQUELON.*

AREA, St. Pierre, 10 square miles; Miquelon, 83.

POPULATION, census of 1921, St. Pierre, 3,419; Miquelon, 499; total 3,918.

CAPITAL, St. Pierre.

St. Pierre and Miquelon are two groups of rocky, barren islands close to the southwestern coast of Newfoundland, inhabited by fishermen. The Government is headed by an Administrator. The exports, cod, fresh and salt, and fish products, in 1920, were valued at 28,047,100 francs, and the imports at 40,846,742 francs. The local budget for 1921 showed expenditures of 1,818,383 francs, toward which France contributed 280,607 francs.

*FRENCH GUIANA.*

AREA, estimated, 32,000 square miles.

POPULATION, census of 1918, 26,325, excluding Indians.

CAPITAL, Cayenne; population, 1919, 13,609.

French Guiana is on the north coast of South America on the Atlantic Ocean, with Dutch Guiana on the west and Brazil on the east and south. The country has lost heavily in population in the last decade, the census of 1911 returning 49,009 inhabitants. It sends one Deputy to the Chamber at Paris. The colony has a Governor and a council general of sixteen elected members. France has had a penal colony there since 1885 and in 1918 it cared for 9,000 convicts. Only 8,800 acres are cultivated. Placer gold mining is the most important industry. The product in 1910 was 123,168 ounces, and in 1918 80,477 ounces. The forests are large and rich in cabinet timber. Imports in 1920 were valued at 40,405,823 francs and exports at 42,674,734 francs. The budget for 1918 balanced at 3,490,000 francs.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $1,312,021 |
| " | 1921-22 | 499,836 |
| Exports, | 1920-21 | 68,627 |
| " | 1921-22 | 329,771 |

*OCEANIA.*

AREA, estimated, 1,520 square miles.

POPULATION, about 30,000, of which about 2,500 are French and 2,500 other Europeans.

CAPITAL, Tahiti, population, 3,617, of whom 1,909 are French.

The French possessions, widely scattered in the southern Pacific Ocean, were grouped together in 1903 as one homogeneous colony under one Governor, with headquarters at Papeete, Tahiti, one of the Society Islands. The other groups are the Marquesas, the Tuamoti Group, the Leeward Islands, the Gambier, the Tubuai, and Rapa Islands.

The chief exports are copra, mother of pearl, vanilla, cocoanuts and oranges. The budget in 1921 balanced at 5,980,000 francs.

Trade of French Oceania with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $1,447,405 |
| " | 1921-22 | 999,978 |
| Exports, | 1920-21 | 1,971,936 |
| " | 1921-22 | 1.130,363 |

*NEW CALEDONIA.*

AREA, 7,650 square miles.

POPULATION, census of 1911, 50,608.

CAPITAL, Noumea; population, census of 1921; 10,053.

France acquired New Caledonia in 1854. Its dependencies are: The Isle of Pines, the Wallis Archipelago, the Loyalty Islands, the Huon Islands, Futuna and Alofi. A Governor administers the colony, assisted by an elective council-general. France has maintained a penal colony on Nou Island, but no convicts have been sent there since 1896.

Mining is becoming the chief industry, the output of nickel from the blast furnaces in 1920 was 3,701 metric tons, and the export of nickel ore was 3,424 tons; of chrome ore, 91,634 tons, and of manganese, 2,693 tons. Exports in 1920 we e valued at 43,043,000 francs; imports at 47,472,000. In 1920, 124 vessels of 128,631 tons entered the ports. The budget for 1921 balanced at 18,35 ,125 francs.

The New Hebrides since 1906 have been jointly administered by High Commissioners of Great Britain and France. Their area is about 5,500 square miles and population about 60,000.

## GEORGIA.

(See under Russia.)

## GERMANY, REPUBLIC OF.

AREA, 185,889 square miles, divided into these states: Prussia, 113,852; Bavaria (with Coburg), 29,501; Wurttemberg, 7,629; Baden, 5,817; Saxony, 5,789; Mecklenburg-Schwerin, 5,068; Thuringia, 4,546; Hesse, 2,966; Oldenburg, 2,482; Brunswick, 1,418; Mecklenburg-Strelitz, 1,131; Anhalt, 888; Lippe, 469; Waldeck, 433; Schaumburg-Lippe, 131; Hamburg, 160; Lubeck, 115; Bremen, 99.

POPULATION, census of Oct. 8, 1919, 59,858,284, divided: Prussia, 36,696,151; Bavaria (with Coburg), 7,140,333; Wurttemberg, 2,518,773; Baden, 2,208,503; Saxony, 4,663,298; Mecklenburg-Schwerin, 657,330; Thuringia, 1,508,025; Hesse, 1,290,988; Oldenburg, 517,765; Brunswick, 480,599; Mecklenburg-Strelitz, 106,394; Anhalt, 331,258; Lippe, 154,318; Waldeck, 55,999; Schaumburg-Lippe, 46,357; Hamburg, 1,050,359; Lubeck, 120,568; Bremen, 311,266.

CAPITAL, Berlin; population, with suburbs, census of 1919, 3,803,770; other cities of over 100,000 population, Hamburg, 985,779; Cologne, 633,904; Munich, 630,711; Leipzig, 604,380; Dresden, 529,326; Breslau, 528,260; Essen, 439,257; Frankfort-on-the-Main, 433,002; Dusseldorf, 407,338; Nurnberg, 352,675; Hanover, 310,431; Stuttgart, 309,197; Chemnitz, 303,775; Dortmund, 295,026; Madgeburg, 285,856; Koenigsberg, 260,895; Bremen, 257,923; Duisburg, 244,302; Stettin, 232,726; Mannheim, 229,576; Kiel, 205,330; Halle-on-Saale, 182,326; Altona, 168,729; Gelsenkirchen, 168,557; Cassel, 162,391; Elberfeld, 157,318; Barmen, 156,326; Augsburg, 154,555; Aachen, 145,748; Bochum, 142,760; Brunswick, 139,539; Karlsruhe, 135,952; Erfurt, 129,646; Mulheim-on-Ruhr, 127,027; Crefeld, 124,325; Lubeck, 113,071; Hamborn, 110,102; Mainz, 107,930; Plauen, 104,918; Muenster, 100,452; and forty-two cities with population of between 50,000 and 100,000. Among the latter is Coblenz, population 56,676, which has been occupied by American troops since the armistice.

*President*, Friedrich Ebert, born Feb. 4, 1871, elected Feb. 11, 1919, term extended to five years.

*Chancellor*, Wilhelm Cuno.

*Ambassador to the United States*, Dr. Otto Wiedfeldt.

*Consul General*, at New York, Erich Kraske.

*United States Ambassador*, Hanson B. Houghton.

*United States Consul General*, at Berlin, William Coffin; *Consuls*, at Bremen, Francis R. Stewart; at Breslau, John E. Kehl; at Coblenz, Elliott Verne Richardson; at Cologne, Emil Sauer; at Dresden, Louis G. Dreyfus Jr.; at Frankfort-on-the-Main, Frederick J. F. Dumont; at Hamburg, J. Klahr Huddle; at Koenigsberg, Albert W. Donegan; at Leipzig, Hernando de Soto; at Munich, vacant; at Stettin, Cornelius Ferris; at Stuttgart, Maxwell K. Moorhead.

It is estimated that the areas and population subtracted from prewar Germany give a total of 27,275 square miles and 6,471,581 population, divided; Alsace-Lorraine, returned to France, 5,604 square miles, and 1,874,014 population; Eupen and Malmedy, ceded to Belgium, 386 square miles, and 60,924 population; part of Eastern and Upper Silesia, ceded to Poland, 17,787 square miles; and 3,853,354 population; Memel, ceded to the Allies, 1,057 square miles, and 140,746 population; Danzig, made a free city, 794 square miles, and 330,252 population; Schleswig northern zone, ceded to Denmark by the plebiscite, 1,537 square miles, and 166,895 population; part of Upper Silesia, ceded to Czechoslovakia, 110 square miles, and 45,396 population.

In addition, the Saar Valley, area 751 square miles, population, 657,870, is to be under the League of Nations and exploited by France for 15 years, then submitted to a plebiscite.

The plebiscite in Upper Silesia, March, 1921, resulted in a majority for retention in the Reich, but, notwithstanding, that territory of 1,255 square miles with a population of 891,669 was annexed to Poland.

The area of the occupied territory is about 9,650 square miles, containing about 7,000,000 inhabitants.

Germany (Deutsches Reich), now a federation of republics in Central Europe, is bounded on the north by the North Sea, Denmark and the Baltic Sea, on the east by Poland, Czechoslovakia and Austria, on the south by Czechoslovakia, Austria and Switzerland, and on the west by France, Luxemburg, Belgium, Holland and the North Sea.

In climate it is characteristically mild in summer and rather cold in winter, as in all western Europe. Its soil is not naturally fertile, being largely a glacial plain over which the action of the ice moved much sand; it has always demanded unusual artificial fertilization. The land naturally was heavily wooded, there being in the country about 160,000,000 acres, of which 35,552,930 acres were forested in 1913, latest available figures. Forestry is far advanced, perhaps more perfected as a science than in any other country. The Black Forest of Germany is famed for its timber and as a resort.

Excepting in the Black Forest, Germany is mostly flat, with slopes toward the north and west.

Mining is a large industry, with much iron and coal lifted, mostly in Prussia, mining districts being Westphalia, the Rhine Provinces, Upper Silesia, and Saxony.

In agriculture, the 160,000,000 acres yield 65,148,000 acres arable, grass, meadow and pastures, 21,760,000; vineyards, 296,500; and other, 12,811,500.

Crops in 1921 were: 2,663,460 metric tons of wheat from 3,603,902 acres; rye, 6,608,023 metric tons from 10,741,417 acres; barley, 1,792,904 metric tons from 3,846,897 acres; oats, 4,715,697 metric tons from 7,974,457 acres; potatoes (1920), 28,248,765 metric tons from 6,149,680 acres; beets (1920), 7,964,024 metric tons from 817,435 acres; hay (1920), 23,659,144 metric tons from 13,721,665 acres.

In 1913 there were in the German Empire 196,084,642 fruit trees—apples, pears, plums, cherries, apricots, peaches and walnuts.

In 1920 the area devoted to vines was 181,653 acres, the wine yield being 53,683,256 gallons, valued at 2,395,274,480 marks.

Domestic animals in 1920 numbered; horses, 3,588,005; cattle, 16,805,950; sheep, 6,149,676; swine, 14,178,375; goats, 4,458,422.

Mining products in 1919 were: Coal, 116,707,234 metric tons; lignite, 93,648,264; iron ore, 6,153,834; zinc ore, 285,596; lead ore, 85,187; copper ore, 616,809; rock salt, 1,487,849; potash, 7,888,152.

Of the coal mined about a third was from Upper Silesia, which has mostly gone to Poland.

Pig iron production in 1913 was 16,763,809 tons, in 1915, 10,154,721; 1916, 11,342,077; 1917, 11,622,168; 1918, 9,208,252; 1919, 5,654,215.

Ingot steel production in 1914 was 13,520,664 tons; 1916, 13,601,451; 1917, 13,778,852; 1918, 11,392,135; 1919, 6,731,699.

Before the war Germany had a virtual monopoly of potash for the world. The return to France of Alsace-Lorraine divided the potash territory.

Industrial development in Germany is not only far advanced but also extremely diversified. The necessity of buying about half of the food consumed compelled large development of industry and mining, with effort to sell products in all foreign markets. Germany's prewar foreign trade assumed large proportions and was growing rapidly.

The common dislocation of all production, agricultural, mineral and industrial, followed the war, although there was some rehabilitation after the armistice, especially before the German mark (par gold at 23.8 American cents) began to fall so rapidly in exchange value. The rate of exchange on November 1 was .000224 cents.

Production of foodstuffs has now approximated closely enough to normal to remove that as an especial problem, excepting that the mark is so low as to render purchases abroad very costly in the German currency. The same is true of the purchases of raw materials for industry, much of which the country must import to carry on industrial prodution.

The loss of the coal production of the Saar Valley subtracted about 12,000,000 metric tons of annual coal output from Germany, and the division of Upper Silesia took away also about 35,000,000 metric tons, the two making about a fourth of the normal coal production of the country.

The spurt by the German export manufacturers for about 24 months following the war, in extending contracts and sales into foreign fields, was checked soon, Germans apparently being unable to deliver on the terms laid in the contracts and sales. The rising scales of labor and the low mark value causing higher prices when expressed in marks for raw materials bought abroad seemed to have estopped the surge of German business across the earth.

Two days before the armistice, that is, on Nov. 9, 1918, the abdication of the German Emperor, William II., was announced. He had fled to Holland, where he has since been living under Dutch surveillance at Doorn. The self-constituted Council of People's Commissioners took over the Government and declared the existing Imperial Parliament dissolved and proclaimed the republic. The reigning Princes of the Federal states were either deposed or abdicated. A call was issued for the election of a National Assembly. Elections, at which all

Germans, men and women over 20 years of age, voted, were held in January, 1919. The composition of the National Assembly thus chosen was: Majority Socialists, 165; Centre (Catholic) Party, 90; Democrats, 75; Conservatives, 42; Independent Socialists, 22; German People's Party, 22; scattering, 7; total 423. It met at Weimar, Feb. 6, 1919, and elected Friedrich Ebert President of the republic on February 11.

The National Assembly adopted a Constitution July 31, 1919. Foreign relations, defense, customs, taxation, and railway service are declared Federal matters; each component state must have a republican constitution; universal suffrage, secret ballot, and proportional representation are provided for. Freedom of speech, of the press and of assembly is guaranteed. The Cabinet appointed by the President must have the confidence of the Reichstag. The Reichsrat consists of 66 members (Prussia 26; Bavaria 10, Saxony 7, Wurttemberg 4, Baden 3, and other states 16).

The Reichstag elected Feb. 20, 1921 is of this complexion: Majority Socialists, 108; Independent Socialists, 61; Centre (Catholic) Party, 72; German National People's Party, 71; German People's Party, 65; German Democratic Party, 40; Bavarian People's Party, 20; scattering, 7; total 469.

Germany's total mobilization in the World War, as given out officially on Oct. 1, 1922, numbered 13,250,000 men, of whom 8,000,000 still were engaged at the end of the fighting. At the height of its expansion, at the beginning of the western offensive, March 31, 1918, these figures state, the German army totalled 3,500,000 enlisted personnel and 140,000 officers on the western front, besides 160,000 enlisted men and 3,000 officers in recruiting depots.

These fighters were distributed among 190 infantry divisions and two defensive cavalry divisions. They were equipped with 32,218 light and 27,143 heavy machine guns, 8,845 mine throwers, 5,652 field rifles, 3,158 light howitzers, 3,083 guns for heavy firing at high elevations, 1,747 guns for heavy fire at low elevations, and 1,137 aerial guns.

Horses to the number of 764,563 were "mustered" into the military service of the Fatherland.

It is estimated that Germany's war expenditures were 186,000,000,000 marks, which is about $46,500,000,000 at gold par for the mark. This includes the cost of technical demobilization.

The Allied estimate is that the total imperial revenues from 1914 to 1918 were 17,000,000,000 marks, or about $4,250,000,000, and the total debt incurred in the war of 157,000,000,000 marks, or about $39,250,000,000 at par of exchange.

Economists have noted also that Germany met the major part of her war needs by issuing evidences of indebtedness and by inflation of credit, taxation devoted to caring for current interest being only about heavy enough to pay that.

Since the armistice, inflation of the circulating medium has been enormous, so much as 3,000,000,000 marks being printed per day in one certain week, and for many weeks 1,000,000,000 a day. The result of these various operations, with credit in outside countries falling constantly, has been that so late as mid-November, 1922, it was estimated that debt and excess circulating medium combined totalled about 750,000,000,000 marks, which at gold par, were such a thing conceivable, would equal $187,500,000,000.

The pre-war debt was 4,504,000,000 marks, or about $1,126,000,000 at par of exchange.

In 1920 the German states surrendered to the Berlin Central Government the right to control direct taxes, hitherto held jealously by the several states. Increases of the direct tax rates followed, income taxes rising 50 per cent.

The stabilizing of German finances and fiscal policies and the creation of a meaningful budget system is rendered more or less impossible by the utter instability of the mark, and its constant tendency to fall in exchange value. Each year that which was to be a "balanced budget" was drafted early in the year, only to appear absurd in mid-year, and not to be recognized when the autumn came.

Late in 1922, it was cabled from Berlin that the prospects for considerable trade and activity by Germans in Russia had been destroyed by the instability and lack of organization in that country, the Krupps and Hugo Stinnes having withdrawn from Russia. After Nov. 1, 1922, the tentative proposal emerged from France that both German marks and Russian rubles be abolished, that Germany be declared bankrupt, and that there be then a building up again from the bottom, with gold as the basis of whatever circulation was to be permitted after the reorganization plan had been formed.

Germany has freedom of religious worship, and there is no state church. Protestants in 1910 numbered 39,991,421, mostly Lutherans; Catholics, 23,821,453; other Christians, 283,946; Jews, 615,021; others, unclassed, 214,152.

Instruction is widespread and compulsory. The 1911 census indicated more than 10,000,000 in the lower schools, about 23,000 in the technical schools, and about 80,000 students in universities, some of which are celebrated and ancient. The University of Berlin, although only slightly over 100 years old, led with 11,807.

Imports in 1920 were 99,077,000,000 marks in value, and exports 69,420,100,000 marks.

Vessels entering German ports in 1919 numbered 39,420, of 7,718,780 tonnage.

The railway mileage of Germany totalled in 1920 35,919, of which 34,689 miles are government-owned.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $381,869,349 |
| " | 1921-22 | 350,442,438 |
| Exports, | 1920-21 | 90,773,014 |
| " | 1921-22 | 95,592,004 |

## GREECE, KINGDOM OF.

AREA, 41,933 square square miles of old Greece; 6,919 square miles of the newer territory; total, 48,852—the new territory being Macedonia, Epirus, and the Aegean Islands.

POPULATION, census of 1920, 4,777,380; divided, old Greece, 2,800,164; newer territories, 1,977,216—Macedonia, 1,144,310; Epirus, 213,276; Crete and six other Aegean islands, 619,630.

CAPITAL, Athens; population, 1920, 300,701; other cities, Salonica, 170,195; Piræus, 133,482; Patras, 52,133; and 27 of more than 4,500 population.

*King*, George II., born July 19, 1890; married on Feb. 27, 1921, to Elizabeth, eldest daughter of King Ferdinand and Queen Marie of Roumania; succeeded his father, King Constantine, who abdicated for the second time, 1922. Constantine, who succeeded his father George I., assassinated March 19, 1913, had abdicated in favor of his second son, Alexander, on June 11, 1917, but had been recalled to the throne by a plebiscite following the death of King Alexander, Oct. 25, 1920.

*Premier*, M. Krokidas (Interior.)

*Minister to the United States*, Lambros A. Coromilas.

*Consuls in the United States*, at New York, George Dracopoulos; at Boston, Leonidas Mateis; at Chicago, Panayiotis Armyriotis; at New Orleans, Leonidas Crysanthopoulis; at St. Louis, Hector M. Pesmazoglou; at San Francisco, C. Panagopoulos.

*United States Minister*, vacant.

*United States Consul General*, at Athens, Will L. Lowrie. *Consuls*, at Patras, George K. Stiles; at Salonica, Leland B. Morris.

By the Treaty of Sevres, 1920, Greece obtained western and eastern Thrace, which stretched along the north shore of the Straits of the Dardanelles and the Sea of Marmora as far as the Bosporus, Turkey being expelled from all except Constantinople and a triangular district about 30 by 40 miles. The Straits were placed under Allied control, the European shore to be under Greek sovereignty, but a neutral zone being established nine miles inland. Thrace, however, has reverted to Turkey by agreement between Great Britain, France, Italy, Turkey and Greece, following the defeat in September, 1922, of the Greek Army in Anatolia by the Turkish Nationalist Army under Mustapha Kemal Pasha. (See Turkey.)

Part of the west coast of Asia Minor, of which Smyrna was the chief city and port, also given by the treaty to Greece for administration, though under Turkish sovereignty, was lost in this campaign and reverted to Turkey. Greece also received the whole coastline of the Aegean Sea and the land back to the crest of the mountains from Bulgaria. Greece's net gain in territory from the war was part of Macedonia, Epirus and six Aegean islands. Crete (Candia) had been annexed in 1913.

In 1912 and 1913 Greece warred with Turkey, and with Bulgaria in 1913, and added to the Grecian area 16,919 square miles of territory, Macedonia, Epirus, the Aegean Islands, and Thrace, which the Treaty of Sevres, as heretofore shown, confirmed to Greece as her permanent territory.

Greece occupies the southern peninsula of the Balkans, stretching down into the Mediterranean Sea, with the Ionian Sea in the west and the Aegean Sea in the east. On the northwest lies Albania, on the north Jugo-Slavia and Bulgaria, and on the northeast corner Turkey, the exact boundary being as yet undetermined. It is about the size of the State of New York. The Indus Mountains, with many spurs, a continuation of the Balkans, runs through the country from north to south. Gulfs and bays are many; the Gulf of Corinth, connected by an 18-mile canal with the Gulf of Aegina, prac-

tically cuts off Sparta from Africa and the northern part of the country.

The authentic history of Greece begins in 776 B. C. and it obtained its greatest glory and power in the fifth century B. C. It became a province of the Roman Empire in 46 B. C., of the Byzantine Empire 395 A. D., and conquered by the Turks in 1456. Greece won its war of independence in 1821-29 and became a kingdom under the guarantee of Great Britain, France and Russia.

Greece proper is chiefly agricultural, with little manufacturing. Only one-fifth of the total area is arable, 12,350,000 of the total of 16,074,000 acres are covered by mountains and lakes and rivers. The forests have been seriously destroyed, but efforts are making to reforest. About 1,300,000 short tons of crops were taken in 1919 from 2,500,000 acres, of which wheat was the chief crop, at 290,000 tons from 373,400 acres. Currants are largely cultivated; 149,000 tons were produced in 1919 and 95,000 tons in 1920. Also barley, oats, corn, tobacco, cotton and wine are produced. Olives abound on about 117,000 acres, and nuts, figs, rice and fruits are produced. Dairy products are of value. Mineral wealth, naturally great, is being rapidly developed, the 1920 output being 155,000 tons. The minerals are lead, magnesia, nickel, zinc, salt, iron pyrites, manganese, iron, emery and chromite, and lignite coal.

The 1917 industrial census showed 2,313 factories, employing 36,124 persons, the output being valued at 260,363,000 drachmas. Cotton mills employed 10,875 persons working 168,000 spindles.

Railway mileage is about 1,470, mostly state owned. There are about 50,000 miles of highways.

The merchant marine in 1921 had 1,192 sailing vessels of 113,726 tonnage, and 408 steamers of 402,221 tonnage. In 1920, there were 2,936 steam vessels entered Grecian ports, of a total tonnage of 3,640,017 tonnage, and 2,600 sailing vessels of 62,083 tonnage.

The Greek Orthodox Church claims the great majority of the people, that being the state religion.

Instruction between ages of 6 and 12 is compulsory, but the law is not well enforced in rural regions.

The unit of the currency is the drachma, its gold par being 19.3 cents. Exchange Nov. 1, 1922, was 2.03.

Imports in 1920 were 2,131,038,321 drachmas; exports, 664,112,647.

The budget of 1921 showed receipts of 1,298,759,754 drachmas, with expenditures the same. No budget was submitted for 1921-22.

The public debt, March, 1921, was 4,200,000,000 drachmas.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $37,804,642 |
| " | 1921-22 | 11,066,880 |
| Exports, | 1920-21 | 24,331,162 |
| " | 1921-22 | 18,566,134 |

## GUATEMALA, REPUBLIC OF.

AREA, 47,500 square miles.

POPULATION, estimated, 2,000,000.

CAPITAL, Guatemala, pop. estd. in 1910, 90,000. It was completely destroyed by earthquakes Jan. 3 and 4, 1917, and rebuilding has been very slow. No estimate is available of its present population.

*President*, Gen. Jose Maria Orellana, 1922-26.

*Premier*, Sr. Aldrian Recinos (Foreign).

*Minister to the United States*, Sr. Don Francisco Sanchez Latour.

*Consuls General in the U. S.*, at New York, vacant; at Jersey City, Virgilio Rodriguez Beteta; at Chicago, Julio J. Brower: at Boston, A. C. Garcia; at New Orleans, vacant. *Consuls*, at San Francisco, Gregorio Cordoza; at Mobile, Guillermo Valenzuela; at Providence, Eduardo G. Kelton.

*United States Minister*, Roy T. Davis (also accredited to Costa Rica).

*United States Consul*, at Guatemala, Arthur C. Frost.

Guatemala, the northern state of Central America, has Mexico for its neighbor on the north and west, British Honduras on the east, Honduras and Salvador on the east and south and the Pacific on the southwest. A range of mountains containing many volcanic peaks runs from northwest to southeast near the Pacific. The narrow west slope is well watered, fertile and the most densely settled part of the republic.

The broad eastern slope is sparsely settled and its chief commercial importance is the production of bananas and timber and chicle (gum) in the Peten district. Coffee and sugar are the chief crops. Stock raising is an important industry. Though rich in mineral resources little is mined owing to lack of transport. Textiles, machinery, etc., and foodstuffs are the chief imports.

Guatemala has about 612 miles of railroads, privately owned but subsidized by the Government. Good roads are few. In 1919 there entered her ports 601 ships of 696,835 tonnage.

Guatemala has a Constitution proclaimed in December, 1879, modified on four occasions, that now provides for universal suffrage, a President elected for six years, a National Assembly, elected for four years and a Council of State of 13 members, partly elected by the Assembly and partly appointed by the President. The Roman Catholic is the prevailing religion. There is complete freedom of worship. Education is free and nominally compulsory. About 60 per cent. of the population is pure Indian and most of the remainder are half castes. Many are held on plantations under a system of peonage. The army numbers 6,200, with a reserve of 126,000.

Manuel Estrada Cabrera ruled the country as a dictator for 22 years. He was turned out in April, 1920, by a revolution which put Carlos Herrera in the President's chair. The latter was overthrown by a coup d'etat Dec. 6, 1921, and Gen. Orellana made Provisional President, being inaugurated for a six-year term, March, 1922.

Guatemala is a member of the League of Nations.

Guatemala is on a silver basis; the peso is 25 grammes in weight, .900 fine. Its value varies, therefore, according to the price of silver. No silver is in circulation. Nominally, silver peso = 50.7 cents.

| | | |
|---|---|---|
| Imports, 1921 | | $13,369,611 |
| Exports, 1921 | | 12,140,826 |
| Budget—Receipts | | 6,739,288 |
| | Expenditures | 7,282,583 |
| Debt—Internal | | No figures available |
| | External, sterling | £1,940,643 |

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $7,550,207 |
| " | 1921-22 | 5,646,907 |
| Exports, | 1920-21 | 14,257,218 |
| " | 1921-22 | 8,934,231 |

## HAITI, REPUBLIC OF.

AREA, 10,204 square miles.

POPULATION, estimated, 2,000,000.

CAPITAL, Port-au-Prince, pop. (estd.), 120,000.

*President*, Louis Borno, 1922-26.

*Premier*, Leon Dejean (Foreign and Worship).

*Minister to the United States*, Albert Blanchet.

*Consul General*, at New York, Andre Faubert; *Consuls*, at Boston, B. Preston Clark; at New Orleans, Emile Marcelin; at Mobile, T. G. McGonigal.

*United States Minister*, Arthur Bailly-Blanchard.

*United States Consul*, at Port-au-Prince, vacant; at Cape Haiten, Damon C. Woods.

Haiti occupies the western portion of the Island of San Domingo, the second largest of the Greater Antilles, lying between Cuba on the west and Porto Rico on the east. The boundary which separates it from the Dominican Republic to the east is 193 miles long. The island is the most fertile of the West Indies. The mountains are covered with rich forest and can be cultivated to the top. Prospecting indicates great mineral wealth, wholly undeveloped. Stock raising is neglected. Coffee is the most important crop and the production of logwood, sugar, cocoa and cotton is increasing.

The majority of the population are Negroes, the rest mostly mulattos descended from the former French settlers. There are about 5,000 foreigners, of which 10 per cent. are white. The Roman Catholic religion prevails. Education is nominally compulsory, but the system is poor and very lax. French is the language of the country.

Haiti, discovered by Columbus in 1492, and a French colony from 1677, attained its independence in 1803 following the revolution headed by Toussaint l'Ouverture in 1791. Its history has been a series of political disturbances and bloodshed. From 1910 to 1915 there were seven Presidents; the last, Gen. Sam, assumed office March 4, 1915, took refuge in the French Legation, July 26, 1915, while 200 political prisoners were massacred in jail, and at the funeral of the victims he himself was dragged out and killed. Two hours later a United States cruiser arrived at Port-au-Prince and landed marines. United States forces occupied the country and restored order.

Sudre Dartiguenave was elected President on Aug. 12, 1915, by the National Assembly which in November ratified a treaty with the United States (which ratified it Feb. 28, 1916), establishing a political and fiscal protectorate by the United States over Haiti for a period of 20 years. The treaty provides that the President of Haiti appoints on nomination by the President of the United States a general receiver of customs to take charge of the custom houses; a financial adviser; American officers (drawn

from the U. S. M. C.) to organize a Haitian constabulary to replace the armed forces, and engineers to supervise public works and sanitation. Haiti agreed not to increase the public debt without consent of the United States. The United States undertook to intervene when necessary for the preservation of Haitian independence and the maintenance of a stable and effective government. The armed constabulary now numbers 2,644 men and order has been maintained. The reserve numbers 20,000. Several hundred miles of roads have been built and a railroad from Port-au-Prince to Cape Haitien, 169 miles distant, is under construction. In 1919 there entered the ports 1,469 ships with tonnage of 91,489.

The Constitution of 1918 provides for a Senate of 15 members for 6 years, and a Chamber of Deputies of about 40 members for 2 years, all elected by popular vote, and a President elected for 4 years by the National Assembly in joint session. The division of authority between the Constitutional Government, the treaty officials and the military occupation has been the cause of much friction, and a delegation visited the United States in 1921 to urge a rearrangement. In September, 1922, Haiti floated a $16,000,000 6 per cent. 30-year loan in New York, being part of the $40,000,000 loan provided for in the protocol between Haiti and the United States, concluded Oct. 3, 1919. It is secured by the customs and internal revenues. The average annual income of Haiti for the past six years has been $4,776,448, and the revenues for the first eight months of the fiscal year, 1921-22, amounted to $3,922,558.

Following the floating of a Haitian loan of $16,000,000 30-year 6 per cent. bonds in New York, for the refunding of the two outstanding French loans, John A. McIlhenny resigned as financial adviser to the Haitian Government and was succeeded by John S. Hord.

Haiti is a member of the League of Nations.

| | |
|---|---|
| Par of exchange, gourde | 20 cents |
| Imports, 1921 | $11,957,205 |
| Exports, 1921 | 4,953,570 |
| Budget—Receipts | 4,669,053 |
| Expenditures | 4,669,053 |
| Debt—Internal | 3,275,380 |
| External, U. S. gold | 30,373,000 |
| Trade with the United States was: | |
| Imports 1920-21 | $10,380,819 |
| " 1921-22 | 8,562,823 |
| Exports 1920-21 | 4,076,857 |
| " 1921-22 | 1,147,090 |

## HEJAZ, KINGDOM OF THE.

(See under Arabia.)

## HOLLAND.

(See Netherlands, the).

## HONDURAS, REPUBLIC OF

AREA, 44,275 square miles.

POPULATION, Jan. 1, 1921, 637,114.

CAPITAL, Tegucigalpa, pop., 1921, 38,950.

*President*, Sr. Don S. Rafael Lopez Gutierrez, 1920-1924.

*Premier*, Sr. Don Guillen Velez (Interior and Justice).

*Minister to the United States*, vacant.

*Consuls General*, at New York, Armando Lopez Ulloa; at New Orleans, Eusebio Toledo Lopez; at St. Louis, Rafael Martinez (in charge); at San Francisco, Marial Lagos. *Consuls*, at Mobile, Benj. Urbizo Vega; at Los Angeles, Manuel F. Rodriguez.

*United States Minister*, Franklin E. Morales.

*United States Consuls*, at Tegucigalpa, George K. Donald; at Ceiba, Alexander K. Sloan.

Honduras is an agricultural and cattle raising state of Central America, bounded on the north by the Caribbean Sea, on the east and south by Nicaragua, on the south and west by Salvador and on the west by Guatemala. The latter boundary is now being determined by a scientific party administered by the American Geographical Society. The coast line on the Caribbean is 400 miles long, the chief ports being Truxillo, Tela Puerto Cortez, Omon, Roatai and La Ceiba. On the Pacific side it has a coast line of 40 miles on the Gulf of Fonseca with a port, Amapala, on Tiger Island, three hours by motor boat from San Lorenzo on the mainland, connected with the capital, 82 miles, by a good automobile road. The country is mountainous, very fertile, though mostly uncultivated, and covered with rich forests.

Mineral resources are abundant but undeveloped. The chief export is bananas, grown on the Carribbean coast 11,524,149 bunches being exported in 1920; exports of cocoanuts that year being 12,647,508. Cattle and hides are also exported. Transport is very backward but is being improved. The country has 463 miles of railroads, laid mostly to provide for the fruit trade. The inhabitants are chiefly Indians with an admixture of Spanish blood.

The country is governed under a Constitution, adopted Sept. 2, 1904, which provides for the direct election by the people of a President for a six year term and a Chamber of Deputies of 42 members, chosen for four years. The President appoints a Cabinet of five Ministers. Education is free and compulsory. The Roman Catholic is the prevailing religion. There is a university at the capital. Military service is compulsory, with 2,900 in the regular army and 43,577 in the first line of the reserve. Of the export and import trade 95 per cent. is with the United States.

The five Central American republics proclaimed their independence as a confederation, July 1, 1823. This confederation soon broke down but renewed efforts were made again and again to re-establish it. The last attempt was made on Sept. 15, 1921 when Honduras, Guatemala and Salvador signed the Constitution of the Federation of Central America. This was to come into effect on Feb. 1, 1922, but collapsed after the Herrera administration in Guatemala was overthrown.

In 1907 representatives of the five Central American states, Mexico and the United States, met in Washington and agreed to adjust any differences that might arise in a Central American Court of Justice, which tribunal was later set up at Cartago, Costa Rica, composed of five Judges, one from each state. On Aug. 20, 1922, on board the U. S. S. Tacoma, in neutral waters of the Gulf of Fonseca, the Presidents of Honduras, Nicaragua and Salvador signed a treaty renewing the treaty of 1907 and extending its scope especially to make impossible the fomenting of revolutions from the territories of neighboring states. The Presidents of Guatemala and Costa Rica were invited to adhere to this agreement and a commercial and economic conference was called. Guatemala declined.

Honduras is a member of the League of Nations.

Honduras is on a silver basis. The peso nominally is equal to 50.7 cents, but fluctuates with the value of silver.

| | |
|---|---|
| Imports, 1921 | $16,722,700 |
| Exports, 1921 | 5,428,587 |
| Budget—Receipts | 7,611,933 |
| Expenditures | 7,684,370 |
| Debt—Internal—No figures available. | |
| External, sterling | £28,188,047 |
| Trade with the United States was: | |
| Imports, 1920-21 | $14,637,695 |
| " 1921-22 | 10,526,633 |
| Exports, 1920-21 | 6,017,554 |
| " 1921-22 | 5,181,943 |

## HUNGARY.

AREA, 35,654 square miles. (Some boundaries to be determined).

POPULATION, census of 1921, 7,840,832.

CAPITAL, Budapest, census of 1921, population, 1,184,616; other cities, Szegal, 109,896; Debreczen, 103.228; Kecskemet, 72,76S; and eight others from 40,000 to 60,000.

*Regent*, Admiral Nicholas von Horthy, born 1867; elected March 1, 1920.

*Premier*, Count Stephen Bethlen (April 14, 1921).

*Minister to the United States*, Count Laszlo Szechenyi.

*Consul General*, at New York, Charles Winter.

*United States Minister*, Theodore Brentano.

*United States Consul*, at Budapest, Edwin Carl Kemp.

Hungary for a thousand years has been the abode of the Magyars. Formerly a kingdom forming an integral part of the Austro-Hungarian Empire, becoming an independent republic after the war, it was much reduced in size by the Treaty of the Trianon, June 4, 1920, losing Transylvania to Roumania, Croatia and Slavonia to Jugo-Slavia. Pre-war, it had 25,000,000 population on 125,608 square miles of territory, or about the size of the States of Ohio, Kentucky and Tennessee; now it is slightly smaller than Indiana, with 7,840,832 population on 35,654 sq. miles. Hungary is now a flat plain with insufficient fuel, no waterpower and a scarcity of raw materials. The Jugo-Slavia and Roumania boundaries are to be determined by a mixed commission. The subtraction of territory took away from the country 21,841,143 domestic animals, 7,821,362 for Roumania, 3,239,164 for Czecho-slovakia, 2-439,066 for Jugo-Slavia and 325,687 for German Austria, leaving Hungary 6,432,744.

Agriculture is the chief activity, with great variety. The soil is fertile; in 1920, from 3,700,000 acres Hungary produced 19,600,000 quintals of wheat, barley, rye, and oats. From the 533,000 acres of vineyards excellent wine is produced.

Forests cover 1,357,438 of the total of 22,784,000 acres of the country. Coal production in 1920 was 4,458,694, plus brown coal and lignite. There were 4,372 miles of railroads in 1921, of which 1,858 were state owned. Hungary now has no seaport. She has 687 miles of navigable rivers.

On the breakup of the Dual Empire, Oct. 31, 1918, a revolution began the movement for a republic, King Charles abdicating Nov. 13. Three days later the republic was proclaimed with Count Michael Karolyi as Provisional President. Disorder followed; a Bolshevik government with Bela Kun dominant was set up March 22, 1919, but was swept away with assistance of the Roumanian army. A national government was re-established on Aug. 7, 1919. Elections, with universal suffrage, were held in January and February, 1920, a bloc of parties of the Right succeeding to control of a Provisional National Assembly which elected a Regent officially styled "Protector of the Magyar Republic." On March 23, 1920, a Government order declared Hungary a monarchy. However, two attempts of the late King-Emperor Charles to regain the throne in 1921 failed dismally.

Freedom of religion is a fundamental tenet of the new state, with equality between the many divergent sects. Four state universities have 4,750 students. The national army under the treaty is limited to 35,000 men and officers, all volunteers; other forces numbering 31,500 being police, gendarmerie and customs guards. Hungary has no air force.

Hungary became a member of the League of Nations in September, 1922.

The crown is the unit of currency, gold par of exchange being 20.26 cents (exchange, Oct. 15, 1922, being .0415 cents). Imports in 1916, last reliable figures, 3,250,000,000 crowns; exports, 2,650,000,000. Budget 1922—

Receipts.....crowns 20,294,193,738
Expenditures.....crowns, 26,762,508,209
Deficit.....crowns, 6,468,314,471

The public debt is 54,453,041,000 crowns, of which 8,287,835,000 is pre-war, 32,631,056,000 incurred in the war, and 13,534,150,000 since the armistice.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $1,521,581 |
| " | 1921-22 | 180,329 |
| Exports, | 1920-21 | 262,410 |
| " | 1921-22 | 193,464 |

## ICELAND, KINGDOM OF.

AREA, 39,799 square miles.

POPULATION, census of 1920, 94,690.

CAPITAL, Reykjavik; population, 17,976; other towns, Akrureyri, 2,700; Vestmannaeyjar, 2,519; Hafnarfjordur, 2,310; Isafjordur, 2,175.

*King*, Charles X. (See Denmark).

*President of the Council*, Siggudur Eggers (Justice and Ecclesiastical Affairs).

Iceland is an island in the North Atlantic Ocean with an area nearly equal to that of Kentucky. It is of volcanic origin and has many geysers and hot springs. It is treeless. Agriculture engages 43,411 of the people, who produce hay, potatoes and turnips mostly. Domestic animals number 651,000, including 579,000 sheep (census of 1918) and furnish five-sixths of the exports. The fisheries output in 1918 was valued at 22,600,000 kroner. Imports include all necessaries. There are no railways, but 320 miles of roads. In 1917, 178 vessels with tonnage of 61,432 entered the ports.

Iceland was an independent republic from 903 to 1263, when it joined with Norway. The two came under Danish rule in 1381. When Norway separated from Denmark in 1814, Iceland remained under Denmark. In 1918 Denmark acknowledged Iceland as a sovereign state, united with Denmark only in that the Danish King, Christian X., was also to be King of Iceland. Its permanent neutrality was guaranteed. Provisionally until 1940 Denmark has charge of its foreign affairs, and a joint committee of six reviews bills of importance to both states.

Iceland has evolved strange social customs and traditions; is admitted to have attained approximately to absolute justice of the sterner sort, and in its constitutional monarchy to have developed an excellent democracy.

Leif Eriesson, the Norseman, sailed from Iceland in the year 1000 and discovered the American mainland, starting a colony called Vinland, probably at New Bedford, Mass.

Trade of Iceland and the Faroe Islands (Danish), which lie between Iceland and the Shetland Islands (British), with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $619,149 |
| " | 1921-22 | 371,882 |
| Exports, | 1920-21 | 107,376 |
| " | 1921-22 | 165,335 |

## IRAQ, KINGDOM OF THE.

MESOPOTAMIA.
(British Mandate.)

AREA, 143,250 square miles.

POPULATION, census of 1920, 2,849,282; divided, Sunni Mohammedans, 1,146,685; Shi'ah Mohammedans, 1,494,015; Jews, 87,488; Christians, 78,792; of other religions, 42,302.

CAPITAL, Bagdad, population, 1920, 170,000; port, Basra, population, 85,600; Mosul (on the site of Nineveh), 90,000.

*King*, Feisal, third son of El Husein ibn Ali, King of the Hejas, crowned Aug. 23, 1921.

*Premier*, The Naqib of Bagdad.

*High Commissioner of Great Britain, the Mandatory Power*, Sir P. Z. Cox.

*U. S. Consul*, at Bagdad, Thomas R. Owens.

Mesopotamia (in classical days "the country from Mosul and Tikrit on the Tigris to the borders of Syria") is the name now applied to the whole Euphrates country in southwest Asia—the former Turkish Villayets of Basra, Bagdad and Mosul. The Arab name for this territory is Iraq. It is bounded on the north by Kurdistan; on the east by Persia; on the south by the Persian Gulf and Kuwait and on the west by the Arabian and Syrian deserts. The boundary lines are indeterminate. It is as large as the States of New York, New Jersey, Pennsylvania and Ohio.

The country is a great alluvial plain stretching from the Persian Gulf 400 miles north, rising in rolling hills in Mosul and beyond to the limestone mountains of Kurdistan. The climate is subtropical and the rainfall (all in the winter months) is scanty, Bagdad averaging 6.64 inches in 29 years. The temperature varies widely; 120 in the shade is not uncommon, and severe frosts in the winter. The country is unhealthy, demanding extreme care. Mosquitoes and sand flies are pests, and malaria and "Bagdad boils" are common. Dysentery and fever are prevalent; cholera, the bubonic plague and typhus fever have frequently scourged the country.

The soil is of extraordinary fertility and engineers estimate that the Tigris-Euphrates Rivers could irrigate 7,000,000 acres in winter and 3,000,000 of varied crops in summer. Half of this area, the report of Sir William Willcocks further declares could be immediately reclaimed if the ancient system of canals and drains were restored. Only regulatory work is attempted at present and about 1,500,000 are under water and improvements in methods of cultivation are urged. Wheat, barley, rice and millet are the chief crops with tobacco in the Kurdish hills. Cotton is being grown and large yields are possible. Dates are grown in the tidal stretches of the Shatt el Arab and the hundred miles from Fao to Qurna on both sides of the river is a continuous date grove. Dates are a staple food of the Arabs and in 1919 £1,470,000 worth were exported. Large flocks of sheep are raised in the north and wool and skins form a considerable export. Industries, weaving, silk spinning, leather working, etc., are for the local market only.

The chief port is Basra, 70 miles up the Shatt el Arab from the Persian Gulf. A railroad runs from Kalat just south of Mosul to Bagdad (designed to be part of the Berlin to Bagdad railroad) and the English have connected Bagdad and Basra by rail (opened Jan. 13, 1920).

The great value of the country to Great Britain is its petroleum. In southeastern Mesopotamia, Great Britain has built great refineries to handle the product of the country and of Persia which is now comparatively small but the reserve is great. The mandate under the Treaty of Peace with Turkey, 1920, for Mesopotamia as an independent state, was intrusted to Great Britain by the Allies, British and Indian forces having conquered the country during the World War, occupying Basra on Nov. 22, 1914 and Bagdad March 11, 1917. A British High Commissioner set up a provisional Arab Government with the Naqib of Bagdad at the head, in November, 1920. Emir Feisal, third son of the Grand Sharif of Mecca, now King of the Hejas, who made a notable reputation as a soldier during the war and as a diplomat at the Paris Peace Conference, presented himself as a candidate for the throne. He was chosen ruler by acclamation as a constitutional democratic sovereign, a choice subsequently ratified by a referendum, and was crowned at Bagdad Aug. 23, 1921. Since then the British garrison has been gradually reduced.

A treaty of alliance between Iraq and Great Britain was signed on Oct. 10, 1922. Under it King Feisal agrees to be guided by the advice of King George on international and financial obligations and interests for the whole period—twenty years—of the treaty. Great Britain agrees to give

such support and assistance to the armed forces of the King of Iraq as may be necessary.
Budget, 1919-20—Receipts.....£3,437,000
Expenditures.....£3,692,000
The trade of the Hejaz, Arabia and the Iraq with the United States in 1921-22 was: Imports, $291,229; exports, $734,523.

## ITALY, KINGDOM OF.

AREA, Prewar Italy, 110,632 square miles; territory added by the war, Alto Adige, 618 square miles; Carinzia, 113; Carniola, 782; Gorizia and Gradisca, 1,138; Triest, 37; Istria, 2,035; Trentino and Ampezzano, 2,627; total, 7,350. Grand total, 117,982. Colonial possessions, Eritrea, 45,435 square miles; Somaliland, 139,430; Libya, estimated (southern boundaries undetermined), 406,000; total, 590,865.

POPULATION, Prewar Italy, census December 1921, 37,270,493; population added by the war, Alto Adige, 24,345; Carinzia, 7,667; Carniola, 88,605; Gorizia and Gradisca, 260,749; Triest, 229,510; Istria, 404,309; Trentino and Ampezzano, 393,111; Zara, 32,551; total, 1,564,691; grand total, 38,835,184. Colonial possessions, Eritrea, pop. census of 1920, 402,893; Somaliland, estimated, 650,000; Libya, estimated, 1,000,000; total, 2,052,893.

CAPITAL, Rome, pop. 1920, 650,000; other cities, Naples, pop. 723,208; Milan, 663,059; Turin, 451,994; Palermo, 345,891; Genoa, 300,139; Florence, 242,147; Catania, 217,389; Bologna, 189,770; Venice, 168,038; Messina (1921), 126,557; Bari, 109,218; Leghorn, 108,585; Padera, 105,135; Ferrara, 102,550; Bresire, 89,622; Verona, 86,448.

*King*, Victor Emmanuel III., born Nov. 11, 1869, succeeded his father, King Humbert I., July 29, 1900; married Helena, daughter of Nicholas, King of Montenegro, Oct. 24, 1896; children, Crown Prince Humbert, Prince of Piedmont, born Sept. 15, 1904; Princess Yolande, born June 1, 1901; Princess Mafalda, born Nov. 19, 1902; Princess Giovanna, born Nov. 13, 1907; and Princess Maria, born Dec. 26, 1914.

*Premier*, Benito Mussolini (Interior and Foreign Affairs).

*Ambassador to the United States*, Prince Gelesio Caetari.

*Consul General in the United States*, at New York, Tenistode Bernardi; *Consuls*, at Boston, Marquis Agostino Terronte di Ruffano; at Philadelphia, Chevalier Luigi Stillitti; at New Orleans, Count Guglielmo Silenzi; at Washington, Salvatore Floria; at Chicago, Count Giulio Bolognesi; at San Francisco, Vincenzo Fileti; at Denver, vacant. There are consular agents at many other cities.

*United States Ambassador*, Richard Washburn Child.

*United States Consuls General*, at Rome, Francis B. Keene; at Genoa, John Ball Osborne. *Consuls*, at Catania, Carl R. Loop; at Florence, W. Roderick Dorsey; at Leghorn, Lucien Memminger; at Messina, Benjamin F. Chase; at Milan, Clarence Carrigan; at Naples, Homer M. Byington; at Palermo, Edward L. Nathan; at Triest, Joseph E. Haven; at Turin, Dana C. Sycks; at Venice, James B. Young.

The Kingdom of Italy occupies the entire Italian peninsula, stretching from the Alps southeast into the Mediterranean, with the islands of Sicily, Sardinia, Elba and about 70 smaller ones. On the east is the Adriatic Sea which it dominates, on the south, the Mediterranean, on the west between the mainland, Sicily and Sardinia is the Tyrrhenian Sea, and further north the Ligurian Sea. The maritime Alps on the west separate it from France, the Swiss Alps in the north from Switzerland, and the Dolomites Alps from Austria, and the Carnac and Julian Alps on the east from Jugo-Slavia. The great plain shut in by these huge mountains, and the Ligurian Apennines, and watered by the Po (220 miles long) and the Adige, shared by the provinces of Piedmont, Lombardy, Emilia and Venetia, stretches across the top from the Maritime Alps to the head of the Adriatic. Its maximum length is 360 miles. The Ligurian Mountains circling the Gulf of Genoa run down the middle of the peninsula as the Apennines, with many summits like Monte Cimone (altitude 7,103 feet) in the northern part, and the Gran Sasso d'Italia (9,560 feet) in Central Italy, nearing the western coastline in Campagna and running down (with altitudes of about 6,000 feet), through the southern province, Calabria, to the "toe of the boot" at Cap Spartivento. Across the narrow strait of Messina the mountain range continues through the Island of Sicily with its famous volcano Mt. Etna (altitude 10,755 feet). The active volcano Mt. Vesuvius rises to an altitude of about 4,000 feet on the Bay of Naples, and north of the Strait of Messina is the island volcano of Stromboli (3,040 feet).

The length of the peninsula is 760 miles, while its breadth nowhere exceeds 150 miles and does not generally measure more than 100 miles. Italy is about equal in area to New England and New York together, and has more than twice their population.

Two rivers, having the greatest historic importance, rise in the Apennines, and flow west to the sea—the Tiber, which flows through Rome, and the Arno, which waters the Florentine plain. The rivers in the south are unimportant. Between the spurs of the Alps lie seven beautiful Italian lakes, especially noteworthy being Como, Lugano, Maggiore and Garda, the last being the largest and the last two over 30 miles long. All are of great depth.

The Adriatic coastline from Rimini to Otranto is flat with but one indentation, and with no harbors worthy of the name save Brindisi. The silt brought down by the Po, the Adige and the eastern streams, also rising in the Alps, have built out the land from Ravenna to the Gulf of Triest, with marshes and lagoons so marked a feature of the mouths of the Po and of Venice. Triest on the western side of the Istrian peninsula, and Fiume on the eastern side, were Austro-Hungary's seaports on the Adriatic. Triest has been joined to Italy as a prize of war, and Fiume, after a bitter quarrel, occupation by d'Annunzio's troops, and much negotiation, has been created by the Italian-Jugo-Slavian treaty (Nov. 12, 1920) a free city. Italians who have not acquiesced in this settlement (the Fascisti) have tried during 1922 to upset this verdict (see Fiume; also chronology of the year for later developments).

The climate of Italy is sunny, although northern Italy has a cold winter; snow is rarely seen in Naples, and olives, oranges, lemons, figs, sugar cane, cotton and pomegranates flourish in Calabria. The soil is fertile and the people industrious and frugal. Italy, through drained before the war by emigration, is one of the most densely populated states in Europe.

The population is unusually homogeneous. In prewar Italy there were about 85,000 of French origin, 10,000 Teutonic in the Val d'Aosta, 81,000 Albanian in Calabria and Sicily, 29,000 Greek, 43,000 Slav, mostly in Cividale, and 12,000 Spanish (Catalans) in Sardinia. In the "redeemed" provinces, formerly Austrian, annexed after the war, there are 215,345 Germans in Alto Adige and 13,920 in the Trentino; 326,715 Slovenes in the northeastern districts, and 141,663 Croats in Istria. The religion of the great majority is Roman Catholic, the census reporting 123,253 Protestants; 34,324 Jews; and 847,532 of no religion. Emigration has been very heavy. The United States census of 1920 reported 1,610,109 Italian-born in the United States alone. In the decade before the war about 650,000 immigrants left Italy annually, and about 500,000 returned each year, being a net loss to Italy of 1,500,000 in that period. It was estimated that the emigrants sent or brought home some 500,000,000 lire a year. In 1914 there were about 1,500,000 residing in Brazil, 1,000,000 in Argentina, 450,000 in France, 220,000 in Switzerland, 120,000 in Germany, and 150,000 in Northern Africa. The war checked emigration greatly, but it reached 230,000 in 1919 and 365,000 in 1920.

Agriculture is the chief industry. Of a total of 71,692,592 acres 65,995,000 are under crops. The number of peasant proprietors is large, especially in Northern Italy. The census of 1921 returned 3,796,561 as proprietors of lands, buildings or both. The wheat acreage in 1921 was 11,927,000; sugar beet, 125,000. There are 5,735,500 acres given over to olives and 10,590,000 to vineyards. The sugar output in 1921 was 170,466 tons. Silk culture flourishes. Dairy farming and cheese making is important in Northern Italy. Italy has suffered greatly from deforestation, but a determined effort has of late been made to reafforest the country. The chestnut crop is of great value. There are about 30,000 vessels and boats and about 110,000 men engaged in fishing.

Italy is not rich in mineral deposits and is especially lacking in coal. Much hydroelectric power is going to waste in the mountains, but the work of harnessing the water is going on. In 1919 Italy imported 6,220,000 tons of coal, of which 1,160,000 were from the United States. The amount dropped in 1920, and about 1,200,000 tons of lignite were mined in her 200 mines. Italy is almost the world's largest producer of sulphur, chiefly in the volcanic regions of Sicily, the amount in 1920 being 296,099 metric tons. Poor in iron, she produced 389,876 metric tons from 529 mines in 1920. The production

of zinc was 95,985 metric tons, and of lead 40,634 metric tons. The possession of the quicksilver mines of Idria in the territory taken from Austria, north of Fiume, makes Italy the foremost producer in the world, the output being about 1,700 metric tons in 1919, and 1,400 in 1920. The quarry industry is important.

Italy's industrial development since 1880 has been great. The chief industries have been steel products, textiles, chemicals, paper, etc. The difficulty of obtaining coal during and after the war, and the fall in exchange, depressed all industry; unemployment was widespread, and strikes and in some cities the seizure of the plants by the working forces disarranged all industry.

Italy in 1920 had 8,761 miles of state railroads operating under a heavy deficit, and 980 miles of privately owned lines; the state had electrified 639 miles by June 30, 1921, and will electrify about 4,000 miles in all. The number of ships entering Italian ports in 1919 were: Italian, 93,397, of 15,164,409 tons; foreign, 4,792 of 8,929,230 tons. The chief ports in order of tonnage entered were Genoa, Naples, Palermo, Leghorn, Venice, Messina and Catania. In her mercantile marine in 1922 were 825 steamers of 3,129,903 tons. In this year the amount of ship subsidies granted was estimated as 300,000,000 lire, the subsidy policy having begun in 1877 when 9,000,000 was given.

Italy, divided, dismembered even for centuries, began to take shape as a unity when, following the war of 1859, Lombardy, by the peace of Zurich, came under the crown of King Victor Emmanuel II. of Sardinia of the house of Savoy. By plebiscite in 1860 Parma, Modena, the Romagna and Tuscany joined, to be followed at once by Sicily and Naples, and by The Marches and Umbria. The first Italian Parliament assembled in February, 1861, and on March 17, 1861, declared Victor Emmanuel King of Italy. Mantua and Venetia were added in 1866, an outcome of the Austro-Prussian war. The Papal States were taken possession of by Italian troops on Sept. 20, 1870, after the withdrawal of the French garrison in the Franco-Prussian war (see Rome, See of), and by plebiscite on Oct. 2 were annexed to the kingdom, thereby rounding out United Italy. Italy suffered heavily in the World War, her northeast provinces having been overrun by the Austrians and Germans after a crushing defeat at Caporetto. Her loss in men was 650,000 killed and missing, and the cost to the kingdom was 48,000,000,000 lire. The increase in territory that followed the war is given in detail above.

The country is governed under an expansion of the Constitution granted to Sardinia in 1848. The executive authority is exercised by the King, acting through a Minister. The legislative power rests with the King and a Parliament of two Houses. The Senate is composed of nine Princes of the Blood and eminent men nominated for life by the King; the number in 1920 was 368. The Lower House consists of 535 Deputies (1 to every 71,000 of the population) elected by districts directly. The electoral law of 1920 provides for universal suffrage of all men and women 21 years old, and the electoral reform of 1919 provided for proportional representation. The complexion of the House elected in May, 1921, was: Constitutionalists, 275; Socialists, 122; Catholics, 107; Communists, 16; Republicans, 7; Germans, 4; and Slavs, 4.

The duration of Parliament is 5 years, but the King has power to dissolve the Lower House at any time; a new election must follow within four months. All money bills must originate in the Lower House.

The army on a peace basis numbers 250,000 men, with 2,350,000 in the reserve. Service is compulsory and universal. The navy has two strongly fortified naval bases, Pola and Spezia. Many of its prewar units have been discarded. (For present condition see Washington Arms Conference.)

Italy is a member of the League of Nations.

The percentage of illiteracy has been high in Italy, especially in Calabria, and the other southern provinces, but in the last decade much progress has been made in correcting it. Lower grade education is compulsory. Italy has ten universities dating from the thirteenth century or the first years of the fourteenth. Famous among these are Bologna (founded 1200), with 3,031 students; Genoa (1243), 2,459 students; Naples (1224), 9,266 students; Padua (1222), 2,082 students; Pavia (1300), 1,512 students; Pisa (1338), 1,729 students, and Rome (1303), 5,178 students. The total number of students at the 21 universities in 1919 was 37,768.

The lira is the unit of currency. At par of exchange, lira = 19.3 cents; exchange rate on Oct. 15, 1922, was 4.23.

| | |
|---|---|
| Imports, 1921, lire | 3,842,425,000 |
| Exports, 1921 | 2,120,000,000 |
| Budget, 1922-23—Receipts, lire | 17,602,957,000 |
| Expenditures | 20,454,809,000 |
| Deficit | 2,851,852,000 |
| Debt, 1920—Capital (nominal) | 72,574,300,000 |
| Rentes, interests, etc. | 3,712,770,638 |
| Sinking fund | 75,830,330,458 |
| Floating debt | 649,000,000 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $302,121,278 |
| " 1921-22 | 138,174,639 |
| Exports, 1920-31 | 59,096,514 |
| " 1921-22 | 61,346,780 |

## Italian Colonial Possessions.

### *ERITREA.*

AREA, 45,435 square miles.

POPULATION, census of 1920, 405,681, of which 2,435 are Italians.

CAPITAL, Asmara; population, 14,711.

*Governor*, Marquis G. Ceirina Ferani; appointed 1919.

Italy's colonial venture in Africa began in 1870 when the port of Assab in the extreme southern part of Eritrea was purchased. Lagging interest was revived in 1885 when the colonial project was vigorously pushed. An effort to establish a protectorate over Abyssinia was made in 1889 but was upset by King Menelek who with an army of 80,000 annihilated a force of 12,000 Italians at the Battle of Adowa in 1896. Eritrea was constituted a colony in 1890.

Eritrea stretches for 620 miles along the African coast of the Red Sea from Cape Kasar to Cape Dumeireh. To the west it is bordered by the Soudan and on the south by Abyssinia. The lowlands along the coast are very hot but the uplands are cool, sometimes cold. Irrigation is necessary to supplement rainfall for the crops and the soil is poor. Agriculture and stock raising are the chief industries. There is a railroad 75 miles long connecting the seaport Massawa (population, 2,275) with the capital, Asmara (altitude 7,765 feet), which is being extended via Keren to Agordat (109 miles) to open up a cotton-growing district. Gold is mined in Hamassen and petr leum is found, but there has been as yet no development.

Efforts to settle large numbers of Italians in the uplands, the only part of the country where Europeans can live permanently, have been abandoned.

The budget for 1921-22 balances at 25,044,000 lire, but this includes a state contribution to the receipts of 6,650,000 lire.

The imports, 1920, were 39,969,000 lire, and exports, 31,126,555 lire.

### *ITALIAN SOMALILAND.*

AREA, 139,430 square miles.

POPULATION, about 650,000.

CAPITAL and port, Mogadishu; population, estimated, 14,000.

*Governor*, Carlo Riveri.

Italy's African colony, the Italian Somaliland, extends along the Indian Ocean from the Gulf of Aden to the Juba River. The coast line runs in a northeast-southwest direction, is 1,100 miles long with no indentation of importance. Jubaland, the valley of the Juba River, was taken from Kenya (German East Africa) and added to the colony to balance British and French acquisitions of former German possessions. Agriculture and cattle and camel raising are the chief industries. In 1920, 619 steamers of 161,481 tons, entered the ports.

The budget for 1921-22 balances at 12,992,000 lire; this includes a state contribution to the receipts of 5,593,000 lire.

The imports for 1920 were 28,447,389 lire and exports 17,623,109 lire.

### *TRIPOLITANIA AND CYRENAICA.*

(Italian Libya.)

AREA, 406,000 square miles.

POPULATION, estimated, 1,000,000 (30 per cent. Arabs, 40 per cent. Negroes, 23 per cent. Jews, 7 per cent. Europeans).

CAPITAL, Tripoli, population, estimated, 73,000, and Benghazi, population, 35,000.

*Governor of Tripolitania*, Guiseppe Volpi, appointed 1921.

*Governor of Cyrenaica*, Luigi Pirtor, appointed 1922.

Tripolitania and Cyrenaica, or Italian Libya, in North Africa, extend along the Mediterranean Sea from Egypt on the east to Tunis (French) on the west. On the south they extend into the desert, the boundary line being unmarked though settled by treaty with France Sept. 12, 1919.

Tripoli, formerly one of the Barbary States and independent since 1714, was reconquered by Turkey

in 1835. During the Turko-Italian war of 1911-12, Italy proclaimed the annexation of Tripoli, which was recognized in the Treaty of Ouchy, Oct. 18, 1912.

The territory was divided into two independent districts for administrative purposes May 17, 1919. In both provinces natives have equal rights with Italians and there is a certain amount of local autonomy by elected local Parliaments.

The prevailing religion is Mohammedan and Arabic is generally spoken.

The country is rather barren but has date palm orchards, olive groves, lemon, almond and fig trees, and vineyards. Some cereals, chiefly barley, are grown. Pasturage is abundant in Cyrenaica. Sponge fishing is important; the value of the product in 1920-21 was 16,424,250 lire. There is considerable caravan trade to the south. The total railroad mileage is 163.

The budget for 1921-22 balanced at 176,752,200 lire. This includes a state contribution to the receipts of 86,821,100 lire.

The imports for 1920 were 196,176,950 lire and exports 62,897,225 lire.

Trade with the United States was:

| | | |
|---|---|---|
| Imports | 1920-21 | $212,758 |
| | 1921-22 | 101,203 |
| Exports | 1920-21 | 332,666 |
| " | 1921-22 | 11,501 |

## JAPAN, EMPIRE OF.

AREA, Japan proper, 148,756 square miles. Korea (Chosen), 84,738 square miles; Formosa (Taiwan), 13,944 square miles; Pescadores (Hokoto), 47 square miles; Japanese Sakhalin (Karatuto), 13,253 square miles. Total 260,738 square miles.

POPULATION, Japan proper, census of Oct. 1, 1920, 55,961.140; Korea, 17,284,207; Formosa, 3,654,398; Sakhalin, 105,765; total, 77,005,510.

CAPITAL, Tokio, (Greater) population, 1922, 5,164,300; other cities with over 100,000; Osaka, 1,252,972; Kobe, 608,628; Kyoto, 591,305; Nagoya, 429,990; Yokohama, 422,942; Nagasaki, 176,554; Hiroshima, 160,504; Hakodate, 144,740; Kure, 130,354; Kanazawa, 129,320; Sendai, 118,978; Otaru, 108,113; Sapporo, 102,571; Kagoshima, 102,396; Yawata, 100,227; and 59 other cities with more than 30,000 inhabitants.

*Emperor*, Yoshihito, born Aug. 31, 1879, succeeded his father, Mutsuhito July 30, 1912, married Princess Sadako, May 10, 1900; four sons.

*Regent*, Crown Prince Hirohito, born April 21, 1901, constituted Regent because of his father's ill health, Nov. 25, 1921; betrothed to Princess Nagako Kuni.

*Premier*, Admiral Baron Tomosaburo Kato (Marine), born 1859, assumed office June 11, 1922.

*Ambassador to the United States*, Baron Kijuro Shidehara.

*Consuls General*, at New York, Kyo Kumazaki; at San Francisco, Shichitaro Yada. *Consuls*, at Seattle, Hiroshi Saito; at Los Angeles, Ujiro Oyama; at Chicago, Kadzue Kuwashima; at Portland, Ore., vacant.

*United States Ambassador*, Charles Beecher Warren.

*United States Consuls General*, at Yokohama, George H. Scidmore; at Seoul, Korea, Ransford S. Miller; *Consuls*, at Kobe, Erle R. Dickover; at Nagasaki, Henry B. Hitchcock; at Nagoya, Harry F. Hawley; at Taikoku, Formosa, Harvey T. Goodier.

The island empire of Japan lies in the north Pacific Ocean off the coast of China and Siberia from the 22° north latitude, the southern point of Formosa (Taiwan) due east of Hongkong, to the 51° of north latitude, the last of the Kurile Islands, a few miles south of Kamchatka. It includes also the southern half of the island of Sakhalin, and the ancient Kingdom of Korea, annexed May 25, 1915, on the mainland. Japan also holds the Kwangtung peninsula (Port Arthur and Dairen) on a 99-year lease, and has the mandate for the Marshall, Caroline, Ladrone and Pelew Islands, former German possessions in the Pacific.

The southernmost island is subtropical; the northernmost subarctic. Were the empire stretched out in the Atlantic off the coast of the United States at the same latitudes Formosa would lie across Cuba and Southern Florida. Tokio would be due east of Norfolk, Hakodate due east of New York, and Sakhalin would lie athwart Newfoundland with the northernmost island, Paramushir, off Labrador. In area Japan proper is about the size of New York, New Jersey, Pennsylvania and Ohio combined.

Japan proper, the ancient empire, bears a strong likeness to the British Isles, similarly separated from the continent of Europe; its 148,756 square miles compare3 with Great Britain and Ireland's 121,633 and its 55,961,140 inhabitants with the United Kingdom's 47,307,601. The Japanese coast is even more deeply indented. its coast line measuring 17,150 miles. Few places in Japan are far removed from the mountains or really distant from the sea. The northern islands are a continuation of the Russian Karafuto chain running down through Yezo and the mainland. The continuation of the Kuentun mountain range of China appears in the southern islands, the ranges meeting in the grand Japanese Alps. In the vast transverse fissure crossing the mainland from the Sea of Japan to the Pacific rises the group of volcanoes, mostly extinct or dormant, with the majestic sacred mountain Fujisan lifting its white cone 60 miles west of Tokio to an altitude of 12,425 feet. The earthquake zone —where the average is said to be four slight ones a day, with very serious ones only every six or seven years—has its greatest centre along the Pacific Coast near the Bay of Tokio.

The Pacific Ocean here on the eastern coast of Japan is very deep. Soundings show 4,655 fathoms in what is known as the Tuscarora Deep (named after the United States man-o-war which made the survey). Many of the earthquakes with accompanying tidal waves seem to have their origin here and the configuration suggests a submarine crater.

Separating the islands of Shikoku and Kiushiu from the mainland is the wonderfully beautiful inland sea opening both into the Sea of Japan and the Pacific. It is 255 miles long and 56 wide, with a coast line of 700 miles and a surface expanse of 1,325 square miles.

Heavy snowfalls are frequent on the Japan Sea slopes of the mountains of Yezo, while the Pacific side, by which flows the Japan current, enjoys delightful winter weather. There is an abundant rainfall. The streams are short, swift and often unruly, of little value for transportation, but offering a vast but as yet little developed supply of hydro-electric power. Myriads of waterfalls add their charm to the wonderfully beautiful scenery. The "Splendor of the Sun" at Nikko makes an unbroken plunge of 350 feet. There are a thousand mineral springs.

Three-fourths of the mountain land is uncultivable, and the soil of the rest is only moderately fertile, yet by intensive cultivation, hard work and great frugality more than half the people wrest their living from the land. There is a rich supply of fish of many kinds in the sea and fish is a staple diet, a hardy, daring, self-reliant race of fishermen has been developed.

About three-fifths of the arable land is owned by small peasant proprietors, with holdings of an acre more or less, each. The rest is mostly worked by tenant farmers. More than half the land is used for growing rice, the staple food of the country. The number of acres planted in 1919 was 7,761,527; about 300,000,000 bushels is produced annually, the crop in 1920 reaching 450,000,000. Large crops are raised of wheat, barley, rye, millet, buckwheat, maize, beans and potatoes, also tobacco and tea. Mulberry trees are widely grown and in 1919 the number of families engaged in silk culture was 1,940,000; 6,294,736 cocoon egg-cards were hatched, providing 35,387,751 bushels of cocoons. There were 3,848 factories engaged in the silk industry, employing 64,188 men and 430,110 women.

Forests cover 36,000,000 acres, about 17,000,000 belonging to the state and to the imperial household. Much cabinet wood is produced; the lacquer tree is largely cultivated in the north and the camphor tree furnishes much of the wealth of Formosa.

In the decade 1908-18 the number of industrial establishments doubled, increasing from 11,390 to 22,391, with horsepower increased from 379,556 to 2,006,098; men operatives increased from 248,751 to 646,115, and women operatives from 400,925 to 763,081. Government factories in the same decade decreased in number from 196 to 161 but doubled in power and increased somewhat in number of operatives, the figures for 1918 being men, 123,087 and women, 36,349.

The cotton mills also prospered greatly during the war, the capital was increased 288 per cent. by June, 1920, over the pre-war figure, with 3,689,000 spindles as compared with 2,409,900 in 1914. At the end of 1918 there were 6,710 factories with 65,316 men and 218,041 women operatives.

Japan has become a heavy producer of coal, 31,271,000 metric tons were mined in 1919, valued at 442,540,941 yen. The value of petroleum produced was 42,562,023 yen. Copper, 67,581,475 yen; of silver, 11,131,055 yen; and of gold, 9,681,494 yen. The difficulty of getting iron during the war compelled Japan to increase its foundries from 20 to 250, and in 1919 these produced 613,000 tons of pig iron and 553,000 tons of steel. About 2,700 factories were engaged in machine making, etc.

Shipbuilding enjoyed an enormous boom during the war. The number of shipyards increased from 6 to 57, with over six times the amount of capital and in 1914-18 the twelve leading yards built 233 steamers of a gross tonnage of 972,807.

JAPAN'S MINERAL PRODUCTS.

| Year. | Gold. | Silver. | Copper. | Lead. | Pig Iron. | Coal. | Petroleum. |
|---|---|---|---|---|---|---|---|
| | *Yen.* | *Yen.* | *Yen.* | *Yen.* | *Yen.* | *Yen.* | *Yen.* |
| 1906 | 3,572,940 | 3,351,453 | 29,236,853 | 496,909 | 2,042,913 | 63,144,000 | 3,145,502 |
| 1907 | 3,868,755 | 4,040,431 | 32,467,871 | 568,636 | 2,089,586 | 59,961,264 | 5,218,737 |
| 1908 | 4,457,430 | 4,362,740 | 22,409,424 | 405,123 | 1,736,734 | 63,623,773 | 6,520,871 |
| 1909 | 5,077,058 | 4,261,481 | 24,536,150 | 428,204 | 2,025,235 | 58,213,680 | 6,428,514 |
| 1910 | 5,671,806 | 4,896,188 | 25,819,259 | 488,828 | 2,197,169 | 51,076,398 | 6,880,471 |
| 1911 | 6,059,497 | 4,761,652 | 27,133,448 | 506,604 | 1,964,649 | 55,006,501 | 6,733,514 |
| 1912 | 6,799,072 | 5,896,084 | 40,252,061 | 531,282 | 2,304,614 | 61,412,837 | 8,377,073 |
| 1913 | 7,252,000 | 5,635,124 | 42,012,126 | 617,866 | 2,552,245 | 70,956,121 | 12,498,506 |
| 1914 | 9,398,449 | 5,370,278 | 39,067,387 | 827,282 | 2,742,223 | 80,350,387 | 9,430,505 |
| 1915 | 10,804,546 | 5,287,624 | 53,731,798 | 976,380 | 2,497,130 | 65,068,894 | 9,873,413 |
| 1916 | 10,417,459 | 7,135,060 | 109,812,610 | 3,755,933 | 4,084,633 | 80,625,582 | 14,996,695 |
| 1917 | 9,398,512 | 11,946,403 | 118,692,244 | 5,661,020 | 11,475,250 | 140,009,591 | 19,003,950 |
| 1918 | 10,252,085 | 12,622,005 | 90,390,232 | 4,152,991 | 37,778,788 | 286,032,498 | 30,417,097 |
| 1919 | 9,729,123 | 11,131,055 | 67,581,475 | 1,592,483 | 38,810,554 | 442,540,941 | 42,562,023 |
| 1920 | 10,352,701 | 9,865,435 | 47,577,402 | 1,384,172 | 20,384,123 | 418,073,754 | 35,356,655 |

Total value of all mineral production, in yen (1917), 442,516,068; (1918), 621,413,403; (1919), 710,520,488.

FOREIGN TRADE OF JAPAN.

(From data furnished by Akira Den, Japanese Financial Commissioner.)

| Year. | Exports. | Imports. | Total. | Year. | Exports. | Imports. | Total. |
|---|---|---|---|---|---|---|---|
| | *Yen.* | *Yen.* | *Yen.* | | *Yen.* | *Yen.* | *Yen.* |
| 1869 | 12,908,978 | 20,783,633 | 33,692,611 | 1896 | 117,842,761 | 171,674,474 | 289,517,235 |
| 1870 | 14,543,013 | 33,741,637 | 48,184,650 | 1897 | 163,135,077 | 219,300,772 | 382,435,849 |
| 1871 | 17,968,609 | 21,916,728 | 39,885,336 | 1898 | 165,753,753 | 277,502,157 | 443,255,910 |
| 1872 | 17,026,647 | 26,174,815 | 43,201,462 | 1899 | 214,929,894 | 220,401,926 | 435,331,820 |
| 1873 | 21,635,441 | 28,107,390 | 49,742,831 | 1900 | 204,429,994 | 287,261,846 | 491,691,840 |
| 1874 | 19,317,306 | 23,461,814 | 42,779,120 | 1901 | 252,349,543 | 255,816,645 | 508,166,188 |
| 1875 | 18,611,111 | 29,975,628 | 48,586,739 | 1902 | 288,303,065 | 271,731,259 | 530,034,324 |
| 1876 | 27,711,528 | 23,064,679 | 51,676,207 | 1903 | 289,502,442 | 317,135,518 | 606,637,960 |
| 1877 | 23,348,521 | 27,420,903 | 50,769,424 | 1904 | 319,260,896 | 371,360,738 | 690,621,634 |
| 1878 | 25,988,140 | 32,874,834 | 58,862,974 | 1905 | 321,553,610 | 488,538,017 | 810,071,627 |
| 1879 | 28,175,770 | 32,953,002 | 61,128,772 | 1906 | 423,754,892 | 418,784,108 | 842,539,000 |
| 1880 | 28,395,387 | 36,626,605 | 65,021,488 | 1907 | 432,412,573 | 494,467,346 | 926,880,219 |
| 1881 | 31,058,888 | 31,191,246 | 62,250,134 | 1908 | 378,245,673 | 436,257,462 | 814,503,135 |
| 1882 | 37,721,751 | 29,446,594 | 67,168,345 | 1909 | 413,112,511 | 394,198,843 | 807,311,354 |
| 1883 | 36,268,020 | 28,444,842 | 64,712,862 | 1910 | 458,428,996 | 464,233,808 | 922,662,804 |
| 1884 | 33,871,466 | 29,672,647 | 63,544,113 | 1911 | 447,433,888 | 513,805,705 | 961,239,593 |
| 1885 | 37,146,691 | 29,356,968 | 66,503,659 | 1912 | 526,981,842 | 618,992,277 | 1,145,974,119 |
| 1886 | 48,876,313 | 32,168,432 | 81,044,745 | 1913 | 632,460,213 | 729,431,644 | 1,361,891,857 |
| 1887 | 52,407,681 | 44,304,252 | 96,711,933 | 1914 | 591,101,461 | 595,735,725 | 1,186,837,186 |
| 1888 | 65,705,510 | 65,455,234 | 131,160,744 | 1915 | 708,306,997 | 532,449,938 | 1,240,756,935 |
| 1889 | 70,060,706 | 66,103,767 | 136,164,473 | 1916 | 1,127,468,118 | 756,427,910 | 1,883,896,028 |
| 1890 | 56,603,506 | 81,728,581 | 138,332,087 | 1917 | 1,603,005,033 | 1,035,792,443 | 2,638,797,476 |
| 1891 | 79,527,272 | 62,927,268 | 142,454,540 | 1918 | 1,962,100,668 | 1,668,143,833 | 3,630,244,501 |
| 1892 | 91,102,754 | 71,326,080 | 162,428,834 | 1919 | 2,098,872,617 | 2,173,459,880 | 4,272,332,497 |
| 1893 | 89,712,865 | 88,257,172 | 177,970,037 | 1920 | 1,948,394,611 | 2,336,174,781 | 4,284,569,392 |
| 1894 | 113,246,086 | 117,481,955 | 230,728,041 | 1921 | 1,252,837,715 | 1,614,154,832 | 2,866,992,547 |
| 1895 | 136,112,178 | 129,260,578 | 265,372,756 | | | | |

Divide yen by 2 for dollars. Trade of Chosen and Taiwan not included in the table.

The chief exports are raw silk, silk waste and silk tissues, cotton yarns and tissue, coal, earthenware and glassware, matches, refined sugar, machinery, copper, tea, toys and camphor. The chief imports are raw cotton and textiles, machinery and iron products, oilcake, wool and woollen tissues, sugar, rice, beans and peas, petroleum, crude rubber, coal, flax, hemp and dyes.

TRADE BETWEEN JAPAN AND THE UNITED STATES.

| Year (Cal'dar). | Exports to U. S. | Imports From U. S. | Year (Cal'dar). | Exports to U. S. | Imports From U. S. | Year (Cal'dar). | Exports to U. S. | Imports From U. S. |
|---|---|---|---|---|---|---|---|---|
| | *Yen.* | *Yen.* | | *Yen.* | *Yen.* | | *Yen.* | *Yen.* |
| 1891 | 27,795,754 | 6,840,047 | 1902 | 80,232,805 | 48,652,825 | 1913 | 184,473,382 | 122,408,361 |
| 1892 | 38,674,771 | 5,988,053 | 1903 | 82,723,986 | 46,273,871 | 1914 | 196,539,008 | 96,771,077 |
| 1893 | 27,739,458 | 6,090,408 | 1904 | 101,250,773 | 58,116,344 | 1915 | 204,141,844 | 102,534,279 |
| 1894 | 43,323,557 | 10,982,558 | 1905 | 94,009,072 | 104,286,528 | 1916 | 340,244,817 | 204,078,950 |
| 1895 | 54,028,950 | 9,276,360 | 1906 | 125,964,408 | 69,948,681 | 1917 | 478,536,845 | 359,707,858 |
| 1896 | 31,532,341 | 16,373,420 | 1907 | 131,101,015 | 80,697,362 | 1918 | 530,129,393 | 626,025,530 |
| 1897 | 52,436,404 | 27,030,538 | 1908 | 121,996,586 | 77,636,556 | 1919 | 828,097,621 | 766,381,438 |
| 1898 | 47,311,155 | 40,001,098 | 1909 | 131,547,139 | 54,043,172 | 1920 | 565,017,126 | 873,182,251 |
| 1899 | 63,919,270 | 38,215,894 | 1910 | 143,702,249 | 54,699,166 | 1921 | 496,283,879 | 574,400,915 |
| 1900 | 52,566,395 | 62,761,196 | 1911 | 142,725,642 | 81,250,909 | | | |
| 1901 | 72,309,359 | 42,769,430 | 1912 | 168,708,896 | 127,015,757 | | | |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $189,181,585 |
| " 1921-22 | 248,716,339 |
| Exports, 1920-21 | 253,217,835 |
| " 1921-22 | 307,514,995 |

Japan in 1920 had 6,202 miles of state owned railroads and 2,005 privately owned, a total of 8,207. Announcement has been made of plans to make the standard gauge 4.85 feet and to complete the work of rebuilding in 20 years. Comprehensive plans have been made for the electrification of the Government railroads, the first section to be the Takaido line, 408 miles, from Tokio to Kobe. A railway tunnel 7 miles long is under construction between the islands of Kiushu and Honshu under the Moji Shemonoseki Straits.

The Government subsidizes five shipping companies for the foreign trade. The merchant navy in 1920 consisted of 3,031 steamers of 3,011,634 gross tons, 14,415 sailing vessels of 976,286 tons.

There entered the Japanese ports in 1920 11,948 steamers of 25,239,591 tonnage. Of these, 804 of 3,148,126 tons were American; 1,121 of 4,781,888 tons, British; and 9,802 of 16,756,868 tons, Japanese.

There are 60 harbors open to foreign trade, the most important being Yokohama, Kobe and Osaka on the Pacific Coast of the main island, and Niigata on the Japan Sea coast, the port of transshipment for Vladivostok. Nagasaki, on Kyushu Island, Tamsui, in Formosa, and Fusan, in Korea, are the important ports.

The Japanese in continental United States, by the census of 1920, numbered 111,010 (in 1910 there were 72,157). Of these there were 71,952 in California (an increase of 30,000), 17,387 in Washington, 4,151 in Oregon, and 2,686 in New York. In Hawaii they number 109,274 of which about 17,000 in Honolulu are tradesmen and the rest labor on the sugar and pineapple plantations or are farmers. In the Philippines there are 10,000. There are about

16,000 in Canada, 3,000 in Mexico, 7,000 in Peru, 30,000 in Brazil, 3,000 in Argentina, 18,000 in Malaysia, and 12,000 in Australasia. In Manchuria, according to official reports, there were 181,206 in 1919, and in China proper, 31,987. The foreign visitors to Japan number about 30,000 yearly.

REVENUES AND EXPENDITURES OF JAPAN.

| Financ'l Year. | Revenue. | Expenditure. | Financ'l Year. | Revenue. | Expenditure. | Financ'l Year. | Revenue. | Expenditure. |
|---|---|---|---|---|---|---|---|---|
| | *Yen.* | *Yen.* | | *Yen.* | *Yen.* | | *Yen.* | *Yen.* |
| 1877–78. | 52,338,133 | 48,428,324 | 1893–94. | 113,769,381 | 84,581,872 | 1908–09. | 794,937,260 | 636,361,093 |
| 1878–79. | 62,443,749 | 60,941,336 | 1894–95. | 98,170,028 | 78,128,643 | 1909–10. | 677,546,278 | 532,893,635 |
| 1879–80. | 62,151,752 | 60,317,578 | 1895–96. | 118,432,721 | 85,317,179 | 1910–11. | 672,873,778 | 569,154,028 |
| 1880–81. | 63,367,254 | 63,140,897 | 1896–97. | 187,019,423 | 168,856,509 | 1911–12. | 567,192,221 | 585,374,613 |
| 1881–82. | 71,489,880 | 71,460,321 | 1897–98. | 226,390,123 | 223,678,844 | 1912–13. | 687,392,480 | 593,596,445 |
| 1882–83. | 73,508,427 | 73,480,667 | 1898–99. | 220,054,127 | 219,757,569 | 1913–14. | 721,975,484 | 573,633,925 |
| 1883–84. | 83,106,859 | 83,106,859 | 1899–00. | 254,254,524 | 254,165,538 | 1914–15. | 734,648,055 | 648,420,409 |
| 1884–85. | 76,669,654 | 76,663,108 | 1900–01. | 295,854,868 | 292,750,059 | 1915–16. | 708,615,882 | 583,269,853 |
| 1885–86. | 62,156,835 | 61,115,313 | 1901–02. | 274,359,049 | 266,856,824 | 1916–17. | 813,308,614 | 590,795,353 |
| 1886–87. | 85,326,144 | 83,223,960 | 1902–03. | 297,341,424 | 289,226,731 | 1917–18. | 1,084,958,388 | 735,024,252 |
| 1887–88. | 88,161,074 | 79,453,036 | 1903–04. | 260,220,758 | 249,596,131 | 1918–19. | 1,479,115,804 | 1,017,035,558 |
| 1888–89. | 92,956,933 | 81,504,024 | 1904–05. | 327,466,936 | 277,055,682 | 1919–20. | 1,808,633,184 | 1,172,328,292 |
| 1889–90. | 96,687,979 | 79,713,672 | 1905–06. | 535,256,392 | 420,741,205 | 1920–21. | 2,000,524,614 | 1,359,978,247 |
| 1890–91. | 106,469,354 | 82,125,403 | 1906–07. | 530,447,807 | 464,275,583 | 1921–22. | 1,584,750,485 | 1,584,224,790 |
| 1891–92. | 103,231,489 | 83,555,891 | 1907–08. | 857,083,817 | 602,400,959 | 1922–23. | 1,466,056,902 | 1,466,056,902 |
| 1892–93. | 101,461,911 | 76,734,740 | | | | | | |

Figures 1922-23 are budget estimates.

The financial years from 1877-78 to 1884-85 consist of 12 months each, from July 1 to June 30; the financial year 1885-86 comprises 9 months, from July 1 to March 31; and those subsequent to 1886-87 inclusive consist of 12 months each, from April 1 to March 31. The figures for the financial years from 1875-76 to 1919-20 represent the settled accounts, those for the financial year 1920-21 the actual account on October 31, 1916.

National debt (Feb. 28, 1922) yen 3,524,336,596.

The Japanese fix 660 B. C. as the date of the accession of their first Emperor, Jimmu Tenno, and count the present Emperor the 122d of that dynasty. Ethnologists trace the origin of the Japanese people to Chinese, Korean, Mongol and Malayan sources, a stock mixture that has become thoroughly amalgamated. The hairy Ainus, now surviving in meagre numbers in the island of Yezo, are believed to be the remnants of the aboriginal inhabitants.

For centuries closed to foreign influence or even contact the nation developed a high civilization and a wonderful body of art. Efforts to penetrate the island empire by Dutch traders and by missionaries were equally barren of results. The United States expedition, commanded by Commodore Matthew C. Perry, U. S. N., which arrived in Yokohama in 1853, broke through the reserve and the treaty he sought of amity and the opening of the port to trade was signed in March, 1854. This treaty was followed by a much broader one negotiated by Townsend Harris, the United States Minister, in June, 1857. In Japan then the ruling power was that of the Shogunate, which had been in control since the twelfth century. In 1868, however, the de jure Emperor Mutsuhito (ruled 1867-1912 and posthumously styled Meiji) overthrew the Shogun after a short war and by 1872 had entirely suppressed the feudal system. The change and modification of Japan's social, industrial and political institutions that followed has been the most complete and radical in history.

Able men visited foreign countries and adapted ideas and methods they found there to the needs of their country. The first railroad was begun in 1870. Compulsory military service was made obligatory in 1872, and army training and development on European lines followed. In 1875 Japan got the Kurile Islands from Russia, rounding off her empire to the north. In exchange she relinquished her claim to Sakhalin, the southern half she recovered in 1905 as spoils of the Russo-Japanese War. In 1876 she seized the Liukiu Islands, extending southward to Formosa and in the Chino-Japanese War of 1895 that great island, Formosa (13,944 square miles), larger than the State of Maryland, with a population of 3,654,398 and great potential wealth, was with the Pescadores her prize of war, and completed the southern half of her territory. In that year of her first great military success Japan drove the Chinese out of Korea, Southern Manchuria, and the Liaotung peninsula. Diplomatic pressure from Russia, France and Germany forced Japan to give up Port Arthur and withdraw from Korea, while Russia then obtained for herself from China a 25-year lease of the Liaotung peninsula with Port Arthur and Dalny the ice free seaport terminus, via the Manchurian railroad, of her Trans-Siberian railroad. Germany also to avenge two murdered missionaries compelled China to give her a 99-year lease of Kiaochow and 254 square miles of hinterland in Shantung.

In 1902 Japan made a defensive alliance with Great Britain which protected her from European interference when she fought Russia from February, 1904, to September, 1905. By the Treaty of Portsmouth Japan obtained the recognition of her paramount rights in Korea (though that country remained independent), also the Russian lease of the Liaotung peninsula (later to be extended by China to 99 years), and also the southern half of the Island of Sakhalin. Moreover, Russia evacuated Manchuria, the development of which Japan coveted. In 1910 she annexed Korea.

Japan came into the World War under the treaty with Great Britain and drove the Germans out of Kiaochow and took the Marshall and Caroline Islands, former German possessions. She took occasion to press her claims for control in China by presenting, on Jan. 18, 1915, the "twenty-one demands." To this China was then unable to resist. By these Japan was to acquire all German rights in Shantung and no part of that province was to be leased to a third power. She also was to receive valuable railroad concessions there and in Southern Manchuria, commercial ports, special trading privileges and mining rights in Southern Manchuria and Mongolia; China also agreed to employ influential Japanese advisers in political, financial, military and police development. In fact, it was a virtual surrender of China to Japan. In July, 1916, Japan and Russia signed a treaty, practically an alliance, whereby Russia recognized Japan's special interests in China and received recognition of her special interests in Mongolia and Turkestan.

Japan announced on Oct. 10, that the former German leasehold of Kiaochow in Shantung, which was captured during the World War, would be restored to China on Dec. 2, 1922, in carrying out the terms of the treaty signed at Washington on Feb. 4, 1922. On that date the official announcement of the Japanese members of the Shantung commission said, "the Japanese troops will withdraw, civil and military authority will be handed over and the Chinese flag will be hoisted for the first time since Germany acquired the territory in 1898."

The last troops of the Japanese Expeditionary Army in Siberia left Vladivostok on October 25. The stores of arms and munitions, amounting to 300,000 tons, stored near that port belonging to the Allies and the United States were handed over to the "Red" army before their departure.

Japan has announced her determination to hold the northern half of Sakhalin Island until her demands for reparation for the Nikolaievsk affair, where 600 Japanese were killed in 1920, have been satisfied.

Japan, previously an absolute monarchy, is now governed under a constitution promulgated Feb. 11, 1889. The Emperor, who is declared to be "sacred and inviolable," exercises the whole of the executive powers with the advice and assistance of the Cabinet Ministers, whom he appoints and who are responsible to him. He declares war, makes peace and concludes treaties; he "exercises the legislative powers with the consent of the Imperial Diet;" he has supreme command of the army and navy; and he "determines the organization and peace standing of the army and navy." The Emperor has a privy council to consult with on important affairs of state and which interprets the Constitution.

Every law requires the consent of the Imperial Diet, which consists of two Chambers. The House of Peers numbers (1921) 394 members, 16 Princes of the Blood, 13 Princes, 43 Marquises, 20 Counts, 73 Viscounts, 20 Barons, 120 Imperial nominees, and 45 representatives of the largest taxpayers,

The House of Representatives has 464 members, elected for four years by 2,800,000 voters, who must be males over 25 paying a direct national tax of not less than three yen. There has been much agitation for universal suffrage. The Cabinet has an entirely free hand to formulate policies of state quite independent of the political parties and of the House, and is often organized independent of it. When it can't control the House it dissolves the Diet. Every law requires consent of the Diet.

The power of the Diet is growing steadily and it has now become an absolute necessity for the Cabinet to control a majority of the Diet, for without its approval no important matter of state can be carried out. The power and influence of the military men, it is said, are declining.

An extra-constitutional but hitherto most influential body is the Genro or Elder Statesmen, consulted on grave matters of policy by the Emperor. Death has reduced their number to four—Prince Saionji, Marquis Matsukata, Viscount Kiyoura, and Admiral Count Yamamoto, all men who have played a distinguished part in public affairs. In Japan the outgoing Premier does not always recommend his successor, for the Ministry is not responsible to the Diet. In such instances the Emperor depends on the decision of the Genro.

Governors and sheriffs of prefectures are appointed by the Government. The Mayor is that one of three candidates elected by the municipal assembly who obtains the Emperor's approval. The elected Chief Magistrates of towns and villages must obtain the Governor's approval.

There is absolute religious freedom. The chief forms of religion in Japan are Shintoism and Buddhism. Neither has state support. Elementary education is compulsory. In 1919 there were 612 kindergartens with 51,834 pupils, and 25,625 elementary schools with 172,979 teachers and 8,137,347 pupils. Japan had in 1920 five imperial universities, and 11 other institutions of university rank; the total number of teachers was 1,868 and 32,434 students. The most influential is the Tokio Imperial University established in 1877, which has 417 teachers and 5,283 students.

Japan has twelve sects of Buddhism, 71,750 Buddhist temples, 181,100 Buddhist priests and 51,511,100 believers. The thirteen sects of Shintoism, which originated in the combined spirit of Japanese ancestor worship and Imperial veneration, centre in the shrines which number 171,725, but the Shinto priests number only 14,900. There are twelve forms of Christianity in the empire. The Greek communicants number 65,615, with 131 churches; the Roman Catholics, 14,200 with 189 churches; the Anglican and American Episcopalian Mission, 16,215 with 213 churches; the Methodist Mission, 13,356 with 181 churches, and the Congregational Mission, 15,847, with 151 churches.

Service in the army is universal and compulsory; actual service begins at 20 and lasts two years in the ranks for all arms. The peace strength of the active army is 300,000 men with a reserve of 2,350,000. (For detailed figures of the navy see the special article on the Washington Arms Conference.)

### *KOREA (CHOSEN).*

AREA, 85,229 square miles (including islands).

POPULATION, 1920, 17,284,207, including about 337,000 Japanese and about 23,000 foreigners.

CAPITAL, Seoul; population, 1919, 250,942 (Koreans, 182,207; Japanese, 66,943); other cities, Fusan, population, 1919, 63,567; Pingyang, 62,775; Taiku, 40,065; Kaisong, 39,855; Chemulpo, 29,989.

*Governor-General*, Admiral Baron Saito.

*United States Consul General*, at Seoul, Ransford S. Miller.

Korea is an ancient kingdom with a history extending back to the twelfth century B. C. but during recent centuries the "Hermit Kingdom." It occupies a peninsula in northeastern Asia dividing the Yellow Sea from the Sea of Japan. The boundaries on the mainland are the Yalu River and the Tamean River. The mainland is as large as the State of Minnesota. Its coastline is over 6,000 miles long. Southern Manchuria lies along its northwest frontier for 500 miles and it touches Siberia for a few miles, a scant 100 miles from Vladivostok, in the extreme northeast. Situated between that Russian port and Port Arthur, then a Russian leasehold and subject to diplomatic control and penetration by Russia, Korea became to Japan "a dagger pointed at her heart"—the chief immediate cause of the Russo-Japanese War of 1904-1905. After this war the "complete independence" of Korea that had been recognized in the treaty following the Chino-Japanese War of 1894-95 (which also was for the control of Korea), gave way to a recognition by Russia of Japan's paramount interest in Korea. Japan continued her military occupation of the country, and in 1910 annexed Korea outright.

The administration of the country has been in the hands of a military governor of high rank directly responsible only to the throne. The first was Gen. Terauchi, who on becoming Premier of Japan relinquished the office to Gen. Count Hasegowa.

Recent reforms, following nationalist disturbances make the Governor General responsible to the Premier of Japan, open the office to civilians, and promise steadily increasing measures of local autonomy, and reduction of military rule.

The former Emperor of Korea is now known as H. I. H. Prince Yi Wang; he receives the treatment of a Prince of the Blood in Japan and enjoys an annual grant of 1,500,000 yen, the same as before annexation.

Korea had no system of education when brought under Japanese control, only about 10 per cent. of the children of school age, and these all of the upper classes, attended school where they learned something of the Chinese classics. At the end of 1918, 462 public common schools had been established, attended by 76,898 boys and 10,481 girls. In addition there were 809 private schools of which 323 were connected with foreign missions. There were also 380 purely Japanese elementary schools with 42,811 pupils. Secondary and technical schools in that year numbered 109.

Confucianism and Buddhism are the chief religions and Christianity has gained a great vogue among all classes. The mission force numbers about 2,500 with about 300,000 Korean converts.

The country is mountainous, especially in the north where the forests are of great value, and there is much mineral wealth awaiting development. There are extensive fertile plains well watered by good rivers in the south and west where are the five excellent harbors of Fusan, Mokpo, Chemulpo and Chinnampo. The larger rivers in the west can at full tide float boats far up the streams. At Ninsen is a tide of 33 feet.

The climate is dry and bracing. The mulberry tree thrives, 60,000 acres being planted with them. Silk worm culture has been much encouraged by the Japanese and the quality of the cocoons improved. Some 400,000 families are engaged in the industry. The cultivation of tobacco is also fostered. Stock raising is everywhere an important industry. Afforestation and irrigation are being systematically carried on by the Government.

Mining concessions covering 270,000 acres, mostly gold-bearing, which had been in the hands of about fifteen foreign corporations (four American) and individuals (four Americans) before annexation are respected, but a new law (April 1, 1916) prohibits foreigners from acquiring mining rights. Gold, silver, zinc, copper, lead, iron, tungsten, graphite, anthracite coal and kaolin are present. In 1919 the value of gold produced was 25,314,500 yen. The output of Pyongyang coal, anthracite (Government owned), in 1919, was 128,274 tons.

The trade of Korea is almost entirely in the hands of the Japanese, who also have provided 85 per cent. of the capital for the 1,500 factories already established.

The mileage of the Government owned railroads in 1921 was 1,603. The chief line is the trans-peninsula line (585 miles), from Fusan, where the Fusan-Shiminoseki ferry service connects with the Imperial Japanese railroads, to Antung, at the mouth of the Yalu River across the Manchurian boundary where it connects with the Antung-Mukden line of the South Manchurian Railway, thus forming part of the two international through traffic lines—Japan to China, and Japan to Europe via the Trans-Siberian Railway. The total investments in the Government railroads amount to over 130,000,000 yen, and the profits in 1920 and 1921 were 3,874,000 and 6,627,000 yen, respectively. There are 230 miles of privately owned railroads.

The unit of currency is the yen—49.8 at par of exchange.

Korea was a drain on the Japanese Imperial Government until 1919 when the administration became for the first time financially independent. The budget for 1921-22 is balanced at 156,942,000 yen.

| | |
|---|---|
| Debt, Oct., 1920 | 119,358,000 |
| Imports, 1920, yen | 191,158,000 |
| Exports, 1920, yen | 238,956,000 |

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $2,417,677 |
| " | 1921-22 | 2,858,032 |
| Exports, | 1920-21 | 84,112 |
| " | 1921-22 | 2,471,677 |

### *KWANGTUNG.*

(Leased for 99 years from China.)

AREA, 1,300 square miles.

POPULATION, census of 1919, 600,644 (534,849 Chinese and 65,692 Japanese).

CAPITAL, Dairen (formerly called Dalny); population, 1919, 108,228.

*Civil Governor*, I. Yamagata.
*United States Consul*, at Dairen, (vacant).

Kwangtung is the southern part of the Liaotung peninsula, the southernmost portion of Manchuria, which has the Bay of Korea on the east, the Yellow Sea to the south and the Liaotung Gulf on the west. Japan had taken it as spoils of war from China by the Treaty of Shiminoseki but was forced to turn it back by diplomatic pressure from Russia, Germany and France. Russia then leased it for 25 years from China, and constructed the strongly fortified city of Port Arthur and the nearby commercial port of Dalny (now Dairen).

Japan took Port Arthur by seige ending with a brilliant assault in 1905 and at the conclusion of the Russo-Japanese War took over the lease in the Treaty of Portsmouth, 1905. In May, 1915, the lease was extended to 99 years by China. Kwangtung by Imperial Ordinance of April 12, 1919, was given a civil government superseding the former military government.

Dairen is a free port, the chief seaport of Manchuria and the southern terminus of the South Manchurian railroad which connects with the Peking and Korean lines at Mukden and with the Trans-Siberian at Changchun. It is a well-built, well-governed modern city with varied industries.

The number of vessels that entered the port in 1920 was 2,142 with a tonnage of 4,864,904; of this tonnage 3,408,369 was Japanese; 483,073 Chinese; 421,028 British; 381,729 American; 34,146 Russian; French, 18,277, and Norwegian, 11,618. Beans (567,129 tons), bean cake (1,131,208 tons), and cereals (707,237 tons) furnished the bulk of the exports. The value of the foreign trade was:

| | |
|---|---|
| Imports, 1920 | $207,913,839 |
| Exports, 1920 | 221,517,637 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $6,403,561 |
| " 1921-22 | 5,862,221 |
| Exports, 1920-21 | 5,724,131 |
| " 1921-22 | 1,835,664 |

## JUGO-SLAVIA.

(See Serbs, Croats, and Slovenes, Kingdom of.)

## LATVIA, REPUBLIC OF.

AREA, 25,000 square miles.
POPULATION, 1921, 1,813,000.
CAPITAL, Riga; population, 1920, 185,137; other cities, Libau, population, 51,583; and six with more than 10,000.
*President*, Jan Chakste.
*Premier*, Zigfrid Meierovics.
*Minister to United States*, vacant; C. Louis Seya, Charge d'Affaires.
*Consul*, at New York, Arthur B. Lule.
*United States Minister*, Frederick W. B. Coleman; also accredited to Esthonia and Lithuania.
*United States Consul*, at Riga, Daniel B. MacGowan.

Latvia, formerly a Russian province, became a republic Nov. 17, 1917, final elections being held on April 17, 1920, and the Legislative Assembly meeting first on May 1, 1920. It is bounded on the north by the Gulf of Riga and Esthonia, on the east by Russia, on the south by Lithuania and Poland, and on the west by the Baltic Sea. It is one of the three Baltic states of North Central Europe. It is about the size of the State of West Virginia and has a little larger population.

About half the people engage in agriculture, dairying, livestock and other food producing industries. Flax is the important product. Pre-war flax acreage was 275,000, and annual crops were 30,000 tons of fibre and 25,000 tons of seed, exported mostly to Germany, Holland, Belgium and England. War devastation reduced the flax acreage to 70,000, and another cause was the flight of 500,000 farmers as refugees. Wheat, rye and potatoes are also produced.

The last census figures showed in 1913 there were 297,645 horses, 940,319 cattle, 1,100,481 sheep, and 538,920 swine—2,877,365 head in all, or one and two-thirds head per capita.

Forests cover 3,775,000 acres of the total in the country of 16,000,000, so that exportation of timber will be important, while scientific preservation of the forests will be observed.

Industry is beginning to count in the national wealth, the paper, match, wood distilleries and woodwork output having already attained large proportions for so small a country.

Other industries—metals, chemicals, textiles, and scattering—produce annually about $113,500,000 worth.

Latvia's importance is enhanced by the fact that it is the natural route for through international trade between Russia and western nations. Pre-war, 20.6 per cent. of all Russian imports and 28 per cent. of all exports passed through Latvian territory. Excellent harbors at Riga, Liepaja and Ventspils made this possible, and three Russian main railway lines converge at Riga, Windau and Libau, all ports of Latvia. In 1920, there entered the ports 1,679 vessels of 479,801 tons. The coast line is 340 miles long. The railway mileage is 1,829 miles.

Latvia is Protestant by 76.54 per cent., Roman Catholic by 18.49 per cent., and there are Baptists, Moravians and other faiths.

In 1910 only 3.2 per cent. of the people were illiterate, and the native Letts form 80.41 per cent. of the total population.

Latvia is a member of the League of Nations.

Trade with the United States in the fiscal year 1921-22 was: Imports, $6,660,589; Exports, $275,-432.

## LIBERIA, REPUBLIC OF.

AREA, estimated, 40,000 square miles.
POPULATION, estimated, 2,000,000.
CAPITAL, Monrovia, population, estimated, 1920, 4,000.
*President*, Charles D. B. King, 1920-24.
*Consuls in the U. S.*, at New York, Edward G. Merrill; at Philadelphia, Thomas Hunt; at St. Louis, Hutchins Inge; at Mobile, George W. Lovejoy; at Galveston, J. R. Gibson; at San Francisco, Oscar Hudson.
*United States Minister and Consul General*, Solomon Porter Hood.
*Receiver of Customs and Financial Adviser* (designated by the United States Government), H. F. Worley.

Liberia lies on the southwest (Guinea) coast of Africa between Sierra Leone (British) on the west and the French colony of the Ivory Coast on the east, with a coast line on the South Atlantic of about 350 miles. It extends inland about 200 miles. Beyond 25 miles there is no civilized settlement. Most of the country is covered with tropical forests rich in timber and oil nuts but lacking in transportation. There is one motor road, 20 miles long. The Government is trying to float a loan of $5,000,-000, based on custom receipts, with the United States Government, with the proceeds of which it will build roads to open the hinterland to commerce. The House has acted favorably on the resolution, which was waiting action in the Senate at its adjournment in September. The country has now a bonded indebtedness of $1,700,000 floated by New York bankers in 1912, with an internal floating debt of about $500,000.

The population is entirely of the African race; about 100,000 of the dwellers along the coast may be considered civilized. The number of American Negroes is estimated at 12 000. Liberia was founded in 1822, when a settlement was made at Monrovia by Negro freedmen from the United States with the assistance of American colonization societies. It was declared a free and independent republic on July 26, 1847. Its Constitution is modelled on that of the United States. Electors must be of Negro blood and owners of land. The Government rests with a President, elected for four years, a Senate, elected for six years, and a House of Representatives, elected for four years.

The control of customs since 1912 has been in the hands of a General Receiver and Financial Adviser, designated by the United States.

Government schools are supplemented by mission schools, mostly of Protestant denomination. The Methodists maintain a college at Monrovia. There is an organized militia of 650 men, with reserves of 2,500.

Liberia was a signatory of the Versailles Treaty and is a member of the League of Nations.

Coffee, rubber, oil nuts, raffia, ivory and ginger are the chief exports and textiles, hardware, glass and earthenware, tobacco, spirits, rice and foodstuffs are the principal imports. In 1920 there entered at Monrovia 446 vessels of 525,314 tonnage. Customs duties in 1918 were $162,120; 1919, $226,-720; in 1920, $314,690.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $189,002 |
| " 1921-22 | 178,048 |
| Exports, 1920-21 | 3,532 |
| " 1921-22 | 1,444 |

## LIECHTENSTEIN.

(Principality).

AREA, 65 square miles.
POPULATION, 1912, 10,716.
CAPITAL, Vaduz; population, 1,376.

*Prince*, John II., born Oct. 5, 1840; succeeded his father Nov. 12, 1858.
*Administrator*, appointed by the Prince, Joseph Ospelt.

Liechtenstein is on the Upper Rhine between Austria and Switzerland. It was a member of the German Confederation until 1866. Since that time it had practically been a dependency of Austria, but on Nov. 7, 1918, the Diet declared its complete independence. By treaty with Switzerland in 1921 that country administers its posts and telegraphs. The population is agricultural; stock raising is highly developed. The monarchy is hereditary. By the Constitution, October, 1921, legislative powers rest in a Diet of 15 members, elected for four years by direct vote, on a basis of universal suffrage and proportional representation. The budget for 1922 balanced at 384,500 francs.

## LITHUANIA, REPUBLIC OF.

AREA, 33,000 square miles.
POPULATION, 4,500,000, of which 70 per cent. are Lithuanians, 13 per cent. Jewish, 8 per cent. Polish or Polanized Lithuanians.
CAPITAL, Kovno, temporarily; population, 190,000.
*President*, Alexsandras Stulginskis.
*Premier*, E. Galvanauskas.
*Minister to the United States*, vacant; Voldemar Carneskis, Charge d'Affaires.
*Consul*, at New York, Dr. J. J. Bielskis (acting).
*United States Minister*, Frederick W. B. Coleman; also accredited to Esthonia and Latvia.
*United States Consul*, at Kovno, Clement S. Edwards.

Lithuania, a Baltic state, is bounded on the north by Latvia, on the east by Russia, on the south by Poland, and on the west by Poland and the Baltic Sea. It is about the size of the State of Maine.

Lithuania was a Grand Duchy under the Russian Empire, having shared the fate of Poland. After the Bolshevists captured the Russian Government, the republic proclaimed its independence on Feb. 16, 1918. It was recognized by most of the powers and by Russia in the Treaty of Moscow, July 12, 1920. The dispute with Poland, relative to whether or not certain Lithuanian areas were to be left as a part of the country or become part of Poland has been constant since 1918.

The League of Nations has had the matter in hand. On Oct. 9, 1920, General Zeligowski, with 15,000 Polish troops, occupied Vilna, historic Lithuanian capital, and declared it annexed to Poland. The Polish Government proclaimed Zeligowski a rebel, but he remained there many months. Vilna has been lately claimed as a part of Poland, but the Lithuanians refuse to consent, and late in 1922 the matter was in status quo, with proposals afoot that it be referred to the International Court of the League of Nations, Poland not consenting. Lithuania is a member of the League of Nations.

Legislative power is vested in a constituent Assembly of 112 members, elected directly on a basis of proportional representation by universal equal suffrage. The Assembly elects the President.

Eighty per cent. of the people engage in agriculture, there being in all the country 21,120,000 acres, of which 5,638,426 are arable, 1921 production being 530,000 tons of rye, 145,350 of barley, 77,300 of wheat, 263,500 of oats, 1,386,000 of potatoes, 23,100 of flaxseed and 18,800 of flax fibre.

Agriculture was close enough to making the people self-supporting to enable export in the crop year of 1920-1921 of 10 per cent. of the rye, barley and wheat, half the flax and much of other products.

Forest wealth also gives export of timber. Forests cover a fourth of the total area, pine, fir and hardwood.

Livestock is abundant, in 1921 there being 370,000 horses, 780,000 cattle, 1,262,000 swine and 1,036,000 sheep. This was a gain of 50 per cent. over the 1920 figures.

The industries employed, in 1922, 42,000 persons, and concerned utilization of the country's products.

Exports are of the country produce, plus the output from textile mills, and imports are manufactures. The total in 1921 was 631,964,148 marks. Imports totalled 876,874,930 marks.

Memal, chief port, is under Allied control; there are 1,800 miles of railway.

Lithuania is on the through railway route from Paris, Berlin, Warsaw to Riga, Dvinsk and Petrograd, and regards the international rail traffic as one of its principal points of importance, it being the intention to develop facilities for its proper care.

About 75 per cent. of the people are Roman Catholic, 12 per cent. Jewish, 9 per cent. Greek Catholic and 4 per cent. Protestants.

Pre-war there were 871 schools with 40,330 pupils. In 1922 there were 1,801 schools with 177,379 pupils.

A state university was opened in Kovno Feb. 16, 1922. The old university at Vilna was declared Polish by President Pilsudski soon after Poland was made a republic, and along with Vilna and adjacent territory remains in question as to control.

Trade with the United States in the fiscal year 1921-22 was: imports, $63,968; exports, $62,850.

## LUXEMBURG, GRAND DUCHY OF.

AREA, 999 square miles.
POPULATION, census of 1916, 263,824.
CAPITAL, Luxemburg, population, 1921, 45,986.
*Grand Duchess*, Charlotte, born Jan. 23, 1896; succeeded on the abdication of her sister, Marie Adelaide, Jan. 9, 1919; married Prince Felix of Bourbon-Parma on Nov. 6, 1919; *Heir*, their son, Prince Jean, born Jan. 6, 1921.
*President of Government*, Emile Reuter.
*Minister to the United States*, vacant.
*Consuls*, at Chicago, Pierre Kransz; at Minneapolis, Emile Ferrant.
*United States Minister*, vacant. (Diplomatic matters cared for by the legation at The Hague, Netherlands.)

Luxemburg is a European Grand Duchy four-fifths the size of Rhode Island, situated between Germany on the east, Belgium on the west, and France on the south. Its integrity and neutrality were guaranteed by the Treaty of London, May 11, 1867, having been previously, since 1815, a part of the Germanic Confederation. It, however, remained in the German Customs Union, formed in 1842. German capital built its railroads and its iron and steel furnished material before and during the war to the Germans, who occupied the country throughout the war.

A referendum (under universal suffrage) taken Sept. 28, 1919, to settle some of the problems brought to the front by the World War resulted in the following vote out of a total of 90,984: For the reigning Grand Duchess, 66,811; for a continuation of the dynasty under another Grand Duchess, 1,286; for another dynasty, 889; for a republic, 16,885; for an economic union with France, 60,133; for an economic union with Belgium, 22,242. France declined the union in favor of Belgium. A treaty was then negotiated between Luxemburg and Belgium eliminating the customs barrier and providing for the use of Belgian money in the Grand Duchy. The agreement came in force April 1, 1922, and is for 50 years.

The Grand Duchy is governed under the Constitution of 1868 as amended in 1919. Legislative power rests with a Chamber of 48 Deputies, elected by universal suffrage (men and women over 21). Executive power rests with a Minister of State and President of Government and a Cabinet of four Directors-General. The population is almost entirely Catholic. Education is compulsory for children between the ages of six and thirteen.

Agriculture gives occupation to 90,000 of the population, but mining is the chief industry. The production in 1920 was: Iron, 3,704,390 tons; steel, 732,457 tons. There were in 1920, 330 miles of railroads.

Par of exchange, franc.....19.3 cents
Rate of exchange Nov. 1, 1922.....6.57 cents
Budget—Receipts, francs.....56,388,147
Expenditures, francs.....156,569,044

## MESOPOTAMIA.

(See the Kingdom of the Iraq.)

## MEXICO, REPUBLIC OF.

AREA, estimated, 767,198 square miles.
POPULATION, estimated, 15,800,000.
CAPITAL, Mexico City, population estimated, 1920, 1,080,000; chief cities, Guadalajara, pop. 119,468; Puebla, 96,121; Vera Cruz, 48,633; Tampico, 16,313; San Luis Potosi, 85,000; and Monterey, 85,000.
*President*, Gen. Alvaro Obregon, 1920-24, inaugurated Dec. 1, 1920.
*Ambassador to the United States*, vacant; Sr. Salvador Diego-Fernandez, Minister Plenipotentiary, Charge d'Affaires ad interim; Dr. Manuel C. Tellez, Secretary of the Embassy.

*Consuls General* in the United States, at New York, Gumaro Villabos; at New Orleans, Arturo M. Elias; at San Francisco, Jose Garza Zertuche; at Laredo, Enrique D. Ruiz. *Consuls*, at Mobile, Pablo Tamayo; at Los Angeles, Gustavo Luders; at Boise, Miguel Angel Rico; at Baltimore, Roberto Garcia; at Boston, Rafael Calvo y Arias; at Kansas City, Luis Villalpando; at Cincinnati, Raoul G. Dominguez; at Norfolk, Jose Antonio Valenzuela; at Clifton, M. A. Limon; at Phoenix, Manuel Esparza; at Calexico, Manuel G. Paredes; at Corpus Christi, Lisandro Pena; at Dallas, Bengno Cantu Y.; at El Paso, Hermenegildo Valdez; at Galveston, German Meade y Fierro; at Hidalgo, Francesco Perez; at Port Arthur, Guillermo Prieto Laurens; at Presidio, Cosme Benegoecha; at Rio Grande, Renato Cantu Lara. There are also consulates (vacant) at Naco, Nogales, Tucson, Brownsville, Del Rio, Eagle Pass, Houston, San Antonio, Seattle, Denver, Chicago, St. Louis, Jacksonville, Salt Lake, Portland, Ore., and Philadelphia.

*United States Ambassador*, vacant; George T. Summerlin, counsellor of Embassy, Charge d'Affaires ad interim.

*United States Consul General*, at Mexico City, Claude I. Dawson; *Consuls*, at Vera Cruz, John Q. Wood; at Monterey, Paul H. Foster; at Acapulco, George A. Bucklin; at Ciudad Juarez, John W. Dye; at Matamoros, Gilbert R. Willson; at Mazatlan, William E. Chapman; at Mexicali, Walter F. Boyle; at Progreso, O. Gaylord Marsh; at Nogales, Francis J. Dyer; at Tampico, vacant; at Frontera, Robert L. Rankin.

Mexico is bounded on the north by the United States, on the east by the United States (Texas), the Rio Grande forming the boundary line, and the Gulf of Mexico; on the south by Guatemala and on the southwest and west by the Pacific Ocean. The Gulf of California, 739 miles long with a maximum width of 190 miles, makes a huge indentation in the western coast, completely separating the narrow mountainous sterile and sparsely inhabited peninsula of Lower California, 760 miles long, from the mainland. On the east the province of Yucatan juts out into the Gulf of Mexico, connected with the main territory of the country by a narrow strip northwest of the Guatemala frontier. The coast line on the Pacific is 4,574 miles long and 1,727 on the Caribbean.

The Sierra Madre range runs north and south near the western coast turning near Colima and continuing nearly due east paralleling the coast into Central American countries. Near the Gulf Coast a range of mountains—a continuation of the eastern range of the Rocky Mountains—runs down nearly to Vera Cruz. Loftiest of the extinct volcanoes are Popocatepetl, altitude, 17,888 feet, Ixlaccihuatl, altitude, 17,343 feet, and Orizaba, altitude, 18,209 feet.

Between the two ranges lies the vast tableland of Mexico, altitude from 5,000 feet to 8,000 feet, with a delightful climate (like New York in September) and with the vegetation and products of the temperate zone varying with the altitude. The lowlands along the coast are tropical, rising to sub-tropical in the foothills; hot, and unhealthy with a heavy rainfall on the Gulf side. Along the Pacific slope and in the interior irrigation is needed and natural streams from the mountains are put to use with increasing zeal.

Agriculture and stock-raising are the chief industries. The country is marvellously rich, but the land is barely scratched except on the larger ranches; primitive methods of cultivation prevail. The cultivated lands amount to about 30,000,000 acres (of which 20,000,000 require irrigation) the grazing lands 120,500,000 acres and forests 44,000,000 acres, of which 25,000,000 are estimated to be rich in pine, spruce, cedar, mahogany, rosewood and logwood. The principal products are corn, cotton, henequen (sisal), wheat, coffee, beans, tobacco, sugar and molasses. In 1920 there were 2,162,984 cattle, 929,385 horses, 354,331 mules, 1,089,976 sheep 1,987,869 goats, and 1,654,089 pigs. Cattle, hides and tallow were among the chief exports.

Next to agriculture, the chief wealth of Mexico is in its minerals, and mining has been the most highly developed of her industries since the days of the Spanish conquest. The total value of silver mined from the first year of the Spanish conquest (1521) to January, 1922, was $3,000,000,000, somewhat more than 155,000 tons in weight, according to figures compiled by the Bureau of Mines of the Mexican Department of Commerce and Industry, being two-thirds of the world's silver production for the last 400 years. About $500,000,000 American capital is invested in mining. Mexico now yields over one-third of the world's production of silver and about 5 per cent. of its gold.

Mexico has an abundance of low grade coal, much like that of Texas, with 300,000,000 tons in sight.

## PETROLEUM PRODUCTION.

The petroleum industry in Mexico, which, in 1920, produced 23.5 per cent. of the world's output, became a commercial factor in 1910. The total production from 1901 to 1920 has been 563,524,000 barrels, or 80,470,000 metric tons. Oil had been discovered in 1901 in the Tampico district. In 1910 the famous Juan Casiano No. 7 well was drilled, and the equally famous Potrero del Llano No. 4, came in later with an initial flow of 10,000 barrels daily, increasing to 160,000 barrels, establishing itself as the largest producer up to that time. These were in the southern part of the Tampico district.

In January, 1914, in the Panuco pool, a well with a flow of 100,000 barrels daily was brought in. On Feb. 10, 1916, the Cerro Azul No. 4 well, in the southern district, was completed and on the 19th flowed 260,858 barrels, being estimated the largest producer ever drilled. In 1921 it was still continuing its steady yield.

Plenty of wells with large initial capacity have been completed in the Casiano pools. The Alamo pool, the southernmost producing area in the Tampico-Tuxpam region, came into prominence in October, 1914, when the famous Alamo No. 2 well began to flow. It is estimated to have produced by May, 1921, 27,000,000 barrels of oil.

In 1919 and 1920 large gushers came in in the Naranjas pool in the southern field which produced about 90,000,000 barrels in 1920, considered to be the largest output in history.

The Potrero del Llano No. 4 well suddenly went to salt water in December, 1918, after producing up to that time about 100,000,000 barrels of oil. The Juan Casiano No. 7 well went to salt water in November, 1919, after producing about 80,000,000 barrels of oil. Many of the large wells in the Tepetate pool and the Panuco field were affected by salt water in 1919 and 1920. There are important wells in the Toteco district, and in 1920 it was estimated this field produced 120,000,000 barrels, all in a strip of land 42 miles long and less than 1 mile wide.

The petroleum production of Mexico, from 1908 to 1920 is estimated:

| | Barrels. | Met. Tons |
|---|---|---|
| 1908 | 3,932,900 | 624,968 |
| 1909 | 2,713,500 | 431,175 |
| 1910 | 3,634,080 | 577,455 |
| 1911 | 11,552,798 | 1,994,640 |
| 1912 | 16,558,215 | 2,631,100 |
| 1913 | 25,696,291 | 4,083,141 |
| 1914 | 26,235,403 | 4,168,805 |
| 1915 | 32,910,508 | 5,229,480 |
| 1916 | 40,545,712 | 6,445,957 |
| 1917 | 55,292,770 | 8,790,583 |
| 1918 | 63,828,327 | 10,147,587 |
| 1919 | 87,072,954 | 13,843,077 |
| 1920 | 163,000,000 | 22,638,888 |

Mexico's manufacturing plants are not sufficient to supply home consumption. Cotton mills (about 140 with 762,200 spindles, and 27,100 looms) and woolen mills have been established under a high protective tariff. There are about 1,500 tobacco factories. Some smelters, paper mills, flour mills, saw mills, sugar mills, and refineries and breweries are also in operation.

Mexico had in 1918 15,942 miles of railroads. In 1909 the main lines were united in one Government-controlled corporation—the National Railways of Mexico, the operation of which, with virtually all the private lines, was taken over in 1914 and operated by the Government under the name of the Constitutionalist Railways of Mexico. The National Railways of Mexico own 6,818 miles of track and control 1,220 more; the Mexican Railroad has 520 miles of track; the Tehuantepec, 184; the Mexico Northwestern, 512; the Southern Pacific Railroad of Mexico about 1,000; and the United Railroads of Yucatan about 500. Vera Cruz, Tampico, Puerto Mexico, Salina Cruz, Manzanilla and Acapulco, are the chief ports.

## CIVIL WARS AND INSURRECTIONS.

Mexico has been much torn by civil war and insurrections since achieving its independence from Spain (proclaimed Sept. 15, 1810, and effected in 1821). Conditions resulting almost in a state of war with the United States followed the *coup d'etat* by which, in February, 1913, Gen. Victoriano Huerta replaced Francisco I. Madero (murdered Feb. 22, 1913) in the Presidency. The United States did not recognize his Government (he resigned July 15, 1914), but on Oct. 19, 1915, did recognize that of Gen. Carranza who had driven Huerta's successor Carbajal from the capital, and assumed executive power, Aug. 20, 1915. Carranza

held power until May, 1920, when he fled from the capital before an uprising, and was killed trying to reach Vera Cruz. Adolfo de la Huerta, then Governor of Sonora and now Secretary of the Treasury, was made Provisional President in May, 1920, and Gen. Alvaro Obregon was chosen President at a general election in September, being inaugurated Dec. 1, 1920. The United States has not yet recognized his Government, no common ground having been found following the suggestions of Secretary of State Hughes, presented May 27, 1921, suggesting the preliminary signing of a convention covering boundary disputes, claims, and the stipulation that Article 27 of the new Constitution (1917) is not to be interpreted retroactively.

Article 27 affirmed that the title to mineral and other subsoil deposits was vested in the people of Mexico, and stipulated that only Mexicans and Mexican companies had the right to acquire concessions to develop mineral fuel in the republic. A foreigner might secure that right only if he renounced the privilege of recourse to his Government for redress through diplomatic channels. The intent to safeguard future concessions in the interest of the commonweal is clear, but whether or not the article is retroactive has been the subject of much debate.

However, following decisions of the Mexican Supreme Court to that effect, President Obregon in September, 1922, declared Article 27 to be non-retroactive. Foreign corporations holding concessions, however, hold that the intent under the article and the manner of its interpretation by the Mexican authorities was confiscation. President Carranza had on Feb. 10, 1918, issued a decree imposing heavy taxes on petroleum land and on contracts and royalties and exacted license fees for new drilling and explorations. Other provisions in decrees at various times have aimed to bring the entire oil industry under the Federal Government. Citizens of the United States and the United Kingdom appealed to their Governments for protection against what they asserted to be threatened confiscation. A new source of trouble is the asserting of an independent right to tax oil production recently made by some of the individual states.

### AGREEMENT ON THE DEBT.

The Secretary of Finance, Adolfo de la Huerta, signed an agreement in New York, June 16, 1922, with the International Committee of Bankers, designed to settle the eight-year-old question involving the Mexican external and internal debt. This agreement was approved by both Houses of the Mexican Congress and has been signed by President Obregon.

The plan of adjustment relates to all external Mexican Government debts, direct or guaranteed, the National Railways debt and certain so-called internal Government debts largely held outside Mexico; the total face value of the securities covered being over $500,000,000 gold, on which the interest in arrears amounts to approximately $200,000,000.

This $700,000,000 includes Mexico's direct debt and guaranteed railroad bonds, totalling approximately $322,000,000 gold; the railroad debt, not guaranteed, amounting to about $230,000,000 back interest on bonds, and railroad debt amounting to about $115,000,000; sinking fund defaults amounting to about $28,000,000.

As to current interest, cash payments, in varying proportions among the different bond issues, are to be begun after Jan. 2, 1923, out of a special fund as provided for in the agreement; the schedule of disbursements in general to be based on the relative values and priorities of the different issues of bonds. For such part of current interest as is not in cash, scrip will be issued and redeemed in due course, certain bonds being made available for this purpose.

The special fund for current interest will be increased each year until Jan. 1, 1928, when full service of the debt will be resumed. The oil export taxes and a surcharge of 10 per cent. on railway gross receipts will be paid into this special fund.

As to back interest, all cash payments are to be waived. The matter will be arranged by the deposit of overdue coupons with a trustee. Against these coupons receipts will be issued to be amortized without interest over a period of time. This arrangement is, in effect, equivalent to cancellation of a part of the back interest.

As to the railways, they are to be operated by private management as before the revolution. The Government will assume by indorsement all railway debts not previously guaranteed. The rights of foreclosure hitherto held by the bonds will be suspended so long as the plan is being carried out, thereby protecting both the stock ownership of the Mexican Government and other shareholders, as well as the ultimate rights of the bondholders.

In general, in order to give time for full resumption of all cash obligations, all classes of bondholders are to agree to temporary suspension of sinking fund rights during a five-year period, after which all contract clauses will again become effective.

### THE NEW CONSTITUTION.

Mexico is now governed under a new Constitution promulgated Feb. 5, 1917, replacing the Constitution of 1857. By it Mexico is declared to be a federated republic of 28 states, each with a large measure of home rule and with Governor, Legislature and Judiciary elected by popular vote; two territories and a Federal District whose Governors are appointed by the President. Interstate customs duties are not permitted. The legislative power rests in a Congress consisting of a Chamber of Deputies, and a Senate of 58 members, two for each state, all elected for two years by universal suffrage. The President is elected for 4 years by direct popular vote and cannot be re-elected. He appoints a Cabinet of ten Secretaries. Article 33 confers on the President the right to expel from Mexico without "judicial process" any foreigner whose presence he might deem "inexpedient." The prevailing religion is Roman Catholic but the new Constitution provides for the separation of church and state, and all religions are tolerated.

Education is under Federal control and is free and compulsory from 6 to 16. The percentage of illiteracy among the peons is very high, and there are many Indian tribes, about 20 per cent. of the population, quite uncivilized. The present administration is making every effort to extend elementary education to all classes of the people; 2,000 volunteer teachers of illiterates were enrolled in 1921. The appropriation by the Government for schools in 1922 was $49,826,716; number of schools supported was 3,388. Vocational education, particularly in agriculture, is being promoted. There are normal schools for both sexes throughout the country and some hundred technical schools. The National University of Mexico, founded in 1553, is famous among Latin-American universities, and in the capital are many higher institutions of learning and culture and scientific institutions and societies.

The army numbers 68,316 men, with a reserve of 833,000. Military education is compulsory in the schools.

Mexico is not a member of the League of Nations.

| | |
|---|---|
| Par of exchange, peso | 49.8 cents |
| Rate of exchange, Oct. 15, 1922 | 48.3 cents |
| Imports, 1921 | $178,775,221 |
| Exports, 1921 | 203,273,450 |
| Budget—Receipts | 83,504,250 |
| Expenditures | 106,625,059 |

The debt of Mexico, which is covered in the agreement between the International Committee of Bankers in Mexico and the Mexican Government, is as follows:

INTERNAL DEBT.

| | |
|---|---|
| Consolidated 3% internal debt, 1886 | $21,191,925 |
| 5% internal redeemable bonds, 1894 | 46,455,850 |
| State loans guaranteed by Mexican Govt. | 1,750,000 |
| Total | 69,397,775 |

EXTERNAL DEBT.

| | |
|---|---|
| Customs secured Government loans | 128,080,837 |
| Other secured Government guaranteed loans | 31,719,675 |
| Unsecured Government loans | 37,037,500 |
| Railway loans | 241,894,778 |
| Total | 438,732,790 |
| Grand total | 508,130,565 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $267,169,762 |
| " 1921-22 | 137,750,077 |
| Exports, 1920-21 | 154,093,154 |
| " 1921-22 | 122,956,524 |

## MONACO, PRINCIPALITY OF.

AREA, 8 square miles.

POPULATION, 1913, 22,956.

CAPITAL, Monaco, population, 1913, 2,247; other towns, La Condamine, 11,082; Monte Carlo, 9,627.

*Prince*, Louis, born July 12, 1870, succeeded his father, the late Prince Albert, June 26, 1922.

Monaco is a small Principality on the Mediterranean surrounded by the French department of the Alpes Maritimes. An independent Principality for 800 years, the reigning Prince was dispossessed by the French Revolution. The line was re-established in 1814 and placed under the protectorate of the Kingdom of Sardinia. In 1861 King Charles III. ceded his rights to France. The Prince of Monaco

was an absolute ruler until Jan. 7, 1911, when a Constitution was promulgated which provides for a National Council of 21 members, elected by universal suffrage for four years. The revenue is mainly derived from the gaming tables of the Casino at Monte Carlo. The annual grant for the concession was £80,000 in 1917; in 1927 it will be £90,000, and in 1937, £100,000. The yearly average of visitors is over 1,500,000. The late Prince established an important oceanographic museum and laboratory at Monaco.

## MONTENEGRO.

(See Serbs, Croats and Slovenes, Kingdom of.)

## MOROCCO, SULTANATE OF.

(French and Spanish Protectorates.)

AREA, about 231,500 square miles; viz., French Protectorate, 220,400; Spanish Protectorate, 10,960; Tangier (internationalized), 140.

POPULATION, estimated, 1921, French zone, 5,400,000; Spanish zone, 550,000; Tangier zone, 52,000.

CAPITAL, Fez, population, census of 1920. 62,693; Seat of government French zone, Rabat, population, 29,559; residence of French Resident General. Seat of government Spanish zone, Tetuan, population, 30,000; administrative headquarters of the Califha and the Spanish High Commissioner. Other cities, Marrakesh or Morocco, population, 1920, 102,170; Casablanca, 101,690 (39,283 European); Tangier, 50,000; Meknes, 36,592; Mazagan, 21,630; Mogador, 20,309; Sale, 24,202; Safi, 26,396, and Melilla, 42,590.

*Sultan*, Mulai Yusef, proclaimed on the abdication of his brother, Sultan Mulai Abd-el-Hafid, Aug. 18, 1912.

*French Resident General*, Marshal Hubert Lyautey, appointed (second term) April 7, 1917.

*Spanish High Commissioner*, Gen. Domaso Berenges, appointed Jan. 25, 1919.

*United States Consul General*, at Tangier, Joseph M. Denning; at Casablanca, Robert R. Bradford.

Morocco of to-day is the remnant of the great Shereefian Empire founded by the Arab invaders who carried the crescent of Islam west at the close of the seventh century and ruled all northwestern Africa and most of the Iberian peninsula. It is bounded on the east by Algeria, on the north by the Mediterranean, the extreme point opposite Gibraltar being Ceuta, a city which, with its four-mile-long peninsula (dominated by Jebel Musa, one of the Pillars of Hercules), has belonged to Spain since the close of the sixteenth century. This narrow northern strip, about 60 miles wide, from the Atlantic nearly to the Algerian border, is one of the Spanish zones.

On the west is the Atlantic Ocean and on the south Rio de Oro (Spanish) and the Sahara Desert. The extreme southern end forms a second Spanish zone, and a strip 50 miles long by 15 deep on the Atlantic coast, inclosing the town of Ifni, the third.

Along the 200 miles of the Mediterranean littoral run the Rif hills, still unexplored. Through the country from northeast to southwest run the Atlas Mountains in five great ranges rising to an altitude of 12,000 feet (Mt. Ayashiu, altitude 14,150 feet). Between these ranges lie fertile, well-watered plains, and the northern slopes of the mountains are well wooded. Irrigation is much used, though all agricultural methods and implements are primitive.

The climate is good and healthy, especially on the Atlantic coast, which is shielded from the hot winds of the Sahara by the Atlas Mountains, and where there is a "tell" or fertile region. Tangier is a recognized health resort, also Mogador, where the temperature never rises above 80° or falls below 40°.

The most numerous of the inhabitants are the aboriginal Berbers, mountain dwellers, whose forebears thrice conquered Spain, and who so long maintained the independence of their country. The plains are mostly occupied by Arabs and a mixture of the two races, known to foreigners as "Moors." The latter are also town dwellers. The third race is Jewish, in two sections, one settled there from time immemorial, and the other driven from Europe in comparatively modern times, who live near the ports, are progressive and have much of the foreign trade. The European population in 1921 numbered about 100,000, of which two-thirds are French.

The people are agricultural and pastoral. Eggs and poultry have become the chief articles of export, reaching even to England. In 1919 the value of eggs exported was 44,948,779 francs, and in 1920, 29,910,442 francs. Other important exports are skins, hides, wool, beans, barley, linseed and wheat, almonds, cummin and gums. The chief imports are textiles, sugar, tea, machinery and hardware, candles and spirits. Fruit and vineyards are abundant and dates a regular crop. Under proper cultivation Morocco should become a rich, cereal-producing country. Carpets, leather goods, fezzes, woolen and silk stuffs are among the manufactures, chiefly for domestic consumption. Mineral deposits are undeveloped, but much copper, lead and tin are known to exist. An oil field extends from Fez to Laraish. Phosphate exists in great abundance, estimated at 100,000,000 metric tons with a yield of 65 per cent., and a decree of 1920 reserves to the Sultan's Government the right of exploitation.

The country had no roads or bridges, transportation being by mule and camel back, but the French have built about 3,000 kilometres and have more surveyed; the most important being from Tangier to Fez. Little has been done in the Spanish zone. In the French zone, in 1920, there were 610 miles of railroads, those of narrow gauge being rebuilt at standard gauge. The Spaniards have a narrow gauge road from Ceuta to Tetuan Is Rio Martin. The French use aeroplanes for mail, passengers and freight. In 1919, 1,200 vessels of 845,708 tonnage entered the ports of French Morocco.

French interests in Morocco had been steadily growing because of its proximity to Algeria for years and had been recognized in the agreements of 1906 and 1909. A general rising of the tribes in October, 1910, culminating in the siege of Fez called out a French expedition of pacification which occupied Fez in 1911. The need of this had been notified to the powers, but was resented by Spain, who in June suddenly occupied two towns, and by Germany, who on July 1, 1911, sent the gunboat Panther to Agadir, a seaport on the Atlantic, ostensibly to safeguard German subjects in the Sus, but really to challenge the extension of French influence. The crisis became acute and war seemed inevitable. Great Britain, however, stood by the Entente and made formal objection to Germany's acquiring territorial influence in Morocco. Diplomatic conversations followed, which resulted in the Franco-German treaty of Nov. 4, 1911, by which France ceded to Germany some territory in French equatorial Africa on the southern and eastern borders, the Cameroons, in return for recognition of her political protectorate over Morocco. A treaty with Spain adjusted the limits of their respective spheres. On March 30, 1912, the Sultan Mulai Hafid signed a treaty with France accepting the protectorate, which was recognized by the powers who withdrew their diplomatic representatives. Gen. Lyautey was appointed Resident General and his advice the Sultan, an absolute despot, and his six viziers have to follow. Risings occurred later in the year and Mulai Hafid abdicated in favor of his brother. The rebellious tribesmen made much trouble and were stirred up to more by the Germans during the World War. The last outbreak, in October, 1920, was crushed by the French capture of Wazzan, who thus consolidated their rule in most of the districts.

A severe outbreak near Melilla in July, 1921, seriously threatened the Spanish rule in its protectorate and has but recently been suppressed by a vigorous military expedition. The notorious brigand, Raisuli, now dead, was probably the directing spirit.

Gen. Lyautey's wise administration of the protectorate, to which he returned in 1917, after service in 1916 as Minister of War in Paris, has been one of peaceful penetration, extension of railroads and roads, public works and social welfare. Agricultural and industrial enterprises have been fostered, public health and education improved. The country has become safe and orderly. Able army officers and civilians have assisted him. Colonization is encouraged. Economic opportunity, the "open door" is guaranteed to all.

Tangier, a seaport of 52,000 inhabitants, including 11,700 Europeans and 12,000 Jews, which occupies the extreme northwest corner of Africa on the Atlantic, was temporarily internationalized in the negotiations of 1911-12, with a hinterland of about 100 square miles. It is administered by the resident diplomatic corps, which does not make for economic progress. Both France and Spain desire complete possession, but no agreement has been reached.

The revenue and expenditures of the French protectorate are estimated for the year 1921 at about £10,750,000 each. The Moroccan debt (three French loans) amounted in 1921 to £16,224,960.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $2,717,303 |
| " 1921-22 | 3,470,526 |
| Exports, 1920-21 | 522,516 |
| " 1921-22 | 205,913 |

## NEPAL, KINGDOM OF.

AREA, estimated, 54,000 square miles.
POPULATION, 5,639,092.
CAPITAL, Kathmandu, population, 60,000.
*Sovereign*, Maharajah Tribhubana Blr Blkram, born June 3, 1906, succeeded his father Dec. 11, 1911.
*Prime Minister*, Maharajah Sir Chandra Shumshere Jung, Bahadur Rana, appointed June 26, 1901; he holds the rank of General in the British Army.

Nepal is an independent state on the southern slope of the Himalayas, bounded by Thibet on the north, by Sikkim and Bengal on the east and by Bengal and the United Provinces of British India on the south and west. Though friendly, a policy of seclusion is followed and travel discouraged. The Ghurkas, whose Aryan ancestors from Rajputana mixed with the Mongolic aborigines, overran the country in the latter half of the eighteenth century, and are the dominant race. From their ranks the British Indian Government recruits regiments of most valuable soldiers. The kingdom maintains a well-drilled and efficient army of 32,000 infantry and 2,500 artillery. There are many fertile valleys lying in the slopes of the bleak and lofty mountains (which include Mt. Everest, altitude 29,141 feet), and its territory runs into the Terai on the plains of India. It has rich forests. Nepal exports rice, grain, hides and cattle, and imports textiles, sugar, salt, hardware, etc. The capital is in a most fertile valley cultivated from end to end, 15 miles long and 20 miles wide, which supports 300,000 inhabitants and is noted for its 2,700 Buddhist shrines, nearly all lavishly decorated examples of Nepalese art. Paton is the largest city and Pashpoti a holy centre for pilgrims. In 1920-21 its exports to India were £4,112,000 and imports £1,913,000.

## THE NETHERLANDS, KINGDOM OF.

HOLLAND.

AREA, 12,582 square miles. Colonial possessions: Dutch East Indies, 683,000 square miles; Dutch Guiana, 46,060 square miles; Curacao Islands, 403 square miles; total, 742,045. Grand total, 756,627.
POPULATION, census of 1920, 6,841,155. Colonial, Dutch East Indies, 49,161,047; Dutch Guiana (1921), 113,181; Curacao, 53,702. Grand total, 56,169,085.
CAPITAL, The Hague, population (1920), 353,286; other cities, Amsterdam, population, 642,162; Rotterdam, 510,538; Utrecht, 140,189; Groningen, 89,895; Haarlem, 76,858 and 24 others from 25,000 to 70,000.
*Queen*, Wilhelmina, born Aug. 31, 1880, succeeded, on the death of her father, Willem III., Nov. 23, 1890; crowned Sept. 6, 1898. Married Prince Henry of Mecklenburg-Schwerin (Prince Consort), Feb. 7, 1901. *Heir*, her only daughter, Princess Juliana, born, April 30, 1909.
*Premier*, Jonkheer Dr. Ch. J. M. Ruys de Beerenbrouck (Interior), born Dec. 1, 1873, appointed Sept. 9, 1918.
*Minister to the United States*, Dr. J. C. A. Everwijn.
*Consuls General in the United States*, at New York, D. J. Steyn Parve; at San Francisco, H. A. van Coenen Torchiana; at Chicago, J. Vennema; *Consuls*, at Boston, J. H. Reurs; at Philadelphia, A. P. van der Burch; at Baltimore, R. H. Mottu; at Norfolk, J. P. A. Mottu; at Charleston, J. L. C. Diemes; at New Orleans, W. J. Hammond; at St. Louis, W. A. J. M. van Waterschoot van der Gracht; at Kansas City, H. Visscher; at Mobile, Palmer Pillans; at Galveston, O. S. Flint; at Grand Rapids, J. Steketee; at Cleveland, P. Plantings; at Seattle, J. C. J. Kempees; at Port Arthur, L. F. J. Wilking.
*United States Minister*, vacant.
*United States Consul General*, at Rotterdam, George E. Anderson. *Consuls*, at Amsterdam, Frank W. Mahin; at Curacao, W. I., Bradstreet S. Rairden; at Batavia, Java, Charles L. Hoover; at Soerabaya, Java, Parker W. Buhrman; at Medan, Sumatra, Carl O. Spamer.

The Netherlands (Holland) a kingdom in northwestern Europe, 196 miles long by 109 miles wide, is bounded by Germany on the east, Belgium on the south and the North Sea on the west and north. Its surface is flat with an average height above sea level of 37 feet and with about one-fourth of its land below sea level, reclaimed and protected by dikes, of which there are 1,500 miles. A plan to drain half of the shallow Zuyder Zee has been prepared by engineers designed to add 817 square miles to the cultivable land (polders), adopted June 14, 1918, but not yet begun. The work is expected to take 15 years, the first outlay to cost $26,500,000. Of the country's 8,052,480 acres, 6,089,200 are cultivated intensively and 615,165 given over to forests equally well cared for. Great crops of cereals, potatoes, etc., are raised. Dairy products are an important industry, her cheese products being famous, and her cattle high grade; tulips and other flowering bulbs and roots are grown and exported extensively. In 1920, 1,965,552 tons of sugar beets were raised on 158,675 acres. Fisheries engage about 6,500 vessels and 18,000 men, and the product of the herring fisheries alone is about $3,750,000.

Shipbuilding and sugar refining are important industries, also brewing and distilling. Amsterdam is famous for diamond cutting. Coal is found in Limburg where 2,168,590 tons were mined from privately owned mines and 1,772,210 from state mines, total 3,940,590.

Canals, of which there are 2,000 miles, are most important in internal communication; elaborate systems are in the cities and feed the harbors. The Rhine and the Scheldt reach the sea through the Netherlands and carry enormous traffic. There are 3,000 miles of roads, 1,830 miles of tramways and 2,377 miles of railroads. Holland's merchant marine in 1921 numbered 1,069 vessels of a total gross tonnage 226,318. In 1921 there entered the ports of the Netherlands 14,074 vessels with a tonnage of 8,051,114.

The first Constitution after the reconstruction of the Netherlands as a sovereign state was promulgated in 1814, and revised in 1815, after the addition of the Belgian provinces, and again in 1840, 1848, 1887 and 1917. It assures a hereditary constitutional monarchy. Executive power rests exclusively in the sovereign, legislative power in the sovereign and the States-General of two Chambers—First Chamber, 50 members, elected for 9 years (one-third each third year) by the provincial states, and the Second Chamber, 100 Deputies, elected for four years directly. Universal suffrage for citizens of both sexes over 25 years of age and proportional representation is in force. The sovereign exercises the executive authority through a Council of Ministers, the President thereof corresponding to a Prime Minister. There is a State Council of 14 members, named by the sovereign of which she is President, to be consulted on all legislative and some executive matters.

The kingdom has a unique system of frontier defense, besides the fortresses, inasmuch as two-thirds of the total area is surrounded by the sea, with dikes to hold back the waters, an advance by an enemy may be stopped by inundating the lands. Army service is partly compulsory and partly voluntary. Every Dutchman is liable for service from ages nineteen to forty. Actual service may be by lot, substitution being prohibited. Annually 25,500 are recruited, with 600 for sea service. The reserve numbers 450,000.

Entire liberty of worship and conscience is guaranteed. The royal family belong to the Dutch Reformed Church. The state budget contains allowances for different churches, Protestant, 1,388,000 guilders; Roman Catholic, 2,053,000; Jewish, 14,000.

Education is obligatory from ages six to thirteen. Intelligence is most widely diffused. Conscripts called in 1913 showed only six-tenths of 1 per cent. unable to read. There are universities at Amsterdam, Utrecht, Leyden, Delft and Groningen. The Netherlands is a member of the League of Nations.

The guilder (or florin), is the unit of currency, gold par being 40.2 cents. Rate of exchange, Nov. 1, 1922, 39.05 cents.

The budget voted for 1921 and estimates for 1922 were:

| | 1921 Guilders | 1922 Guilders |
|---|---|---|
| Budget—Receipts | 552,170,069 | 606,590,233 |
| Expenditures | 934,245,953 | 938,139,598 |

The budget for the colonial possessions in the East Indies for 1922 is:

| | Mother Country Guilders | Colonies Guilders |
|---|---|---|
| Budget—Receipts | 44,038,070 | 690,453,771 |
| Expenditures | 214,378,361 | 710,339,019 |

The budget for 1922 shows the national funded debt to be 2,502,150,000 guilders, with an annual interest and sinking fund charge of 170,318,096 guilders.

The imports for 1921 were 2,288,503,000 guilders; exports, 1,471,564,000 guilders.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $25C,818,059 |
| " | 1921-22 | 129,789,054 |
| Exports, | 1920-21 | 61,315,284 |
| " | 1921-22 | 53,120,972 |

### *DUTCH EAST INDIES.*

AREA, 683,000 square miles; viz. Borneo, 212,737; Molucca Islands, 144,620; Celebes Islands, 72,070; Java and Madura, 50,557; Sumatra, 159,739; Timor Archipelago, 17,698; Rian-Lingga, Archipelago, 16,301; New Guinea and others.

POPULATION, census of 1920, 49,161,047. Java, 35,017,204; Borneo, 1,625,453; Sumatra, 5,848,868, etc. (No figures available for New Guinea.)

CAPITALS, Batavia, Java, population, 234,697; Banjermasin, Borneo, 52,000.

*Governor General*, Dr. D. Fock.

*United States Consuls*, at Batavia, Charles L. Hoover; at Soerabaya, Parker W. Buhrman; at Medan, Sumatra, Carl O. Spamer.

The colonial possessions of the Netherlands in the East Indies consist of great islands and archipelagoes lying along the Equator from about 6° north latitude to 10° south latitude, between the Asiatic mainland and the Philippines, and Australia. They form the bulk of Malaysia. The census of 1920 gave the native Malay population as 48,112,706; Europeans, 169,355 and Orientals, chiefly Chinese and Arabs, 878,986. Java is the most densely populated land mass in the world. The great majority of the natives are Mohammedans. Much attention is given to education.

The islands are luxuriant, even for the Tropics, of enormous natural and annually productive wealth. Dense forests abound in valuable timber. Besides raising sufficient food for the dense population, there is produced for export in Java and Madura alone, sugar (1,480,346 tons in 1920), coffee, tea, cocoa, indigo, spices, cinchona, tobacco, rubber, copra, tin and petroleum. Of coal the mines of Java, Sumatra and Borneo produced, in 1920, 1,055,832 tons.

There are 3,923 miles of railroads, 3,130 in Java and 793 in Sumatra. In 1920, 12,167 vessels of 5,106,156 tonnage entered the ports. The Colonial army numbers 40,000, about one-quarter European, with 20,000 in the reserve.

The guilder with native coin is legal currency, guilder gold par being 40.2 cents. Imports were 1,310,823,000 guilders; exports, 2,267,871,000. Receipts, budget of 1922 were: 734,491,841 guilders; expenditures, 924,717,380; deficit, 190,225,539. Debt, 446,868,584 guilders.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $61,180,547 |
| " | 1921-22 | 7,767,816 |
| Exports, | 1920-21 | 104,613,907 |
| " | 1921-22 | 27,794,652 |

### *DUTCH GUIANA (Surinam).*

AREA, 46,060 square miles.

POPULATION, 1921, 113,181, exclusive of Negroes and forest Indians.

CAPITAL, Paramaribo, population, 1920, 50,560.

*Governor*, Baron von Heemstra.

Dutch Guiana (about the size of the State of Mississippi) is situated on the north coast of South America, between French Guiana on the east and British Guiana on the west; inaccessible forests and savannas on the south stretch to the Tumuc Humac Mountains. The chief products are sugar (10,091 metric tons in 1920), cacao coffee, bananas and rum. Placer mines produced in 1920 gold to the amount of 13,110 ounces. In 1920, 214 vessels of 409,878 tonnage entered its ports.

The Dutch by the Treaty of Breda, 1667, gave New Netherlands (New York) to England in exchange for Surinam.

The guilder is the unit of currency, gold par being 40.2 cents. Imports in 1920 were 13,718,000 guilders; exports, 7,477,512. Receipts, 1921, were 6,440,000 guilders, expenditures, 8,193,000.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $2,056,133 |
| " | 1921-22 | 977,549 |
| Exports, | 1920-21 | 470,296 |
| " | 1921-22 | 925,292 |

### *CURACAO—(Dutch West Indies).*

AREA, 403 square miles.

POPULATION, 1920, 53,702.

CAPITAL, Willemstad, population, 12,500.

A group of six islands in the Caribbean Sea, off the coast of Venezuela, constitute the colony.

Products are maize, pulse, cattle, salt and phosphates; chief industry is the refining of oil.

In 1920, 3,144 vessels of 2,654,000 tonnage entered the ports.

Imports, 1920, were 7,307,000 guilders; exports, 10,903,000.

Budget of 1922—Receipts, 1,302,000 guilders; expenditures, 2,723,000 guilders.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $3,173,607 |
| " | 1921-22 | 2,092,962 |
| Exports, | 1920-21 | 2,514,838 |
| " | 1921-22 | 1,735,227 |

## NICARAGUA, REPUBLIC OF.

AREA, 51,700 square miles.

POPULATION, census of 1920, 638,119.

CAPITAL, Managua, population, 1920, 60,342; other cities, Leon, population, 47,234; Granada, 21,925; Matagalpa, 32,271.

*President*, Sr. Don Diego Manuel Chamorro (1921-25), inaugurated Jan. 1, 1921.

*Premier*, Engineer Adolfo Cardenas, Acting Minister (Foreign).

*Minister to the United States*, Sr. Don Emiliano Chamorro.

*Consuls General*, at New York, Toribio Tegerino; at San Francisco, Fernando Chamorro Chamorro; at New Orleans, Agustin Bolonos Chamorro; at Kansas City, Kan., Edwin R. Heath; at Chicago, Berthold Singer; at Philadelphia, Lorenzo Guerrero Potter; at St. Louis, Rodolfo Jose Gutievres. *Consuls*, at Boston, David Sequeira; at Calexico, Arturo Pallais; at Minneapolis, F. Stewart; at Kansas City, Mo., Willis Wood; at Fort Worth, John E. Petrilli; at Houston, James P. Williams; at Norfolk, Charles M. Barnett; at Seattle, W. L. Kennedy. *Consul General* at Panama for the Canal Zone, Marco E. Velasquez.

*United States Minister*, John E. Ramer.

*United States Consul*, at Corinto, Harold Playter; at Bluefields, William H. Heard.

Nicaragua lies between the Caribbean Sea, with a coastline of 280 miles, and the Pacific (200 miles), with Honduras on the north and Costa Rica on the south. In area it is a little larger than the State of New York. The Cordillera range of mountains, including many volcanic peaks runs from northwest to southeast through the middle of the country. Between this range and a range of volcanic peaks to the west, lies Lake Managua, 30 miles long by 15 miles wide, and Lake Nicaragua, 100 miles long and 45 miles wide, of great importance in the transport system of the country; and with the San Juan River on the Costa Rican boundary, the latter forms the route for a trans-isthmian ship canal planned to connect the Atlantic and Pacific. The right to construct a canal over this route for 99 years, together with a naval base in the Gulf of Fonseca on the Pacific and Corn Island in the Caribbean was acquired for $3,000,000 by the United States in a treaty ratified Feb. 18, 1916; the United States was to supervise the expenditure of that money. The Pacific Railroad running from Corinto to Leon and from Managua to Granada (171 miles), the only one in the country, was Government-owned, but 51 per cent. of the stock was sold to New York bankers who also hold the rest of the stock in escrow for a loan of $1,060,000.

The country has valuable forests, some gold is mined, but it is essentially an agricultural and stock raising community. On the broad tropical plains of the east coast, bananas and sugar cane are cultivated, and coffee is grown on the mountain slopes. The chief exports are coffee, sugar, bananas, timber and hides. Textiles, machinery, etc., chemicals and flour are the chief imports.

In 1920, 779 ships with a tonnage of 463,925 entered her ports.

The Constitution of March 12, 1912, amended in 1913, provides for a Congress of two Houses, a Senate of 13 members elected for six years, and a House of 40 Deputies elected for four years by universal suffrage. The President is appointed for four years and has a Council of five Ministers. The Roman Catholic is the prevailing religion. The army numbers 2,000 men, selected by conscription. Nicaragua is a member of the League of Nations. (For part in Federation of Central America, see Honduras.)

| | |
|---|---|
| Par of exchange | cordoba = $1.00 |
| Imports, 1921 | $5,309,902 |
| Exports, 1921 | 8,070,949 |
| Budget—Receipts | 3,388,828 |
| Expenditures | 2,804,026 |
| Debt—Internal | No figures available |
| External | cordobas, 8,425,936 |

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $6,133,302 |
| " | 1921-22 | 3,385,030 |
| Exports, | 1920-21 | 6,477,186 |
| " | 1921-22 | 3,504,591 |

## NORWAY, KINGDOM OF.

AREA, 124,964 square miles (exclusive of Spitzbergen, estimated, 25,000).

POPULATION, census of 1920, 2,646,306.

CAPITAL, Christiania, population, 258,520; Bergen, 91,081; Trondhjem, 54,520; Stavanger, 43,883; Drammen, 26,174, and twelve others above 10,000.

*King*, Haakon VII., born Aug. 3, 1872, second son of Frederick VIII., King of Denmark, elected King of Norway by the Storthing Nov. 18, 1905, and crowned June 22,1906; married July 22, 1896, to Princess Maud, third daughter of King Edward VII. of Great Britain. *Heir*, Crown Prince Olaf, born July 2, 1903.

*Premier*, Otto Albert Blehr (Finance).

*Minister to the United States*, H. H. Bryn.

*Consul General*, at New York, Hans Heinrich Theodor Fay; *Consuls*, at Chicago, Olaf Bernts; at St. Paul, Engebreth Hagbarth Hobe; at San Francisco, Nils Voll.

*United States Minister*, Laurits S. Swenson.

*United States Consul General*, at Christiania, Alban G. Snyder; *Consuls*, at Bergen, George N. Ifft; at Stavanger, Robert S. S. Bergh.

Norway occupies the west part of the Scandinavian Peninsula in Northwest Europe from the Skagerrack, which separates it from Denmark, to the North Cape in the Arctic Ocean, where on the east it meets Lapland and Finland. The Kjolen Mountains, which separate Norway from Sweden to the east, give to Norway in the northern part but a narrow fringe of country washed by the Arctic and North Atlantic Oceans, and cut deep by fjords of scenic grandeur. The climate is mild and moist, like England's, on the west coast, but cold and dry in the interior and in the north and east sections.

Norway has but 4,400 square miles of land under cultivation; rivers and lakes occupy 5,000, and forests 25,000: three-fourths of the land is unproductive. Norway is essentially a maritime country. Her merchant fleet, though neutral, suffered heavily in the World War by sinking and torpedoing, the total loss being 831 vessels with a total of 1,238,300 registered tons, and 1,200 men killed. She dropped from fourth place to sixth in mercantile tonnage. Norway's merchant marine on Jan. 1, 1921, was 3,828 vessels of 1,528,104 net tons. Her sailors are known the world over. Fisheries constitute a leading industry and provide a large part of the exports. In 1921 more than 112,000, 17 per cent. of the entire male wage earning population (660,000), earned their living directly or indirectly by the sea.

The forests have an estimated value of a billion kronen (approximately $250,000,000) and about three-fifths of the acreage is covered with pine and fir trees. The export of timber and wood pulp in 1919 was valued at 113,048,100 kronen; and in 1920 at 226,669,000. The Norwegian Afforestation Association has planted since 1906 between ten and fifteen million new trees annually. Agriculture is limited and the country imports much food supply.

The country lacks coal but has become a great power producing country by utilizing by electrical transmission its greatest natural asset—water power, which is estimated to amount to 15,000,000 horsepower day and night. Of this the Government owns 2,000,000, and has developed 75,000. Private enterprise has developed about 1,200,000 horsepower. Engineering plans are under way to transmit hydro-electric power to Central Europe. Already Norway is feeling the impulse on its industries which, on Jan. 1, 1921, numbered 8,069 establishments, giving employment to 158,259 workers; and which have been developing on an export basis.

The chief mineral products are pyrites, copper ore, iron ore, nickel ore, silver and feldspar.

Norway, in 1921, had 2,139 miles of railroads, of which 1,771 are state owned; the work of converting these to electrical power is going on rapidly. The number of ships entering Norwegian ports in 1920 was 8,031 with a net tonnage of 4,402,277.

The population of Norway is singularly homogeneous, there being numbered of non-Norwegians only about 1 per cent., 20,000 Lapps or Finns and 8,000 Quains, both of Mongolian ancestry. This excludes about 50,000 foreign-born residents of the country before the war, many of whom returned to their native countries. Norwegians have emigrated in great numbers, chiefly to the United States and Canada. The United States Census of 1920 returned 363,862 residents of the United States as born in Norway.

Norway under its Constitution, adopted May 17, 1814, is a constitutional hereditary monarchy. Independent for centuries, Norway entered into a union with the Kingdom of Denmark in 1381. By treaty of Jan. 14, 1814, the King of Denmark ceded Norway to Sweden, but the Norwegian people declared themselves independent and elected a Danish Prince as their King. The foreign powers refused to recognize this election; as a result a convention on Aug. 14 proclaimed the independence of Norway in union with Sweden, and on Nov. 4 elected Charles XIII. of Sweden King of Norway. This union lasted until 1905. Disagreements having arisen, culminating in Norway's claiming the right to maintain its own consular service, Norway declared the union dissolved on June 7, and after negotiations a repeal of the union by mutual agreement was signed Oct. 26, 1905. After a plebiscite Prince Charles of Denmark was elected King and ascended the throne, taking the name of Haakon VII. A treaty guarantecing the integrity of Norwegian territory was signed in October, 1907, by Norway, Great Britain, France, Germany and Russia.

The legislative power is vested in the Storthing, the members numbering 150, elected for three years by direct vote on universal suffrage of citizens, both male and female, of 23 years of age. The Storthing divides itself into two sections, one-fourth of the membership forming the Lagthing, and three-fourths the Odelsthing, which consider the legislation separately, sitting in joint session on failure to agree separately, when decision is made by a two-thirds majority. The King may exercise the veto twice, but if the same bill is passed a third time it becomes law. The King appoints an executive Cabinet of at least eight Ministers, who may speak in the Storthing, but have no vote. There is a large measure of home rule throughout the country through local governing bodies elected by universal suffrage.

The Evangelical Lutheran religion is endowed by the state and its clergy are nominated by the King. All religions are tolerated.

Education is compulsory from seven to fourteen, and the school system is highly organized. There is, so to speak, no illiteracy. The University at Christiania, founded 1811, has 1,500 students and is subsidized by the state.

The army is a national militia with universal and compulsory service. The peace strength is 40,000 men, with a reserve of 315,000. The navy is designed for coast defense only and numbers about 1,200 officers and men, with all seafaring men between the ages of 20 and 44 enrolled on the active list and liable to conscription.

The Norwegian Meteorological Service established in October, 1922, a station at Mygbugten, in eastern Greenland, and weather reports are now being transmitted daily by radio-telegraphy. Greenland is one of the "factories" of polar air.

Norway in the reaction from the World War found herself in the grip of hard times in the year 1921, and her industries and commerce have suffered heavily. The unit of currency, the kroner (par of exchange, 26.8 cents), being quoted in October, 1921, at 8.45 to the dollar. Great recovery has been made during 1922, and the dollar now (Oct. 15, 1922), equals 5.40 kroner. Norway's commerce was:

Imports, 1920, calendar year...kronen, 3,029,900,000
" 1921, calendar year...kronen, 1,460,000,000
Exports, 1920, calendar year...kronen, 1,241,800,000
" 1921, calendar year..kronen, 576,000,000

Norway's trade with the United States was:

Imports, 1920-21, fiscal year.....$57,920,018
" 1921-22, fiscal year.....$29,789,272
Exports, 1920-21, fiscal year.....$18,849,358
" 1921-22, fiscal year.....$11,739,624
Budget—Receipts, 1920-21.....kronen, 820,229,181
Expenses, 1920-21.....kronen, 903,350,065
Debt—Internal, June 30, 1921...kronen, 782,249,095
External, June 30, 1921..kronen, 433,710,634

### *SPITZBERGEN.*

AREA, about 25,000 square miles.

POPULATION, 1921, 1,503.

Spitzbergen, a mountainous group of islands in the Arctic Ocean between 76° 26′ and 80° 50′ north latitude and 10° 20′ and 32° 40′ east longitude, the largest being West Spitzbergen (12,000 square miles), lies about 370 miles due north of Norway, half-way to the Pole. Discovered by Norsemen in 1194 and rediscovered by Barents in 1596 the islands had been the resort of whalers of several nations. Ever since 1261 Norway has periodically asserted her claims to the islands, and from 1870 the demand became more insistent, increasing as Norwegian exploration discovered rich outcropping seams of coal—a necessity which Norway lacks. International conferences were held without result, the islands remaining a No Man's Land. The war put an end to negotiations, but following action by the Peace Conference in 1919, a treaty was signed in Paris Feb. 9, 1921, by the United States, Great Britain, Denmark, France, Italy, Japan, the Netherlands, Sweden and Norway, which put Spitzbergen under the flag of Norway, but not with unlimited sovereignty, as they set certain specified guarantees —no naval base to be established, the ships of all

signatories to enjoy hunting and fishing privileges there; and equal treatment must be shown to all.

The development of the coal fields has proceeded rapidly. Norwegians own the two largest mining companies. The coal exported has been good steam coal; the output in 1919 was 90,000 tons, and in 1921, 172,500 tons, practically all of which went to Norwegian ports. There are large deposits of low-grade iron ore and gypsum, and signs of oil have been reported.

## PALESTINE.

(British Mandate)

AREA, estimated, 9,000 square miles.

POPULATION, estimated, July 1, 1921, 770,000; divided 600,000 Mohammedans, 80,000 Jews, 84,500 Christians, 5,700 Druses, 170 Samaritans.

CAPITAL, Jerusalem, population, estimated, 64,000.

*British High Commissioner*, Sir Herbert L. Samuel.

*United States Consul*, at Jerusalem, vacant.

Palestine, the Holy Land, lying between the Mediterranean Sea and the River Jordan, was formerly a villayet of the Turkish province of Syria. It was conquered during the World War by British troops under General, now Field Marshal, Viscount Allenby, Jerusalem being surrendered Dec. 9, 1917. Jerusalem had been in Moslem hands since 1244, had been conquered and reconquered in the crusades, and had been under the rule of the Turk since 1517. It remained under British Military Administration until July 1, 1920, when Sir Herbert L. Samuel was appointed High Commissioner and a civil government set up. The announced policy of Great Britain is to accord equal treatment to the people and to provide a national home for the Jews, permitting them to return to Palestine only as the development of that country guarantees the normal absorption of immigrants for rising industries and reclaimed agricultural lands. There were about 60 colonies in 1921 with about 17,000 colonists living on 163,000 acres, about 10 per cent. of the cultivated area. Jews maintain an agricultural experimental station in Haifa.

Jerusalem, the Holy City, is visited annually by large pilgrimages of Orthodox Greek Christians. The Mosque of Omar occupies the site of Solomon's Temple. It contains the sacrificial stone of Abraham and a relic of Mahomet. Bethlehem is also visited, the Church of the Nativity being reputed the oldest Christian church in existence.

Palestine proper is about the size of the State of Vermont with twice as many inhabitants. On the west is the coastal plain a hundred miles long and fifteen wide, fertile and well watered. In the centre is the plateau of Judea. The eastern border drops sharply into the depressed valley of the River Jordan and the Dead Sea, 46 miles long, with an average width of 8 miles, 1,292 feet below sea level. The country is capable of great agricultural development, dependent on irrigation. Olives, figs and grapes are grown in large quantities; also cereals. There are large flocks of sheep and goats. The Government is making an effort to reforest the country. Rice, sugar, petroleum and cotton textiles are the chief imports.

There were 625 miles of railroads in 1921; and for the year ending March 30, 1921, 603 steamers of 779,521 tons, and 2,688 sailing vessels of 29,578 tons entered the seaports—Jaffa, population, 15,000; Haifa, 26,000; Acre, 6,500; and Gaza, 15,000.

Transjordania, an ill defined territory of Arabia east of the Jordan, has been set up as an Emirate by the British Government with Abdullah, the second son of the King of the Hejaz and brother of the King of the Iraq, as its Emir. The seat of Government is at Amman.

## PANAMA REPUBLIC OF.

AREA, 31,890 square miles.

POPULATION, 1920, 401,428, excluding the Canal Zone.

CAPITAL, Panama, population, 1917, 61,369; Colon, 26,076.

*President*, Dr. Belisario Porras, 1920-24.

*Premier*, Sr. Rodolfo Chiari (Interior and Justice).

*Minister to the United States*, Dr. Ricardo J. Alfaro.

*Consuls General*, at New York, Belisario Porras, Jr.; at New Orleans, vacant; *Consuls*, at Boston, Melvin Maynard Johnson; at San Francisco, Francisco Jimenez; at Atlanta, John Ashley Jones; at Kansas City, Loren O. Booram; at St. Louis, vacant; at Fort Worth, L. T. Rogers; at Galveston, A. A. Van Alstyne.

*United States Minister*, John Glover Smith.

*United States Consuls*, at Panama, George Orr; at Colon, Julium D. Dreher.

*United States Governor of the Canal Zone*, Col. Jay J. Morrow, U. S. A., appointed March 28, 1921.

The Republic of Panama, formerly a department of Colombia, declared its independence Nov. 3, 1903, and was recognized Nov. 13 by the United States. It occupies the entire isthmus of that name connecting North and South America, lying between the Caribbean Sea on the north and the Pacific on the south. The Costa Rican boundary line on the west has been a matter of dispute (see Costa Rica). The Colombian boundary line to the east was determined in 1921 by the Thompson-Urrutia Treaty.

By treaty Nov. 18, 1903, ratified Feb. 23, 1904, and with a supplemental (Taft) agreement of 1904, the United States acquired the right to construct the Panama Canal across the Isthmus, a strip (the Canal Zone) extending for five miles on each side of the Canal, the terminal cities of Cristobal adjacent to Colon, and Balboa adjacent to Panama, and islands for defensive purposes in the bay, in perpetuity and exclusive control for police, judicial, sanitary and other purposes. The United States also has complete jurisdiction over sanitary and quarantine matters in the two Cities of Colon and Panama and owns and operates the Panama Railroad, 47 miles long, connecting these cities. In return the United States paid Panama $10,000,000, and $250,000 a year, beginning after nine years.

President Harding recommended to Congress on Sept. 5, 1922, the negotiation of a new treaty with Panama to supersede the 1903 treaty with the Taft agreement under which the Canal was constructed. The Panaman Government is anxious to have clarified the provision regarding the right recognized for the Government of the United States to intervene in behalf of peace and order in Panama; also that relating to relations with the Canal authorities; and also that on land valuations.

The civil population of the Canal Zone by census of June 30, 1921, was 23,757, of whom 8,158 were Americans, and 2,825 American men and 323 American women were employed by the Panama Canal and Railroad. The other employees numbered 5,168, chiefly British West Indian Negroes.

The Canal Zone is a military reservation and is administered by the War Department. No private individuals are permitted to acquire land. (For statistics of the Panama Canal see page 720).

The soul of Panama is very fertile, but of the whole area more than half is wholly uncultivated. Immigration is encouraged. The forest resources are great. Stock raising is extensively carried on. The chief exports are bananas (from Almirante), cocoanuts, balata, hides, gum and tortoise shell.

The Constitution, adopted Feb. 13, 1904, and amended Dec. 26, 1918, provides for a Chamber of Deputies of 33 members (election to be held every four years beginning with 1924) and a President, also elected by direct vote for a four-year term, and not eligible for re-election. He appoints a Cabinet of five Ministers. There are eight provinces, each under a Governor elected by popular vote. The Roman Catholic religion prevails, but religious freedom is guaranteed. Primary education is free and compulsory. A university has been opened. There is no army; the national police numbers 69 officers and 750 men. The finances of the republic have been reorganized by a fiscal agent of the United States.

Panama is a member of the League of Nations.

| | |
|---|---|
| Par of exchange | balboa = $1.00 |
| Imports, 1921 | $11,660,769 |
| Exports, 1921 | 2,495,407 |
| Budget—Receipts | 6,408,880 |
| Expenditures | 3,989,968 |
| Debt—Internal | None |
| External, U. S. gold | 7,101,000 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $32,179,004 |
| " 1921-22 | 14,662,814 |
| Exports, 1920-21 | 5,581,781 |
| " 1921-22 | 3,535,566 |

## PARAGUAY, REPUBLIC OF.

AREA, estimated, 75,673 square miles.

POPULATION, estimated, 700,000.

CAPITAL, Asuncion, population, 1920, 99,836.

*President*, Dr. Eusebio Ayala, 1920-24, assumed office, Oct. 29, 1921.

*Premier*, Sr. Rogelio Ibarra (Interior).

*Minister to the United States*, none; legation in charge of the Consul General.

*Consuls General*, at New York, William Wallace White; at Philadelphia, Rodman Wanamaker. *Consuls*, at Norfolk, Carlos Barrett; at New Orleans, James Lloveras; at Chicago, Alberto W. Holmes; at Seattle, Erastus Brainerd.

*United States Minister*, William J. O'Toole.
*United States Consul*, at Asuncion, Harry Campbell.

Paraguay is an inland agricultural and pastoral country of South America, communicating with the South Atlantic by the Paraguay River, a tributary of the River Plata, and navigable by vessels of light draft up to Asuncion. A railroad, British owned, 232 miles long, connects the capital with the Argentine railroad system. It is bounded on the north by Bolivia and Brazil, on the east by Brazil and Argentina, on the south by Argentina, and on the west by Argentina and Bolivia. In area it is about the size of Nebraska. The high plateaus are suitable for cattle raising. The chief exports are hides, timber, cattle, yerba (mate) and tobacco.

The Constitution of 1870 is modelled on that of the United States, but more centralized. The history of Paraguay since its declaration of independence from Spain in 1811 has been one of constant dissensions, dictatorships, revolutions and wars. The Roman Catholic religion is established but others are tolerated. Education is free and nominally compulsory. The university at Asuncion had 247 students in 1919.

Paraguay is a member of the League of Nations. She has a standing army of 1,900 and a reserve of 100,000.

Par of exchange....Argentine gold peso = 96.5 cents
Imports, 1921.....$8,108,154
Exports, 1921.....8,988,450
Budget—Receipts.....3,519,878
Expenditures.....3,985,042
Debt—Internal.....No figures available
External, sterling.....£1,069,510

Trade with the United States was:
Imports, 1920-21.....$980,357
" 1921-22.....262,531
Exports, 1920-21.....1,207,791
" 1921-22.....1,161,732

## PERSIA, KINGDOM OF.

AREA, 628,000 square miles.
POPULATION, estimated, 10,000,000.
CAPITAL, Teheran, population estimated, 280,000; other cities, Tabriz, 200,000; Ispahan, 100,000; Meshad, 80,000, and 42 cities of above 10,000.
*Shah*, Ahmed Mirza, born June 29, 1898, succeeded his father, Mohammed Ali (who abdicated), July 16, 1909, crowned July 21, 1914; heir, his brother, Mohammed Hassan Mirza, born Feb. 19, 1899.
*Premier*, Mushir-ed-Dowleh (Interior).
*Administrator General of Finance*, Dr. Arthur C. Millspaugh of the United States, appointed September, 1922.
*Minister to the United States*, Hurza Hussein Khan Alai.
*Consul General*—at New York, H. H. Topakyan.
*Consul*, at San Francisco, vacant.
*United States Minister*, Joseph Saul Kornfeld.
*United States Consul*, at Teheran, Gordon Paddock.

Persia (Iran) is an ancient kingdom occupying the western and larger half of the great Iranian plateau, between the rivers Indus and Tigris in Southwestern Asia. It is bounded on the north by Transcaucasia (Russia), the Caspian Sea and Turkestan; on the east by Afghanistan and Beluchistan (British India); on the south by the Arabian Sea and the Persian Gulf; on the southwest by Mesopotamia (the Kingdom of Irag); and on the west by Armenia. The boundaries are indeterminate—a cause of much friction. In size it equals the States of Idaho, Colorado, Utah, Nevada, Arizona and New Mexico combined. It is described as a "vast and miserably poor country with scanty population." The people are Moslems, mostly of the Shi'a sect, and education is largely limited to reading the Koran.

Across this plateau, which lies at an altitude of 4,000 to 8,000 feet, in the north central part, from northwest to southeast, stretches a desert, 800 miles long, varying from 100 to 200 miles wide. There are many peaks from 9,000 to 10,000 feet high. Fine forests cover the maritime plains and mountain slopes. Mineral deposits are undeveloped, but known to be considerable. Turquoise mines are worked crudely in Nishapur. Oil is produced near Ahwaz in Karun Valley, at the head of the Persian Gulf. The Anglo-Persian Oil Company holds the concession, covering nearly 500,000 square miles, and has large refineries at Abadan in the Shatt el Arab on the Persian side of the Tigris below Basra. The British Government bought control in this company in 1914 and increased its holdings in 1917 to $25,000,000. Prospecting is vigorously pushed.

Agriculture is the chief industry, wheat, barley, rice, fruits, gums, drugs, wool and cotton being the chief products. Some wines are famous. Persian carpets, all made on hand looms, are produced in Tabriz, Sultanabad and Kerman. The chief exports in 1920 were petroleum, cottons, carpets, fruits, opium and rice; the chief imports were textiles, sugar, tea and manufactures of metals. The British Empire, Russia, Egypt and Turkey are the best customers. There are fifteen regular trade routes along which goods are carried by caravans. Persia has but 350 miles of railroads. At the southern ports, all small, there entered in 1919-20 vessels of a total tonnage of 1,551,129, nearly all British; and at the Caspian ports 808,921, all Russian.

Persia has been in political turmoil for twenty years. A Constitution was forced from the Shah in 1906 which provides for a National Assembly, which has been convened three times. Government is in the hands of a Cabinet. In 1907, Great Britain and Russia, by a convention, while mutually engaging to respect the integrity and independence of Persia, marked off special "spheres of influence" for each, Russia taking about two-fifths of her territory in the north and Great Britain about one-quarter in the South, the remainder being a buffer zone. Persia, though a neutral in the World War, was constantly fought over, suffered heavily and the northwest provinces brought nearly to famine. The province of Azerbaijan, peopled by Tatars, in the extreme northwest, adjoining Armenia and Transcaucasia with Baku, the great oil port on the Caspian as its capital, declared its independence in 1917 after the Russian debacle, and later became a Soviet republic.

On Aug. 9, 1919, Great Britain and Persia signed a treaty by which the former agreed to furnish expert advisers, military officers, munitions and modern military equipment, a loan of $10,000,000 to be secured by customs duties, and to build certain railroads. This agreement was never put in force and was denounced by Persia with the consent of Great Britain in February, 1921. Immediately (in March) Persia signed a treaty with the Russian Soviet Republic as a substitute for all previous Russo-Persian treaties, which established diplomatic relations, restored Firuzeh and Ashurada to Persia, annulled all concessions previously granted to Russians in Persia, turned over the Russian Discount and Loan Bank to the Persian Government, cancelled all Persian debts to Russia and abolished the capitulations.

Persia sent a delegation to Paris in 1919 to lay its claims before the Peace Conference, but was denied a hearing. Persia is a member of the League of Nations.

Trade with the United States was:
Imports, 1920-21.....$1,762,667
" 1921-22.....1,210,399
Exports, 1920-21.....3,309,169
" 1921-22.....3,139,514

## PERU, REPUBLIC OF.

AREA, 722,461 square miles.
POPULATION, estimated, 3,500,000, besides unenumerated savage tribes.
CAPITAL, Lima, population, 1920, 176,467; chief port, Callao, population, 52,843. Other cities are Quipa, population, estimated, 35,000, Cuzco; 12,000.
*President*, Dr. Augusto B. Leguia, 1919-1923, by coup d'etat July 4, 1919, legalized by Congress; he took the oath Oct. 15, 1919, for full term of five years.
*Premier*, Dr. Alberto Salomon (Foreign).
*Ambassador to the United States*, Federico Alfonso Pezet.
*Consuls General*, at New York, Edwardo Higginson; at New Orleans, Victor Pezet; *Consuls*, at Boston, A. G. Riveros; at Baltimore, Carlos Alberto Oyague y Pflucker; at Philadelphia, Edwardo Espantoso y Cosio; at San Francisco, Santiago Llosa Arguelles; at Los Angeles, Alexandro de la Puente y Ganoza; at St. Louis, vacant; at Portland, Ore., M. D. Derteano; at Charleston, vacant; at Norfolk, vacant; at Seattle, J. M. Macedo. *Consul General* at Panama for the Canal Zone, Guillermo Espantoso.
*United States Ambassador*, vacant.
*United States Consul*, at Callao-Lima, Claude E. Guyant.

Peru is situated on the Pacific Coast of South America, bounded on the north by Ecuador, on the east by Brazil and Bolivia, and on the south by Chile. In area it almost equals the combined area of Texas, Oklahoma, Kansas, Nebraska, Colorado and New Mexico. The territory in the northeast corner in the Amazon basin is in dispute between Colombia, Ecuador, Brazil and Peru, and the possession of the provinces of Tacna and Arica on the Pacific, containing the very valuable nitrate deposits, which were retained by Chile on defeating Peru in

the war of the Pacific, 1879-82, has been long in dispute and is now the subject of diplomatic negotiations with the United States as mediator. The Protocol and Complementary Act, signed at the Washington Conference, was ratified by the Peruvian Congress on Sept. 12 by a vote of 94 to 3.

The Andes reach their highest altitudes in Peru, which contains seven peaks tower'ng about 19,000 feet, of which Huasaran (altitude 22,050 feet), Huandoy (21,100 feet), Arequipa or Misti (20,013 feet) and Hualcan (20,000 feet) are the loftiest. The thirty mile wide strip of land along the Pacific is a desert except as it is irrigated from streams from the mountains; the uplands or western slopes of the Andes are well watered and also the eastern descent to the Amazon basin, which is covered with forests. The mountains are rich in minerals and many valuable mines, some dating back to the Incas, are being worked. Peru produces 95 per cent. of the world's vanadium. Sugar, cotton, copper, silver, vanadium, guano, petroleum and wool (both alpaca and sheep), are the principal exports, and textiles, wheat lumber and coal the chief imports.

There were in 1920, 1,984 miles of railroads, 1,385 being state railroads under control of the Peruvian Corporation. At Callao in 1920 in the foreign trade there entered 721 steamers of 1,767,032 tons, of these 194 were British, 192 American, 135 Peruvian, 131 Chilean, and 11 Japanese.

Under the new Constitution, Jan. 18, 1920, the Government is highly centralized. The President, the Senate (35 members) and the House of Representatives are all elected for five years. Absolute political and religious freedom is guaranteed. The Catholic religion is the state religion. The law of Feb. 5, 1921, makes elementary education compulsory and free. At Lima s the Univers ty (w th, in 1920, 1,308 students) founded by Charles V. in 1551. Over 50 per cent. of the population are full-blooded Indians, including many uncivilized and unenumerated tribes, 40 per cent. are Mestizos, or of other mixed blood, and but 2 per cent. entirely of Caucasian blood. The lot of the Indians has been very bad. President Leguia put in motion an elaborate series of reforms to modernize the country, including the sanitation of 31 Peruvian cities, the reorganization of the army and navy, the reconstruction of the educational system, huge irrigation works, and the stamping out of yellow fever.

Military service is compulsory; the standing army numbers 7,500, with 99,000 in the reserves. The navy is small. Peru is a member of the League of Nations.

| | |
|---|---|
| Par of exchange, libra | $4.86 |
| Rate of exchange, Oct. 15, 1922 | $4.02 |
| Imports. 1920 | $89,220,968 |
| Exports, 1920 | $171,578,198 |
| Budget—Receipts | $35,988,108 |
| Expenditures | $35,966,919 |
| Debt—Internal | *No figures available* |
| External, U. S. gold | $34,015,000 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $42,954,229 |
| " 1921-22 | 12,4 6 799 |
| Exports, 1920-21 | 40 822 263 |
| " 1921-22 | 14,442,775 |

## POLAND, REPUBLIC OF.

AREA, 124,097 square miles; viz.: former Prussian portion, 16,568; Russian portion, 40,603; former Austrian Galicia, 30,533; Teschen, 386. Eastern territories, boundaries undetermined (estimated), 43,920; acquired in Upper Silesia, 1,300.

POPULATION, census of 1921, 26,376,103, viz.: Former Prussian, 2,912,283; Russian, 11,221,249; Austrian Galicia, 7,464,367; Teschen Silesia formerly Austrian, 145,241; eastern territories (undetermined), 3,662,963; Upper Silesia, 970,-000. Figures exclusive of army, which then numbered 230,000. Density of population, 181 per square mile.

CAPITAL, Warsaw, population, 931,176. Chief cities, Lodz, population, 500,000; Krakow, 181,-000; Lwow, 218,000; Poznan, 178,000; Sosnowiec, 120,000.

*President—Chief of State,* Marshal Joseph Pilsudski.
*Prime Minister,* Dr. Julian Nowak.
*Minister to the United States,* Dr. Ladislas Wroblewski.
*Consuls General in the United States,* at New York, Dr. Stefan Grotowski; Chicago, Dr. Zygamunt Nowicki. *Consul,* at Pittsburgh, Zdzislaw Kurvikowski; at Detroit, George Barthel de Weydenthal; at Buffalo, Stanislaw Manduk (V. C.).
*United States Minister to Warsaw,* Hugh S. Gibson.
*United States Consul General at Warsaw,* Leo J. Keena.

The Republic of Poland was formed following the World War of reunited parts of the old kingdom, dismembered about 150 years ago by Russia, Austria and Prussia. It is about the size of the States of Ohio, Kentucky and Tennessee.

Poland is bounded by Germany on the north and west; Latavia and Lithuania, north; Czechoslovakia and Roumania, south; Ukraine and Russia, east. Of the population about 18,000,000 are Catholic Poles and Slavs; 3,000,000 Jews; the others are Ruthenians, Germans, Lithuanians, Russians, etc. Fifty cities have over 25,000.

Poland is, except in the extreme south, an unbroken plain, across which three glacial movements have swept; average elevation, 480 feet; average rainfall, 21 to 23 inches; snowfall, 10 to 20 per cent. of total precipitation lasting 40 to 100 days.

Access to Free City of Danzig (Gdansk), formerly of German Empire, port on Baltic Sea, was granted by Treaty of Versailles. Poland also has developed its own Baltic port, Gdania, on Polish soil, the "corridor" granted her just west of Danzig.

The Vistula River gives navigation from Danzig south through Poland. A trans-European trade route is projected by canalizing the Vistula, cutting a canal to the Dneiper, and canalizing that river to the Black Sea at Odessa.

Fifty-one per cent. of the population engage in agriculture. There are approximately 45,000,000 acres arable; 13,000,000 pastures; 23,153,000 forests; 9,000,000 gardens and other uses. Heavy war losses have been recouped to within approximately 80 per cent. of normal agricultural productivity. Normal cereal crops run about 60,000,000 bushels of wheat; 185,000,000 rye; 124,000,000 oats; 60,-000,000 barley; 800,000,000 bushels potatoes; sugar beets, 4,828,000 tons; more than 1,000,000 tons of clover. Domestic animals normally number 17,-000,000; distilleries, 2,000, with an output of 40,000,-000 gallons; 422 breweries, 75,000,000 gallons; normal sugar production, 600,000 tons.

In Galicia there are large deposits of petroleum. Operations are closely controlled by the Government, but French and English capital for 25 years has been predominant and is permitted to retain their interests. The oil measures are estimated at several billion tons. Ore production has ranked Galicia eighth in the world. The output in 1921 was 790,-478 short tons, less than half that of 1909, which was the highest ever known, 2,309,793 tons. The market is mainly in Poland, the Ukraine, Czechoslovakia, Germany, Austria and the Baltic states.

Forests cover 23 per cent. of area; total, 22,153,000 acres; state-owned, 29.5 per cent.; private, 70.5 per cent. Coniferous trees predominate, mostly Scotch pine, spruce, fir, larch; deciduous trees, beech, oak, alder, birch, elm, aspen, etc. Woodworking industries are important. Annual regrowth is estimated at 9,000,000,000 feet board measure, permitting exportation of about 5,500,000 tons or about 8,000,000,000 feet, with constant demand.

In Upper Silesia, Poland acquired 1,300 square miles of 4,100 involved. Most of mineral and industrial values were in Polish-acquired territory, which contains enough coal to mine annually 50,-000,000 tons for 300 years. The normal coal production in Poland proper, Dumbrowa district, is 10,000,000 tons. Poland acquired virtually all the zinc mines, whence annually 180,000 tons are taken —18 per cent. of world's zinc; most of iron industry, 22 out of 36 blast furnaces. Railways, which are nationalized, are to remain undivided for 15 years, with Polish-German commission to supervise them and industries. The major part of steel industry remains German.

Commercial treaties exist with all neighboring nations, especially close political and economic relations with France. Polish exports run at about 650,000 tons; imports, excluding coal, 850,000 tons. Poland is self-supporting, foodwise, producing normal food surplus more than enough to pay for necessary food imports. Exports include live animals, food, raw materials, manufactures and semi-manufactures. Upper Silesian coal acquisitions will give Poland large surplus for exportation. Heavy trade with Russia is anticipated. Trade with others is approaching normality by removal of hampering post-war restrictions. Imports from United States, raw cotton, automobiles, tires, machinery, locomotives (of which $7,500,000 worth was bought in 1919), foodstuffs up to 1920, when they practically ceased.

Poland is governed under a Constitution adopted March 17, 1921, which calls for a two-chamber legislative body, Senate and House, elected by universal suffrage. Freedom of press, religion, etc., is guaranteed. The President of the republic is to be chosen by Parliament for a seven-year tenure and appoints a Cabinet of Ministers responsible to Parliament. There are six political parties.

The Polish Army, which numbered more than 1,000,000 during Soviet-Polish war of 1920, was re-

duced to 230,000 by Sept. 1, 1922, and it is announced will be reduced by January, 1923, to 200,000.

Four universities and two polytechnics have 17,000 students; public schools, 2,000,000.

Poland is a member of the League of Nations.

Par of exchange is mark..... 23.8 cents
Exchange rate, Nov. 1, 1922.....0072 cents

Internal debt, 420,000,000,000 marks; foreign debt, 732,138,000,000 marks, plus $18,969,120 bond issue floated in the United States. Foreign debt, at exchange rate, about $10 per capita; total all debts, $15 per capita.

The budget for 1922 shows a deficit at exchange rate of about $50,000,000. The estimates are:

Budget—Receipts, marks.....459,000,000,000
Expenditures, marks.....591,500,000,000

Trade of Poland and Danzig with the United States was:

Imports, 1920-21.....$37,520,659
" 1921-22..... 9,475,560
Exports, 1920-21..... 962,129
" 1921-22..... 1,204,679

## PORTUGAL, REPUBLIC OF.

AREA, 35,490 square miles; which includes the Azores, 922 square miles, and Madeira, 314, islands in the North Atlantic Ocean. Colonial possessions in Africa—Cape Verde Islands, 1,480 square miles; Guinea, 13,940; Principe and St. Thomas Islands, 360; Angola, 484,800; Mozambique, 426,712; total Africa, 927,292; in Asia—Goa, India, 1,469; Damao, India, 169; Timor, Malaysia, 7,330; Macao, China, 4; total Asia, 8,972. Grand total, 965,754.

POPULATION, census of 1911, 5,960,056. Colonial possessions—Africa, 7,734,701; Asia, 1,001,153; total colonial possessions, 8,735,854. Grand total, 14,695,910.

CAPITAL, Lisbon, population, 1920, 500,276. Other cities, Oporto, population, 1920, 215,981; Setubas, 30,346; Funchal (Madeira) 24,687.

*President*, Dr. Antonio Jose de Almeida, born 1866, elected Aug. 6, 1919.

*Prime Minister*, Antonio Maria Silva (Interior), appointed Feb. 9, 1922.

*Minister to the United States* Viscount d'Alte.

*Consuls General in the U. S.*, at New York, Jorge da Silveira Duarte d'Almeida; at Chicago, S. Chapman Simms; at Boston, Eduardo Rodrigues de Carvalho; at New Orleans, Luiz da Costa Carvalho; at San Francisco, Mario do Nascimento.

*Consul*, at Panama for the Canal Zone, Jose Augustin Arango.

*United States Minister*, Fred Morris Dearing.

*United States Consul General*, at Lisbon, W. Stanley Hollis; *Consuls*, at Loanda, Angola, Reed Paige Clark; at Oporto, Samuel H. Wiley; at Funchal, Madeira, Stillman W. Eells; at St. Michaels, the Azores, Drew Linard; at Lourenco Marques, East Africa, Cecil M. P. Cross.

Portugal occupies the western part of the Iberian Peninsula, being bounded on the north and east by Spain and on the south and west by the Atlantic Ocean. Its area is 34,254 square miles, a little larger than the State of Maine. The Azores and Madeira, Islands in the North Atlantic, are politically an integral part of the republic. The country is mountainous and well watered to the north. About one-third of the land is cultivated. Vineyards abound, and wines, olive oil and fruit are largely produced. Wine-making is the chief industry. Forests of pine, oak, cork and chestnut cover 19 per cent. of the country, and cork, of which 175,000,000 pounds are produced annually, is the second largest industry. Portugal has much mineral wealth, but is undeveloped because of a scarcity of coal and poor transportation. The sardine fisheries are important. Hides and wool are also exported.

Portugal had in 1920 2,128 miles of railroads, of which 733 were state owned. The merchant marine in 1917 numbered 206 vessels, with tonnage of 122,726; in 1918, 5,566 vessels of 3,284,995 tonnage entered the ports.

Portugal, an independent state since the twelfth century, was a kingdom until Oct. 5, 1910, when a revolution drove King Manuel II. from the throne and proclaimed a republic. It is governed under a Constitution, adopted Aug. 20, 1911, which provides for a National Council of 164 members, elected by direct vote of three years, and an Upper Chamber of 71 members, elected by the Municipal Councils, half renewable every three years. The President is elected by both Chambers for a four-year term; he appoints the Ministers, who are responsible to the Chamber. Voters must be able to read and write (1919). The army is raised by conscription and numbers 33,000, with reserves of 620,000. The navy personnel is 6,000.

The dominant religion is Roman Catholic; there is freedom of worship. Primary education is free and nominally compulsory; the republic has been showing increased interest in education, but the percentage of illiteracy is about 75. There are three universities.

Portugal is a member of the League of Nations.

The escudo is the unit of currency, gold par being $1.0805. Exchange, Oct. 15, 1922, $0.0655.

Imports in 1919 were 52,110,675 escudo; exports, 24,874,600.

Budget, 1921—Receipts, escudos.....134,565,000
Expenditures, escudos...264,010,000

Debt, 1921—Internal, escudos.....1,862,815,897
Foreign, escudos.....173,264,430

Trade of Portugal with the United States was:

Imports, 1920-21.....$14,773,549
" 1921-22.....7,219,158
Exports, 1920-21.....5,991,230
" 1921-22.....4,368,174

Trade of the Azores and Madeira Islands with the United States was:

Imports, 1920-21.....$1,726,524
" 1921-22.....897,555
Exports, 1920-21.....2,442,687
" 1921-22.....3,191,248

### *PORTUGUESE COLONIAL POSSESSIONS.*

### *Asiatic.*

**Portuguese India** includes Goa (capital, Panju), on the Malabar coast; Damao, near Bombay; and Diu, a small island 140 miles from Damao; area 1,638 square miles; population, 548,472. Salt is produced in Goa and Damao, and manganese near Mormugao, where there are 20 mines. Manganese is imported into the United States for steel-making as an essential. The 1921 estimated revenue of this group was 1,651,000 escudos; expenditures, 2,086,000; imports, 4,751,000; exports, chiefly cocoanuts, copra, fish, spices and salt, 1,401,000.

**Macao**, China, is on an island of the same name at the mouth of the Canton River; it has 74,866 population (1910); 2,171 of which were Portuguese, the rest Chinese; a military force of 488 natives; and had (budget of 1922) a revenue of 2,665,000 escudos, and expenditures of 2,519,000. with imports in 1920 of 9,519,000 escudos, and exports of 7,016,000. The trade is mostly transit.

**Portuguese Timor** is the eastern part of the Malay island of that name, off the north coast of Australia, Holland having the western part. The population in 1915 was 377,815. The 1922 budget estimate shows revenues 378,125 escudos, expenditures the same—a balanced budget; imports, 1919, 814,612 escudos; exports, coffee, sandalwood, sandal root, copra and wax, 365,595.

### *PORTUGUESE AFRICAN POSSESSIONS.*

**The Cape Verde Islands**, in the North Atlantic, longitude 25°, latitude 15°, 14 in number, Praia, capital, had a population of 149,793 in 1912, of which 4,799 were white. Chief products are coffee, medicinal products, hides and millet. Receipts, budget of 1922, 2,783,000 escudos; expenditures, the same—a balanced budget.

**Portuguese Guinea**, on the coast of Senegambia, chief port Bissau, has a population estimated at 289,000. In 1920 imports were 15,659,000 escudos; exports, chiefly rubber, wax, oils, ivory and hides, 9,540,000.

**Angola**, Portuguese West Africa, has a 1,000-mile coast line stretching south from the mouth of the Congo. It is governed by a High Commissioner, who resides in Loanda, with large powers. The Portuguese have owned it since 1575. Its area covers 484,800 square miles.

The native population in 1914 was estimated at 2,124,000. There were 52 Government schools, with 2,400 pupils. The budget estimated revenues and expenditures for 1922 were 53,507,000 escudos.

Chief products are coffee, rubber, wax, sugar, oil seeds, cocoanuts, ivory, cattle, fish, tobacco for local use, cotton, petroleum and asphalt. There are large deposits of malachite, copper, iron and salt, and gold has been found. Railway mileage is 818.

**Mozambique**, Portuguese East Africa, extends from Cape Delgado (10° 40′ south latitude) to the Union of South Africa just below the capital, Lourenco Marquez. To the west lies the Union of South Africa and Rhodesia (British). On the north is Tanganyika, formerly German East Africa, but surrendered to the British in November, 1918; over 400 square miles of that territory, the Kionga Triangle, was transferred to Mozambique in 1919.

Mozambique has 428,132 square miles, and an estimated population of 3,150,000 natives and 10,500 whites. The budget estimates for receipts and expenditures for 1922 were 13,749,000 escudos. Chief products are sugar, cocoanuts, beeswax and mining products. Gold has been discovered and coal deposits exist. It has vast natural resources practically untouched. The principal ports are Mozambique, population in 1910, 363,000 (including

472 Europeans); Ibo, Quillame, Chinda and Beira. In 1919 imports were 27,923,000 escudos; exports, 11,730,000, re-exports and transits, 66,463,958.

Railroads are being pushed, the most important line being the Delagoa Bay to Pretoria, 347 miles.

The islands of St. Thomas and Principe, 125 miles off the coast of Africa in the Gulf of Guinea, were discovered in 1471. The population in 1914 was 63,500. Chief products are cacao, coffee, rubber and cinchona. The 1921 estimated budget, revenues and expenditures, were 1,718,000 escudos. Imports in 1920 were 12,398,000 escudos; exports, 17,490,000.

Trade of Portuguese Africa with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $9,218,606 |
| " 1921-22 | 2,767,675 |
| Exports, 1920-21 | 1,378,402 |
| " 1921-22 | 1,881,146 |

## ROME, THE SEE AND CHURCH OF.

*Supreme Pontiff*, Pius XI. (Achilles Ratti), born at Desio, May 30, 1857, created Archbishop of Milan, September, 1921, Cardinal, June 13, 1921, elected Pope (261st) in succession to Benedict XV., Feb. 6, 1922.

*Secretary of State*, Cardinal Gasparri.

(For members of the College of Cardinals consult the index).

*Apostolic Delegate to the United States*, Archbishop Bonzano.

The Popes for many centuries, with some slight breaks, held temporal sovereignty over mid-Italy (the so-called Papal states), extending from sea to sea, comprising an area of some 16,000 square miles with a population in the nineteenth century of over 3,000,000. This territory in the reign of Pius IX. was incorporated in the Kingdom of Italy, the sovereignty of the Pope being confined to the palaces of the Vatican and the Lateran in Rome and the villa of Castel Gandolfo by the Italian law of May 13, 1871; this law also guaranteed to the Pope and his successors in the chair of St. Peter a yearly indemnity of 3,225,000 lire ($622,425 at par of exchange), which allowance, however, remains unclaimed and unpaid.

The central administration of the Roman Catholic Church is carried on by eleven committees called Sacred Congregations, viz: Holy Office, Consistorial Discipline of the Sacraments, Council, Religious, Propaganda Fide, Under Rites, Ceremonial, Extraordinary Ecclesiastical Affairs, Seminaries and Universities, Tribunals and various offices.

The Holy See maintains diplomatic relations with Austria, Bavaria, Belgium, Czechoslovakia, France, Germany, Great Britain, Hungary, Jugo-Slavia, Monaco, the Netherlands, Poland, Portugal, Roumania, Russia, Spain, together with the most of the American republics except the United States and Mexico.

## ROUMANIA, KINGDOM OF.

AREA, 122,282 square miles; divided, Old Roumania, 53,489; additions confirmed by the 1919 peace treaties, Bessarabia, 17,146; Bukovina, 4,030; Transylvania, 22,312; Crisana, 8,038; Maramuresh, 6,258; Banat, 11,009.

POPULATION, 17,393,149; divided, Old Roumania, 7,904,104; Bessarabia (joined March, 1918), 2,344,800; Bukovina (joined November, 1918), 800,098; Transylvania (joined December, 1918), 2,678,367; Crisana, 1,316,981; Maramuresh, 766,666; Banat, 1,582,133 (Census of 1917).

CAPITAL, Bucharest; population, 345,666; *other cities*, Chisinau, population, 114,100; Cernauti, 87,128; Ismail, 85,600; Iasi (Jassy), 76,120; and 20 others from 25,000 to 75,000.

*King*, Ferdinand I., born Aug. 24, 1865; succeeded his uncle King Carol, Oct. 11, 1914; married Jan. 10, 1893, Princess Marie, daughter of the Duke of Saxe-Coburg and Gotha, granddaughter of Queen Victoria. *Heir*, Crown Prince Carol, born Oct. 15, 1893, married March 10, 1921, Princess Helen of Greece; one son Michel.

*Prime Minister*, Jon Bratiano (War).

*Minister to the United States*, Prince A. Bibesco.

*Consul General in the United States*, at New York, T Tileston Wells; *Consuls*, at Chicago, Ivan C. Popovici; at Pittsburgh, Samuel A. McClung.

*United States Minister to Roumania*, Peter Augustus Jay.

*United States Consuls*, at Bucharest, Ely E. Palmer; at Constanzia, Richard B. Haven.

Roumania, whose history began as a Roman colony, was formed within Turkey in-Europe by the union of the Danubian principalities Wallachia and Moldavia, in 1861; proclaimed its independence May 21, 1877, during the Russo-Turkish war; and was so confirmed by the Treaty of Berlin in 1878, losing Bessarabia, however, to Russia. The World War resulted in the return of Bessarabia, the addition of Transylvania from Hungary and of Bukovina with part of the Banat, Crisana and Maramuresh from the Austro-Hungarian Empire, based on ethnological grounds. The country is now bounded on the north by Hungary, Czechoslovakia and Poland, on the east by the Ukraine (Russia) and the Black Sea, on the south by Bulgaria and Serbia, and on the west by Jugo-Slavia and Hungary. It is equal in size to the State of New Mexico. For about 300 miles the Danube forms its southern boundary; the last 250 miles of its course (from Oltenitza to the Black Sea) it flows through Roumania. The Dniester forms its northeast boundary for 300 miles. The Carpathian Mountains extend from north to south to the middle of the country, whence the Transylvanian Alps extend 200 miles due west. These mountains formed the old western boundary.

The forests are extensive (18,750,000 acres), and the timber industry important. The soil is very fertile, making the country a granary of Europe. Four-fifths of the population engages in agriculture and stock raising. The production of wheat in 1919 was 1,320,000 tons and in 1920 640,000 tons; other cereals, 3,148,000 and 2,710,000 tons respectively. The tobacco crop in 1920 was 5,000 tons. About 50,000 are employed in the oil fields, the largest industry, and 1,160,885 metric tons of petroleum was produced in 1920. Salt mining in the lower Carpathians is a state monopoly.

Roumania had in 1920 7,240 miles of railroads, with a navigation service in the Black Sea and the Danube River, all state operated. The merchant marine has 158 vessels of 71,158 tonnage. In 1919 there entered Roumanian ports 10,546 vessels of 2,991,000 tonnage. The European Commission of the Danube, established in 1856, with sovereign powers over the navigation of that river, has its seat at Galatz.

A Constituent Assembly was elected in May and June, 1920, by universal, direct and secret suffrage. Work is in progress on harmonization of the Constitutions of the several countries which before had Constitutions—Old Roumania, Bessarabia, Transylvania and Bukovina. The Constitution of Old Roumania was adopted in 1866, and amended in 1879 and 1894. It provided for two legislative chambers. The Senate now consists of 170 members, 82 for Old Roumania, 45 for Transylvania, 24 for Bessarabia, 19 for Bukovina, four for the universities, and two bishops. The Chamber of Deputies now consists of 347 members, 158 for Old Roumania, 112 for Transylvania, 51 for Bessarabia, 16 for Bukovina. The King has veto power over the acts of the Assembly. Executive power is vested in a Council of twelve Ministers. Military service is compulsory. On Jan. 1, 1922, the effective strength was 230,000 men, there having been disorders in 1918 which called 400,000 men to the colors. Further reductions are in progress.

The navy consists of a small cruiser, six destroyers, two scout boats, and four gunboats, with a special Danube River naval force of 12 gunboats, nine sloops, four river monitors, eight destroyers and seven torpedo boats. The naval base is at Sulina, on the Black Sea, chief port.

Of the population in 1918 there were 9,695,000 of the Orthodox Greek Church, 1,456,000 of the Greek Catholic Church, 1,483,000 of the Roman Catholic Church, 1,334,000 Protestants, 17,000 Armenians, 834,000 Jews and 44,000 Mohammedans. Liberty of worship is assured. Orthodox clergy are paid by the state, other clergy being subventioned.

Instruction is free and compulsory, "wherever there are schools." Intelligence is spreading, but in 1909, by a special census, 60.16 per cent. of the population over seven years of age was illiterate. Roumania is a member of the League of Nations.

The leu is the unit of currency, gold par being 19.3 cents. Exchange, Nov. 1, 1922, was .63 cents. Imports in 1919 were 3,575,000,000 lei; exports, 102,875,000. The too heavy adverse trade balance caused Roumania to default the interest of her two-year treasury notes early in 1922. Nationalization of mineral resources is seriously proposed.

Budget, 1922-23—Receipts, 10,250,000,000 lei: expenditures, theoretically equal.

The public debt on April 1, 1921, was 20,311,293,312 lei, besides the portions of the debts of Austria-Hungary and Russia which have been assumed by Roumania, 10,000,000,000 lei.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $9,779,668 |
| " 1921-22 | 2,577,415 |
| Exports, 1920-21 | 55,065 |
| " 1921-22 | 501,868 |

## RUSSIA.

(Russian Socialist Federal Soviet Republic.)

AREA, 8,166,130 square miles; dependencies (Khiva, estimated, 24,000 square miles, and Bokhara, estimated, 83,000), 107,000 square miles; grand total, 8,273,130 square miles.

POPULATION, estimated, 1922, 131,546,065; dependencies, Khiva, estimated, 646,000; Bokhara, estimated, 1,250,000; total 1,896,000; grand total, 133,442,065.

CAPITAL, Moscow, succeeding Petrograd (St. Petersburg) as capital of Soviet Russia; population, 1920 census, 1,050,011; other principal cities, Petrograd, population, 1915, 2,318,645; population, estimated, 1922, 700,000; Kharkov, capital of the Ukraine, population, 1913, 258,360; Odessa, port on the Black Sea, population, 1912, 631,000; Kazan, 1913, 195,300.

*Council of People's Commissaries* (as of April, 1922): *President, of Council*, Vladimir Ilich Ulianov-Lenin, born April 23, 1870.

*Minister of Foreign Affairs*, Georges Chicherin.

*War and Marine*, Leon Trotzky; *Finance*, Krestinsky; *Health*, Semashko; *Posts and Telegraphs*, Dovgalevsky; *Ways and Communications*, Dzerzhinsky; *Supreme Economic Council*, Bogdanov; *Agriculture*, Yakovenko; *Food*, Brivkhanov; *Justice*, Kursky; *Social Welfare*, Vinckurov; *Labor*, Schmidt; *Education*, Lunacharsky; *Nationalities*, Stalin; *Workers' and Peasants' Inspection*, Stalin; *Home Affairs*, Dzerzhinsky; *Foreign Trade*, Krassin.

*Chairman of the Central Executive Committee of Soviets*, Kalinin (elected by the All-Russian Congress for period of one year).

*Ambassador to the United States*, no diplomatic relations with the Soviet Government. The United States State Department still recognized (May, 1922) Boris Bakhmeteff, appointed July 5, 1917, by the Kerensky Government, as Ambassador from Russia.

*Consuls General in the United States*, at New York, Michel Ostinow; at Seattle, Wash., Nikolai Bogoyavlensky (also for Nome, Alaska); at Chicago, Antoine Volkoff. *Consuls*, at Boston, Joseph A. Conroy; at Philadelphia, William Tucker; at Pittsburgh, Georges Tchirkow; at San Francisco, George Romanovsky.

*United States Ambassador to Russia*, vacant.

*United States Consuls*, at Vladivostok, Siberia, S. Pinckney Tuck.

Russia stretches across two continents from the North Pacific to the Baltic. It occupies the northern part of Asia and the eastern half of Europe, from the Arctic to the Black Sea.

On March 12, 1917, the day of the revolution that destroyed Czardom, Imperial Russia comprised 8,764,586 square miles of territory, with 182,182,600 (official "revision" estimate of 1915) of population; this included 131,796,800 in European Russia; 13,229,100 in the Caucasus, 10,377,900 in Siberia, and 11,254,100 in the Central Asiatic provinces. The population analyzed 100,331,516 Aryans, the several branches of the Slavs forming 92 per cent. thereof, with half a dozen other races represented.

The changes wrought by the world war, the revolutionary movements in minor regions, treaty decrees of the Allied and Associated Governments, and negotiations of the Russian Socialist Federal Soviet Republic as to political and economic relations, brought dismemberment to the old empire and great modifications of territory and relationship toward the new federations (R. S. F. S. R.) of many of the old districts and provinces. Five independent states have risen in the west. In 1920 the Russian Soviet Government concluded treaties of peace with each, Esthonia, Feb. 2; Lithuania, July 12; Latvia, Aug. 11; Poland, Oct. 12; and Finland, Oct. 14; which recognized the territorial limitations of each or provided for further settlement. That same year agreement was reached by the Allied Powers whereby Rumania received Bessarabia, taken from her in 1878, subject to later discussion by Russia. The former Turkish province of Kars, also taken in 1878, was renounced by the Soviet in the Treaty of Brest-Litovsk, March 3, 1918. The area and population lost were:

| | Square miles | Population |
|---|---|---|
| Poland (independent) | 43,804 | 12,247,600 |
| Finland (independent) | 125,689 | 3,241,000 |
| Esthonia (independent) | 16,090 | 1,750,000 |
| Latvia (independent) | 27,000 | 2,500,000 |
| Lithuania (independent) | 22,890 | 2,246,000 |
| Bessarabia (to Roumania) | 17,330 | 2,213,000 |
| Kars Area (semi-autonomous) | 7,780 | 492,000 |
| Total | 260,493 | 24,689,600 |

The Ukraine, nine provinces, 174,510 square miles (about the size of New England, New York, New Jersey and Pennsylvania), with 26,001,802 of population, was, by the Treaty of Riga, 1921, technically left as an independent state, so recognized by Soviet Russia and Poland. The subsequent establishment of a Soviet form of government, under direct Soviet influence, placed Ukrainia virtually in Russian territory, and it appears now to be regarded by practically all authorities as properly inclusive in the areas and population of the R. S. F. S. R. These are the statistics given out March 1, 1922, by the People's Commissar of Internal Affairs.

RUSSIA OF TO-DAY.

*INDEPENDENT REPUBLICS:*

| | Square Miles | Population |
|---|---|---|
| Soviet Russia Proper | 1,290,440 | 65,751,898 |
| Ukraine | 174,510 | 26,001,802 |
| White Russia | 23,290 | 1,634,223 |
| Azerbaijan | 33,970 | 2,096,973 |
| Armenia | 15,240 | 1,214,391 |
| Georgia | 25,760 | 2,372,403 |
| Far Eastern Republic | 652,740 | 1,811,725 |
| Siberia | 4,210,420 | 9,257,825 |
| *AUTONOMOUS REPUBLICS:* | | |
| Bashkir | 40,420 | 1,268,132 |
| Tartar | 25,960 | 2,852,135 |
| Crimea | 15,060 | 761,600 |
| Mountain Republics | 17,420 | 808,480 |
| Daghestan | 13,730 | 798,181 |
| Kirghiz | 843,640 | 5,058,553 |
| Turkestan | 577,400 | 7,201,551 |
| *AUTONOMOUS AREAS:* | | |
| Votiak | 11,300 | 686,049 |
| Zyrian | 107,060 | 186,878 |
| Kalmyk | 38,440 | 126,256 |
| Mari (Cheremiss) | 6,040 | 300,069 |
| Chuvash | 6,720 | 758,161 |
| *LABOR COMMUNES:* | | |
| Karelia | 28,890 | 144,392 |
| German Volga Commune | 7,680 | 454,368 |
| Total | 8,166,130 | 131,546,045 |

Because of permanent agreement the Asiatic states of Khiva and Bokhara should be considered as dependencies of the R. S. F. S. R. Their statistics are:

*DEPENDENCIES OF THE R. S. F. S. R.:*

| | Square miles | Population |
|---|---|---|
| Khiva | 24,000 | 646,000 |
| Bokhara | 83,000 | 1,250,000 |
| Total | 107,000 | 1,896,000 |

Of the group under the heading Independent Republics, the Ukraine is the southwestern division of European Russia. (See following.)

White Russia lies along the Polish frontier with Minsk as its chief city.

Azerbaijan (the size of the State of Maine), has the southern half of the Caspian Sea shore line for its eastern boundary with Persia on the south.

Armenia (the size of Massachusetts, Connecticut and Rhode Island), also of the independent republic group, on the south and west, and Georgia (the size of West Virginia), another on the north and Daghestan (the size of Maryland), classed as an autonomous republic, along the Caspian, on the north; Baku, the great oil port on the Caspian is its chief city. Armenia has Persia on the south, Turkey on the west and Georgia on the north. Erivan is its chief city.

Georgia also has Turkey as its neighbor on the south and Daghestan on the northeast. On the west it lies along the Black Sea with Tiflis as its capital and Batum as its port.

North of Georgia and west of Daghestan, with Russia on the north and the Black Sea on the west are the mountain republics of the autonomous group—four of them—(about the size of Vermont and New Hampshire). These five divisions are a rearrangement of the former Transcaucasia.

Of the other autonomous republics, the Crimea (about the size of Maryland and Delaware) occupies the peninsula between the Black Sea and the Sea of Azof. Sebastopol is its chief city and seaport. Turkestan (twice the size of Texas) lies in Asia east of the south half of the Caspian Sea. North of it in Asia and enclosing the north side of the Caspian Sea so that the western portion lies along the European side of the Ural River is Kirgiz (as large as the eight mountain states of the United States), and still north of that, in European Russia, Bashkir (a province as large as Kentucky), Tartar (the size of West Virginia), lies further to the west on both

sides of the Volga with the so-called autonomous area Votiak as its neighbor on the north, and Mari and Chuvash as neighbors on the west. Kazan is its chief city. These three neighbors together are about equal in size to Tartar. Further to the north Zyrian stretches up to the Arctic Ocean with the Ural Mountains as its northeast frontier. In territory it equals Nevada, with nearly twice its population. Kalmyk has the Caspian Sea on the southeast and the Volga runs along its northeast frontier. It is about the size of Indiana. Astrakhan is the chief city.

The so-called Labor Commune, Karelia, lies along the Finnish frontier, to the north, between Lakes Ladoga and Onega and the Arctic Circle with the White Sea on the northeast. Beyond is the Murman coast. The other Labor Commune, the German Volga Commune, is an irregular group like islands on both sides of the Volga east and south of Saratov, and is somewhat smaller than the State of New Hampshire with about the same number of inhabitants.

## DECLINE OF POPULATION.

M. W. Mikhailovsky, director of the Central Statistical Office at Moscow, in an article on the third Russian census, as quoted in a bulletin of the health section of the League of Nations, September, 1922, gives these figures on the decline of population in Russia. He bases his study on data for European Russia, Northern Caucasus, Siberia up to the Baikal Sea, the Kirghiz Republic and two governments of the Ukraine. He finds that in this area the population has declined from 102,793,000 in 1914 to 90,790,000 in 1920 (excluding the army which was then estimated at 3,000,000 men), a decrease, including the army, of nearly 10 per cent. Instead of this decrease of 9,000,000 inhabitants, there would have been an increase of about 12,000,000, it is stated, if the rate of natural increase obtaining before the war had continued.

European Russia is said to have been the principal sufferer, whereas the population has diminished only slightly in the far-away Asiatic territories. The percentages of decrease given by M. Mikhailovsky are 14 per cent. for Northern Caucasus, 3 per cent. for Siberia, and 4 per cent. for the Kirghiz Republic.

The decline in population is given as due to the following causes: (1) Emigration following the civil war, which is estimated as high as 2,000,000; (2) military losses in the World War, 2,500,000; (3) loss of life in the civil war, estimated at not less than 1,000,000; and (4) excess mortality, largely due to the great epidemics, about 3,500,000. The latter figure is stated as being probably an underestimate.

The census of Russia was taken in August, 1920, it should be noted, and since that time the famine has occurred which overshadows all previous scourges of this kind from which the country has suffered, and the loss of lives from which is estimated in millions.

The disproportion of the sexes, especially in the rural districts, is highly significant. The sex distribution is given as follows:

| | Male. | Female. | Total. |
|---|---|---|---|
| Urban..... | 9,788,000 | 10,904,000 | 20,692,000 |
| Rural..... | 51,241,000 | 59,613,000 | 110,854,000 |
| Total..... | 61,029,000 | 70,517,000 | 131,546,000 |

The birth rate in Russia, stated to have been extremely high before the war, averaging about 45 per 1,000 population, is said to have declined by more than 40 per cent.

The London Times, on Sept. 1, 1922, printed a despatch from Riga, saying that according to official Bolshevist figures the Cheka executed 1,766,118 persons before being renamed the supreme political administration last February. The total includes 6,775 professors and teachers, 8,800 doctors, 355,250 other intellectuals, 1,243 priests, 54,650 officers, 260,000 soldiers, 59,000 policemen, 12,950 landowners, 192,350 workmen and 815,100 peasants.

## RESOURCES OF RUSSIA.

The political home of the Russian Socialist Federal Soviet Republic is in Eastern Europe; centralized in fact, in Moscow, the ancient capital.

The Russian domains comprehend every phase of climate except the distinctly tropical, and have varied topography. It has vast plains, some virtually desert, some actually or potentially productive; many high mountain ranges, and a distinctive geologic feature is the Russian steppes—broad plains of shifting sandy formation.

In the main, however, Russia proper begins in the centre with a series of low tablelands, and slopes in the direction of the Baltic, Black and Caspian Seas, and toward the White Sea and the Arctic Ocean to the north.

The Ural Mountains form the boundary between Russia proper and the main body of Asia; the Caucasian Mountains are on the southern line, between the Black Sea and the Caspian. Extensive forests occupy much of the central portions, total forest area being about 500,000 square miles.

The rivers are important as actual or potential channels of commerce—the Dnieper and Dniester, flowing into the Black Sea, the Dnieper being part of the proposed trans-European waterway from the Black Sea at Odessa to the Baltic Sea at Danzig; the Volga and Ural flowing into the Caspian Sea; the Neva flowing into the Gulf of Finland; and the Petchora flowing into the Arctic Ocean. There are 42,091 miles of rivers, lakes and canals navigable for steamers.

The areas controlled by Russia comprehend nearly every material natural resource of modern civilization—minerals of all kinds, base and precious; every variety of timber, excepting tropical, every character of cereals, vegetable and fruit lands; being as near to self-contained, economically, as any other power, excepting the British Empire.

The chief interest is in agriculture, the other physical resources not yet being well developed. The oil measures, however, have been quite well developed, there being petroleum in large quantity in the Baku region, in the Caspian fields, with considerable pre-war production, and production now being resumed in small measure; and in several other parts petroleum exists in large measure. Several working concessions have lately been reported as granted by the Soviet Government to American and British oil interests, but no development has been undertaken as yet.

Russia is normally the world's greatest source of platinum, the Russian share in 1912 and 1913 being from 250,000 to 300,000 troy ounces of the world total of 267,000 to 313,000.

Unmined iron ore is estimated at nearly 1,000,000,000 tons, considerable of it being in the Ukraine, economically convenient to transport to the Black Sea.

There are very large mineral resources in the Ural Mountains. Gold and silver are mined there and in many other localities, also coal, salt, zinc and copper.

Before the war, Russia was a heavy exporter of foodstuffs; since the war, Russia has had to call on other countries, chiefly the United States, for food to feed millions who were starving. (See special article elsewhere in THE ALMANAC on the Russian famine and the work of the American Relief Administration.)

The cotton crop of 1917 was reported as about 526,000,000 pounds, or about 1,000,000 bales, around one-eighth to one-tenth of the crop of the United States.

Approximately 500,000,000 acres of forested areas are to a large degree potentially agricultural when the timber has been removed. The by and large estimate is that under development such as has been attained in other civilized countries Russia would have close to 700,000,000 acres of cultivable lands, or the equivalent of more than 1,000,000 square miles of actually tilled lands, which is more than like areas in the United States.

Industry is not well advanced, although in some of the western portions there has been considerable progress in iron, steel and tin making, with rather heavy production of sugar from the beet.

Railway mileage is relatively small, the figures for lines actually operated in 1921 being 29,909 miles, with about 130,000 miles of telephone lines in 1913. On the vast plains area and in the more settled areas in the west there were enormous totals of domestic animals, the 1914 figures showing 33,875,000 horses, mostly the smaller Russian type; 50,038,000 cattle; 14,543,000 swine and 71,708,000 goats.

Development of industry has run coincidentally with the freeing of the serfs 60 years ago, and the further progress toward modern conditions up to the time of the late troubles. Industrial employment was about 2,000,000 when the war began, in about 15,000 factories. The cotton industry normally is important. In 1916, Russia had 8,000,000 spindles, produced nearly 700,000,000 pounds of yarn, and wove nearly 750,000,000 pounds of cotton cloth. Russian flax and linen also were extensively produced.

Since the 1917 revolution, industry has been much upset. Reliable figures are not easily obtained. The normal Russia imported much machinery from England and Germany, and agricultural machines from the United States; raw cotton from Egypt, and iron and coal from England.

## PRODUCTION OF PRE-WAR RUSSIA.

What Russia was capable of producing before the war and the Bolshevik revolution is indicated by these official statistics of the former empire; the cultivable areas in acres were as follows:

European Russia, cereal crops, 196,997,000 acres:

potatoes, 8,059,000; flax and hemp, 4,733,000; total, 209,789,000; meadows, 61,330,000 acres.

Poland, cereal crops, 11,377,000; potatoes, 2,586,000; flax and hemp, 110,000; total, 14,073,000; meadows, 2,280,000 acres.

Caucasia, cereal crops, 22,073,000; potatoes, 247,000; hemp and flax, 292,000; total, 22,612,000; meadows, 5,676,000 acres.

Siberia, cereal crops, 14,925,000; potatoes, 292,000; hemp and flax, 147,000; total, 15,364,000; meadows, 17,132,000 acres.

Central Asia, cereal crops, 11,458,000; potatoes, 67,000; hemp and flax, 236,000; total, 11,761,000 acres; meadows, 9,338,000 acres.

Acreage totals, cereals, 256,830,000; potatoes, 11,251,000; hemp and flax, 5,518,000; total, 273,599,000 acres; meadows, 95,756,000 acres. The grand total of cultivable and meadow lands was, therefore, 369,628,500 acres.

In round numbers, the crops produced in 1913, in Russia, exclusive of Finland, were:

Winter wheat, 20,800,000 tons, or about 624,400,000 bushels; spring wheat, 9,900,000 tons, or about 297,600,000 bushels.

Winter rye, 27,600,000 tons, or about 827,800,000 bushels; spring rye, 634,000 tons, or about 19,000,000 bushels.

Oats, 19,900,000 tons, or about 598,400,000 bushels. Other cereals, 8,677,000 tons.

Total cereals, 45,092,800 tons, or about 3,000,000,000 bushels.

Potatoes, 39,400,000 tons, or about 1,183,300,000 bushels. Hay, 58,400,000 tons. Tobacco produced in 1913 was about 200,000,000 pounds.

Russia in 1914 had the return from 34,973,000 horses; 52,053,000 cattle; 72,273,000 sheep and goats; 14,995,000 pigs.

Cotton production in Ferghana, Samarkand, Bokhara, Transcaspia, Khiva, Syr-Daria, (not including Amu-Daria,) Erivan, Elizavetpol, Baku, Tiflis and Kutais, in 1915 was 1,125,675 of 500-pound bales. Russia imported considerable cotton from Egypt and other countries, raw cotton consumption being larger than production, and using 416,274 spindles.

The forests netted annually about $30,000,000 profit.

In 1912, mineral production was given as 58,462 kilograms of gold, 5,525 kilograms of platinum, 18,018 kilograms of silver, 1,699 metric tons of lead, 11,708 metric tons of zinc, 33,531 metric tons of copper, 4,198,000 metric tons of pig iron, 3,727,000 metric tons of iron and steel, 30,910 metric tons of coal, 9,260,000 metric tons of naphtha, and 1,906,000 metric tons of salt.

Oil production in 1915 was 9,152,000 short tons, four-fifths of it coming from the Baku region; alcohol, 60,812,000 gallons; sugar, 1,697,760 short tons from 1,888,136 acres; the 1914 catch of the fisheries being 996,500,000 pounds, or 33 per cent. less than former years, with 35,051,000 rubles paid for imported fish, and about 7,300,000 rubles for fish and caviar exported.

Total Imperial Russian imports in 1915 were given as 1,114,000,000 gold rubles (par of exchange in 1914, 51.5 cents) and exports 397,000,000 rubles; but up to 1913, exports exceeded imports, figures for that year by the Russian Government being imports, 1,374,000,000 rubles, and exports, 1,520,000,000 rubles.

The export in 1913 of 807,183,000 rubles of food, more than half of all exports, indicates to what extent Imperial Russia helped to feed the world, much of the Russian export food going to Great Britain and to Germany, both of which returned in exchange largely manufactures, machinery, woolens, and coal, and raw cotton came from the United States and Egypt. A study of the foreign trade of Imperial Russia for some years before the war proves that the balance between imports and exports, exports being always in excess, was close enough to be economically healthy.

## BOLSHEVIST CONTROL.

Cataclysmic events took place when Imperial Russia fell on March 12, 1917, and revolutionary forces took over the Government, Czar Nicholas II. abdicating. A provisional government was set up by the Duma, Russia's national legislative body, with Prince George Lvoff as the head, Alexander Kerensky becoming Premier on Aug. 6, 1917. The All-Russian Congress of Workmen's, Soldiers' and Peasants' Deputies finally seized the power in a revolutionary movement on Nov. 7, 1917, the Military Revolutionary Committee of the Soviet of Petrograd having wrested the government away from Kerensky. Lenin and Trotzky were leaders.

The official name of the Government became the Russian Socialist Federal Soviet Republic, and it was officially announced that this Communism was fashioned on the Karl Marxian social and economic theories. The basic demand was that only actual workers, laborers, should have part in government. The dictatorship of the proletariat was set up.

Russia withdrew from her alliance with the Allied and Associated Governments in the World War and signed the Brest-Litovsk Treaty of Peace with Germany, March 3, 1918.

All right of private property was abolished. The Government took over all transport, communication, industry, food, money, the productive processes of all activities, title to lands, stocks of goods, and assumed disposition of the products of industry and the produce of agriculture.

By the end of December, 1917, the theories of nationalization were in almost absolutely complete operation, confiscation having proceeded without limitation. Private capital was no longer permissible.

## CAPITAL EXPROPRIATED.

Disregarding the comparatively small number of private estates and residences in Russia, practically all the foreign capital in that country was represented by investments in banking, industrial, and trading establishments. According to the data of the Petrograd Institute of Economic Research (published in the Soviet paper, Izvestiya, of June 24, 1922), the aggregate capitalization of these investments in January, 1917, amounted to 2,242,974,000 gold rubles, made up of stock and share capital to the extent of 1,986,772,000 rubles and bonds to the amount of 256,202,000 rubles (the gold ruble equals $0.5146).

These investments were distributed among the following classes of commercial enterprises:

| Enterprise. | *Gold Rubles.* |
|---|---|
| Mining industry | 834,320,100 |
| Metallurgical industry | 392,709,600 |
| Urban real estate | 259,430,900 |
| Credit institutions | 237,200,000 |
| Textile industry | 192,494,000 |
| Chemical industry | 83,593,200 |
| Trading establishments | 80,715,200 |
| Foodstuffs manufacture | 37,330,500 |
| Paper and printing arts | 31,404,800 |
| Transports, roads, and rolling stock | 26,650,000 |
| Sawmills and woodworking industry | 25,736,500 |
| Mineral-working industry | 18,239,300 |
| Animal-products industry | 14,450,000 |
| Insurance | 8,700,000 |
| Total | 2,242,974,100 |

The foreign investments were distributed as follows:

| Nationality. | Invested in all Russia. | Per cent. | Expropriated by Soviet Russia. |
|---|---|---|---|
| | *Gold Rubles.* | | *Gold Rubles.* |
| French | 731,746,600 | 32.6 | 648,089,700 |
| British | 507,479,800 | 22.6 | 500,563,700 |
| German | 441,593,200 | 19.7 | 317,475,500 |
| Belgian | 321,602,500 | 14.3 | 311,812,400 |
| American | 117,750,000 | 5.2 | 117,750,000 |
| Dutch | 35,456,700 | 1.6 | 36,456,700 |
| Swiss | 32,479,100 | 1.5 | 31,666,700 |
| Swedish | 23,772,300 | 1.1 | 16,646,700 |
| Danish | 14,737,700 | 0.7 | 14,537,700 |
| Austrian | 7,550,000 | 0.4 | 5,900,000 |
| Italian | 2,506,200 | 0.1 | 2,106,200 |
| Norwegian | 2,300,000 | 0.1 | 2,300,000 |
| Finnish | 2,000,000 | 0.1 | 2,000,000 |
| Total | 2,242,974,100 | | 2,007,305,300 |

The investments included in the first column and not expropriated are those in territories like Latvia, Poland, etc., now beyond the boundaries of Soviet Russia.

Various counter-revolutions broke forth against the Soviet Government, which consisted of government by group representation in the hands of the Bolshevist Party, so that the admittedly correct definition was that *Russia's government was administered by the Bolshevist Party by means of the Soviet method.*

The Soviets held the control, and finally removed the capital to Moscow, further from the western frontier, for greater safety.

For various reasons, the Soviets at last decided to modify materially the degree to which Communism nationalization and the prohibition of private capital was to be enforced, there being yielding to the extent that private capital was permitted in some instances, official promulgation by the Government of the new economic policies (so-called "Nep.") in March, 1921, being that for the present the continuance of absolute Communism would not be insisted on.

This change found expression in various permissions for private capital to operate in industry, and for the individual citizen of the Russian Socialist

Federal Soviet Republic to possess certain kinds of property.

ALTERATION OF POLICY.

A fundamental alteration of Soviet Russian policy, as analyzed by the United States Department of Commerce in October, 1922, was a "reversion from the land policy of strict socialization to the plan of peasant possession, peasants being allowed to acquire actual possession, though technically ownership remains with the state."

The new status was further accentuated at various times by such concessions as were reported to have been granted in 1920 to Washington D. Vanderlip of Los Angeles, an American, in Siberia, the present status of which is indeterminate; and the reported giving back in 1922 to Leslie Urquhart, chairman of the Russia Asiatic Corporation, Ltd., Urquhart to have a 99-year lease on properties, and to pay the Government 6 per cent. of the output. Validation of this transaction was later refused by the Soviet Government.

London and Berlin cablegrams to American newspapers outlined this situation at various times, it being regarded as a fundamental test of alteration of Soviet policy.

Also, the status of the Baku oil fields was reported often to have undergone changes, by concessions by the Soviets, which were to permit private operation of the wells.

Careful correspondence from London to The New York World in October, 1922, indicated that Lenin, President of the Council of the People's Commissaries, R. S. F. S. R., in a speech on Oct. 17, declared "that his hearers could not but remark the sudden change in the economic policy of the Soviets, which now included more elements of the old economic system than had hitherto been the case."

The United States, having withheld indorsement of American participation in Russian economic operations, finally considered sending a commission to study economic conditions in Russia, but failed to reach an acceptable agreement.

Cables to American newspapers on Sept. 21 1922, reported that the Soviets had granted a concession to the American International Barnsdall Corporation to certain oil working rights; this being followed two days later with cablegrams to The New York World, intimating that the conditions governing the concession were not so favorable as had been thought at first.

Summing up all reports, the consensus appears to be that the initial degree of nationalization had been fundamentally altered, and that the Soviets had decided to retrace somewhat their long step toward complete Communism.

The British Government, in 1919 and 1920, negotiated a trade agreement with Russia, M. Krassin, Minister of Foreign Trade, being the Soviet representative, who went to London for the purpose, and remained there for many weeks, going occasionally back to Moscow. The agreement, although signed *de facto* by the British Government, had not, at last reports, been made *de jure* by the Parliament at London.

The signing of a separate treaty between Russia and Germany by their delegates at the Genoa Conference is referred to elsewhere in THE ALMANAC; but one of the international questions which has been raised has been whether the two mentioned nations were in a rapprochement which would unite Russia's large natural resources and German organizing and scientific skill in some close working agreement. Also late in 1922 the report was that China was about to recognize the Soviet Russian Government.

The United States remained in a non-committal attitude regarding America's part in Russian trade. Russia was understood to back the Turks in the dispute over the Straits of the Dardanelles. Russia and Japan were in a deadlock over the disposition of the northern part of Sakhalin Island in the Pacific, which had been occupied by Japan. Russia was believed by many to aspire to lead all Asiatic people, among whom already she had a footing in her Central Asiatic provinces.

Since the revolution of 1917, the chief military activity of the Russian Socialist Federal Soviet Republic has been against the Poles, in the Soviet-Polish war. It found its culmination in 1920, when Marshal Pilsudski of Warsaw, with more than a million men in the Polish Army, invaded the Ukraine, reaching Kiev, its capital, and 100 kilometres beyond toward the Black Sea, and then was hurled back to close to Warsaw. French Generals Weygand and Henry, aides to Marshal Foch, aided in reorganization of the Polish forces, and the Soviets were driven out from Poland. The Treaty of Riga in 1921 ended hostilities, reparations in gold and jewels being pledged by the Soviets, the values paid over later forming the first gold reserve established by the Warsaw Government as the basis of the new currency.

Military service is compulsory under Bolshevist Sovietism, actual bearing of arms having been reserved solely for the actual workmen, soldiers, sailors and peasants, others doing non-combat service. In the Soviet-Polish war, numbers of Mongolians were utilized by Russia. The army numbers 1,300,000 with a reserve of 3,500,000.

Trotzky, the Commissar for War, however, in an interview on Aug. 26, 1922, told the Associated Press: "Our fighting forces have been reduced from 5,500,000 to 800,000," and he praised the work of the new Black Sea Navy.

Russia is not a member of the League of Nations.

The state religion of Russia is Greek Orthodox, the church being thrown somewhat into confusion by the changed attitude of the Soviets toward religious establishment. But there are many Mohammedans in technical Russian territory, and also in much of the area of the autonomous and semi-autonomous Soviet republics in the south. It has been claimed that the Soviet Government, during the immediately post-revolutionary action killed a majority of the Russian intellectuals. Reliable figures are not available.

OFFICIAL STATEMENT OF THE R. S. F. S. R. AT THE HAGUE.

In 1914 Imperial Russia, as reported by the officials thereof, had in circulation paper currency totalling 1,775,000,000 rubles, the gold ruble being worth 51.46 American cents. It was based on a gold guarantee fund of 1,695,000,000 rubles.

Under the Soviet regime its financial conditions have not been easily ascertainable. Reports vary widely. However, resorting to the claims of the R. S. F. S. R., put forward by its delegation at the Hague Conference in July, 1922, the following is a condensation of the fiscal facts as set forth at that time by them;

*PAPER MONEY IN CIRCULATION.*

(In Billions of Rubles.)

| | 1918. | 1919. | 1920. | 1921. | 1922. |
|---|---|---|---|---|---|
| Jan..... | 1.2 | 4.1 | 35.2 | 130.3 | 12,021.9 |
| Feb..... | 1.4 | 3.8 | 32.8 | 189.3 | 18,832.1 |
| March.... | 3 | 5.8 | 47.6 | 198.5 | 26,945.6 |
| April..... | 4.2 | 5.9 | 47.1 | 230.5 | 45,893.2 |
| May..... | 2.5 | 11.4 | 62.9 | 205.1 | 65,000 |
| June..... | 3 | 8.5 | 61.2 | 224.8 | 85,000 |
| July..... | 2.6 | 12.1 | 68.9 | 461 | |
| Aug..... | 2.3 | 13.8 | 70.6 | 702.6 | |
| Sept..... | 2.8 | 22 | 93.9 | 1,023.7 | |
| Oct..... | 2.8 | 21.9 | 117.6 | 1,950.3 | |
| Nov..... | 3 | 22.4 | 132.8 | 3,365 | |
| Dec..... | 4 | 32.5 | 173 | 7,694.2 | |
| Total... | 33.5 | 164.2 | 943.6 | 16,373.3 | 253,692.8 |

Paper money circulating July 1, 1922, totalled 271,236,000,000,000 of rubles.

*1913 BUDGET OF IMPERIAL RUSSIA.*

**Ordinary Revenues.**

| | Gold Rubles. | Per Cent. |
|---|---|---|
| Taxes, direct, rubles..... | 249,865,738 | 7.78 |
| Taxes, indirect..... | 657,424,200 | 20.7 |
| Taxes, customs..... | 218,257,160 | 6.9 |
| Imperial duties..... | 925,303,075 | 29.1 |
| Imperial revenues..... | 986,849,769 | 31.1 |
| Property taken from the domains..... | 1,625,680 | .05 |
| Paid in redemption of peasants' lands..... | 909,700 | 03 |
| Reimbursement of Treasury expenses..... | 113,115,772 | 3.6 |
| Various..... | 15,791,734 | .06 |
| Total..... | 3,169,142,828 | 99.86 |

**Extraordinary Resources.**

| | | |
|---|---|---|
| Permanent deposits in the Russian Imperial Bank.. | 2,000,000 | .01 |
| Returned to the Treasury from capital set apart for food and seed in the Empire..... | 8,000,000 | .04 |
| Total..... | 10,000,000 | |
| Total ordinary and extraordinary revenues..... | 3,179,142,828 | |
| Cash in the Treasury..... | 29,264,133 | .09 |
| Grand total..... | 3,208,406,961 | 100.00 |

*1913 BUDGET OF IMPERIAL RUSSIA.*

**Ordinary Expenses.**

| | Gold Rubles. | Pct. |
|---|---|---|
| Ministers of the Court | 16,359,595 | .51 |
| Higher Institutions of the Empire | 9,213,214 | .28 |
| Holy Synod | 44,219,759 | 1.38 |
| Ministry of the Interior | 182,303,677 | 5.68 |
| Ministry of the Finance | 453,699,561 | 14.15 |
| Ministry of Justice | 89,460,491 | 2.78 |
| Ministry of Foreign Affairs | 7,279,295 | .22 |
| Ministry of Public Instruction | 136,734,476 | 4.26 |
| Ministry of Ways and Communication | 649,609,650 | 20.27 |
| Ministry of Commerce and Industry | 59,539,776 | 1.85 |
| Ministry of Agriculture | 135,813,118 | 4.23 |
| Direction of Breeding Stud. | 2,593,450 | .08 |
| Ministry of War | 545,581,753 | 17.02 |
| Ministry of Navy | 230,374,400 | 7.18 |
| Control of the Empire | 12,094,904 | .37 |
| Carrying of the Public Debt | 402,907,086 | 12.56 |
| Expenses extraordinary, divers | 10,000,000 | .31 |
| Total | 2,987,784,205 | 93.13 |

**Surplus.**

| | | |
|---|---|---|
| Revenues over expenses | 181,358,623 | |

**Extraordinary Expenses.**

| | | |
|---|---|---|
| Continued liquidation of the cost of the Russo-Japanese war | 101,950 | .02 |
| Active expense of war | 90,112,569 | 2.80 |
| Construction of railways | 110,775,137 | 3.45 |
| Payments on railway account | 1,633,100 | .05 |
| Construction of new ports and improvement of existing ports | 18,000,000 | .55 |
| Total extraordinary | 220,622,756 | 6.87 |
| Grand total | 3,208,406,961 | 100.00 |

*PROPOSED BUDGET FOR 1922, JAN. TO SEPT.*

**Revenues.**

| In Gold Rubles as of Apr. 18, 1922 | | Pct. |
|---|---|---|
| Taxes, direct | 39,000,000 | 3.8 |
| Taxes, indirect | 80,076,900 | 8.1 |
| Customs | 5,908,000 | .6 |
| Transport, Posts, Telephones and Telegraphs | 295,876,725 | 29.8 |
| Commerce of the State | 35,110,230 | 3.5 |
| Food, things of first necessity and basic materials | 319,277,043 | 32.2 |
| Nationalized Industry | 66,500,000 | 6.7 |
| Reimbursement of advances made by the State | 150,950,250 | 15.2 |
| Sundry | 773,920 | .1 |
| Total | 993,473,068 | 100.00 |

**Deficit.**

Surplus expenses over receipts 138,552,041 rubles.

The Soviet also listed as sources of revenue 15,000,000 rubles from purchase of gold and platinum, and 78,446,907 from the reserve of gold held by the R. S. F. S. R.

**Expenses.**

| | In Gold Rubles | Pct. |
|---|---|---|
| General Executive Com. | 3,884,859 | 0.3 |
| Council of the People's Commissaries and of Labor and Defense | 967,851 | 0.1 |
| Com of Foreign Affairs | 1,684,261 | 0.1 |
| Com. of the Interior | 36,149,433 | 3.2 |
| Com. of the Nationalities | 633,306 | 0.06 |
| Com. of Justice | 4,885,340 | 0.4 |
| Com. of Public Instruction | 37,871,855 | 3.4 |
| Com. of Public Hygiene | 25,084,928 | 2.3 |
| Com. of Labor | 2,393,270 | 0.2 |
| Com. of Social Welfare | 404,291 | 0.04 |
| Bureau of Statistics | 4,036,278 | 0.4 |
| Com. of Inspection and Peasants | 2,704,190 | 0.2 |
| Com. of Finance | 105,978,196 | 9.4 |
| Com. of Agriculture | 37,172,624 | 3.3 |
| Com. of Provisions | 188,440,875 | 16.6 |
| Superior Council of Economics | 94,694,064 | 8.4 |
| Com. of Foreign Trade | 4,578,088 | 0.4 |
| Com. of Ways and Communication | 259,401,538 | 22.9 |
| Com. of Posts, Telephones and Telegraphs | 23,624,868 | 2.1 |
| Com. of War | 185,690,610 | 16.4 |
| Com. of Navy | 26,327,310 | 2.3 |
| Allied and autonomous Republics | 85,411,156 | 7.5 |
| Total | 1,132,025,109 | 100.00 |

*RECAPITULATION.*

| *Taxes and Revenues in 1921 and from January to April, 1922, according to values as of May 1, 1922:* | *Rubles.* |
|---|---|
| Direct taxes from industrial and commercial enterprises | 42,672,900,000 |
| Other revenues | 4,490,300,000 |
| Total | 47,163,200,000 |
| Indirect taxes: | |
| Wines | 7,088,300,000 |
| Tobacco | 26,073,800,000 |
| Matches | 10,603,000,000 |
| Alcohol | 3,382,900,000 |
| Salt | 64,217,000,000 |
| Naphtha | 1,249,900,000 |
| Beer | 323,400,000 |
| Cider and syrups | 60,800,000 |
| Paper and cartons for cigarettes | 5,700,000 |
| Local taxes | 77,711,700,000 |
| Total | 237,853,700,000 |
| *Revenues from Public Enterprises and Services:* | |
| Ways and communications | 466,593,000,000 |
| Posts, telegraphs and telephones | 284,399,000,000 |
| Superior Economic Council | 101,334,000,000 |
| Other commissariats | 71,445,000,000 |
| Total | 923,772,000,000 |
| *Revenues of Local Soviets:* | |
| Rev. from communal enterprises | 105,085,000,000 |
| Grand total | 1,266,710,000,000 |

*THE STATE BANK.*

The State Bank of Soviet Russia reported accounts from Jan. 1 to May 1, in "money of the 1922 model," which drops four ciphers in computation, both sides of the ledger showing totals for these months:

| | Rubles, 1922 Model. | | Rubles, 1922 Model. |
|---|---|---|---|
| Jan. 1 | 385,227,700 | Apr. 1 | 1,409,261,900 |
| Feb. 1 | 345,883,700 | May 1 | 1,910,337,950 |
| Mar. 1 | 762,915,300 | | |

The bank's accounts contained interest-bearing accounts, non-interest-bearing accounts and accounts discountable as follows:

| In Cash. | In Rubles, 1922 Model. | | Discountable. |
|---|---|---|---|
| | Interest-Bearing. | Non-Interest-Bearing. | |
| Jan | 134,894,800 | 74,807,700 | 321,800 |
| Feb | 261,550,100 | 40,294,700 | 504,800 |
| Mar | 360,699,300 | 22,114,200 | 775,000 |
| Apr | 542,644,800 | 16,146,600 | 159,000 |
| In Fixed Form. | | | |
| Jan | 220,325,100 | 4,277,600 | 402,300 |
| Feb | 295,300,200 | 25,122,400 | 833,800 |
| Mar | 360,512,000 | 20,298,300 | 167,400 |
| Apr | 565,341,100 | 12,234,300 | 152,400 |

The working credits of the State Bank as of May 1, 1922, in millions of rubles, model of 1922 were:

| | Demand. | Time. | Industrial. | Discount. | Merchandise. |
|---|---|---|---|---|---|
| Enterprises of the State | 837.6 | 603.9 | 266.2 | 35.2 | 302.4 |
| Co-operative enterprises | 440.2 | 188.4 | 54.4 | 93.5 | 50.9 |
| Private enterprises | 27.9 | 21.0 | .10 | 4.4 | 16.1 |
| Totals | 1305.7 | 813.3 | 310.7 | 133.1 | 369.4 |

*CURRENT COSTS OF LIVING.*

The Soviet report to The Hague showing the rise of the cost of living in Russia is here reproduced. It was based on 100 as the 1913 value standard, as set forth in the report:

| Date. | Average for the Principal Places. | Ave. Russia, Except Moscow and Petrograd. | Average for All Russia. |
|---|---|---|---|
| 1921. | | | |
| Sept | 6,308,426 | 6,051,760 | 6,285,305 |
| Oct | 6,668,948 | 6,310,099 | 5,412,091 |
| Nov | 8,262,078 | 8,093,839 | 8,842,092 |
| Dec | 9,771,205 | 9,998,023 | 10,277,122 |
| 1922. | | | |
| Jan | 18,275,835 | 18,275,340 | |
| Feb | 46,698,217 | 44,770,192 | 44,804,306 |
| Mar | 87,783,002 | 83,473,948 | 89,414,312 |
| Apr | 1,193,775,387 | 185,253,297 | 194,851,133 |
| May | 10.263.714,167 | 267,319,959 | 257,394,138 |

THE ECONOMIC STATUS QUO.

Apart from the foregoing official statement by the representatives of the Russian Socialist Federal Soviet Republic at The Hague Conference in July, 1922, not much information may be obtained as to economic conditions at the present, other than unofficial figures and estimates by authorities outside of Russia. One comparison of products was made in thousands of poods weight—a thousand poods being equal to about 16 short tons:

Coal fell from 1,728,000 poods in 1913 to 466,499 in 1920; oil from 564,300 to 233,900; ores from 638,000 to 10,400; cast iron from 257,400 to 6,330; electrical machines from 678,000 to 36,700; brick from 2,000,000 to 43,000; sulphuric acid from 7,688,128 to 691,387; cotton yarn from 16,000 to 825; hides from 16,000 to 825; sugar from 82,806 to 5,542. and so on through a long list.

Other unofficial estimates were that the number of livestock had decreased approximately 35 to 40 per cent. up to 1921 from 1913 figures, and tilled acreage about 40 to 50 per cent.

The United States Department of Commerce, late in 1922, issued a review of Russian economic activities for 1921, on the basis of comparison between 1913 and 1921, and, while finding gradual increase of industrial and commercial movement during the year, estimated that "at pre-war prices the foreign trade for 1921 amounted to 268,700,000 gold rubles (51.46 American cents), of which 248,500,000 represented imports, and 20,200,000 exports. The combined exports and imports were 9.6 per cent. of the former normal trade. By weight, the total trade amounted to 68,200,000 poods (1,000 poods equal to about 16 short tons), of which 55,300,000 poods (892,000 long tons), represented imports, and 12,900,000 (208,000 long tons), exports, being only 2.8 per cent. of the trade for 1913, reckoned by weight. Imports from the United States increased somewhat during the last quarter of the year. In December, they amounted to 610,000 poods (9,839 long tons), of which 300,000 poods (4,839 long tons), consisted of goods for famine relief. From the United States, Russia obtained coal, foodstuffs, shoes and drugs."

The department also stated that exports of manufactures were only three-tenths of 1 per cent. of the total, or 2.5 per cent. of the total value in rubles; and that the chief export markets for Russia were Great Britain, Latvia and Germany.

It was accepted generally throughout the economic world that the industrial life in Russia was disorganized more seriously than in most countries.

In 1913 exports totalled $782,243,460, and imports $707,060,400. Later events completely overturned that healthy balance between income and outgo. This disparity is seen in the figures of United States exports to Russia of $26,000,000 in 1913, and of more than $315,000,000 in 1917.

Present imports and exports into and from the United States are negligible. Trade with the United States as reported by the Department of Commerce was:

**Russia in Europe.**

| | |
|---|---|
| Imports 1920-21 | $17,111,758 |
| " 1921-22 | 13,830,070 |
| Exports 1920-21 | 1,055,146 |
| " 1921-22 | 22,153 |

**The Ukraine.**

| | |
|---|---|
| Imports 1921-22 | $5,915,811 |
| Exports 1921-22 | 47,398 |

**Armenia and Kurdistan.**

| | |
|---|---|
| Imports 1921-22 | $526,081 |
| Exports 1921-22 | 3,163 |

**Russia in Asia.**

| | |
|---|---|
| Imports 1920-21 | $979,245 |
| " 1921-22 | 863,622 |
| Exports 1920-21 | 3,564,488 |
| " 1921-22 | 327,019 |

*THE UKRAINE.*

(Ukrainian Socialist Soviet Republic.)

AREA, 174,510 square miles.
POPULATION, 1922, estimated, 26,001,802.
CAPITAL, Kharkov, population, 1913, 258,360; chief cities, Odessa, population, 1912, 631,040; Kiev, population, 1913, 610,190; Ekaterinoslav, population, 1914, 180,000; Zhitomir, population, 1914, 80,000.

The Ukraine, the richest and most densely populated part of Russia, consists of the nine provinces in the southwestern part of European Russia bordering on the Black Sea. It formerly included Bessarabia, a strip taken from Roumania by Russia after its victory over Turkey in 1878, but restored to that country by the Allies in the Treaty of Peace. The Dniester River forms its boundary with Roumania on the southwest, and on the west it is bounded by Poland. The black soil is the richest in Russia; it is the great wheat growing district and Odessa, its great port on the Black Sea, has large elevators and in pre-war days was a most important grain shipping port.

There are large deposits of coal and iron ore.

The people belong to the Little Russian branch of the Slavs. Their independence, encouraged by Germany, was declared Nov. 21, 1917, but it was despoiled by Germany and later overrun by the Bolshevists. Soviet Russia admitted its independence even so late as March 19, 1921, in the Treaty of Riga with Poland, but the Ukraine's efforts at complete independence have been frustrated by the R. S. F. S. R., to which its economic adherence is vital. The two Soviet Governments of Russia and the Ukraine on Dec. 28, 1920, signed a military and economic alliance which established Joint People's Commissariats for Industry, Foreign Trade, Transport, Finance, Labor, War, and Posts and Telegraphs.

*ARMENIA.*

(Socialistic Soviet Republic of Armenia.)

AREA, 15,240 square miles.
POPULATION, 1922, estimated, 1,214,391.
CAPITAL, Erivan, population, 90,000.

Armenia, first winning recognition of independence from Turkey and Germany, joined with the Georgians and the Tartars, to form a federal republic in 1918. It was overthrown in five weeks, Georgia and Armenia declaring their independence. Armenia's independence was recognized by the Allies in 1920. On April 2, 1921, Armenia became a Soviet republic, and has therefore such relations with the R. S. F. S. R. as classes it in a measure as Russian territory.

It lies at the southeastern frontier of Trans-Caucasia, and was a part of Imperial Russia, being now classed as one of the several autonomous republics which have sprung up in that region.

*GEORGIA.*

(The Fraternal Soviet Republic of Georgia.)

AREA, 25,760 square miles.
POPULATION, 1922, estimated, 2,372,403.
CAPITAL, Tiflis; population, 1915, 446,766.

Georgia, situate in Trans-Caucasia, between the Black and Caspian Seas, is bounded on the north by the Caucasus, on the east by Azerbaijan, and on the south by Armenia.

Georgia joined the federal republic which was set up by Georgia, Armenia and Tartary in 1918, in March of the following year, Georgia becoming independent. Tumult followed, until, in 1921, Russian Soviet armies occupied the land. The country is now governed by a revolutionary committee fashioned after Soviet Russia, which claims the dominant power in that area.

The people are Christians. Ninety per cent. of the population engage in agriculture, with tillage most crude. Corn, wine, fruits, silk, honey, cattle and minerals are the chief interests. The production of manganese ore around Tchiaturi is important.

There are railways, and 1919 exports were 257,559,000 rubles, and imports, 366,897,167 rubles. Batum, population, 1915, 25,020, is its important port on the Black Sea.

*AZERBAIJAN.*

(Azerbaijan Socialist Soviet Republic.)

AREA, 33,970 square miles.
POPULATION, 1922, estimated, 2,096,973.
CAPITAL, Baku; population, 250,000.

Baku, the capital, is the centre of the extensive oil industry and perhaps the most important of the several autonomous states in Trans-Caucasia for that reason.

Azerbaijan joined with Georgia and Armenia in 1917 to form a federal republic, but Azerbaijan declared its complete independence on May 28, 1918, a Soviet government being formed, which was recognized by Great Britain in January, 1920. In April, the Bolshevists overthrew that government and declared alignment with Soviet Russia. In September, 1920, a political and economic treaty was signed between Azerbaijan and the R. S. F. S. R.

The people are Mohammedans. Besides oil, other interests are cotton, fisheries, cereals and cattle.

*FAR EASTERN REPUBLIC.*

(Far Eastern Democratic Republic.)

AREA, estimated, 652,740 square miles.
POPULATION, 1922, estimated, 1,811,725.
CAPITAL, Chita.

The "Far Eastern Democratic Republic," to give it its full title, is the southern part of Siberia from Lake Baikal east to the Sea of Okhotsk and the Japan Sea. It includes Transbaikalia, Amur, and the Maritime Province (capital and seaport Vladivostok). The upper half of the Island of Sakhalin, now held by the Japanese as security for claim for the Nikolaievsk affair, normally belongs with it. In the south are Mongolia and Manchuria,

That part of Siberia which lies to the north is a waste. Of its 1,800,000 inhabitants spread out over a territory as large as Texas, New Mexico, Arizona and California, 80% are peasants, 15% are in the Government service and 5% are in private industry.

The people have suffered terribly in the three years of civil war that has devastated the land and beggared the people. The forests are enormous and the country rich in gold and coal, but wholly undeveloped. The Trans-Siberian Railroad is its artery of life.

"The Government" is a commission of seven elected by the National Assembly of about 400, which itself is elected by direct vote with proportional representation on a basis of universal suffrage of all men and women above 18 years of age. Liberty of speech, the press, assembly and religion are guaranteed. Education is free and compulsory. Bodily and capital punishment are abolished. There is a system of people's commissars and a secret political police as under the Moscow government.

### Russian Dependencies.

*BOKHARA.*

(Bokharan People's Soviet Republic.)

AREA, 83,000 square miles.
POPULATION, 1922, estimated, 1,250,000.
CAPITAL, Bokhara, population about 75,000.

Bokhara is a vassal state in Central Asia, bounded on the north by the Russian provinces of Syr-Daria and Samarkand; on the east by the province of Ferghana, on the south by Afghanistan, and on the southwest by the Russian provinces of Trans-Caspia and Khiva. A treaty, political and economic, was signed with the R. S. F. S. R., by virtue of which it remains as recognized Russian territory, one feature being that none may be admitted into Bokhara without a Russian passport. The new government is Soviet. No duty may be levied on Russian goods imported.

The religion is Mohammedan, and the products are corn, fruit, silk, tobacco, cotton, hemp, sheep, goats, horses, camels, gold, silver, alum and sulphur. There is navigation for steamers on the Oxus River, and railway lines operate to close to the capital.

*KHIVA.*

(Khorasmian People's Soviet Republic.)

AREA, 24,000 square miles.
POPULATION, 1922, estimated, 646,000.
CAPITAL, Khiva, population about 5,000.

Khiva is a vassal state of Russia, bounded on the north by the Aral Sea; on the east by the Oxus River; on the south and west by the Russian Trans-Caspian province.

It has a Soviet government, and has signed a treaty, political and economic, with the Russian Soviets, which lists Khiva as virtual Russian territory. The people are Mohammedans, and their products are chiefly cotton and silk.

## SALVADOR REPUBLIC OF.

AREA, 7,225 square miles.
POPULATION, estimated, Jan. 1, 1922, 1,500,000.
CAPITAL, San Salvador, population 80,756. Other cities: Santa Ana, 60,679; San Miguel, 30,406; Nueva San Salvador, 23,291; San Vicente, 26,881.
*President*, Sr. Don Jorge Melendez, 1919-23.
*Premier*, Dr. Arturo Romez Arias (Foreign, Public Instruction, Justice, and Charities).
*Minister to the United States*, Sr. Salvador Sol M.
*Consul General*, at New York, Trinidad Romero.
*Consuls*, at New Orleans, Leonilo Montalvo; at St. Louis, Rafael Garcia Escobar; at San Francisco, Pio Romero Bosque, Jr.
*United States Minister*, Montgomery Schuyler.
*United States Vice-Consul*, at San Salvador, Lynn W. Franklin.

Salvador lies along the Pacific Ocean with Honduras as its northeast boundary, and Guatemala on the northwest. Its coast line is 160 miles long and its average breadth 60 miles. It is about the size of the State of New Jersey. Along the sea is a narrow low alluvial plain and the interior is a plateau about 2,000 feet above sea level, containing a number of volcanic cones. Earthquakes are frequent; that of June 8, 1917, destroyed much of the capital and three other towns; even greater damage was done the capital on April 28, 1919. It has luxuriant forests and abundant mineral deposits which are undeveloped. The leading products are coffee, of which 60,000,000 pounds was produced in 1921, and sugar, 40,000,000 pounds. Cacao, indigo, cotton, tobacco, balsam, hemp, hides, rubber, and bananas are also exported. Mestizos and Indians form two-thirds of the population.

Under the Constitution of 1824, modified last in 1886, a president for four years and a single chamber of 70 deputies for a year are elected by universal suffrage. The President appoints a ministry of four members. The dominant religion is Roman Catholic. Education is free and compulsory. The army numbers 7,500, with reserves of 25,000. There are 213 miles of narrow gauge railroads. In 1920, 520 steamers, tonnage 657,396, entered its ports. Salvador is a member of the League of Nations.

(For part in federation of Central America see Honduras.)

Par of exchange, colon.....50 cents
Imports, 1920.....$12,628,370
Exports, 1920.....$17,943,827
Budget—Receipts.....$7,316,141
Expenditures.....$6,687,987
Debt—Internal, colones.....15,593,913
External, colones.....13,438,400
Trade with the United States was:
Imports, 1920-21.....$6,205,186
" 1921-22.....4,614,934
Exports, 1920-21.....6,980,175
" 1921-22.....1,987,102

## SAN MARINO, REPUBLIC OF.

AREA, 38 square miles.
POPULATION, census of June, 1920, 12,027.

San Marino, situated in the Apennines near Rimini, in the heart of Italy, claims to be the oldest state in Europe and to have been founded in the fourth century. Its treaty of friendship with the Kingdom of Italy, concluded June 28, 1907, was revised in 1921. It has an extradition treaty with the United States and other countries. Agriculture and stock raising are practically the only industries. It is governed by a Great Council of 60 members elected by popular vote, two of whom are chosen to exercise executive power for a term of six months. It maintains a military force of 39 officers and 950 men. Revenue for 1920-21 was 2,000,000 lire and expenditures 2,150,000 lire.

## SANTO DOMINGO.

(See Dominican Republic.)

## SERBS, CROATS AND SLOVENES, KINGDOM OF THE.

JUGO-SLAVIA.

AREA, approximately 86,878 square miles.
POPULATION, 1922, estimated, 11,600,000.
CAPITAL, Belgrade, population, 1919, 120,000
*King of the Serbs, Croats and Slovenes*, Alexander I., born Dec. 17, 1888, Prince Regent from June 24, 1914 to Aug. 16, 1921, when his father, King Peter I., died; married June 8, 1922 at Belgrade, Princess Elizabeth of Roumania.
*Prime Minister*, N, Pashitch (Radical).
*Minister to the United States*, Dr. Anton Tresic-Pavicic.
*Consuls General in the United States*, New York, Pavle Karovitch; Chicago, Branko Lazarevitch; *Consul*, San Francisco, Bozidar Puritch.
*United States Minister at Belgrade*, H. Percival Dodge.
*United States Consuls*, Belgrade, Kenneth S. Patton; at Zagreb, Joseph F. McGurk.

Representation of the Kingdom of Montenegro is maintained in New York City by Luigi Criscuolo as Delegate Plenipotentiary "with particular duties referring to Montenegrins in the United States who have not become, and have no desire to become, citizens of the Kingdom of the Serbs, Croats and Slovenes." The State Department at Washington has revoked the exequatur of the former Montenegrin Consul General.

Serbia, which had since the Battle of Kossovo in 1389 been a vassal principality of Turkey, was established as an independent kingdom by the treaty of Berlin, July 13, 1878. By the Balkan wars of 1913 her boundaries were enlarged by the annexation of Old Serbia. The government of Austria-Hungary laid the assassination of the Archduke Franz Ferdinand (June 28, 1914) to a Serbian plot and by invasion following her ultimatum brought on the World War of 1914-18. Serbia was overrun and suffered enormously, but in October, 1918, her army again occupied Nish and on Nov. 3, 1918 reoccupied the capital, Belgrade. At the dissolution of the Austrian-Hungarian Empire, the National Assembly of the former Hungarian provinces of Croatia and Slovania proclaimed their independence and a National Council was established to which representatives of other Slav states of the

old empire including Bosnia and Herzegovina were admitted and union with Serbia as the Kingdom of the Serbs, Croats and Slovenes (Jugo-Slavia) became effective on Dec. 29, 1918, when a ministry was formed.

On Nov. 29, 1918, the National Parliament of Montenegro, which had been recognized as an independent state by the Treaty of Berlin in 1870, deposed King Nicholas who was born in exile and decided to unite with Serbia. This union became a fact on the death of King Nicholas, March 1, 1921, and Montenegro officially disappeared from the map of Europe on July 13, 1922, when the Council of Ambassadors sitting in Paris to ratify the boundaries of Jugo-Slavia and Albania recognized the fact that its union was an accomplished fact. The dispute over the allotment of Fiume to Jugo-Slavia under the Treaty of Versailles rendered acute by the d'Annunzio raid of September, 1919, was composed by an agreement with Italy in 1921, in the Treaty of Rapallo, when the buffer state of Fiume-Istria-Dalmatia was set up in which Fiume has a special status, being administered by a committee of five members, two Italians, two Jugo-Slavs and one citizen of Fiume.

Jugo-Slavia is bounded by this buffer state and the Adriatic Sea on the east, by Austria and Hungary on the north, by Bulgaria and Greece on the east, and by Albania and Greece on the south. Its area and population by provinces is approximately as follows:

According to nationality there are approximately 9,730,000 Slavs, 500,000 Germans, 490,000 Hungarians, 480,000 Albanians, 180,000 Roumanians, and 10,000 Italians. According to religion there are approximately 5,460,000 Greek Orthodox (the state religion), 4,475,000 Roman Catholics, 345,000 Mohammedans and 750,000 of other religions. Under a concordat with the Vatican a Roman Catholic Archbishop of Belgrade is to be established.

The Constitution, adopted June 28, 1921, provides for a single Legislative Chamber of 419 members elected for four years, one Deputy to every 40,000 inhabitants. The present Chamber is made up as follows: 96 Radicals, 49 Democrats, 54 Communists; 49 Croatian Agrarians, 30 Serb Agrarians, 27 Mohammedans, 25 Catholic People's Party, and 43 scattering.

Elementary education is nominally compulsory and is free. There are three universities, Belgrade with 7,668 students in 1921; Zagreb, 3,249; and Ljubliana, 769.

The army has been reorganized on a nominal peace strength of 150,000 but (in 1921) about 250,000 are with the colors. Compulsory service is in force.

The principal exports are grain, cattle, timber and prunes; imports, agricultural and animal products, machinery and chemicals. Serbia is an agricultural country of small peasant holdings. Over one-third of its area is covered with forests. There are valuable coal and iron mines and some lead and copper. The State owns 5,175 of the 5,684 miles of railroads. The river navigation of the Danube and the Save is important. Access to seaports, Fiume and Salonica, is guaranteed by treaty.

The unit of currency is the dinar or crown; par of exchange, 20.3 cents, exchange, Nov. 1, 1922, .42 cents.

Imports, 1920, dinars.....3,487,996,150
Exports, 1920.....1,320,905,955
Budget, 1922—Receipts, dinars.....6,257,577,805
Expenditures, theoretically equal.

The total debt was 3,564,240,897 dinars.

Trade with the United States, including that of Fiume was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $1,326,528 |
| " | 1921-22 | 1,831,187 |
| Exports, | 1920-21 | 72,956 |
| " | 1921-22 | 155,920 |

## SIAM, KINGDOM OF.

AREA, 198,000 square miles, of which about 45,000 is in the Malay Peninsula.

POPULATION, census of 1911-12, last available, 8,266,408. Official estimate, 1920, 9,022,000.

CAPITAL, Bangkok, population, 541,000.

*King*, Rama VI. (Chao Fa Maha Vajiravudh); born Jan. 1, 1881; succeeded on Oct. 23, 1910, on the death of his father, King Chulalongkorn I.

*Minister to the United States*, Phya Prabha Karavongse.

*Consuls in the United States*, at New York, F. Warren Sumner; at Chicago, Milward Adams; at San Francisco, Henry G. W. Dinkenspiel.

*United States Minister*, William H. Hoenibrook.

*United States Consul*, at Bangkok, Maurice P. Dunlap.

Siam is situate in Southeastern Asia, with Burma (British India) on the northwest and west and French Indo-China on the northeast and east, and the Gulf of Siam, which makes on the Pacific Ocean on the south and east. It also occupies the neck of the Malay Peninsula as far as the Federated Malay States (British). It is of rolling topography, with large areas susceptible to irrigation, of which about 300,000 acres were brought under water in 1922.

There are many large forests, teakwood being an important article of export. Labor is higher than in almost any other Oriental country. The chief product is rice, the national food, and heavily exported, with 6,150,000 acres of it under cultivation in 1920, and an average of 1,700,000 tons exported annually. There are 80 rice mills in the Bangkok district. Livestock in 1920 was 6,294 elephants, 132,675 horses and ponies, 2,620,682 bullocks, and 2,508,164 buffaloes, all of which are used as beasts of burden. Annual exports of teak average about 70,000 tons, worth about $6,000,000.

Mineral resources are extensive and varied, including tungsten, wolfram, coal, iron, manganese, antimony, and quicksilver. Tin also is abundant, exports having been 6,183 tons in 1921, and normally in previous years up to 8,800 tons.

In 1920 there were 1,376 miles of state railways. In 1921, 571 vessels entered the port of Bangkok, of 492,812 tonnage, mostly of British registry, with some flying the flags of France, Norway, Japan and other countries.

Executive power vests in the King, who is advised by a Cabinet. Formerly there was a Council of State, which has been succeeded by the Legislative Council of Ministers and others, not less than twelve, appointed by the King. Present membership is forty. It supervises the legislation of the Kingdom, being charged with the task of perfecting the statutes. Laws must be signed by the King.

Buddhism is the prevailing religion. In 1919 there were 13,616 temples, with 87,538 priests. Schools are controlled by the Minister of Education, excepting those for military, naval and legal training, and some which come under royal patronage. In 1919 there were 402 Government schools, with 1,026 teachers and 35,945 pupils, 2,416 non-Government primary schools with 2,819 teachers and 113,793 pupils. About 11 per cent. of the people were literate in the last census.

Every able-bodied man serves in the army. The navy has 5,000 active and 20,000 reserve men. In 1920 there were over 15,000 Boy Scouts. Siam is a member of the League of Nations.

The tical is the unit of the currency, its gold par being 37.69 cents. Imports in 1921 were 230,685,000 ticals; exports, 103,546,400 ticals. Principal revenues are from opium, land capitation, excise, railways, mines, forests, and customs; total 99,811,000 ticals in 1920. The national debt was 99,509,000 ticals in 1920.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $2,442,756 |
| " | 1921-22 | 820,148 |
| Exports, | 1920-21 | 290,075 |
| " | 1921-22 | 138,607 |

## THE SOUDAN.

(Anglo-Egyptian.)

AREA, 1,014,600 square miles.

POPULATION, estimated, 1921, 4,000,000.

CAPITAL, Khartoum, including Khartoum North, on the Blue Nile, population, 1921, 39,056. Below on the White Nile, Omdurman, the old Dervish capital, population, 50,429.

*Governor General of Soudan*, Major Gen. Sir Lee O. F. Stack, appointed 1919.

The Soudan is bounded by Egypt on the north, the line being the 22° north latitude; the Red Sea and Eritrea (Italian) and Abyssinia on the east; Uganda (British), and the Belgian Congo on the south, and French Equatorial Africa on the west. Its greatest length north and south is 1,650 miles, and its greatest breadth east and west is about 1,200 miles. The northern zone consists of the Libyan desert, on the west, and the mountainous Arabian desert, extending to the Red Sea on the east, separated by the narrow valley of the Nile; the central zone has large areas of fertility, including the rainlands of Kassala and Tokar, the Gezira plain and the pastures and gum forests of Kordofan; and the southern equatorial belt where the soil is richest and watered by tropical rains.

The White Nile flows north through the middle of the country, the Blue Nile rising in the mountains of Abyssinia, flows northwest to its junction at Khartoum with the White Nile to make the Nile that flows on in a huge S curve to enter Egypt at Halfa.

Two large dams for impounding the waters, one the Makwar dam in the Blue Nile, for irrigation

of the Gerira country between the rivers, and the other at Gebel Aulia in the White Nile, 24 miles south of Khartoum, to hold up double the quantity of water stored by the Aswan dam for the benefit of Egypt, are under way after being suspended by the war. The Governor-General has authorized (1922) a loan of £7,000,000 to facilitate the completion of these works; it must be approved by the British Government.

The population, which was estimated at 9,000,000 in 1884, decreased to 2,000,000 under Dervish misrule through war, famine and disease. The inhabitants are partly Arabs, partly Negroes and partly Nubians of mixed Arab and Negro blood; the Arabs and Nubians are all Mohammedans. The Mahdist rebellion in 1884, culminating in the fall of Khartoum and the death of Gen. Gordon Jan. 26, 1885, forced the Egyptian Government to withdraw from the Soudan, retaining only Wadi Halfa on the Nile and Suakin on the Red Sea as frontier ports. The Dervishes were overthrown by Lord Kitchener with the Anglo-Egyptian army at Omdurman, Sept. 2, 1898. On the reconquest of the Soudan an agreement was signed Jan. 19, 1899, between Egypt and Great Britain which fixed the boundary, provided for the administration of the territory by a Governor-General appointed by Egypt with the consent of Great Britain (aided since 1910 by a council) who should make laws by proclamation, and providing that the British and Egyptian flags should fly togcther. Free trade with Egypt was provided for also and the import and export of slaves was forbidden together with the import of arms, ammunition and spirits. The civil and criminal codes are based on those of Egypt and India.

The country has prospered under the Anglo-Egyptian rule though suffering agriculturally during seasons of low water in the Nile, and by depression consequent on the past years of the war when the exports of grain and cattle almost entirely ceased. Cotton can be grown successfully with increased irrigation and transportation facilities. Rich forests are of great extent and the Soudan is the chief source of the world's supply of gum arabic, the exports being 12,109 tons valued at £E566,925, in 1920. Of ivory, 45 tons, valued at £E78,819 were exported in 1920.

The Soudan railroad reached Khartoum in 1899. A line from Atbara across the Arabian desert to Port Soudan and Suakin on the Red Sea was opened in 1906. A bridge has been built over the Blue Nile at Khartoum and another over the White Nile near Hillet Abbas. The total length of railroads is about 1500 miles.

A fleet of Government passenger and freight steamers is maintained on the Nile and its tributaries with a scheduled service covering over 2,500 miles.

The future control of the Soudan has not been settled. Egypt claims it as an integral part and is making possession of it a basic part of its projected new Constitution. However, Lord Allenby, when in the Soudan (1922), informed the native leaders that Great Britain does not intend to abandon the Soudan.

The revenue of the Soudan for 1920 was £E4,425,340 and the expenditures £E3,564,848. The budget estimate for 1921 balanced at £E4,026,000.

## SPAIN, KINGDOM OF.

AREA, including the Balearic and the Canary Islands, 194,783 square miles; Spanish Colonies in Africa, including Spanish Morocco, 128,149; total 320,932.

POPULATION, estimated, in 1920, 20,783,844 in Spain proper; Canary Islands, 506,414; Colonies, estimated, 844,339; total, 21,134,597.

CAPITAL, Madrid; population, 1918, estimated, 608,793; other cities, Barcelona, 582,240; Valencia, 236,477; Seville, 150,631; Malaga, 136,364; Murcia, 123,936; Zaragoza, 117,742; Cartagena, 102,542; and 28 of more than 30,000.

*King*, Alfonso XIII.; born May 17, 1886, after the death of his father, King Alfonso XII.; succeeding on birth; married, May 31, 1906, Princess Victoria Eugenie, daughter of Prince Henry of Battenberg and Princess Beatrice, youngest daughter of Queen Victoria of Great Britain; *Heir*, his eldest son, Prince Alfonso, born May 10, 1907. There are three other sons and two daughters.

*President of the Council*, Sanchez Guerra.

*Minister of Foreign Affairs*, Fernandez Prida.

*Ambassador to the United States*, Senor Don Juan Riano y Gayongos.

*Consul General in the United States*, at New York, Alexandro Berea y Rodrigo; *Consuls*, at Philadelphia, Emilio de Motta y Ortiz; at New Orleans, Jose Maria Sempere y Olivares; at Galveston, Andreas Iglesias y Velayos; at San Francisco, Jose Jimeno Aznar; at St. Louis, vacant.

*United States Ambassador to Spain*, Cyrus E. Woods.

*United States Consuls*, at Barcelona, Ralph J. Totten; at Madrid, Keith Merrill; at Bilbao, Henry M. Wolcott; at Cadiz, Lucien N. Sullivan; at Seville, Robert Harnden; at Malaga, Gaston Smith; at Valencia, Henry C. A. Damm; at Teneriffe, Canary Islands, Frank Anderson Henry; at Corunna, Fred C. Slater; at Huelva, Horace Remillard; at Santander, Leonard G. Dawson; at Vigo, Henry T. Wilcox.

Spain is bounded on the west by Portugal and the Atlantic Ocean, on the north by the Atlantic and by France, on the east and south by the Mediterrean Sea, the British fortified station Gibraltar being at the southernmost tip, guarding the entrance to the Mediterranean from the Atlantic. The Balearic Islands in the Mediterranean (capital Palma, area 1,935 square miles, population, 331,195) and the Canary Islands (area 3,342 square miles, population 506,414) in the Atlantic (capital Santa Cruz, area 2,807 square miles, population 520,516) are provinces of Spain; Ceuta, a fortified post in Africa, opposite Gibraltar, (area 5 square miles, population 23,907) is part of the Province of Cadiz.

Spain occupies the entire Iberian peninsula with the exception of Portugal. The lofty Pyrenees separate it from France. The interior is a high inclosed platcau traversed east and west by mountain ranges and deficient in rainfall. However, 88.45 per cent. of the soil is regarded as productive or potentially so, crops and fruit being gathered from more than one-third of the productive area, and a quarter of it is given over to grazing. Crops in 1921 from about 20,000,000 acres were 8,600,000 tons, including practically all of the farm products of the temperate and south temperate zones. Grapes in 1920 amounted to 9,576,528,864 pounds, yielding 706,756,116 gallons of wines, much of which was exported. Other products are olives, which yielded 1,662,384 tons, from which 316,963 tons of oil were made, flax, hemp, oranges and nuts. Silk culture is carried on in Valencia, Murcia and other localities. There are 73 sugar factories, 1920 production being about 237,000 short tons.

Domestic animals in 1921, estimated, were 722,183 horses, 1,294,912 mules, 1,137,980 asses, 3,718,189 cows, 20,521,677 sheep, 4,298,056 goats, 5,151,988 swine. 4,268 camels (in the Canary Islands), and 25,102,973 poultry.

Spain has large mineral wealth. Iron abounds, with coal, lead, copper, asphalt, tin, wolfram, manganese, quicksilver, silver, sulphate of soda, salt, sulphur, and phosphorus. Platinum has lately been discovered. Mining industries employed in 1920 104,918 men, 2,152 women, and 17,970 boys and girls under 18 years of age. The 1920 mineral output was valued at 500,984,695 pesetas. Coal represented 328,000,000 pesetas, copper, 14,000,000, and lead, 59,808,000.

Cotton and woolen goods for domestic use are manufactured to a considerable amount, the normal employment of cotton spindles being 2,614,000, and woolen spindles 662,000.

Paper making and glass works are important.

Fisheries in 1918 employed 24,907 boats and 104,999 men, the catch being valued at 228,832,842 pesetas, the most important products being sardines, tuna fish and cod.

Railway mileage in 1919 was 9,436, privately owned, but subsidized by the Government. Highway mileage in 1917 was 45,972.

The merchant marine in 1922 was composed of 621 steamships of 912,817 net tons, and 581 sailing vessels of 101,285 net tons. Bilbao and Barcelona are the principal ports. In 1920 vessels entering numbered 14,609 of 12,995,625 tonnage, of which 9,519 of 5,426,611 were of Spanish registry.

Spain was once overrun by the Moors, who swept across the Mediterranean and went even into France. They were expelled from Europe in 1609, having entered Europe in 711, and for those centuries dominated that part of the European Continent, leaving many marks in customs and habits impressed to this day on the Spanish people. However, the language remains in general Castilian, with variations in each separate region. Spain's colonial period was brilliant and extended to the Americas and the Philippines. She lost Mexico and her Central and South American colonies by revolution a hundred years ago, and in 1898 Cuba secured her independence, and she lost the Philippines, Guam and Porto Rico to the United States as a result of the Spanish-American War. Now her colonial possessions are confined to Morocco in North Africa, Spanish Guinea and a few islands along the Guinean coast. In the north there are 400,000 Basques, of a distinctly different race and language; and there are 50,000 gypsies.

The Government is that of a constitutional mon-

archy, the Constitution dating from 1876. It provides for a sovereign and the Cortes composed of two Houses, the Senate and the Congress, equal in authority, 360 Senators and 417 Deputies in the Congress. Election requirements are complicated. The last twenty years has seen a very marked tendency toward democracy, numerous disturbances having occurred, with Socialists as the moving force. Spain has moved towards modernization and has made good economic progress.

The Roman Catholic is the national religion, all the people adhering excepting about 30,000 Protestants, Jews and others. The Constitution requires state support of the church.

There is a heavy percentage of illiteracy, the 1910 census showing that only 38.59 per cent. could read and write. Although there has been a compulsory education law since 1857, it has not been rigidly enforced. There are 2,604,000 pupils in the public schools, with about 50,000 in secondary institutions. Spain has 11 universities, which attain high culture.

Military service is compulsory, the peace establishment being set at about 300,000, with reserves in addition.

The navy has nine vessels of from 2,134 to 15,700 tons, and 51 auxiliaries. A building programme for six years from 1915 called for 59 additional vessels, but the work was delayed.

Spain was neutral in the Great War, and is a member of the League of Nations.

The unit of the currency is the peseta, its gold par being 19.3 cents; rate of exchange on Nov. 1, 1922, was 15.27.

Imports in 1921 were 1,261,390,000 pesetas; exports, 812,440,000.

Budget, 1921-22, receipts, pesetas, 1,976,663,000; expenditures, pesetas, 2,550,794,000.

The public debt on Jan. 1, 1922, was 11,963,084,525 pesetas, of which 910,761,400 was external.

Trade of Spain with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $118,578,676 |
| " 1921-22 | 66,408,756 |
| Exports, 1920-21 | 32,154,558 |
| " 1921-22 | 27,626,411 |

Trade of the Canary Islands with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $3,335,505 |
| " 1921-22 | 1,905,926 |
| Exports, 1920-21 | 208,573 |
| " 1921-22 | 307,541 |

*SPANISH COLONIES IN AFRICA.*

AREA, 128,149 square miles; divided, Rio de Oro and Adrar, 109,200; Ifni, 965; Spanish Guinea, 9,470; Fernando Po and others near Guinea, 814; and Spanish Morocco, 7,700.

POPULATION, 844,339; Morocco, 600,000; others near Guinea, 244,339.

The colonies of Spain are now relatively unimportant, in sharp contrast with those which she held in the sixteenth, seventeenth and eighteenth centuries. The Guinean lands are undeveloped, and small values are taken therefrom. All figures are mere estimates.

Morocco, over a part of which Spain exercises a protectorate and where she has lately had military operations, is less developed than the French Algerian and other African possessions.

Exports to Spain from Fernando Po, in 1917, were 6,261,379 pesetas; imports from Spain, 3,137,750.

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $118,412 |
| " 1921-22 | 606,394 |
| Exports, 1920-21 | 117 |

## SWEDEN, KINGDOM OF.

AREA, 173,035 square miles.

POPULATION, census of 1920, 5,903,762.

CAPITAL, Stockholm, population, 1921, 419,429; other cities, Goteborg, 202,366; Malmo, 113,558; Norrkoping, 58,101; and 29 with more than 10,000 population.

*King*, Gustaf V.; born June 16, 1858; succeeded on the death of his father, Oscar II., on Dec. 8, 1907; married, Sept. 20, 1881, Princess Victoria, daughter of Friedrich, Grand Duke of Baden.

*Heir*, Crown Prince Gustaf Adolf, born Nov. 11, 1882, married, June 15, 1905, Princess Margaret (died May 1, 1920), daughter of the Duke of Connaught and grand-daughter of Queen Victoria; has five sons and one daughter.

*Premier*, Hjalmar Branting (Foreign).

*Minister to the United States*, Capt. Axel Wallenberg.

*Consul General in the United States*, at New York, Olaf Herman Lamm; *Consuls*, at Boston, Carl Wilhelm Emanuel Andre Johanson; at Chicago, Carl Otto David von Dardel; at San Francisco, Carl Edward Wallerstedt.

*United States Minister* to Sweden, Ira Nelson Morris.

*United States Consul General*, at Stockholm, Dominic I. Murphy; *Consul*, at Malmo, Gerhard H. Krogh; at Goteborg, Walter H. Sholes.

Sweden occupies the eastern and largest part of the Scandinavian peninsula in northwest Europe. The Kjolen mountain range separates it from Norway in the west, and the Gulf of Bothnia and the Tornea River from Finland on the east. The Baltic Sea separates it from the Baltic States and Germany on the southeast and south and the Cattegat from Denmark on the southwest.

Although of broken, mountainous topography, it contains much productive land, well watered, on which the Swedes have attained high efficiency in agriculture. In 1910, 45.8 per cent. of the people were engaged in agriculture, the remainder being industrial and commercial. Sweden's total area divides 9.4 per cent. arable, 2.3 per cent. meadows, 59.4 per cent. forests which are largely susceptible of cultivation after removal of the trees and which yield large annual timber cuts.

The crops in 1921 were valued at 1,384,000,000 kroner, and live-stock in 1919 was horses, 715,681; cattle, 2,550,828; sheep, 1,563,654; swine, 716,783. In 1921, cereal crops of 2,700,000 tons were taken from about 3,000,000 acres, and 1,804,974 tons of potatoes from 350,000 acres.

In 1920 were produced 4,519,112 tons of iron ore, of which 3,736,329 were exported, and 2,901 tons of silver and lead ore, 1,136 of copper ore, 47,674 of zinc ore, 14,926 of manganese ore, and 107,326 of sulphur pyrites, and 439,584 of coal. Iron ore mining is most extensive north from the Arctic Circle. The iron and steel industries—Swedish steel being of especial value for tool making—is mostly in the central part. Much machinery is manufactured, with considerable porcelain production. In 1919, the value of the industrial output was about 2,900,000,000 kroner, with 291,777 men, 54,744 women, 34,611 boys and 11,779 girls under 18 years of age employed in factories.

On Jan. 1, 1922, Sweden's merchant marine—ships of over 100 tons—was 1,310 vessels of 1,090,000 tonnage. Goteborg was the most important port in 1920, with 394,771 of ship tonnage; Stockholm next with 278,216. In 1919 there entered Swedish ports 23,300 vessels of 8,521,385 tonnage. In 1919 149,657 ships and boats passed through the canals of Sweden.

In 1920 Swedish railways were of 9,420 miles, of which 3,459 were state-owned.

The Government is a constitutional monarchy, executive power being vested in the King, advised by a Council of State, headed by the Minister of State or Premier. The Legislature has two Chambers, the first of 150 members and the second of 230 members. Suffrage is universal for all over 25 years of age of both sexes.

A plebiscite was taken in Sweden, Sunday, Aug. 27, 1922, on a consultative referendum on prohibition. The official result of the vote was 930,655 against prohibition, 901,053 for, a majority of 29,602 out of 1,831,708 votes cast. Fifty-three per cent. of the Stockholm vote was cast by women. Of this 53 per cent. 44 was against and 9 in favor of prohibition. At Gothenburg, the second city in Sweden, 23,355 women voted against prohibition and 11,904 in favor. In Malmo, the third city, 15,141 women voted against and 4,511 for.

The present system of restricted liquor traffic, devised by Dr. Ivan Bratt, was put into effect in 1914, replacing the Gothenburg system, which abolished the saloon and established certain hours when liquor could be sold.

Briefly, the Bratt system is this: All wine and spirits in Sweden containing over 3.6 per cent. alcohol are sold through the Wine and Spirits Central, the only organization in Sweden having the right to manufacture and to sell liquor wholesale. This organization sells to 120 local companies in as many local districts throughout Sweden, and these in turn supply individuals as well as hotels and restaurants. Individual buying is controlled by the "motbok," a booklet with detachable slips on which its owner must sign his name every time he buys strong liquor. The "motbok" entitles its owner to four litres of spirits a month, although in some parts of Sweden, such as the northern provinces, where the prohibition forces are strong, the quantity is two litres. Applying for a "motbok" is like applying for a passport. Usually only one member of a family may have one of these books, exception being made in the case of sons who have reached the age of 25.

In public places, such as hotels and cafes, the amount of spirits to be sold is based on the amount of food consumed, with a certain maximum quantity permitted.

The Wine and Spirits Central has bought out all the private wine merchants in Sweden, and the

shareholders of it and of the local companies which it serves are entitled to only 5 per cent. on their money. The balance of the profits go to the Government. Three main ideas run through the Bratt system: Reduction of the general ration of distilled and spirituous liquors through a central control, denial of liquor to alcoholics and persons who are known to abuse drink, and elimination of all private interest in the liquor traffic. Under this law Sweden now derives a revenue of 110,000,000 crowns from the liquor traffic.

In 1913, before the present restrictive measures went into effect, the total Swedish consumption of distilled and spirituous liquors was 38.7 millions of litres. In 1921 the total consumption was 28.4 millions of litres, a reduction of 27 per cent. But even these figures are far too modest, for in 1913 distilled liquors were sold by scores of private dealers, the figures for which are lacking. Arrests for drunkenness in Sweden have gone down 49 per cent. In 1913 there were 58,909 arrests for drunkenness in the kingdom. In 1921 there were 30,081. The Katarina Hospital in Stockholm, which is the central receiving hospital for cases of the kind, reports a reduction of 61 per cent. in chronic alcoholism. In 1913 it had 584 cases; in 1921, 228.

The population is very homogeneous, being entirely of the Scandinavian branch of the Aryan family, except about 30,000 Finns and 10,000 Lapps. Emigration has sent about 2,200,000 Swedes abroad, of whom 1,500,000 are in America and 370,000 in Finland. Most of the people are Lutheran Protestant, which is the state religion, but complete freedom of worship exists. Education is compulsory from 7 to 14 years of age, and besides the many higher institutions of learning (including two universities) which attain great culture, schooling is so general that army recruits in 1910 were only 0.16 per cent. illiterate.

Compulsory military service is required, with volunteering permitted, 655,000 men being on the army rolls, with 400,000 reserves. The navy has 13 vessels of from 3,600 to 7,180 tons, with 10 destroyers, 4 torpedo gunboats, 27 torpedo boats and 14 submarines. For the 1922-24 programme Sweden is to expend 15,000,000 kroner on submarines.

The unit of the currency is the krona, its gold par being 26.8 cents. Rate of exchange, Nov. 1, 1922, was 26.75.

Imports in 1921 were 1,266,237,485 kroner; exports, 1,097,273,992.

Budget, 1922—Receipts, kroner.....795,990,900
Expenditures, kroner.....795,990,900
Extraordinary expenditures, kroner...143,933,887

The public debt on Jan. 1, 1922, was 1,423,464,853 kroner, contracted mostly for productive purposes, therefore representing, not net liability but investment, the interest on state investments covered by this debt being more than the interest thereon.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $76,615,673 |
| " | 1921-22 | 30,082,053 |
| Exports, | 1920-21 | 27,905,342 |
| " | 1921-22 | 23,203,575 |

## SWITZERLAND, CONFEDERATION OF.

AREA, 15,976 square miles.

POPULATION, census of 1920, 3,880,320.

CAPITAL, Berne, population, 104,626; other cities, Zurich, population, 207,161; Basel, 135,976; Geneva, 135,059; St. Gall, 70,437; Lausanne, 68,583 and 19 above 10,000 population.

*President*, for 1922, Dr. Robert Haab, born 1865; *Vice-President*, Charles Scheurer.

*Minister to the United States*, Marc Peter.

*Consuls in the United States*, at New York, Louis H. Junod; at Philadelphia, Charles Vuilleumier; at New Orleans, Paul U. Thalman; at Chicago, Ernest Bubler; at San Francisco, John Freuler; at Denver, Paul Weiss; at St. Paul, Alfred Kahlan; at Galveston, Rene J. Mueller.

*United States Minister to Switzerland*, Joseph C. Grew.

*United States Consul General*, at Zurich, George H. Murphy; *Consuls*, at Berne, Thornwell Haynes; at Geneva, Lewis W. Haskell; at Basle, Phillip Holland; at St. Gall, Gebhard Willrich.

Switzerland is bounded on the west by France, the north by Germany, the east by Austria and Italy and the south by Italy. It is mostly mountainous, having many high peaks of the Swiss Alps, with many fertile and productive valleys between, in which dairying flourishes, and much foodstuff is procured. The German language is spoken by a majority of the people in 19 of the 25 cantons, French in five, and Italian in one. In 1920, there were 412,306 foreigners in the country, and in 1910 German was spoken by 2,594,298 persons, French by 793,264, Italian by 302,578; Romansch by 40,122; and 23,031 other languages. There are estimated to be about 300,000 peasant proprietors.

Of the total area, 28.4 per cent. is unproductive. Of the productive area, 35.8 per cent. is devoted to meadows, 29 per cent. to forests; 18.7 per cent. to fruits, and 16.4 per cent. to crops and gardens. In 1921 there were 97,282 tons of wheat produced from 111,275 acres, 39,599 tons of rye from 50,000 acres, 44,063 tons of oats from 53,075 acres, with large quantities of potatoes. Dairy products are the chief agricultural interest, vast quantities of condensed milk and of various forms of chocolate being produced. Wine and tobacco also are produced. In the last census, 1920, there were 129,269 horses, 3,581 mules, 891 donkeys, 2,112,115 cattle, 242,553 sheep, 546,112 swine, and 333,852 goats.

The Swiss Confederation has enacted that the forest area, 3,290 square miles, or 2,105,214 acres, shall never be reduced, the law applying to national, cantonal and private forests, re-planting being provided for. In 1920, there were planted 16,466,785 trees, chiefly coniferous.

There were, in 1920, 208 establishments for fish culture.

Switzerland has important clock and watch works, 1,859 embroidery works, and employed in manufacturing in 1918, 381,170 persons, with 526,098 horse power for motive power.

Railway mileage in 1920 was 3,881 State owned, and 34 miles of foreign lines, the cost of construction up to 1918 having been 2,476,247,157 francs.

The Government is a confederation of the 25 cantons, which are joined under a Federal Constitution (that of May 29, 1874, being now in force), with large powers of local control retained by each canton. The national authority vests in a parliament of two chambers, a "Standerat" or State Council, and a "Nationalrat" or National Council, the first of 44 members, the second of 189 members. There is universal suffrage, and in many cantons the people meet in popular assemblies to vote directly under absolute democratic methods. Switzerland has maintained its unity since the men of the three cantons of Uri, Schwyz and Lower Unterwald formed a defensive league in 1291, and became formally independent of the Holy Roman Empire in 1648.

There is complete freedom of worship. In 1920, there were 2,218,589 Protestants, 1,586,826 Roman Catholics, and 20,955 Jews. Protestants are in a majority in 12 of the cantons, and Catholics in 10.

Instruction is obligatory, about 600,000 pupils being taught in the lower schools, with many technical schools and seven universities with about 7,000 students.

The national defense depends on the National Militia, with compulsory service. Fortifications defend the St. Gothard Pass on the south and the Rhone River valley. The army always has been efficient and for many generations has been constantly in effective condition.

Switzerland was neutral in the great war and is a member of the League of Nations, of which Geneva is the seat.

The unit of the currency is the franc, its gold par being 19.3 cents. Rate of exchange on Nov. 1, 1922, was 18.05.

Imports in 1921 were 2,298,288 francs; exports, 2,140,135.

Swiss export trade fell off 2,000,000,000 francs from 1920 to 1921, owing in large part to the high international exchange value of the Swiss franc making it difficult for countries with depreciated currencies to buy Swiss goods.

Budget—Receipts, 1922.....francs 422,170,000
Expenditures.....francs 528,570,000

The public debt, in 1921, exclusive of the railway debt, was 1,605,859,100 francs, with about 250,000,000 francs of floating debt.

Trade with the United States was:

| | | |
|---|---|---|
| Imports, | 1920-21 | $25,632,565 |
| " | 1921-22 | 5,016,246 |
| Exports, | 1920-21 | 46,797,810 |
| " | 1921-22 | 41,556,266 |

## SYRIA.

(French Mandate.)

AREA, estimated, 60,000 square miles.

POPULATION, estimated, 3,000,000.

ADMINISTRATIVE CAPITAL, Beirut, population 160,000. Chief cities, Damascus, population, estimated, 300,000; Aleppo, 250,000; Homs, 70,000; Hama, 60,000; Adana, 45,000; Marash, 50,000; Alexandretta, chief port, 10,000.

*French High Commissioner*, Gen. Henri Gouraud.

*United States Consuls*, at Aleppo, Jesse B. Jackson; at Beirut, Paul Knabenshue; at Damascus, Charles E. Allen.

Syria is a former province of Turkey lying south of Anatolia with Mesopotamia on the east, the

Arabian desert and Palestine on the south and the Mediterranean on the west. It is about the size of the State of Georgia. It was made an independent state by the Treaty of Sevres, Aug. 10, 1920, and the mandate given to France by the Supreme Council of the Allied Powers. Palestine, which formed a vilayet of the old province, was given separate independence and placed under a British mandate (see Palestine). The boundary line on the north has been readjusted by a treaty between France and the Nationalist Government of Turkey, and the Palestine boundary by Franco-British agreement, Dec. 23, 1920.

The French development of Syria provides for a federative state of four provinces, Aleppo (the district around Latakia), Alaouite, Damascus and Great Lebanon. The latter was proclaimed a state Sept 1, 1920, with Beirut as its capital and given a flag, the French tricolor with a cedar on the white ground. The greater part of the population is of the orthodox Mohammedan faith.

The eastern part of the country is dry, being cut off from the sea moisture-laden winds by mountains. Irrigation is essential to cultivation. Tobacco, wheat, fruit, wine and silk are the chief products. Mineral wealth is unimportant. Great Lebanon, which extends along the Mediterranean for 120 miles, with an average width of 30 miles, produces olives, wheat, grapes, oranges and mulberry trees, and also supports much livestock.

Important railroad lines are Beirut to Damascus, with connections at Royak to Homs, Homa and Aleppo and from Tripoli, a promising seaport, to Aleppo, where connection is made with the Bagdad railroad. Damascus, with "the Street called Straight," famous in the time of the Apostles, is one of the oldest cities in the world, and 35 miles northwest of it are the magnificent ruins of Heliopolis. Beirut is the seat of the Syrian Protestant College founded by the Rev. Dr. Daniel Bliss in 1864, which shares with Robert College in Constantinople American educational honors in the Levant.

Trade of Syria and Palestine with the United States in 1921-22 was:

| | |
|---|---|
| Imports | $3,167,822 |
| Exports | 752,949 |

## TURKEY.

(The Ottoman Empire.)

AREA, approximately 247,650 square miles, but boundaries are indeterminate.

POPULATION, approximately, 13,302,300.

CAPITALS, Constantinople, population approximately 1,000,000; Nationalist capital in Anatolia, Angora.

*Commander-in-Chief*, Mustapha Kemal Pasha.

*Grand National Assembly at Angora* asserts its complete control of the Ottoman Empire and has sent Rafet Pasha to take charge of Constantinople. The Assembly on Nov. 2, 1922, declared that it is invested with sovereign rights, that the Sultanate is abolished, that the present Sultan is deposed as Caliph (spiritual head of Islam); and that a suitable member of the house of Osman will be appointed to that place. The Sultan on Nov. 17 boarded the British battleship Malaya and was taken to Malta. On the 18th the National Assembly elected to the Caliphate the heir to the Sultanate. Abdul Medjid Effendi, (born May 25, 1868), the cousin of Sultan Mohammed VI. (See Chronology for developments.)

*Diplomatic and Consular Interests* of Turkey in the United States are cared for by Spain (which see).

*United States High Commissioner*, at Constantinople, Rear Admiral Mark L. Bristol, U. S. N.

Up to the beginning of the World War, Turkey, or the Ottoman Empire, included European Turkey, Anatolia, Arabia, Syria, Palestine, Mesopotamia, Armenia and Kurdistan, also groups of islands in the Aegean Sea.

So late as 1916, the areas of the Turkish Empire totalled about 710,224 square miles, with about 21,273,900 of population. Cyprus and Egypt had passed to British domination—Cyprus annexed, and Egypt under a protectorate. There remained, therefore, in the Turkish Empire, 10,882 square miles of area with 1,891,000 of population in and around Constantinople and Adrianople on the north of the Straits; in Asia Minor, including Ismid (opposite Constantinople), Brussa, Bigha, Smyrna, Kastamuni, Angora, Konia, Adana, Sivas and Trebizond, 199,272 square miles, with 10,186,900 of population; Armenia and Kurdistan, 71,900 square miles, with 2,600,000 of population; Mesopotamia, 143,250 square miles, with 2,000,000 of population; Syria, 114,530 square miles, with 3,675,100 of population; and the Hejaz and Yemen in Arabia, 170,300 square miles, with 1,050,000 of population; a total of 710,224 square miles, with 21,273,900 of population.

In Asia, Armenia has in part adopted a Soviet government and is at least in harmonious agreement with Soviet Russia. Syria has passed under the mandate of France, Mesopotamia has been created the dependent kingdom of the Iraq (which see), under the mandate of Great Britain; and Arabia (which see) has asserted its independence as the Kingdom of the Hejaz, the Imamate of Yemen and other divisions.

There remained to the Turkish Empire under the treaty then Constantinople and its hinterland, about 800 square miles, with about 1,000,000 population, and Anatolia with about 236,852 square miles, and about 11,632,300 population. If to these figures is added Thrace, transferred from Greece to Turkey by agreement of the powers following the successful campaign of Mustapha Kemal Pasha, the Nationalist leader (of which later), with its 10,000 square miles and 670,000 population, the total will be approximately 247,652 square miles and 13,302,300 population. This total included Smyrna, population 350,000, the most important city and port in Anatolia, and its hinterland, which, while retaining Turkish sovereignty, had been turned over by the treaty to Greece for administration with military control, and with the promise that a plebiscite might be granted in 1925, to decide under which rule it should continue. Turkey now, therefore, is not quite as large as Texas, but has three times its population.

### CONTROL OF THE STRAITS.

European Turkey before the war, included Constantinople and Thrace on the northwest side of the waters which connect the Mediterranean Sea with the Black Sea—so that Turkey controlled the Straits of the Dardanelles—historic vantage point, politically, economically and diplomatically, of events touching the Near East, with deep significance, also regarding Far Eastern interests.

The Ottoman Empire was at that time under German domination, with German officers training the Turkish army, and Berlin more or less influencing the policy of the Sultan at Constantinople. Turkey was a unit of the Central Powers' military and geographical resources in the World War, and, defeated, was dismembered by the conquerors.

The Balkan wars of 1913 had reduced the European area dominated by Turkey, leaving her only that part of Thrace from Adrianople east to the Black Sea, and south to Enos on the Aegean; but it left her completely the mistress of the Straits of the Dardanelles.

The Treaty of Sevres (Paris), following the World War, further diminished Turkish territory, giving all Thrace to Greece except a triangle 30 miles by 40, containing a neutral zone, along the immediate border of the Dardanelles, the Sea of Marmora and the Bosporus on both the European and the Asiatic sides, to secure equal passage rights to all nations. All fortifications were to be demolished. The Straits were to remain open in peace and in war for all craft and to be neutral in time of war. They were not to be subject to blockade or other hostile acts.

A Commission of the Straits was named, to have complete control of the navigation of the Straits, on which had representatives of Great Britain, France, Italy, Japan, Turkey, Greece, and, if and when joining the League of Nations, of Russia and Bulgaria. The United States was offered a seat. After final peace settlements had been effected, Constantinople was to return to Turkish administration.

The Allied occupation of Constantinople became complete on March 16, 1920, with the Allied High Commission controlling affairs the power of the Sultan and his Ministers is nullified and almost entirely nominal.

The real power in the Turkish Empire (Nov. 1, 1922) rests in the National Assembly and responsible Ministry set up by the Nationalists at Angora in Anatolia which was the most genuinely Turkish section of the old Ottoman Empire. This rests on universal suffrage without religious or race distinction, recognizes the right of minorities to freedom and protection, and has a programme of social reform laid out. This Assembly has offered the dictatorship to Mustapha Kemal Pasha, the soldier and able diplomatist who brought it about. He had served well in Gallipoli under Gen. Liman von Sanders and found the nucleus of the Nationalist movement in his own troops after the war. The movement was spurred on by the Treaty of Sevres which dismembered the Turkish Empire but has not been ratified.

### RISE OF KEMAL PASHA.

Nominally regarded by the Sultan as in rebellion, Kemal established a government at Angora, entered into alliance with Soviet Russia regarding the

division of the Caucasus and control of the Black Sea, arranged the Syrian boundaries with France, the mandatory power, saw that Pan-Islamism was preached, organized his army, drove the Greeks back from the Bagdad railroad in 1921 and in September, 1922, hurled a well organized, well disciplined force upon them and drove them back to the Aegean Sea, capturing Smyrna, which was devastated by fire. Following that victory he pushed on to the Dardanelles, refusing to recognize the neutral zone set up. The French and Italian Governments withdrew their troops, but the British reinforced and strengthened their garrison at Chanak, on the Asiatic side, backing it up with warships. As the two forces faced each other, the situation yielded to diplomatic treatment. Kemal's demand that Greece give up Thrace to Turkey, as well as yielding its claims to Smyrna and the Aidin district, was assented to by military representatives of Great Britain, France, Italy, Turkey and Greece, at a conference in Mudania in October. An agreement was reached for a later peace conference to attempt permanently to settle all questions, the Allies meanwhile to continue as arranged in control of the waterways and land neutral areas, under existing general terms.

On Sept. 26 Secretary Hughes indorsed the Allies peace note and declared that the United States was in accord regarding the effective freedom of the Straits and the protection of racial and religious minorities. Soviet Russia, which had not been invited to the conference, in a note to the powers on the same date, protested against the exclusion from the conference of countries directly interested in the freedom of the Dardanelles and declared Russia would refuse to recognize any decision unless she were a party to the agreement.

The conference of the Allied Powers with Turkey was called to meet in Lausanne in November; the peace conference proper to be participated in by France, Great Britain, Italy, Japan, Jugo-Slavia, Roumania, Turkey and Greece; and at the second conference dealing with the Straits representatives of Russia, the Ukraine, Georgia and Bulgaria were to have seats. The fourteen main points brought forward by the Turks were:

1. The Dardanelles and the Bosporus.
2. Constantinople.
3. The abolition of the capitulations.
4. Exchange of minority populations between Greece and Turkey.
5. Kurdish territories of Iraq.
6. The complete independence of Arab States.
7. The Bagdad Railroad.
8. An autonomy for Macedonia, with a free port for Serbia and autonomy or annexation of Western Thrace, with Dedeaghatch a Bulgarian free port.
9. The question of Demotika and Dedeaghatch as part of Eastern Thrace.
10. The islands off the coast of Anatolia, including the Dodecanese.
11. Control of the public debt.
12. Reparations.
13. The Caliphate.
14. The return of the three Turkish dreadnoughts which were acquired by England before Turkey entered the war.

(Developments in the Near East situation will be found in the Chronology of the Year elsewhere in this Almanac.)

Mohammedans form the vast majority of the people of Anatolia, and about half the population of Constantinople. Mohammedism is the state religion. The Sultan, as Caliph, is the supreme head. The laws of the empire rest on the Koran. The chief ecclesiastical dignitary is the Sheik ul Islam whose functions are chiefly judicial and legal, and who is a member of the Cabinet. Turkey denounced the capitulations providing for ex-territorial privileges for foreigners of certain powers in 1914 before entering the war. This, however, was not assented to by any of the powers, and the treaty rights were reasserted for all nations in the Treaty of Sevres, but with provision for readjustment.

Agriculture is the chief industry of the Turks, products being tobacco, which goes to almost all world marts, cereals, cotton, figs, nuts, fruits of almost all varieties, opium, and gums. Asiatic Turkey was estimated to have about 16,567,000 acres under cultivation, of which about 13,689,000 was in cereals, 473,000 in fruit and vegetables, 779,000 in cotton and flax, and 1,213,000 in vineyards. The approximate production of cotton in 1912 was 200,000 bales, or about 100,000,000 pounds.

Turkey has large mineral resources, not yet developed, chrome ore, zinc, manganese, antimony, copper, borax, emery, asphalt, meerschaum, some coal and lignite, salt, some gold and silver, and petroleum on lands bordering the Marmora Sea.

Turkish fisheries are regarded as important, but manufactures are small and methods crude.

Imports were reported as about $195,000,000 in 1912, and exports about $105,000,000. In 1921 imports were reported as about $365,000,000 and exports about $95,000,000.

The external debt of Turkey on Aug. 31, 1921, was placed at 171,527,034 pounds Turkish (the pound Turkish at par of exchange $4.35).

Trade with the United States as reported by the United States Department of Commerce was:

TURKEY IN EUROPE.

| | | |
|---|---|---|
| Imports, | 1920-21 | $19,791,911 |
| " | 1921-22 | 19,216,628 |
| Exports, | 1920-21 | 4,327,237 |
| " | 1921-22 | 8,627,489 |

TURKEY IN ASIA.

| | | |
|---|---|---|
| Imports, | 1920-21 | $9,843,255 |
| " | 1921-22 | 760,269 |
| Exports, | 1920-21 | 17,171,475 |
| " | 1921-22 | 1,372,201 |

## THE UKRAINE.

(See under Russia.)

## URUGUAY, REPUBLIC OF.

AREA, 72,153 square miles.

POPULATION, 1921, 1,494,953.

CAPITAL, Montevideo; population, 1920, 361,950. There are three cities between 20,000 and 30,000.

*President*, Dr. Baltasar Brum, 1919-23, inaugurated March 1, 1919.

*President of the Administrative Council*, Jose Batlle y Ordonez.

*Premier*, Dr. Gabriel Terra (Interior).

*Minister to the United States*, Dr. Jacobo Varela.

*Consul General*, at New York, Jose Richling; *Consuls*, at Chicago, Rodolfo Carlos Lebret; at Boston, William H. Mossman; at Baltimore, A. F. Pablo du Pont; at Philadelphia, Rodman Wanamaker; at San Francisco, O. W. Goldaracena; at Savannah, Ramon Estreve; at New Orleans, Henry L. Lange; at Portland, Me., James E. Marret; at St. Louis, F. Ernest Cramer.

*United States Minister*, Hoffman Philip.

*United States Consul*, at Montevideo, David J. D. Myers.

Uruguay, the smallest republic in South America, is bounded on the north and east by Brazil, on the south by the South Atlantic Ocean and the River Plate, and on the west by Argentina, the boundary line being the River Uruguay, which is navigable from the Plate to Salto, 200 miles north. In area it is slightly larger than the combined States of New York, Vermont, Massachusetts and Connecticut. Lying between latitudes 30° and 35° south and consisting of rolling grassy plains, it enjoys an extraordinary healthy climate with a uniform temperature. It is agricultural and pastoral. Large herds of cattle and sheep are raised. The chief exports are wool and hides. In 1920 there were entered in its ports 5,731 steamers, tonnage 8,355,932, and 3,996 sailing vessels, tonnage 513,986.

Uruguay declared her independence of Spain Aug. 25, 1825. The present Constitution, as amended, came into force March 1, 1919. It provides for universal franchise for males over 18 and for proportional representation. The President is elected for four years by direct vote. He shares executive power with the National Administrative Council, which consists of nine members, six of the majority party and three of the largest minority—three retiring every two years—all elected by direct popular vote. The President appoints the Ministers of Foreign Affairs, War and the Interior and has supreme control of these departments. The Council appoints the Ministers of Finance, Public Work, Industry and Education and has control. Congress has two Houses—the Senate of 19 members, chosen for six years by an electoral college, one-third retiring every two years; and a House of Representatives of 90 members, chosen for three years by direct vote. There are 19 departments which have ample home rule.

Church and State are separated and there is complete religious toleration. The majority of the people are Roman Catholic. Primary education is compulsory and free. The educational system is highly progressive. The university at Montevideo had 4,165 students in 1920. Schools and hospitals are plentiful, and the prison at Montevideo is a model penal institution. The death penalty was abolished in 1907.

Uruguay has (June 30, 1921) 1,625 miles of railroads, mostly British owned, of which 1,060 miles are under state guarantee. The Bank of the Republic has a paid-up capital of $20,335,955. Its

President and directors are appointed by the Government. It has the exclusive right to issue notes. The Government in 1912 created a National Insurance Bank and gave it a monopoly of issuing insurance. The standing army, in which service is voluntary, numbers 18,500, with a reserve of 157,439 in the National Guard service, which is compulsory.

Uruguay has made great advances in social welfare legislation and administration during the last 12 years. The republic is a member of the League of Nations.

| | |
|---|---|
| Par of exchange | peso (paper) = $1.0342 |
| Rate of exchange Nov. 1, 1922 | 78 cents |
| Imports, 1921 | $41,964,654 |
| Exports, 1921 | 73,075,862 |
| Budget—Receipts | 37,317,186 |
| Expenditures | 36,294,656 |
| Debt—Internal | pesos, 43,468,692 |
| External | pesos, 128,834,073 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $27,960,135 |
| " 1921-22 | 9,702,557 |
| Exports, 1920-21 | 17,564,731 |
| " 1921-22 | 11,588,604 |

## VENEZUELA, REPUBLIC OF.

AREA, approximately, 363,728 square miles.
POPULATION, census of 1920, 2,411,952.
CAPITAL, Caracas; population, 1920, 92,212. Chief cities, Maracaibo, population, 46,706; Valencia, 29,466; Barquisimeto, 23,943; chief port, La Guaira.
*President*, Gen. Juan Vicente Gomez, 1922-29.
*Premier*, Dr. F. Baptista Galindo (Interior).
*Minister to the United States*, Dr. Pedro Manuel Arcaya.
*Consuls General*, at New York, Pedro Rafael Rincones; at New Orleans, Alfredo Olavarria. *Consuls*, at Boston, Ernesto Hurtado; at St. Louis, Alivio Parra Marquez.
*United States Minister*, Willis C. Cook.
*United States Consuls*, at Caracas, Thomas W. Voetter; at Maracaibo, John O. Sanders; at Puerto Cabello, Wm. P. Garrety; at La Guaira, vacant.

Venezuela is the northernmost state of South America and is bounded on the north by the Caribbean Sea, on the east by British Guiana, on the south by Brazil and Colombia and on the west by Colombia. It stretches from 12° 26′ north to within two degrees of the Equator. The climate is tropical, hot and unhealthy in the coastal and river regions. In area it is as large as the States of Texas, Louisiana and Arkansas combined. The spurs of the Eastern Andes and the foothills are covered with dense forest, and the high plateaus provide excellent grazing. The River Orinoco (over 1,500 miles in length) flows through many stretches of level prairies (llanos) and is navigable for 700 miles for large steamers and for 200 miles further for smaller vessels. A natural river or canal, the Casiquiare, unites its upper reaches with the Rio Negro, a tributary of the Amazon. The island of Margarita (area of 400 square miles), noted for its pearl fishing, with Tortuga and some 70 other islands, belongs to Venezuela, but Trinidad, at the mouth of the Orinoco, is British and Curacao and others off the coast are Dutch.

Agriculture and cattle raising are the chief industries and the chief exports are coffee, cacao, balata, hides, gold, rubber and asphalt. Imports are chiefly textiles, machinery and hardware. The country is rich in metals, but is mostly undeveloped, and petroleum is found in the Lake Maracaibo district.

The production of petroleum for the year 1921 was 215,000 metric tons; for 1920, 19,000; for 1919, 45,000. The law concerning hydrocarbons, promulgated June 30, 1920, states clearly the rights and privileges of foreigners in the development of oil lands. Both British and American oil interests have secured possessions in the Maracaibo district.

There are (1921) 644 miles of railroads, Caracas (altitude 4,017 feet), the capital, being connected with its seaport, La Guaira, by a railroad 22 miles long which is famous for its magnificent views. The roads of the country have been greatly improved of late years.

In 1920, 1,120 vessels of 1 124 261 tonnage entered Venezuelan ports.

Venezuela was the first of the Spanish colonies in South America to formally declare her independence (July 5, 1811), following the disturbing conditions in Spain caused by Napoleon. After severe fighting, the Republic of Colombia, of which the present states of Colombia, Venezuela and Ecuador formed the three departments, was established Dec. 17, 1819, under the presidency of the liberator, Gen. Simon Bolivar. In May, 1830, a convention recreated the Republic of Venezuela and adopted a constitution. Separation from Colombia was amicable, but the boundary separating the two republics has never been determined. Both agreed in 1881 to submit the question to the arbitration of the King of Spain. His award, made in 1891, did not satisfy and on one occasion the two countries were on the verge of war. The dispute was submitted to the arbitration of Switzerland in 1915 and Swiss engineers will lay out the line. The territory in dispute is an almost uninhabited tract of the head waters of the Orinoco.

For 60 years the Brazil boundary line was in dispute, but that was settled in 1905. In the dispute with Great Britain over the boundary of British Guiana, Venezuela, on the refusal of her request for arbitration, broke off diplomatic relations and appealed to the United States for aid. This President Cleveland gave in 1895, taking a strong, even belligerent, attitude, based on the Monroe Doctrine. Following diplomatic negotiations, a board awarded the major portion of the territory to Great Britain and gave Venezuela title to valuable territory at the mouth of the Orinoco.

Venezuela has had many revolutions and many revisions of its Constitution since the first was adopted in 1819. That now in force was adopted June 13, 1914. It provides for a President elected by Congress for seven years, a Senate of 40 members elected for three years, and a House of Deputies of about 77 members elected for three years. There are twenty autonomous states, a federal district and two territories. The Roman Catholic is the state religion, but religious liberty is guaranteed. Primary education is free and nominally compulsory. Higher education has been much improved under recent administrations. By a law promulgated in June, 1919, military service was made compulsory. A standing army of 8,000 is maintained, with 87,000 in the reserve. Venezuela is a member of the League of Nations.

| | |
|---|---|
| Par of exchange | bolivar = 19.3 cents |
| Rate of exchange, Nov. 1, 1922 | 18.5 cents |
| Imports, 1921 | $18,433,113 |
| Exports, 1921 | 25,775,299 |
| Budget—Receipts | 12,204,162 |
| Expenditures | 12,204,162 |
| Debt—Internal | bolivars, 46,580,105 |
| External | bolivars, 78,310,186 |

Trade with the United States was:

| | |
|---|---|
| Imports, 1920-21 | $17,459,628 |
| " 1921-22 | 7,585,267 |
| Exports, 1920-21 | 12,312,183 |
| " 1921-22 | 12,409,533 |

## ABBREVIATIONS OF TITLES AND DEGREES.

A. R. A.—Associate of the Royal Academy.
B. A.—Bachelor of Arts.
Bart.—Baronet.
B. D.—Bachelor of Divinity.
B. Sc.—Bachelor of Science.
C. B.—Companion of the Bath.
C. E.—Civil Engineer
C. I. E.—Companion of Order of Indian Empire.
C. J.—Chief Justice.
C. M. G.—Companion of Order of St. Michael and St. George.
C. V. O.—Companion of Victorian Order.
D. D.—Doctor of Divinity.
D. Sc.—Doctor of Science.
D. S. O.—Distinguished Service Order.
F. R. G. S.—Fellow of the Royal Geographical Society.
F. R. S.—Fellow of the Royal Society.
J. P.—Justice of the Peace.
K. C.—King's Counsel.
K. C. B.—Knight Commander of the Bath.
K. C. M. G.—Knight Commander of Order of St. Michael and St. George.
K. C. V. O.—Knight Commander of the Victorian Order.
K. G.—Knight of the Garter.
L. H. D.—Doctor of Humanities.
LL. B.—Bachelor of Laws.
LL. D.—Doctor of Laws.
Litt. D.—Doctor of Literature.
M. A.—Master of Arts.
M. C.—Member of Congress.
M. D.—Doctor of Medicine.
M. P.—Member of Parliament.
M. V. O.—Member of the Victorian Order.
N. A.—National Academician.
O. M.—Order of Merit.
P. C.—Privy Councillor.
Ph. D.—Doctor of Philosophy.
R. A.—Royal Academician.
S. J.—Society of Jesus.
S. T. D.—Doctor of Sacred Theology.
U. S. A.—United States Army.
U. S. N.—United States Navy.
V. C.—Victoria Cross.

## RULERS OF THE WORLD.

The date of birth, when known, is in parentheses.

| Country. | Name of Ruler, Etc. | Access'n. |
|---|---|---|
| Abyssinia | Waizeru Zauditu (1876), *Empress*, daughter of Menelek | 1916 |
| Afghanistan | Amanullah Khan (1892), *Amir*, son of Habibullah | 1919 |
| Albania | Provisional government, under the Allies | |
| Argentina | Marcelo T. de Alvear, *President*, term, six years | 1922 |
| Australia | Lord Forster, *Governor General* | 1920 |
| Austria | Dr. Michael Hainisch, *President*, National Assembly | 1921 |
| Belgium | Albert (1875), *King*, nephew of Leopold II | 1909 |
| Bhutan (Br. Protectorate) | Sir Ugyen Wangchuck, *Maharajah* | 1907 |
| Bolivia | Dr. Bautista Saavedra, *Provisional President;* term, four years | 1921 |
| Brazil | Arturo Bernades, *President;* term, four years | 1922 |
| Bulgaria | Boris III. (1894), *Czar*, son of Ferdinand | 1918 |
| Cambodia | Sisowath, *King* (French protectorate) | 1904 |
| Canada | Gen. Lord Byng, *Governor General;* Mackenzie King, *Premier* | 1921 |
| Chile | Arturo Alessandri, *President;* term, five years | 1920 |
| China | Hsu Shi Chang (1853), *President* | 1918 |
| Colombia | Gen. Pedro Nel Ospina, *President;* term, four years | 1922 |
| Costa Rica | Julio Acosta Garcia, *President;* term, four years | 1920 |
| Cuba | Dr. Alfredo Zayas, *President;* term, four years | 1921 |
| Czechoslovakia | Thomas G. Masaryk (1850), *President* | 1920 |
| Danzig | Gen. Sir Richard Haking, *High Commissioner* | 1921 |
| Denmark | Christian X. (1870), *King*, son of Frederik VIII | 1912 |
| Dominican Republic | Juan Bautista y Burgos, *Provisional President* | 1922 |
| Ecuador | Dr. Jose Tamayo, *President;* term, four years | 1920 |
| Egypt | Fuad I. (1868), *King* (formerly Sultan) | 1922 |
| Esthonia | Konstantin Pats, *State Head* | 1920 |
| Finland | Dr. K. J. Stahiberg (1865), *President;* term, six years | 1919 |
| Fiume | Prof. Riccardo Zanella, *President* | 1921 |
| France | Alexandre Millerand (1859), *President;* term, seven years | 1920 |
| Germany | Friedrich Ebert (1870), *President;* term expires June 30, 1925 | 1919 |
| Greece | George II., *King* | 1922 |
| Guatemala | Gen. Jose M. Orellana, *President;* term, six years | 1922 |
| Haiti | Louis Borno, *President* (under American quasi protectorate) | 1922 |
| Hejaz, The | Husein Ibn Ali, *King* | 1916 |
| Honduras | Gen. R. L. Gutierrez, *President;* term, four years | 1920 |
| Hungary | Admiral Nicholas von Horthy, *Regent* | 1920 |
| Iceland | Christian X. (1870) | 1912 |
| India (British) | The Earl of Reading, *Viceroy* | 1921 |
| Irish Free State | William T. Cosgrave, *President* of Dail Eireann | 1922 |
| Italy | Victor Emmanuel III. (1869), *King*, son of Humbert I | 1900 |
| Japan | Yoshihito (1879), *Emperor;* Crown Prince Hirohito, *Regent* | 1912 |
| Jugo-Slavia | (See Serbs, Croats and Slovenes, Kingdom of) | |
| Latvia | Jan Chakste, *President* | 1922 |
| Liberia | Charles D. B. King, *President;* term, four years | 1920 |
| Liechtenstein | John II. (1840), *Prince* | 1858 |
| Lithuania | A. Stulginskis, *President* | 1922 |
| Luxemburg | Charlotte (1896), *Grand Duchess* | 1919 |
| Mesopotamia (The Iraq) | Feisal I., *King* | 1921 |
| Mexico | Gen. Alvaro Obregon, *President;* term, four years | 1920 |
| Monaco | Louis (1870), *Prince*, son of Albert | 1922 |
| Morocco | Mulai Yusef, *Sultan*, son of Mulai Hassan | 1912 |
| Nepal | Tribhubana Bir Bikram (1906), *Shah* | 1911 |
| Netherlands | Wilhelmina (1880), *Queen*, daughter of William III | 1890 |
| Newfoundland | Sir C. A. Harris, *Governor;* M. P. Cashin, *Prime Minister* | |
| New Zealand | Viscount Jellicoe, *Governor General;* W. F. Massey, *Premier* | 1921 |
| Nicaragua | Gen. Emiliano Chamorra, *President;* term, four years | 1921 |
| Norway | Haakon VII. (1872), *King*, son of Frederik VIII. of Denmark | 1905 |
| Oman | Seyvid Talmur, *Sultan*, son of Seyvid Feysil | 1913 |
| Palestine | Sir Herbert L. Samuel, *British High Commissioner* | 1920 |
| Panama | Dr. Belisario Porras, *President;* term, four years | 1920 |
| Paraguay | Dr. Eusebio Ayala, *President;* term, four years | 1921 |
| Persia | Ahmed Mirza (1898), *Shah*, son of Mohammed Ali | 1909 |
| Peru | Augusto B. Leguia, *President;* term, four years | 1919 |
| Poland | Joseph Pilsudski (1867), *President* | |
| Portugal | Dr. Antonio J. d'Almeida (1865), *President;* term, four years | 1919 |
| Prussia | Herr Otto Braun, *Premier* | 1922 |
| Rome, See and Church of | Pius XI. (1857) | 1922 |
| Roumania | Ferdinand I. (1865), *King*, nephew of late King Carol | 1914 |
| Russia | Governed by Soviet Commissaries headed by Lenin | 1918 |
| Salvador | Jorge Melendez, *President:* term, four years | 1919 |
| Serbs, Croats and Slovenes, Kingdom of | Alexander, *King*, son of King Peter | 1921 |
| Siam | Chao Fa Maha Vajiravudh (1881), *King*, son of Chulalongkorn I | 1910 |
| South Africa, Union of | Prince Arthur of Connaught, *Governor General;* J. C. Smuts, *Premier* | 1920 |
| Spain | Alfonso XIII. (1886), *King*, son of Alfonso XII | 1886 |
| Sweden | Gustaf V. (1858), *King*, son of Oscar II | 1907 |
| Switzerland | The republic chooses a *President* each year | 1922 |
| Syria (French Mandate) | Gen. Henri Gouraud, *High Commissioner* | 1920 |
| Tunis | Sidi Mohammed ed Habib, *Bey* | 1922 |
| Turkey | Mustapha Kemal Pasha, *President*, of Grand National Assembly. Abdul Medjid Bey (1868), *Caliph* | 1922 |
| Ukrainia | Governed by Soviet Commissaries | |
| United Kingdom | George V. (1865), *King* and *Emperor* of India, son of Edward VII. | 1910 |
| United States | Warren G. Harding, *President;* term, four years | 1921 |
| Uruguay | Dr. Baltasar Brum, *President* term, four years | 1919 |
| Venezuela | Gen. Juan Vicente Gomez, *President* term, four years | 1922 |
| Zanzibar | Seyvid Khalifabin Harub (1879), *Sultan* | 1911 |

## BIRTH STONES.

January—Garnet. February—Amethyst. March—Bloodstone and aquamarine. April—Diamond. May—Emerald. June—Pearl and moonstone. July—Ruby. August—Sardonyx and peridot. September—Sapphire. October—Opal and tourmaline. November—Topaz. December—Turquoise and lapis-lazuli.

## ENGLISH RULERS.

| Year Acces. | Name. | Year Acces. | Name. |
|---|---|---|---|
| A. D. | | A. D. | |
| 51 | Caractacus (taken prisoner to Rome). | 941 | Edmund I., 5th son of Edward the Elder. |
| 61 | Boadicea (defeated the Romans). | 948 | Edred, his brother. |
| 451 | Hengist and Horsa (Saxons). | 955 | Edwy, eldest son of Edmund I. |
| 470 | Aella (Saxon), King of Sussex. | 959 | Edgar the Peaceable. |
| 515 | Arthur, King of the Britons. | 976 | Edward II. the Martyr. |
| 686 | Ceadwalla, King of Wessex. | 978 | Ethelred II., his half brother. |
| 827 | Egbert (unites Saxons in Heptarchy). | 1016 | Edmund (Ironsides). |
| 838 | Ethelwolf, son of Egbert. | 1017 | Canute, the Dane. |
| 857 | Ethelbold, his son. | 1036 | Harold (Harefoot), son of Canute. |
| 866 | Ethelred, his brother. | 1039 | Canute II. (Hardicanute). |
| 872 | Alfred the Great. | 1041 | Edward the Confessor. |
| 901 | Edward the Elder. | 1066 | Harold II., son of Earl Godwin. |
| 925 | Athelstan, eldest son of Edward. | | |

| Name. | The House of Normandy. | Acces. | Died. | Age. | Rgd |
|---|---|---|---|---|---|
| William I.... | Obtained Crown by conquest | 1066 | 1087 | 60 | 21 |
| William II... | Third son of William I | 1087 | 1100 | 40 | 13 |
| Henry I..... | Youngest son of William I | 1100 | 1135 | 67 | 35 |
| Stephen..... | Third son of Stephen, Count of Blois, by Adela, fourth daughter of William I | 1135 | 1154 | 60 | 19 |
| | The House of Plantagenet. | | | | |
| Henry II.... | Son of Geoffery Plantagenet, by Matilda, only daughter of Henry I. | 1154 | 1189 | 56 | 35 |
| Richard I.... | Eldest surviving son of Henry II | 1189 | 1199 | 42 | 10 |
| John..... | Sixth and youngest son of Henry II | 1199 | 1216 | 49 | 17 |
| Henry III... | Eldest son of John | 1216 | 1272 | 65 | 56 |
| Edward I.... | Eldest son of Henry III | 1272 | 1307 | 68 | 35 |
| Edward II... | Eldest surviving son of Edward I | 1307 | 1327 | 43 | 20 |
| Edward III.. | Eldest son of Edward II | 1327 | 1377 | 65 | 50 |
| Richard II... | Son of the Black Prince, eldest son of Edward III | 1377 | 1399 (dep.) | 34 | 22 |
| | The House of Lancaster. | | | | |
| Henry IV.... | Son of John of Gaunt, 4th son of Edward III | 1399 | 1413 | 47 | 13 |
| Henry V..... | Eldest son of Henry IV | 1413 | 1422 | 34 | 9 |
| Henry VI.... | Only son of Henry V. (deposed 1461) | 1422 | 1471 | 49 | 39 |
| | The House of York. | | | | |
| Edward IV.. | His grandfather was Richard, son of Edmund, 5th son of Edward III., and his grandmother, Ann, was great-granddaughter of Lionel, third son of Edward III | 1461 | 1483 | 41 | 22 |
| Edward V... | Eldest son of Edward IV | 1483 | 1483 | 13 | 0 |
| Richard III.. | Younger brother of Edward IV | 1483 | 1485 | 35 | 2 |
| | The House of Tudor. | | | | |
| Henry VII... | Son of Edmund, eldest son of Owen Tudor, by Katherine, widow of Henry V.; his mother, Margaret Beaufort, was great-grand-daughter of John of Gaunt | 1485 | 1509 | 53 | 24 |
| Henry VIII.. | Only surviving son of Henry VII | 1509 | 1547 | 56 | 38 |
| Edward VI.. | Son of Henry VIII., by Jane Seymour | 1547 | 1553 | 16 | 6 |
| Mary I..... | Daughter of Henry VIII., by Catharine of Aragon | 1553 | 1558 | 43 | 5 |
| Elizabeth.... | Daughter of Henry VII ., by Anne Boleyn | 1558 | 1603 | 70 | 44 |
| | The House of Stuart. | | | | |
| James I..... | Son of Mary Queen of Scots, granddaughter of James IV., and Margaret, daughter of Henry VII | 1603 | 1625 | 59 | 22 |
| Charles I.... | Only surviving son of James I | 1625 | 1649 | 48 | 24 |
| | Commonwealth Declared May 19, 1649. | | | | |
| Cromwells... | Oliver Cromwell, Lord Protector | 1653 | 1658 | 59 | ,, |
| | Richard Cromwell, Lord Protector, resigned May 25, 1659 | 1658 | 1712 | 86 | ,, |
| | The House of Stuart (Restored). | | | | |
| Charles II... | Eldest son of Charles I | 1660 | 1685 | 55 | 25 |
| James II.... | Second son of Charles I. (Deposed 1688. Interregnum Dec. 11, 1688, to Feb. 13, 1689) | 1685 | 1701 | 68 | 4 |
| William III.. and Mary II. | { Son of William Prince of Orange, by Mary, daughter of Charles I. } { Eldest daughter of James II. } | 1689 | 1702 1694 | 51 53 | 13 6 |
| Anne..... | Second daughter of James II | 1702 | 1714 | 49 | 12 |
| | The House of Hanover. | | | | |
| George I..... | Son of Elector of Hanover, by Sophia, daughter of Elizabeth, daughter of James I | 1714 | 1727 | 67 | 13 |
| George II.... | Only son of George I | 1727 | 1760 | 77 | 33 |
| George III... | Grandson of George II | 1760 | 1820 | 82 | 59 |
| George IV... | Eldest son of George III | 1820 | 1830 | 68 | 10 |
| William IV.. | Third son of George III | 1830 | 1837 | 72 | 7 |
| Victoria..... | Daughter of Edward, 4th son of George III | 1837 | 1901 | 81 | 63 |
| | The House of Saxe-Coburg. | | | | |
| Edward VII. | Eldest son of Victoria | 1901 | 1910 | 68 | 9 |
| | The House of Windsor. | | | | |
| George V.... | Surviving son of Edward VII | 1910 | .... | .. | .. |

## RULERS OF SCOTLAND.
(The date is that of accession.)

| A. D. | Name. | A. D. | Name. | A. D. | Name. | A. D. | Name. |
|---|---|---|---|---|---|---|---|
| 330 | Fergus I. | 684 | Eugenius V. | 893 | Donald VI. | 1165 | William. |
| 357 | Eugenius I. | 686 | Eugenius VI. | 904 | Constantine III. | 1214 | Alexander II. |
| 404 | Fergus II. | 698 | Amberkeletus. | 944 | Malcolm I. | 1249 | Alexander III. |
| 420 | Eugenius II. | 699 | Eugenius VII. | 953 | Indulfus. | 1286 | Margaret (Norway) |
| 451 | Dongardus. | 715 | Mordachus. | 961 | Duff. | 1292 | John Baliol. |
| 457 | Constantine I. | 730 | Etfinus. | 965 | Cullen. | 1298 | Sir W. Wallace, Reg. |
| 479 | Congallus I. | 761 | Eugenius VIII. | 970 | Kenneth III. | 1305 | Robert I (Bruce). |
| 501 | Goranus. | 764 | Fergus III. | 994 | Constantine IV. | 1329 | David II. |
| 535 | Eugenius III. | 767 | Solvathius. | 995 | Kenneth IV. | 1370 | Robert II. |
| 558 | Congallus II. | 787 | Achaius. | 1003 | Malcolm II. | 1390 | Robert III. |
| 569 | Kinnatellus. | 819 | Congallus III. | 1033 | Duncan I. | 1406 | James I. |
| 570 | Aidanus. | 824 | Dongal. | 1040 | Macbeth. | 1437 | James II. |
| 605 | Kenneth. | 831 | Alpine. | 1057 | Malcolm III. | 1460 | James III. |
| 606 | Eugenius IV. | 834 | Kenneth II. | 1095 | Duncan II. | 1488 | James IV. |
| 621 | Ferchard I. | 854 | Donald V. | 1098 | Edgar. | 1513 | James V. |
| 632 | Donald IV. | 858 | Constantine II. | 1107 | Alexander I. | 1542 | Mary. |
| 646 | Ferchard II. | 874 | Eth (Lightfoot). | 1124 | David I. | 1567 | James VI (succeeded to Eng. throne in 1603 at the union.) |
| 664 | Maldiunus. | 876 | Gregory. | 1153 | Malcolm IV. | | |

## RULERS OF FRANCE.

| A. D. | Name. | A. D. | Name. | A. D. | Name. |
|---|---|---|---|---|---|
| 420 | Pharamond (1st King Franks) | 880 | Charles III (the Gross) | 1574 | Henry III. |
| 449 | Merovoeus. | 888 | Eudes or Odo. | 1589 | Henry IV (the Great) of Navarre. |
| 456 | Childeric. | 898 | Charles IV (the Simple). | 1610 | Louis XIII. (the Just). |
| 481 | Clovis. | 923 | Rodolph (Raoul). | 1643 | Louis XIV (the Great). |
| 511 | Childebert, Thierry, Clotaire and Clodomir (four sons of Clovis). | 936 | Louis IV. | 1715 | Louis XV (the Well-beloved.) |
| | | 954 | Lotherius. | 1774 | Louis XVI. |
| 559 | Clotaire (Sole King of France) | 986 | Louis V. | 1793 | Louis XVII (never reigned) |
| 562 | Caribert, Gontran, Sigebert and Childeric. | 987 | Hugh Capet. | | FIRST REPUBLIC. |
| | | 996 | Robert (the Wise). | 1792 | National Convention. |
| 584 | Clotaire II (King of Soissons). | 1031 | Henry I. | 1795 | Directory. |
| 596 | Thierry II and Theodobert II (Kings Paris and Austrasia) | 1060 | Philip I (the Fair). | 1799 | Consulate. |
| | | 1108 | Louis VI (le Gros). | | FIRST EMPIRE. |
| 614 | Clotaire III (Sole King France) | 1137 | Louis VII (le Jeune). | 1804 | Napoleon (Bonaparte) I. |
| 628 | Dagobert and Charibert. | 1180 | Philip II (Augustus). | 1814 | Louis XVIII. |
| 638 | Sigebert II and Clovis II. | 1223 | Louis VIII. | 1824 | Charles X. |
| 654 | Childeris II(King Austrasia). | 1226 | Louis IX (Saint Louis). | 1830 | Louis Philippe. |
| 679 | Thierry IV (King all France). | 1270 | Philip III. (the Bold). | | SECOND REPUBLIC. |
| 692 | Clovis III. | 1285 | Philip IV. (the Fair). | 1848 | Louis Napoleon elected Pres. |
| 695 | Childebert III. | 1314 | Louis X (Hutin). | | EMPIRE RESTORED. |
| 711 | Dagobert III. | 1315 | John I. | 1852 | Louis Napoleon elected Emp. |
| 716 | Childeric II. | 1316 | Philip V. (the Long). | | THIRD REPUBLIC. |
| 720 | Thierry IV. | 1321 | Charles IV (the Fair). | 1871 | Thiers, Louis Adolphe. |
| 742 | Childeric III. | 1328 | Philip VI (of Valois). | 1873 | MacMahon, Marshal. |
| | | 1351 | John II (Jean). | 1879 | Grevy, Paul J. |
| 751 | Pepin (Le Bref), founder of Carlovingian. | 1364 | Charles V (the Wise). | 1887 | Carnot, M. Sadi. |
| | | 1380 | Charles VI. | 1894 | Perier, Jean Casimir. |
| 768 | Charles (the Great) and Carloman. | 1422 | Charles VII. | 1895 | Faure, Francois F. |
| | | 1461 | Louis XI. | 1899 | Loubet, Emile. |
| 772 | Charlemagne (sole monarch) | 1483 | Charles VIII. | 1906 | Fallieres, Armand. |
| 814 | Louis I (le Debonnaire). | 1498 | Louis XII. | 1913 | Poincare, Raymond. |
| 840 | Charles (the Bald). | 1515 | Francis I. | 1920 | Deschanel, Paul (resigned September 16). |
| 877 | Louis II (the Stammerer). | 1547 | Henry II. | | |
| 879 | Louis III and Carloman II. | 1559 | Francis II. | 1920 | Millerand, Alexandre. |
| | | 1560 | Charles IX. | | |

## RULERS OF GERMANY.

| A. D. | Name. | A. D. | Name. | A. D. | Name. |
|---|---|---|---|---|---|
| 534 | Theodobert (King of Metz). | 1056 | Henry IV. | 1411 | Sigismund. |
| 548 | Theodebald (King of Metz) | 1106 | Henry V. | 1438 | Albert II. |
| 840 | Lotharius. | 1125 | Lotharius II. | 1440 | Frederick III. |
| 842 | Lewis (of Bavaria). | 1138 | Conrad III. | 1493 | Maximilian I. |
| 855 | Louis II. | 1152 | Frederick I (Barbarossa). | 1519 | Charles V. |
| 875 | Charles (the Bald). | 1190 | Henry VI. | 1556 | Ferdinand I. |
| 877 | Louis (the Stammerer), also King of France. | 1198 | Philip. | 1564 | Maximilian II. |
| | | 1208 | Otho IV. | 1576 | Rudolph II. |
| 880 | Charles (the Gross), also King of France. | 1212 | Frederick II. | 1612 | Matthais. |
| | | 1251 | Conrad IV. | 1619 | Ferdinand II. |
| 887 | Arnold. | 1273 | Rodolph (of Hapsburg), 1st of Austrian family. | 1637 | Ferdinand III. |
| 900 | Louis IV. | | | 1658 | Leopold 1. |
| 911 | Conrad I. | 1292 | Adolphus (of Nassau.) | 1705 | Joseph I. |
| 918 | Henry (the Fowler). | 1298 | Albert I (of Austria). | 1711 | Charles VI. |
| 962 | Otho (the Great). | 1308 | Henry VII. | 1740 | Maria Theresa. |
| 973 | Otho II. | 1314 | Louis V (of Bavaria). | 1742 | Charles VII. |
| 983 | Otho III. | 1347 | Charles IV. | 1745 | Francis I (of Lorraine). |
| 1002 | Henry II. | 1378 | Wenceslaus. | 1765 | Joseph II. |
| 1024 | Conrad II (the Salic). | 1410 | Josse (Marquis of Brandenburg). | 1790 | Leopold II. |
| 1039 | Henry III. | | | 1792 | Francis II. |

## RULERS OF PRUSSIA.

| A. D. | Name. | A. D. | Name. | A. D. | Name. |
|---|---|---|---|---|---|
| 1134 | Albert I (1st Elector of Brandenburg). | 1688 | Frederick. | 1797 | Frederick William III. |
| | | 1701 | Frederick crowned King of Prussia. | 1840 | Frederick William IV. |
| 1616 | John, Sigismund (Elector, Duke of Prussia). | | | 1860 | William I. |
| | | 1713 | Frederick William I. | 1871 | William I (made Ger. Emp) |
| 1619 | George William. | 1740 | Frederick II ("the Great"). | 1888 | Frederick. |
| 1640 | Frederick William ("The Great Elector"). | 1786 | Frederick William II. | 1888 | William II. |

NOTE TO GERMANY AND PRUSSIA—The German Empire was restored on Jan. 1, 1871, and King William I. of Prussia was proclaimed German Emperor, at Versailles, Jan. 18, 1871. On his death he was succeeded by King Frederick of Prussia, and the latter in turn by William II.

William II. (Kaiser Wilhelm) abdicated as King of Prussia and German Emperor, as of Nov. 9, 1918, all the rest of the sovereigns of the German states quit too, one by one, and the German Empire became a Republic, under the Presidency of Frederick Ebert. The Constitution was adopted July 31, 1919.

## THE POPES.

| Date Elect. or Consc. | Name of Pope. | Date Elect. or Consc. | Name of Pope. | Date Elect. or Consc. | Name of Pope. | Date Elect. or Consc. | Name of Pope. |
|---|---|---|---|---|---|---|---|
| 41 | B. Petrus. | 202 | St. Zephyrinus. | 296 | St. Marcellinus | 422 | St. Codestinus I. |
| 67 | St. Linus. | 218 | St. Calixtus I. | 307 | St. Marcellus. | 432 | St. Sixtus III. |
| 79 | St. Cletus. | 222 | St. Urbanus I. | 309 | St. Eusebius. | 440 | St. Leo I. |
| 91 | St. Clemens I. | 230 | St. Pontianus. | 310 | St. Melchiades. | 461 | St. Hilarus. |
| 100 | St. Evaristus. | 235 | St. Anterus. | 314 | St. Sylvester. | 468 | St. Simplicius. |
| 109 | St. Alexander. | 236 | St. Fabianus. | 336 | St. Marcus. | 483 | St. Felix III. |
| 119 | St. Sixtus. | 251 | St. Cornelius. | 337 | St. Julius I. | 492 | St. Gelasius. |
| 128 | St. Telesphorus. | 253 | St. Lucius. | 352 | St. Liberius. | 496 | St. Anastasius II. |
| 138 | St. Hyginus. | 254 | St. Stephanus I. | 366 | St. Damasus. | 498 | St. Symmachus. |
| 142 | St. Pius. | 257 | St. Sixtus II. | 384 | St. Siricius. | 514 | St. Hormisdas. |
| 157 | St. Anicetus. | 259 | St. Dionysius. | 398 | St. Anastasius I. | 523 | St. Joannes I. |
| 168 | St. Soter. | 269 | St. Felix I. | 402 | St. Innocentius I. | 526 | St. Felix IV. |
| 177 | St. Eleutherus. | 275 | St. Eutychianus. | 417 | St. Zosimus. | 530 | Bonifacius II. |
| 190 | St. Victor I. | 283 | St. Caius. | 418 | St. Bonifacius I. | 532 | Joannes II. |

THE POPES—*Continued.*

| Date Elect. or Consc. | Name of Pope. | Date Elect. or Consc. | Name of Pope. | Date Elect. or Consc. | Name of Pope. | Date Elect. or Consc. | Name of Pope. |
|---|---|---|---|---|---|---|---|
| 535 | St. Agapetus I. | 882 | Marinus I. | 1118 | Gelasius II. | 1458 | Pius II. |
| 536 | St. Silverius. | 884 | Hadrianus III. | 1119 | Calixtus II. | 1464 | Paulus II. |
| 537 | Vigilus. | 885 | Stephanus VI. | 1124 | Honorius II. | 1471 | Sixtus IV. |
| 555 | Pelagius. | 891 | Formosus. | 1130 | Innocentius II. | 1484 | Innocentius VIII. |
| 560 | Joannes III. | 896 | Bonifacius. | 1143 | Coelestinus II. | 1492 | Alexander VI. |
| 574 | Benedictus. | 896 | Stephanus VII. | 1144 | Lucius II. | 1503 | Pius III. |
| 578 | Pelagius II. | 897 | Romanus. | 1145 | Eugenius III. | 1503 | Julius II. |
| 590 | St. Gregorius I. | 897 | Theodorus II. | 1153 | Anastasius. | 1513 | Leo X. |
| 604 | Sabinianus. | 898 | Joannes IX. | 1154 | Hadrianus IV. | 1522 | Hadrianus VI. |
| 607 | Bonifacius III. | 900 | Benedictus IV. | 1159 | Alexander III. | 1523 | Clemens VII. |
| 608 | St. Bonifacius IV. | 903 | Leo V. | 1181 | Lucius III. | 1534 | Paulus III. |
| 615 | St. Deusdedit. | 903 | Christophorus. | 1185 | Urbanus III. | 1550 | Julius III. |
| 619 | Bonifacius V. | 904 | Sergius III. | 1187 | Gregorius VIII. | 1555 | Marcellus II. |
| 625 | Honorius. | 911 | St. Anastasius III. | 1187 | Clemens III. | 1555 | Paulus IV. |
| 640 | Severinus. | 913 | Lando. | 1191 | Coelestinus III. | 1559 | Pius IV. |
| 640 | Joannes IV. | 914 | Joannes X. | 1198 | Innocentius III. | 1565 | St. Pius V. |
| 642 | Theodorus I. | 928 | Leo VI. | 1216 | Honorius III. | 1572 | Gregorius XIII. |
| 649 | St. Martinus. | 929 | Stephanus VIII. | 1227 | Gregorius IX. | 1585 | Sixtus V. |
| 654 | St. Eugenius I. | 931 | Joannes XI. | 1241 | Coelestinus IV. | 1590 | Urbanus VII. |
| 657 | St. Vitalianus. | 936 | Leo VII. | 1243 | Innocentius IV. | 1590 | Gregorius XIV. |
| 672 | Adeodatus. | 939 | Stephanus IX. | 1254 | Alexander IV. | 1591 | Innocentius IX. |
| 676 | Donus. | 942 | Marinus II. | 1261 | Urbanus IV. | 1592 | Clemens VIII. |
| 678 | St. Agatho. | 946 | Agapetus II. | 1265 | Clemens IV. | 1605 | Leo XI. |
| 682 | St. Leo II. | 955 | Joannes XII. | 1271 | Gregorius X. | 1605 | Paulus V. |
| 684 | St. Benedictus II. | 963 | Leo VIII. | 1276 | Innocentius V. | 1621 | Gregorius XV. |
| 685 | Joannes V. | 964 | Benedictus V. | 1276 | Hadrianus V. | 1623 | Urbanus VIII. |
| 686 | Canon. | 965 | Joannes XIII. | 1276 | Joannes XXI. | 1644 | Innocentius X. |
| 687 | St. Sergius I. | 973 | Benedictus VI. | 1277 | Nicolaus III. | 1655 | Alexander VII. |
| 701 | Joannes VI. | 974 | Benedictus VII. | 1281 | Martinus IV. | 1667 | Clemens IX. |
| 705 | Joannes VII. | 983 | Joannes XIV. | 1285 | Honorius IV. | 1670 | Clemens X. |
| 708 | Sisinnius. | 984 | Bonifacius VII. | 1288 | Nicolaus IV. | 1676 | Innocentius XI. |
| 708 | Constantinus I. | 985 | Joannes XV. | 1294 | St. Coelestinus V. | 1689 | Alexander VIII. |
| 715 | St. Gregorius II. | 996 | Gregorius V. | 1294 | Bonifacius VIII. | 1691 | Innocentius XII. |
| 731 | St. Gregorius III. | 999 | Sylvester II. | 1303 | Benedictus XI. | 1700 | Clemens XI. |
| 741 | St. Zacharias. | 1003 | Joannes XVII. | 1305 | Clemens V. | 1721 | Innocentius XIII. |
| 752 | Stephanus II. | 1003 | Joannes XVIII. | 1316 | Joannes XXII. | 1724 | Benedictus XIII. |
| 752 | Stephanus III. | 1009 | Sergius IV. | 1334 | Benedictus XII. | 1730 | Clemens XII. |
| 757 | St. Paulus I. | 1012 | Benedictus VIII. | 1342 | Clemens VI. | 1740 | Benedictus XIV. |
| 767 | Constantinus. | 1024 | Joannes XIX. | 1352 | Innocentius VI. | 1758 | Clemens XIII. |
| 768 | Stephanus IV. | 1033 | Benedictus IX. | 1362 | Urbanus V. | 1769 | Clemens XIV. |
| 772 | Hadrianus I. | 1045 | Gregorius VI. | 1370 | Gregorius XI. | 1775 | Pius VI. |
| 795 | St. Leo III. | 1046 | Clemens II. | 1378 | Urbanus VI. | 1800 | Pius VII. |
| 816 | Stephanus V. | 1048 | Damasus II. | 1378 | Clemens VII. | 1823 | Leo XII. |
| 817 | St. Paschalis I. | 1049 | St. Leo IX. | 1394 | Benedictus XIII. | 1829 | Pius VIII. |
| 824 | Eugenius II. | 1055 | Victor II. | 1389 | Bonifacius IX. | 1831 | Gregorius XVI. |
| 827 | Valentinus. | 1057 | Stephanus X. | 1404 | Innocentius VII. | 1846 | Pius IX. |
| 827 | Gregorius IV. | 1058 | Benedictus X. | 1406 | Gregorius XII. | 1877 | Leo XIII. |
| 844 | Sergius II. | 1059 | Nicolaus II. | 1409 | Alexander V. | 1903 | Pius X. |
| 847 | St. Leo IV. | 1061 | Alexander II. | 1410 | Joannes XXIII. | 1914 | Benedictus XV. |
| 855 | Benedictus III. | 1073 | St. Gregorius VII. | 1417 | Martinus V. | 1922 | Pius XI. |
| 858 | St. Nicolaus I. | 1086 | Victor III. | 1431 | Eugenius IV. | | (Born May 30, |
| 867 | Hadrianus II. | 1088 | Urbanus II. | 1447 | Nicolaus V. | | 1857, at Desio, |
| 872 | Joannes VIII. | 1099 | Paschalis II. | 1455 | Calixtus III. | | Italy.) |

ROMAN RULERS.

| B. C. | Name. |
|---|---|
| 752 | Romulus. |
| 715 | Numa Pompilius. |
| 672 | Tullus Hostilius. |
| 640 | Ancus Martius. |
| 616 | Tarquinius Priscus. |
| 578 | Servius Tullius. |
| 534 | Tarquinius Superbus. |
| 509 | Tarquins, expelled. |
| 498 | Lartius, 1st Dict. |
| 488 | Tribunes created. |
| 483 | Quaestors instit. |
| 456 | Cincinnatus, Dict. |
| 453 | Tribunes incr., 5 to 10. |
| 445 | Milit. Trib. created. |
| 437 | Censorship instit. |
| 391 | Marcus F. Camillus, Dict. |
| 325 | Papirius Cursor, Dict. |
| 301 | Fabius Maximus and Valerius Corvus. |
| 260 | Provin. Quaestors inst. |
| 217 | Fabius Maximus, Dict. |
| 183 | Cato, the Elder, Censor. |
| 82 | Sylla, Dict. |
| 70 | Crassus and Pompey, Cons'ls. |
| 59 | Pompey. |
| 49 | Julius Caesar. |
| 43 | Octavius Caesar, Mark Antony and Lepidus, 2nd Triumvirate. |
| 31 | Octavius (Caesar) Emp. |
| A. D. | |
| 14 | Tiberius. |
| 37 | Caligula (Caius.) |
| 41 | Claudius. |
| 54 | Nero. |
| 68 | Galba. |
| 69 | Otho. |
| 69 | Vitellius. |
| 70 | Vespasian. |
| 79 | Titus. |
| 81 | Domitian. |
| 96 | Nerva. |
| 108 | Trajan. |
| 118 | Adrian (or Hadrian.) |
| 138 | Antoninus Pius. |
| 161 | Marcus A. Antoninus and Lucius Verus. |
| 171 | Marcus Aurelius. |
| 180 | Commodus. |
| 193 | Pertinax; Julianus. |
| 193 | Septimius Severus. |
| 211 | Caracalla and Geta. |
| 217 | Macrinus. |
| 218 | Heliogabalus. |
| 222 | Alexander Severus. |
| 235 | Maximinus. |
| 238 | Pupienus and Balbinus. |
| 238 | Gordian. |
| 244 | Philip the Arabian. |
| 249 | Decius. |
| 251 | Vibius Volusianus. |
| 251 | Gallus. |
| 254 | Valerianus. |
| 260 | Gallienus. |
| 268 | Claudius II. |
| 270 | Aurelian. |
| 275 | Tacitus. |
| 276 | Florianus. |
| 277 | Probus. |
| 278 | Carus. |
| 278 | Carinus and Numerianus. |
| 284 | Diocletian. |
| 304 | Galerius and Constantius. |
| 306 | Constantine the Great. |
| 321 | Constantine removes seat of Empire to Constantinople. |
| 337 | Constantine II., Constans and Constantius. |
| 361 | Julian the Apostate. |
| 363 | Jovian. |
| 364 | Valentinian (West), Valens (East). |
| 367 | Gratian (West). |
| 375 | Valentinian II. (West). |
| 379 | Theodosius the Great (East). |
| 391 | Theodosius (East and West). |
| 395 | Arcadius (East), Honorius (West). |
| 408 | Theodosius II. (East). |
| 424 | Valentinian III. (West). |
| 450 | Marcian (East). |
| 455 | Petronius Maximus (West). |
| 455 | Avitus (West). |
| 457 | Leo the Great (East). |
| 457 | Majorianus (West). |
| 461 | Severus (West). |
| 467 | Anthemius (West). |
| 472 | Olibius (West). |
| 473 | Glycerius (West). |
| 474 | Julius Nepos (West). |
| 474 | Zeno (East). |
| 475 | Augustulus Romulus (West). |
| 476 | Rome taken by Odoacer, King of Italy; extinction of Western Empire. |

*ROMAN EMPIRE OF THE EAST.*

| A. D. | Ruler. | A. D. | Ruler. | A. D. | Ruler. |
|---|---|---|---|---|---|
| 491 | Anastasius. | 793 | Nicephorus. | 1071 | Michael Ducas. |
| 518 | Justin I. | 811 | Michael (Curopalatts). | 1078 | Nicephorus (Boton). |
| 527 | Justinian I. | 813 | Leo (the Armenian). | 1081 | Alexis I. (Comnenus). |
| 565 | Justin II. | 821 | Michael (Balbous). | 1118 | John (Comnenus). |
| 578 | Tiberius II. | 829 | Theophilus. | 1143 | Manuel (Comnenus). |
| 582 | Maurice. | 842 | Michael III. | 1180 | Alexius II. (Comnenus). |
| 602 | Phocas. | 851 | Basillus. | 1183 | Andronicus (Comnenus). |
| 611 | Herodius. | 886 | Leo (the Philosopher). | 1185 | Isaac Angelus. |
| 641 | Constantine. | 911 | Constantine IX. | 1195 | Alexius Angelus (the Tyrant). |
| 641 | Herodionas and Tiberius III. | 915 | Constantine and Romanus. | 1203 | Alexius and Murbzuphlus. |
| 642 | Constans. | 959 | Romanus II. | 1216 | Peter and John Ducas. |
| 668 | Constantius V. (Pogonatus). | 963 | Nicephorus Phocus. | 1219 | Robert. |
| 685 | Justinian II. | 969 | John Zemisses. | 1283 | Andronicus I. (Palaeologus). |
| 695 | Leontius. | 975 | Basilius and Constantine X | 1295 | Michael Andronicus. |
| 697 | Apsimar or Tiberius. | 1028 | Romanus Argyrus. | 1320 | Andronicus II. (Palaeologus). |
| 711 | Philippicus Bardanes. | 1034 | Michael IV. | 1341 | John V. (Palaeologus). |
| 713 | Anastasius II. | 1041 | Michael (Caliphales). | 1391 | Manuel II. (Palaeologus). |
| 714 | Theodosius. | 1042 | Constantine (Monomachus). | 1421 | John VI. (Palaeologus). |
| 716 | Leo (the Isaurian). | 1054 | Theodora (Empress). | 1445 | Constantine (Palaeologus). |
| 742 | Constantine (Copronymus). | 1057 | Isaac (Comnenus). | 1453 | Constantinople taken by the Turks, extinction of the Eastern Empire. |
| 775 | Leo IV. | 1059 | Constantine XII (Ducas). | | |
| 781 | Constantine (Porphyrogenitus). | 1068 | Romanus Diogenes. | | |

ANCIENT AUTHORS, GREEK. (B. C. years are in Italics.)

| B. | D. | Name. | Subj. | B. | D. | Name. | Subj. | B. | D. | Name. | Subj. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *389* | *314* | Aeschines | Orat. | ... | 30 | Dionysius | Hist. | *429* | *347* | Plato | Philos. |
| *515* | *456* | Aeschylus | Dram. | ... | 118 | Epictetus | Stoic. | 49 | 120 | Plutarch | Biog. |
| ... | *572* | Aesop | Tales | *342* | *270* | Epicurus | Philos. | *207* | *128* | Polybius | Hist. |
| ... | *559* | Anacreon | Poet. | *480* | *406* | Euripides | Dram. | *495* | *405* | Sophocles | Dram. |
| *187* | *212* | Archimedes | Physi. | ... | *443* | Herodotus | Hist. | *54* | 10 | Strabo | Geog. |
| ... | *427* | Aristophanes | Dram. | ... | *850* | Heslod | Poet. | *332* | *287* | Theophrastus | Philos. |
| *384* | *322* | Aristotle | Philos. | *962* | *927* | Homer | Poet. | *470* | *404* | Thucydides | Hist |
| ... | 194 | Athenaeus | Antiq. | *436* | *338* | Isocrates | Orat. | *443* | *359* | Xenophon | Hist. |
| *382* | *322* | Demosthenes | Orat. | *342* | *292* | Menander | Dram. | | | | |
| *80* | 13 | Diodorus | Hist. | *522* | *439* | Pindar | Poet. | | | | |

ANCIENT AUTHORS, LATIN. (B. C. years are in Italics.)

| B. | D. | Name. | Subj. | B. | D. | Name. | Subj. | B. | D. | Name. | Subj. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ... | 390 | Ammianus, M | Hist | *59* | *17* | Livy | Hist. | *86* | *34* | Sallust | Hist. |
| 110 | 174 | Apuleius | Satir. | 38 | 65 | Lucan | Poet. | *6* | 65 | Seneca | Moral. |
| 100 | 169 | Aulus Gellius | Satir. | *149* | *103* | Lucilius | Satir. | 25 | 100 | Silius, Italicus | Poet. |
| 470 | 515 | Bolthius | Philos. | *96* | *52* | Lucretius | Philos. | 61 | 96 | Stallus | Poet. |
| *100* | *44* | Caesar, Julius | S-Hist. | ... | 115 | Macrobius | Gram. | 72 | 140 | Suetonius | Biog. |
| *232* | *147* | Cato, the Elder | Orat. | 40 | 104 | Martial | Poet. | 55 | 117 | Tacitus | Hist. |
| *82* | *40* | Catullus | Poet. | *43* | 18 | Ovid | Poet. | *193* | *139* | Terence | Dram. |
| *107* | *43* | Cicero | Orat. | 34 | 62 | Persius | Satir. | ... | *18* | Tibullus | Poet. |
| 365 | 408 | Claudian | Poet. | *254* | *184* | Plautus | Dram. | *70* | *19* | Virgil | Poet. |
| *239* | *169* | Ennius | Satir. | 23 | 79 | Pliny | Natur. | ... | *27* | Vitruvius | Arch. |
| 40 | 120 | Juvenal | Satir. | 61 | 115 | Pliny the Youn'r. | Essays. | | | | |
| *65* | *8* | Horace | Poet. | 42 | 118 | Quintilian | Critic. | | | | |

## AUTHORS OF NOTE.

MODERN AMERICAN.

| Born. | Died. | Name. | Subject. | Born. | Died. | Name. | Subject. |
|---|---|---|---|---|---|---|---|
| 1838 | 1918 | Adams, Henry | Hist., Biog. | 1843 | 1916 | James, Henry | Fiction. |
| 1832 | 1888 | Alcott, Louisa M | Fiction. | 1779 | 1843 | Key, Francis Scott | Poet. |
| 1836 | 1907 | Aldrich, Thos. B | Fiction. | 1826 | 1894 | Larcom, Lucy | Poet. |
| 1779 | 1843 | Allston, Wash | Poet. | 1833 | 1888 | Locke, David R | Humor. |
| 1780 | 1851 | Audubon, J. J | Naturalist. | 1807 | 1882 | Longfellow, Henry W | Poet. |
| 1800 | 1891 | Bancroft, George | History. | 1813 | 1891 | Lossing, Benjamin J | History. |
| 1755 | 1812 | Barlow, Joel | Poet. | 1819 | 1891 | Lowell, Jas. Russell | Poet. |
| 1771 | 1810 | Brown, Chas. Br | Fiction. | 1841 | 1913 | Miller, oaquin | Poet. |
| 1794 | 1878 | Bryant, William C | Poet. | 1822 | 1908 | Mitchell, Donald G | Humor. |
| 1845 | 1912 | Carleton, Will | Poet. | 1779 | 1863 | Moore, Clement C | Poet. |
| 1802 | 1880 | Child, Lydia M | Miscellaneous. | 1814 | 1877 | Motley, J. L | History. |
| 1835 | 1910 | Clemens, Samuel L | Humor. | 1850 | 1896 | Nye, Edgar W | Humor. |
| 1789 | 1851 | Cooper, J. Fenimore | Fiction. | 1737 | 1809 | Paine, Thomas | Politics. |
| 1845 | 1909 | Crawford, F. Marion | Fiction. | 1823 | 1893 | Parkman, Francis | History. |
| 1812 | 1894 | Curtis, Geo. Ticknor | History. | 1791 | 1852 | Payne, John H | Poet. |
| 1824 | 1892 | Curtis, Geo. Wm | Editorial. | 1779 | 1860 | Paulding, J. K | Biography. |
| 1787 | 1879 | Dana, R. H | Poet. | 1785 | 1866 | Pierpont, Rev. John | Hymns. |
| 1815 | 1882 | Dana, R. H. jr | Biography. | 1811 | 1849 | Poe, Edgar Allen | Poet. |
| 1795 | 1820 | Drake, Jos. Rodman | Poet. | 1790 | 1859 | Prescott, William H | History. |
| 1703 | 1758 | Edwards, Jonathan | Religion. | 1822 | 1872 | Read, Thos. Buch | Poet. |
| 1837 | 1902 | Eggleston, Edw | Fiction. | 1762 | 1824 | Rowson, Susan | Fiction. |
| 1803 | 1882 | Emerson, Ralph W | Essay. | 1816 | 1887 | Saxe, John Godfrey | Poet. |
| 1850 | 1895 | Field, Eugene | Poet. | 1791 | 1865 | Sigourney, Lydia H | Poet. |
| 1817 | 1881 | Fields, Jas. T | Biography. | 1806 | 1870 | Simms, W. Gilmore | Fiction. |
| 1842 | 1901 | Fiske, John | History. | 1833 | 1908 | Stedman, Edw. Clar | Poet. |
| 1706 | 1790 | Franklin, Benjamin | Biography. | 1825 | 1903 | Stoddard, Rich. Henry | Poet. |
| 1839 | 1897 | George, Henry | Politics. | 1812 | 1896 | Stowe, Harriet Beecher | Fiction. |
| 1793 | 1863 | Goodrich, Samuel G | Geography. | 1825 | 1878 | Taylor, Bayard | Travel. |
| 1822 | 1909 | Hale, Edw. Ev | Essay. | 1836 | 1894 | Thaxter, Celia | Poet. |
| 1790 | 1867 | Halleck, Fitz-Green | Poet. | 1817 | 1862 | Thoreau, Henry D | Philosopher. |
| 1848 | 1908 | Harris, Joel C | Humor. | 1791 | 1871 | Ticknor, George | History. |
| 1839 | 1902 | Hart, Bret | Fiction. | 1827 | 1905 | Wallace, Lew | Fiction. |
| 1804 | 1864 | Hawthorne, Nathaniel | Fiction. | 1834 | 1867 | Ward, Artemus | Humor. |
| 1830 | 1886 | Hayne, Paul | Poet. | 1829 | 1900 | Warner, Chas. Dudley | Essay. |
| 1819 | 1881 | Holland, J. G | Poet. | 1758 | 1843 | Webster, Noah | Dictionary. |
| 1809 | 1894 | Holmes, Oliver W | Poet. | 1753 | 1794 | Wheatley, Phyllis (col'd) | Poet. |
| 1770 | 1842 | Hopkinson, Jos | Songs. | 1819 | 1892 | Whitman, Walt | Poet. |
| 1819 | 1910 | Howe, Julia Ward | Poet. | 1807 | 1892 | Whittier, John G | Poet. |
| 1783 | 1859 | Irving, Washington | Fiction. | 1807 | 1867 | Willis, Nathaniel P | Essay. |

## ENGLISH.

| Born. | Died. | Name. | Subject. |
|---|---|---|---|
| 1832 | 1904 | Arnold, Edwin | Poet. |
| 1515 | 1568 | Ascham, Roger | Philosophy. |
| 1775 | 1817 | Austen, Jane | Fiction. |
| 1561 | 1626 | Bacon, Francis | Essays. |
| 1615 | 1691 | Baxter, Richard | Religion. |
| 1586 | 1616 | Beaumont, Francis | Drama. |
| 1748 | 1832 | Bentham, Jeremy | Political. |
| 1723 | 1780 | Blackstone, William | Law. |
| 1740 | 1795 | Boswell, James | Biography. |
| 1820 | 1849 | Brontë, Anne | Fiction. |
| 1812 | 1889 | Browning, Robert | Poet. |
| 1628 | 1688 | Bunyan, John | Religion. |
| 1730 | 1797 | Burke, Edmund | Essays. |
| 1759 | 1796 | Burns, Robert | Poet. |
| 1612 | 1680 | Butler, Samuel | Poet. |
| 1788 | 1824 | Byron (Geo. Gordon) | Poet. |
| 1777 | 1844 | Campbell, Thomas | Poet. |
| 1795 | 1881 | Carlyle, Thomas | History. |
| 1328 | 1400 | Cha cer, Geoffrey | Poet. |
| 1772 | 1834 | Coleridge, S. T | Poet. |
| 1670 | 1729 | Congreve, William | Drama. |
| 1731 | 1800 | Cowper, William | Poet. |
| 1800 | 1882 | Darwin, Charles | Evolution. |
| 1661 | 1731 | De Foe, Daniel | Fiction. |
| 1785 | 1859 | De Quinc y, Thomas | Essays. |
| 1812 | 1872 | Dickens, Charles | Fiction. |
| 1805 | 1881 | D'Israeli, Benjamin | Fiction. |
| 1631 | 1700 | Dryden, John | Poet. |
| 1819 | 1880 | Eliot, George | Fiction. |
| 1707 | 1757 | Fielding, Henry | Fiction. |
| 1688 | 1732 | Gay, John | Fables. |
| 1737 | 1794 | Gibbon, Edward | History. |
| 1728 | 1774 | Goldsmith, Oliver | Poet. |
| 1716 | 1771 | Gray, Thomas | Poet. |
| 1591 | 1674 | Herrick, Robert | Poet. |
| 1798 | 1845 | Hood, Thomas | Poet. |
| 1711 | 1776 | Hume, David | History. |
| 1709 | 1784 | Johnson, Samuel | Dictionary. |
| 1574 | 1637 | Jonson, Ben | Drama. |
| 1796 | 1821 | Keats, John | Poet. |
| 1775 | 1834 | Lamb, Charles | Essays. |
| 1491 | 1555 | Latimer, Hugh | Religion. |
| 1632 | 1704 | Locke, John | Philosophy. |
| 1800 | 1859 | Macaulay, Thomas B | Essays. |
| 1806 | 1873 | Mill, J. Stuart | Economic . |
| 1608 | 1674 | Milton, John | Poet. |
| 1779 | 1852 | Moore, Thomas | Poet. |
| 1480 | 1535 | More, Sir Thomas | Economics. |
| 1200 | 1259 | Paris (Matthew of) | History. |
| 1632 | 1703 | Pepys, Samuel | Biography. |
| 1688 | 1744 | Pope, Alex | Poet. |
| 1592 | 1644 | Quarles, Francis | Poet. |
| 1552 | 1618 | Raleigh, Sir Walter | History. |
| 1814 | 1884 | Reade, Charles | Fiction. |
| 1689 | 1761 | Richardson, Samuel | Fiction. |
| 1763 | 1855 | Rogers, Samuel | Poet. |
| 1828 | 1882 | Rossetti, D. Gab | Poet. |
| 1819 | 1900 | Ruskin, John | Art. |
| 1771 | 1832 | Scott, Sir Walter | Fiction. |
| 1564 | 1616 | Shakespeare, William | Drama. |
| 1723 | 1790 | Smith, Adam | Economics. |
| 1771 | 1845 | Smith, Sidney | Essays. |
| 1721 | 1771 | Smollett, Tobias | Fiction. |
| 1774 | 1843 | Southey, Robert | Poet. |
| 1552 | 1599 | Spenser, Edm | Poet. |
| 1820 | 1903 | Spencer, Herbert | Science. |
| 1671 | 1729 | Steele, Richard | Essays. |
| 1713 | 1768 | Sterne, Lawrence | Fiction. |
| 1850 | 1894 | Stevenson, Robert L | Fiction. |
| 1796 | 1874 | Strickland, Agnes | History. |
| 1667 | 1745 | Swift, Jonathan | Fiction. |
| 1837 | 1909 | Swinburne, Alg. C | Poet. |
| 1613 | 1667 | Taylor, Jere | Religion. |
| 1809 | 1892 | Tennyson, Alfred | Poet. |
| 1811 | 1863 | Thackeray, W. M | Fiction. |
| 1700 | 1748 | Thomson, James | Poet. |
| 1740 | 1778 | Toplady, A. M | Hymns. |
| 1815 | 1882 | Trollope, Anthony | Fiction. |
| 1484 | 1536 | Tynda e, William | Religion. |
| 1820 | 1893 | Tyndall, John | Scientific. |
| 1593 | 1683 | Walton, Izaak | Angling. |
| 1674 | 1748 | Watts, Isaac | Hymns. |
| 1720 | 1793 | White, Gilbert | Nat. History. |
| 1095 | 1142 | William (of Malmesbury) | History. |
| 1770 | 1850 | Wordsworth, William | Poet. |
| 1640 | 1715 | Wycherly, William | Drama. |
| 1324 | 1384 | Wyckliffe, John | Religion. |
| 1684 | 1765 | Young, Edw | Poet. |

## FRENCH.

| Born. | Died. | Name. | Subject. |
|---|---|---|---|
| 1079 | 1142 | Abelard, Pierre | Philosophy. |
| 1799 | 1850 | Balzac, Honore | Fiction. |
| 1732 | 1799 | Beaumarchais, P | Drama. |
| 1780 | 1857 | Beranger, Pierre | Poet. |
| 1707 | 1771 | Buffon, Geo. L | Nat. History. |
| 1768 | 1848 | Chateaubriand, Fr | Philosophy. |
| 1445 | 1509 | Comines, Phil | History. |
| 1798 | 1857 | Comte, Auguste | Philosophy. |
| 1606 | 1684 | Corneille, Pierre | Drama. |
| 1792 | 1867 | Cousin, Victor | Metaphysics. |
| 1769 | 1832 | Cuvier, Geo. L | Nat. History. |
| 1840 | 1897 | Daudet, Alph | Fiction. |
| 1596 | 1650 | Descartes, Rene | Philosophy. |
| 1713 | 1784 | Diderot, Denis | Encyclopedia. |
| 1803 | 1870 | Dumas, Alex | Fiction. |
| 1651 | 1715 | Fenelon, Fran | Fiction. |
| 1821 | 1890 | Feuillet, Oct | Fiction. |
| 1621 | 1695 | Fontaine, Jean | Fables. |
| 1337 | 1410 | Froissart, Jean | History. |
| 1787 | 1874 | Guizot, Fran | History. |
| 1802 | 1885 | Hugo, Victor | Fiction. |
| 1661 | 1741 | Le Sage, A R | Fiction. |
| 1850 | 1893 | Maupassant, Guy | Fiction. |
| 1803 | 1870 | Merimee, Prosper | Fiction. |
| 1622 | 1673 | Molier , Jean B | Drama. |
| 1533 | 1592 | Montaigne, Mich | Essays. |
| 1623 | 1662 | Pascal, Blaise | Essays. |
| 1495 | 1553 | Rabelais, Fr | Stories. |
| 1639 | 1699 | Racine, Jean | Drama. |
| 1823 | 1892 | Renan, Ernest | Religion. |
| 1661 | 1741 | Rollin, Chas | History. |
| 1712 | 1778 | Rousseau, J. J | Essays. |
| 1737 | 1814 | Saint Pierre, J. H | Fiction. |
| 1804 | 1876 | Sand, Geo | Fiction. |
| 1626 | 1696 | Sevigne, Mme. de | Letters. |
| 1766 | 1817 | Stael, Mme. de | Fiction. |
| 1804 | 1857 | Sue, Eugene | Fiction. |
| 1828 | 1893 | Taine, H. A | History. |
| 1797 | 1877 | Thiers, Louis | History. |
| 1805 | 1859 | Tocqueville, A. C. de | History. |
| 1828 | 1905 | Verne, Jules | Fiction. |
| 1757 | 1820 | Volney, Const | Agnosticism. |
| 1694 | 1778 | Voltaire, Fr | Essays. |
| 1840 | 1902 | Zola, Emile | Fiction. |

## GERMAN.

| Born. | Died. | Name. | Subject. |
|---|---|---|---|
| 1812 | 1882 | Auerbach, Berth | Fiction. |
| 1592 | 1670 | Comenius, J. A. (Bohem.) | Pedagogy. |
| 1762 | 1814 | Fichte, J. G | Philosophy. |
| 1749 | 1832 | Goethe, J. W | Poet. |
| 1785 | 1863 | Grimm, J. L | Philosophy. |
| 1786 | 1859 | Grimm, W. K | Philosophy. |
| 1770 | 1831 | Hegel, Geo. W | Philosophy. |
| 1797 | 1856 | Heine, Heinrich | Poet. |
| 1769 | 1859 | Humboldt, Alex. von | Travel. |
| 1724 | 1804 | Kant, Immanuel | Philosophy. |
| 1646 | 1716 | Leibnitz, G. W | Philosophy. |
| 1803 | 1873 | Liebig, Baron von | Chemistry. |
| 1483 | 1546 | Luther, Martin | Religion. |
| 1817 | 1903 | Mommsen, Th | History. |
| 1814 | 1873 | Muhlbach, Louise | Fiction. |
| 1823 | 1900 | Muller, Max | Philosophy |
| 1720 | 1797 | Munchausen, Baron | Fiction. |
| 1789 | 1850 | Neander, J. A | History. |
| 1776 | 1831 | Niebuhr, B. G | History. |
| 1795 | 1886 | Ranke, Leop. von | History. |
| 1763 | 1825 | Richter, J. P. F | Humor. |
| 1779 | 1859 | Ritter, Carl | Geography. |
| 1494 | 1578 | Sachs, Hans | Poet. |
| 1819 | 1893 | Schaff, Philip | History. |
| 1759 | 1805 | Schiller, Friedrich | Poet. |
| 1767 | 1845 | Schlegel, Wilhelm | Critic. |
| 1822 | 1892 | Schliemann, Heinrich | Archaeology. |
| 1788 | 1860 | Schopenhauer, Arthur | Philosophy. |

## DANISH.

| Born. | Died. | Name. | Subject. |
|---|---|---|---|
| 1805 | 1875 | Andersen, Hans Chr | Tales. |
| 1587 | 1637 | Arreboe, Anders | Poet. |
| 1684 | 1754 | Holberg, Ludwig | History. |
| ..... | 1244 | Harpestrings, Henry | Medicine. |
| 1789 | 1862 | Ingemann, B. S | Fict. Poet. |
| 1634 | 1703 | Kingo, Thos | Poet. |
| 1783 | 1857 | Molbech, Chr | Hist. Crit. |
| 1809 | 1876 | Muller, F. P | Poet. Dram. |
| 1480 | 1554 | Pedersen, Chr | Relig. |
| 1791 | 1862 | Petersen, Niels | History. |
| 1756 | 1821 | Pram, Chr. H | Tales, Poet. |
| ..... | 1607 | Rauch, Hierony | Drama. |
| 1751 | 1833 | Treschow, Niels | Philosophy. |

ITALIAN.

| Born. | Died. | Name. | Subject. | Born. | Died. | Name. | Subject. |
|---|---|---|---|---|---|---|---|
| 1749 | 1803 | Alfieri, Vittorio | Poet, Drama. | 1469 | 1527 | Machiavelli, Nic | History. |
| 1474 | 1533 | Ariosto, Ludov | Poet. | 1304 | 1374 | Petrarch, Franc | Poet. |
| 1313 | 1375 | Boccaccio | Tales. | 1773 | 1842 | Sismondi, J. C | History. |
| 1265 | 1321 | Dante, Aligh | Poet. | 1544 | 1595 | Tasso, Torquato | Poet. |
| 1564 | 1642 | Galileo, Galilei | Scientist. | | | | |

NORWEGIAN.

| Born. | Died. | Name. | Subject. | Born. | Died. | Name. | Subject. |
|---|---|---|---|---|---|---|---|
| 1684 | 1754 | Holberg, Ludvig | Drama, Hist. | 1833 | 1907 | Bugge, Sophus | Folklore. |
| 1808 | 1845 | Wergeland, Henrik | Poet, Drama. | 1828 | 1906 | Ibsen, Henrik | Drama. |
| 1807 | 1874 | Welhaven, J. S. C | Poet. | 1832 | 1910 | Bjornson, B | Poet, Drama. |
| 1802 | 1829 | Abel, N. H | Mathematics. | 1833 | 1908 | Lie, Jonas | Fiction. |
| 1810 | 1863 | Munch, P. A | History. | 1849 | 1906 | Kielland, A. L | Fiction. |
| 1835 | 1918 | Sars, J. E | History. | 1813 | 1896 | Aasen, Ivar | Poet |

SPANISH.

| Born. | Died. | Name. | Subject. | Born. | Died. | Name. | Subject. |
|---|---|---|---|---|---|---|---|
| 1332 | 1407 | Ayala, Pedr. L. de | Poet. | 1534 | 1597 | Herrera, Ferd | Poet. |
| 1198 | 1268 | Berceo, Gonz | Poet. | 1300 | 1360 | Hita, J. R. de | Poet. |
| 1600 | 1681 | Calderon, Pedro | Drama. | 1760 | 1828 | Moratin, L. F | Drama. |
| 1524 | 1579 | Camoens, Luiz (P't'gese) | Poet. | 1585 | 1648 | Tellez, Gabriel | Drama. |
| 1474 | 1566 | Casas, Las | History. | 1503 | 1536 | Vega, Garcil | Poet. |
| 1547 | 1616 | Cervantes, Miguel | Fiction. | 1562 | 1635 | Vega, Lope de | Drama. |
| 1040 | 1099 | Cid, El | Poet. | 1485 | 1557 | Vicente, Gil (Portuguese) | Drama. |
| 1551 | 1634 | Espinel, Vic | Poet. | 1750 | 1798 | Yriarte, Juan | Proverbs. |

SWEDISH.

| Born. | Died. | Name. | Subject. | Born. | Died. | Name. | Subject. |
|---|---|---|---|---|---|---|---|
| 1627 | 1695 | Arrhenius, Clas | History. | 1793 | 1828 | Erik, Joh. S | Poet. |
| 1740 | 1795 | Bellman, Karl M | Poet. | 1803 | 1876 | Mellin, Gust. H | Fiction. |
| 1796 | 1868 | Beskow, Bernh. von | Drama, Poet. | 1799 | 1837 | Nicander, Karl A | Poet. |
| 1801 | 1865 | Bremer, Fred'ka | Fiction. | 1688 | 1772 | Swedenborg, Emman'l. | Philosophy. |
| 1791 | 1844 | Dahlgren, Karl J | Poet. | 1782 | 1846 | Tegner, Esaias | Poet. |
| 1708 | 1763 | Dalin, Olaf | History. | 1754 | 1808 | Thorild, Thos | Hist., Poet. |

## SOME LITERARY PSEUDONYMS.

| Pen Name. | Real Name. | Pen Name. | Real Name. |
|---|---|---|---|
| Adeler, Max | Clark, Charles Heber. | Iron, Ralph | Cronwright, Mrs. S. C. |
| Arp, Bill | Smith, Charles H. | "Ivory Black" | Janvier, Thomas A. |
| Ayres, Alfred | Osman, Thomas E. | Johnson, Benjamin F. | Riley, James Whitcomb. |
| Beard, Frank | Beard, Thomas Francis. | "Josiah Allen's Wife" | Holley, Marietta. |
| Bede, Cuthbert | Bradley, Rev. Edward | June, Jenny | Croly, Mrs. David G. |
| Billings, Josh | Shaw, Henry W. | Kerr, Orpheus C | Newell, Robert C. |
| Breitmann, Hans | Leland, Charles Godfrey. | Kirke, Edmund | Gilmore, James R. |
| Carroll, Lewis | Dodgson, Rev. C. L. | Lee, Vernon | Paget, Violet. |
| Carter, Nick | Coryell, J. Russell. | Leslie, Amy | Brown, Lillie West. |
| Conway, Hugh | Hume, Fergus. | Leslie, Mrs. Frank | Wilde, Mrs. Miriam F. F. |
| Corelli, Marie | Mackay, Eva Mary. | Logan, Olive | Sikes, Mrs. W. Wirt. |
| Craddock, Charles Egbert | Murfree, Mary N. | Lothrop, Amy | Warner, Anna Bartlett. |
| Crinkle, Nym | Wheeler, Andrew C. | Loti, Pierre | Viaud, L. M. Julien. |
| D'Ache, Caran | Poire, Emmanuel. | Lyall, Edna | Bayly, Ada Ellen. |
| "Dagonet" | Sims, George R. | MacLaren, Ian | Watson, Rev. John |
| Dooley, Martin | Dunne, Finley Peter. | Malet, Lucas | Harrison, Mrs. William. |
| "Droch" | Bridges, Robert. | "Maori" | Inglis, James. |
| "Duchess, The" | Hungerford, Mrs. | Marlitt, E | John, Henriette Eugenie. |
| Eliot, George | Evans, Marian. | Marvel, Ik | Mitchell, Donald G. |
| Fane, Violet | Currie, Lady. | Meredith, Owen | Lytton, Earl of. |
| Finn, Mickey | Jarrold, Ernest. | Miller, Joaquin | Miller, Cincinnatus Heine. |
| "Fitznoodle" | Vallentine, B. B. | Mulock, Miss | Craig, Mrs. G. L. |
| Forrester, Francis | Wise, Daniel. | Nasby, Petroleum V | Locke, David. |
| Forrester, Frank | Herbert, Henry William. | Nordau, Max | Sudfeld, Simon. |
| "Fra Elbertus" | Hubbard, Elbert. | Optic, Oliver | Adams, Rev. William T. |
| France, Anatole | Thibault, Jacques Anatole | O'Reilly, Miles | Halpin, Charles G. |
| "Gath" | Townsend, George Alfred. | O'Rell, Max | Blouet, Paul. |
| Glyn, Elinor | Glyn, Mrs. Clayton. | "Ouida" | Ramee, Louise de la. |
| Gorki, Maxim | Peshkov, A. Maximovitch | Partington, Mrs. | Shillaber, Benjamin P. |
| Graham, John | Phillips, David Graham. | Perkins, Eli | Landon, Melville D. |
| Grand, Mme. Sarah | McFall, Mrs. | Phoenix, John | Derby, George H. |
| Green, Anna Katherine | Rohlfs, Mrs. Charles. | "Porte Crayon" | Strother, David H. |
| Greenwood, Grace | Lippincott, Sara Jane. | Prout, Father | Mahony, Francis S. |
| Greville, Henri | Durand, Mme. | Quad, M | Lewis, C. B. |
| "H. H." | Jackson, Helen Hunt. | "Rita" | Booth, Mrs. E. M. J. von |
| Haliburton, Hugh | Robertson, James Logie. | Rives, Amelie | Troubetskoi, Princess. |
| Hamilton, Gail | Dodge, Mary Abigail. | Schreiner, Olive | Cronwright, Mrs. S. C. |
| "Hard Pan" | Bonner, Geraldine. | Sharp, Luke | Barr, Robert. |
| Harland, Marion | Terhune, Mrs. Mary V. | Sylva, Carmen | Elizabeth, Queen of Roumania. |
| Harrod, Frances | Forbes-Robertson, Frances | Thanet, Octave | French, Alice |
| Hobbes, John Oliver | Craigie, Mrs. Pearl. | Twain, Mark | Clemens, Samuel L. |
| "Holland" | Edwards, E. J. | Verne, Jules | Olchewitz, M. |
| Hope, Anthony | Hawkins, Anthony Hope. | | |

## SHAKESPEARIAN TABLE.

| Character. | Lines to Speak. | Character. | Lines to Speak. | Character. | Lines to Speak. |
|---|---|---|---|---|---|
| Hamlet | 1,569 | Macbeth | 705 | Mistress Page | 361 |
| Richard III | 1,161 | Cleopatra | 670 | Viola | 353 |
| Iago | 1,117 | Prospero | 665 | Julia ("Two Gentlemen") | 323 |
| Othello | 888 | Romeo | 618 | Volumnia | 315 |
| Coriolanus | 886 | Petruchio | 585 | Beatrice | 309 |
| Timon | 863 | Touchstone | 516 | Lady Macbeth | 261 |
| Antony (Cleopatra's) | 829 | Imogen | 541 | Katherine (in "The Shrew") | 220 |
| Lear | 770 | Helen ("All's Well") | 479 | Miranda ("Tempest") | 142 |
| Richard II | 755 | Isabella | 426 | Perdita | 128 |
| Brutus | 727 | Desdemona | 389 | Cordelia | 115 |

## THE MONROE DOCTRINE.

The Monroe Doctrine dates from a declaration of December 2, 1823, by James Monroe, President of the United States, in his seventh annual message to Congress. Brazil had declared its independence of Portugal the year before. Troubles in the latter country had caused a modification of the Constitution. In Spain a revolution had occurred, and the dominion of Peru was lost. The Holy Alliance, formed in 1815 by Russia, Austria and Prussia, was threatening, so it was alleged, to help Spain recover its control in South America. Russia and the United States were in controversy over their Pacific Coast boundaries. Mr. Monroe in his message took up the Russian matter first, saying:

"In the discussions to which this interest has given rise, and in the arrangements by which they may terminate, the occasion has been judged proper for asserting, as a principle in which the rights and interests of the United States are involved, that the American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by any European powers."

The President then spoke of Spain and Portugal in this wise:

"Of events in that quarter of the globe with which we have so much intercourse and from which we derive our origin we have always been anxious and interested spectators. The citizens of the United States cherish sentiments the most friendly in favor of the liberty and happiness of their fellowmen on that side of the Atlantic. In the wars of the European powers, in matters relating to themselves, we have never taken any part, nor does it comport with our policy so to do. It is only when our rights are invaded or seriously menaced that we resent injuries or make preparation for our defence. With the movements in this hemisphere we are of necessity more immediately connected, and by causes which must be obvious to all enlightened and impartial observers. The political system of the allied powers is essentially different in this respect from that of America. This difference proceeds from that which exists in their respective Governments. And to the defence of our own, which has been achieved by the loss of so much blood and treasure, and matured by the wisdom of their most enlightened citizens, and under which we have enjoyed unexampled felicity, this whole nation is devoted. We owe it, therefore, to candor and to the amicable relations existing between the United States and those powers to declare that we should consider any attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety.

"With the existing colonies or dependencies of any European power we have not interfered and shall not interfere. But with the Governments who have declared their ndependence and maintained it, and whose independence we have, on great consideration and on just principles, acknowledged, we could not view any interposition for the purpose of oppressing them, or controlling, in any other manner, their destiny, by any European power, in any other light than as the manifestation of an unfriendly disposition toward the United States."

### CLEVELAND'S DECLARATION IN 1895.

When President Grover Cleveland, in 1895, urged Great Britain to arbitrate her dispute over the boundary between Venezuela and British Guiana, he said (December 17) in a message to Congress:

"The doctrine "(Monroe) "upon which we stand is strong and sound because its enforcement is important to our peace and safety as a nation, and is essential to the integrity of our free institutions and the tranquil maintenance of our distinctive form of government. It was intended to apply to every stage of our national life, and cannot become obsolete while our Republic endures. If the balance of power is justly a cause for jealous anxiety among the Governments of the Old World and a subject for our absolute non-interference, none the less is an observance of the Monroe Doctrine of vital concern to our people and their Government. * * * If a European power, by an extension of its boundaries, takes possession of the territory of one of our neighboring republics against its will and in derogation of its rights, it is difficult to see why to that extent such European power does not thereby attempt to extend its system of government to that portion of this continent which is thus taken. This is the precise action which President Monroe declared to be 'dangerous to our peace and safety,' and it can make no difference whether the European system is extended by an advance of frontier or otherwise. * * * The Monroe Doctrine finds its recognition in those principles of international law which are based upon the theory that every nation shall have its rights protected and its just claims enforced."

### PRESIDENT WILSON'S WORDS IN 1915.

President Wilson said of the Monroe Doctrine (December 7, 1915) in an address to a joint session of Congress: "There was a time in the early days of our own great nation and of the republics fighting their way to independence in Central and South America when the Government of the United States looked upon itself as in some sort the guardian of the republics to the south of her as against any encroachments or efforts at political control from the other side of the water; felt it its duty to play the part even without invitation from them; and I think that we can claim that the task was undertaken with a true and disinterested enthusiasm for the freedom of the Americas and the unmolested self-government of her independent peoples. But it was always difficult to maintain such a rôle without offence to the pride of the peoples whose freedom of action we sought to protect and without provoking serious misconceptions of our motives, and every thoughtful man of affairs must welcome the altered circumstances of the new day in whose light we now stand, when there is no claim of guardianship or thought of wards but, instead, a full and honorable association as of partners between ourselves and our neighbors, in the interest of all America, north and south.

"Our concern for the independence and prosperity of the states of Central and South America is not altered. We retain unabated the spirit that has inspired us throughout the whole life of our Government and which was so frankly put into words by President Monroe. We still mean always to make a common cause of national independence and of political liberty in America. But that purpose is now better understood so far as it concerns ourselves. It is known not to be a selfish purpose. It is known to have in it no thought of taking advantage of any Government in this hemisphere or playing its political fortunes for our own benefit. All the Governments of America stand, so far as we are concerned, upon a footing of genuine equality and unquestioned independence."

### PRESIDENT HARDING'S WORDS IN 1921.

President Harding, April 19, 1921, at the unveiling of the Bolivar Statue, New York City, said:

"Having sacrificed in arms to establish the human inheritance belonging to free men, the American republics may well touch elbows to prove their unselfishness and show to mankind that righteous achievement does not mean anybody's destruction, individually or nationally, but that real victory lies in that human progress wherein every contender, individual or national, may share as it is sought to merit it.

"The doctrine proclaimed under Monroe, which ever since has been jealously guarded as a fundamental of our own Republic, maintained that these continents should not again be regarded as fields for the colonial enterprises of Old-World powers. There have been times when the meaning of Monroeism was misunderstood by some, perverted by others, and made the subject of distorting propaganda by those who saw in it an obstacle to the realization of their own ambitions. Some have sought to make our adhesion to this doctorine a justification for prejudice against the United States. They have falsely charged that we sought to hold the nations of the Old World at arm's length, in order that we might monopolize the privilege of exploitation for ourselves. Others have protested that the doctrine would never be enforced if to enforce it should involve us in actual hostilities.

"The history of the generations since that doctrine was proclaimed has proved that we never intended it selfishly; that we had no dream of exploitation. On the other side, the history of the last decade certainly must have convinced all the world that we stand willing to fight, if necessary, to protect these continents, these sturdy young democracies, from oppression and tyranny."

# Declaration of Independence.

(UNANIMOUSLY ADOPTED IN CONGRESS, JULY 4, 1776, AT PHILADELPHIA.)

WHEN, in the Course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, That whenever any Form of Government becomes destructive of these ends, It is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness. Prudence, indeed, will dictate that Governments long established should not be changed for light and transient causes; and accordingly all experience hath shewn, that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same Object evinces a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Government, and to provide new Guards for their future security. Such has been the patient sufferance of these Colonies; and such is now the necessity which constrains them to alter their former Systems of Government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States. To prove this, let Facts be submitted to a candid world.

He has refused his Assent to Laws, the most wholesome and necessary for the public good.

He has forbidden his Governors to pass Laws of immediate and pressing importance, unless suspended in their operation till his Assent should be obtained; and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other Laws for the accommodation of large districts of people, unless those people would relinquish the right of Representation in the Legislature, a right inestimable to them and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their public Records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved Representative Houses repeatedly, for opposing with manly firmness his invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected; whereby the Legislative powers, incapable of Annihilation, have returned to the People at large for their exercise; the State remaining in the meantime exposed to all the dangers of invasion from without, and convulsions within.

He has endeavoured to prevent the population of these States; for that purpose obstructing the Laws for Naturalization of Foreigners; refusing to pass others to encourage their migration hither, and raising the conditions of new Appropriations of Lands.

He has obstructed the Administration of Justice, by refusing his Assent to Laws for establishing Judiciary powers.

He has made Judges dependent on his Will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of New Offices, and sent hither swarms of Officers to harass our people, and eat out their substance.

He has kept among us, in times of peace, Standing Armies, without the Consent of our legislature.

He has affected to render the Military independent of and superior to the Civil power.

He has combined with others to subject us to a jurisdiction foreign to our constitution and unacknowledged by our laws; giving his Assent to their Acts of pretended Legislation: For quartering large bodies of armed troops among us: For protecting them by a mock Trial from punishment for any Murders which they should commit on the Inhabitants of these States: For cutting off our Trade with all parts of the world: For imposing Taxes on us without our Consent: For depriving us in many cases of the benefits of Trial by Jury: For transporting us beyond Seas to be tried for pretended offences: For abolishing the free System of English Laws in a neighbouring Province, establishing therein an Arbitrary government, and enlarging its Boundaries so as to render it at once an example and fit instrument for introducing the same absolute rule into these Colonies: For taking away our Charters, abolishing our most valuable Laws and altering fundamentally the Forms of our Governments: For suspending our own Legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated Government here by declaring us out of his Protection and waging War against us.

He has plundered our seas, ravaged our Coasts, burnt our towns, and destroyed the lives of our people.

He is at this time transporting large Armies of foreign Mercenaries to complete the works of death, desolation and tyranny, already begun with circumstances of Cruelty & perfidy scarcely paralleled in the most barbarous ages, and totally unworthy the Head of a civilized nation.

He has constrained our fellow Citizens taken Captive on the high Seas to bear Arms against their Country, to become the executioners of their friends and Brethren, or to fall themselves by their Hands.

He has excited domestic insurrections amongst us, and has endeavoured to bring on the inhabitants of our frontiers, the merciless Indian Savages, whose known rule of warfare is an undistinguished destruction of all ages, sexes and conditions. In every stage of these Oppressions We have Petitioned for Redress in the most humble terms. Our repeated Petitions have been answered by repeated injury. A Prince, whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free people. Nor have We been wanting in attentions to our British brethren. We have warned them from time to time of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They too have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity, which denounces our Separation, and hold them, as we hold the rest of mankind, Enemies in War, in Peace Friends.

WE THEREFORE, the REPRESENTATIVES of the UNITED STATES OF AMERICA, IN GENERAL CONGRESS, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the Name, and by authority of the good People of these Colonies, solemnly PUBLISH and DECLARE, That these United Colonies are, and of Right ought to be FREE AND INDEPENDENT STATES; that they are Absolved from all Allegiance to the British Crown, and that all political connection between them and the State of Great Britain is and ought to be totally dissolved; and that as FREE AND INDEPENDENT STATES, they have full Power to levy War, conclude Peace, contract Alliances, establish Commerce, and to do all other Acts and Things which INDEPENDENT STATES may of right do. And for the support of this Declaration, with a firm reliance on the protection of Divine Providence, we mutually pledge to each other our Lives, our Fortunes, and our sacred Honor.

SIGNERS OF THE DECLARATION OF INDEPENDENCE. (REVISED BY SIMON NEWTON, DETROIT.)

| NAME. | Delegate From. | Occupation. | Order of Birth. | Birthplace. | Date of Birth. | Order of Death. | Place of Death. | Date of Death. | Age. |
|---|---|---|---|---|---|---|---|---|---|
| Adams, John | Mass. Bay | Lawyer | 35 | Braintree, Mass. | Oct. 31, 1735 | 54 | Braintree, Mass. | July 4, 1826 | 91 |
| Adams, Samuel | Mass. Bay | Merchant | 11 | Boston, Mass. | Sept. 27, 1722 | 38 | Boston, Mass. | Oct. 2, 1803 | 81 |
| Bartlett, Josiah | New Hamp. | Physician | 20 | Amesbury, Mass. | Nov. 21, 1729 | 27 | ....., N. H. | May 19, 1795 | 65 |
| Braxton, Carter | Virginia | Planter | 36 | Newington, Va. | Sept. 10, 1736 | 30 | Richmond, Va. | Oct. 10, 1797 | 61 |
| Carroll, Charles | Maryland | Lawyer | 38 | Annapolis, Md. | Sept. 20, 1737 | 56 | Baltimore, Md. | Nov. 14, 1832 | 95 |
| Chase, Samuel | Maryland | Lawyer | 45 | Somerset County, Md. | April 17, 1741 | 45 | ..... | June 19, 1811 | 70 |
| Clark Abraham | New Jersey | Lawyer | 14 | Elizabethtown, N. J. | Feb. 15, 1726 | 26 | Rahway, N. J. | Sept. 15, 1794 | 69 |
| Clymer, George | Pennsylvania | Merchant | 41 | Philadelphia, Pa. | Jan. 24, 1739 | 47 | Morrisville, Pa. | Jan. 23, 1813 | 74 |
| Ellery, William | Rhode Island | Lawyer | 18 | Newport, R. I. | Dec. 22, 1727 | 52 | Newport, R. I. | Feb. 15, 1820 | 92 |
| Floyd, William | New York | Farmer | 34 | Brookhaven, N. Y. | Dec 17, 1734 | 53 | Weston, N. Y. | Aug. 4, 1821 | 87 |
| Franklin, Benjamin | Pennsylvania | Printer | 1 | Boston, Mass. | Jan. 17, 1706 | 17 | Philadelphia, Pa. | April 17, 1790 | 84 |
| Gerry, Elbridge | Mass. Bay | Merchant | 52 | Marblehead, Mass. | July 17, 1744 | 50 | Washington, D. C. | Nov. 23, 1814 | 70 |
| Gwinnett, Button | Georgia | Merchant | 29 | ....., England | (About) 1732 | 2 | ....., Ga. | May 27, 1777 | 45 |
| Hall, Lyman | Georgia | Physician | 13 | ....., Ct. | 1725 | 18 | Burke County, Ga. | Oct. 19, 1790 | 65 |
| Hancock, John | Mass. Bay | Merchant | 37 | Quincy, Mass. | Jan. 12, 1737 | 23 | Quincy, Mass. | Oct. 8, 1793 | 57 |
| Harrison, Benjamin | Virginia | Farmer | 44 | Berkeley, Va. | (About) 1740 | 20 | ..... | April 1791 | 51 |
| Hart, John | New Jersey | Farmer | 3 | Hopewell, N. J. | 1708 | 7 | Hopewell, N. J. | 1780 | 72 |
| Hewes, Joseph | N. Carolina | Lawyer | 23 | Kingston, N. J. | 1730 | 5 | Philadelphia, Pa. | Nov. 10, 1779 | 49 |
| Heyward, Jr., Thomas | S. Carolina | Lawyer | 54 | St. Luke's Parish, S. C. | 1746 | 44 | St. Luke's Parish, S. C. | Mar. 6, 1809 | 63 |
| Hooper, William | N. Carolina | Lawyer | 47 | Boston, Mass. | June 17, 1742 | 19 | Hillsborough, N. C. | Oct. 1790 | 48 |
| Hopkins, Stephen | Rhode Island | Farmer | 2 | Scituate, R. I. | Mar. 7, 1707 | 11 | Providence, R. I. | July 13, 1785 | 78 |
| Hopkinson, Francis | New Jersey | Lawyer | 39 | Philadelphia, Pa. | Sept. 21, 1737 | 21 | ..... | May 9, 1791 | 54 |
| Huntington, Samuel | Connecticut | Lawyer | 27 | Windham, Ct. | July 3, 1731 | 28 | Norwich, Ct. | Jan. 5, 1796 | 65 |
| Jefferson, Thomas | Virginia | Lawyer | 50 | Shadwell, Va. | April 2, 1743 | 55 | Monticello, Va. | July 4, 1826 | 83 |
| Lee, Richard Henry | Virginia | Soldier | 28 | Stratford, Va. | Jan. 20, 1732 | 24 | Chantilly, Va. | June 19, 1794 | 62 |
| Lee, Francis Lightfoot | Virginia | Farmer | 33 | Stratford, Va. | Oct. 14, 1734 | 29 | Richmond, Va. | April 3, 1797 | 62 |
| Lewis, Francis | New York | Merchant | 4 | Llandaff, Wales | Mar. 1713 | 39 | New York, N. Y. | Dec. 19, 1803 | 91 |
| Livingston, Philip | New York | Merchant | 6 | Albany, N. Y. | Jan. 15, 1716 | 3 | York, Pa. | June 12, 1778 | 62 |
| Lynch, Jr., Thomas | S. Carolina | Lawyer | 55 | Prince George Parish, S. C. | Aug. 5, 1749 | 6 | At sea | 1779 | 30 |
| McKean, Thomas | Delaware | Lawyer | 32 | New London, Pa. | Mar. 19, 1734 | 51 | Philadelphia, Pa. | June 24, 1817 | 83 |
| Middleton, Arthur | S. Carolina | Lawyer | 48 | Middleton Place, S. C. | June 26, 1742 | 13 | Goose Creek, S. C. | Jan. 1, 1787 | 45 |
| Morris, Lewis | New York | Farmer | 16 | Morrisania, N. Y. | 1726 | 32 | Morrisania, N. Y. | Jan. 22, 1798 | 72 |
| Morris, Robert | Pennsylvania | Merchant | 31 | Liverpool, England | Jan. 20, 1734 | 41 | Philadelphia, Pa. | May 8, 1806 | 72 |
| Morton, John | Pennsylvania | Surveyor | 12 | Ridley, Pa. | 1724 | 1 | Chester County, Pa. | April 1777 | 53 |
| Nelson, Jr., Thomas | Virginia | Statesman | 40 | Yorktown, Va. | Dec. 26, 1738 | 16 | Hanover County, Va. | Jan. 4, 1789 | 50 |
| Paca, William | Maryland | Lawyer | 42 | Wyehall, Md. | Oct. 31, 1740 | 35 | Wyehall, Md. | 1799 | 59 |
| Paine, Robert Treat | Mass Bay | Lawyer | 25 | Boston, Mass. | Mar. 11, 1731 | 49 | Boston, Mass. | May 11, 1814 | 83 |
| Penn, John | N. Carolina | Lawyer | 46 | Caroline County, Va. | May 17, 1741 | 15 | ....., N. C. | Sept. 1788 | 47 |
| Read, George | Delaware | Lawyer | 30 | Cecil County, Md. | Sept. 17, 1733 | 34 | Newcastle, Del. | Sept. 21, 1798 | 65 |
| Rodney, Caesar | Delaware | General | 19 | Dover, Del. | Oct. 7, 1728 | 10 | Dover, Del. | June 29, 1784 | 56 |
| Ross, George | Pennsylvania | Lawyer | 24 | Newcastle, Del. | 1730 | 4 | Lancaster, Pa. | July 1779 | 49 |
| Rush, Benjamin | Pennsylvania | Physician | 53 | Byberry Township, Pa. | Dec. 24, 1745 | 48 | Philadelphia, Pa. | April 19, 1813 | 67 |
| Rutledge, Edward | S. Carolina | Lawyer | 56 | Charleston, S. C. | Nov. 23, 1749 | 36 | Charleston, S. C. | Jan. 23, 1800 | 50 |
| Sherman, Roger | Connecticut | Shoemaker | 9 | Newton, Mass. | April 19, 1721 | 22 | New Haven, Ct. | July 23, 1793 | 72 |
| Smith, James | Pennsylvania | Lawyer | 8 | ....., Ireland | (About) 1720 | 43 | York, Pa. | July 11, 1806 | 86 |
| Stockton, Richard | New Jersey | Lawyer | 22 | Near Princeton, N. J. | Oct. 1, 1730 | 9 | Near Princeton, N. J. | Feb. 28, 1781 | 50 |
| Stone, Thomas | Maryland | Lawyer | 51 | Charles County, Md. | 1743 | 14 | Alexandria, Va. | Oct. 5, 1787 | 44 |
| Taylor, George | Pennsylvania | Physician | 7 | ....., Ireland | 1716 | 8 | Easton, Pa. | Feb. 23, 1781 | 65 |
| Thornton, Matthew | New Hamp. | Physician | 5 | ....., Ireland | (About) 1714 | 37 | Newburyport, Mass. | June 24, 1803 | 89 |
| Walton, George | Georgia | Lawyer | 43 | Frederick County, Va. | 1740 | 40 | Augusta, Ga. | Feb. 2, 1804 | 64 |
| Whipple, William | N. Hampshire | Sailor | 21 | Kittery, Me. | Jan. 14, 1730 | 12 | Portsmouth, N. H. | Nov. 28, 1785 | 56 |
| Williams, William | Connecticut | Statesman | 26 | Lebanon, Ct. | April 18, 1731 | 46 | Lebanon, Ct. | Aug. 2, 1811 | 80 |
| Wilson, James | Pennsylvania | Lawyer | 49 | Near St. Andrews, Scotland | Sept. 14, 1742 | 33 | Edenton, N. C. | Aug. 28, 1798 | 56 |
| Witherspoon, John | New Jersey | Minister | 10 | Gifford, Had'ngtonshire, Scot. | Feb. 5, 1722 | 25 | Near Princeton, N. J. | Sept. 15, 1794 | 73 |
| Wolcott, Oliver | Connecticut | Physician | 15 | Windsor, Ct. | Nov. 26, 1726 | 31 | Litchfield, Ct. | Dec 1, 1797 | 71 |
| Wythe, George | Virginia | Lawyer | 17 | Elizabeth City County, Va. | 1726 | 42 | Richmond, Va. | June 8, 1806 | 80 |

## BRIEF BIOGRAPHIES OF UNITED STATES PRESIDENTS.

(For explanation of reference marks see third page following. Some authorities say Taylor was born Sept. 24, and Fillmore, Feb. 7. The controversy as to which side of the North Carolina-South Carolina line Jackson was born on still goes on, in and out of Congress.)

| | Full Name. | Paternal Ancestry. | Parentage—Father. | Father's Vocation. | Parentage—Mother. |
|---|---|---|---|---|---|
| 1. | George Washington | English | Augustine Washington | Planter | Mary Ball. |
| 2. | John Adams | English | John Adams | Farmer | Susanna Boylston. |
| 3. | Thomas Jefferson | Welsh | Peter Jefferson | Planter | Jane Randolph. |
| 4. | James Madison | English | James Madison | Planter | Nelly Conway. |
| 5. | James Monroe | Scotch | Spence Monroe | Planter | Eliza Jones. |
| 6. | John Quincy Adams | English | John Adams | Lawyer | Abigail Smith. |
| 7. | Andrew Jackson | Scotch-Irish | Andrew Jackson | Farmer | Elizabeth Hutchinson. |
| 8. | Martin Van Buren | Dutch | Abraham Van Buren | Farmer | Maria Hoes. |
| 9. | William Henry Harrison | English | Benjamin Harrison | Statesman | Elizabeth Bassett. |
| 10. | John Tyler | English | John Tyler | Jurist | Mary Armistead. |
| 11. | James Knox Polk | Scotch-Irish | Samuel Polk | Farmer | Jane Knox. |
| 12. | Zachary Taylor | English | Richard Taylor | Planter | Sarah Strother. |
| 13. | Millard Fillmore | English | Nathaniel Fillmore | Farmer | Phebe Millard. |
| 14. | Franklin Pierce | English | Benjamin Pierce | Farmer | Anna Kendrick. |
| 15 | James Buchanan | Scotch-Irish | James Buchanan | Merchant | Elizabeth Speer. |
| 16. | Abraham Lincoln | English | Thomas Lincoln | Farmer | Nancy Hanks. |
| 17. | Andrew Johnson | English | Jacob Johnson | Sexton and Constable | Mary McDonough. |
| 18. | Ulysses Simpson Grant | Scotch | Jesse Root Grant | Tanner | Harriet Simpson. |
| 19. | Rutherford Birchard Hayes | Scotch | Rutherford Hayes | Merchant | Sophia Birchard. |
| 20 | James Abram Garfield | English | Abram Garfield | Farmer | Eliza Ballou. |
| 21. | Chester Alan Arthur | Scotch-Irish | William Arthur | Clergyman | Malvina Stone. |
| 22, 24. | Grover Cleveland | English | Richard Falley Cleveland | Clergyman | Anna Neal. |
| 23. | Benjamin Harrison | English | John Scott Harrison | Farmer | Elizabeth F. Irwin. |
| 25. | William McKinley | Scotch-Irish | William McKinley | Iron Manufacturer | Nancy C. Allison. |
| 26. | Theodore Roosevelt | Dutch | Theodore Roosevelt | Merchant | Martha Bullock. |
| 27. | William Howard Taft | English | Alphonso Taft | Lawyer | Louise M. Torrey. |
| 28. | Woodrow Wilson | Scotch-Irish | Joseph R. Wilson | Clergyman | Jessie Woodrow. |
| 29. | Warren Gamaliel Harding | Scotch-Holland | George T. Harding | Physician | Phoebe Dickerson. |

| | President. | Born. | Birthplace. | Vocation. In Early Life. | Vocation. When Elected. | College. | Yr. Grad.‡ |
|---|---|---|---|---|---|---|---|
| 1. | Washington | February 22, 1732 | Near Bridges Creek, Westmoreland Co., Va | Surveyor | Planter | None | |
| 2. | J. Adams | October 30, 1735 | Quincy, Norfolk County, Mass | Teacher | Lawyer | Harvard | 1755 |
| 3. | Jefferson | April 13, 1743 | Shadwell, Albemarle County, Va | Lawyer | Lawyer | William and Mary | 1762 |
| 4. | Madison | March 16, 1751 | Port Conway, King George County, Va | Lawyer | Lawyer | Princeton | 1771 |
| 5. | Monroe | April 28, 1758 | Head of Monroe's Creek, Westmoreland Co., Va. | Lawyer | St'sman* | William and Mary | 1776 |
| 6. | J. Q. Adams | July 11, 1767 | Quincy, Norfolk County, Mass | Lawyer | Lawyer | Harvard | 1787 |
| 7. | Jackson | March 15, 1767 | Near Cureton's Pond, Union County, N. C.† | Lawyer | Lawyer | None | |
| 8. | Van Buren | December 5, 1782 | Kinderhook, Columbia County, N. Y | Lawyer | Lawyer | None | |
| 9. | Harrison | February 9, 1773 | Berkeley, Charles City County, Va | Soldier | Farmer | Hampden-Sidney | 1790 |
| 10. | Tyler | March 29, 1790 | Greenway, Charles City County, Va | Lawyer | Lawyer | William and Mary | 1807 |
| 11. | Polk | November 2, 1795 | Near Pineville, Mecklenburg Co., N. C | Lawyer | Lawyer | Uni. of N. Carolina | 1818 |
| 12. | Taylor | November 24, 1784 | Near Orange C. H., Orange County, Va | Soldier | Soldier | None | |
| 13. | Fillmore | January 7, 1800 | Summerhill, Cayuga County, N. Y | Tailor | Lawyer | None | |
| 14. | Pierce | November 23, 1804 | Hillsborough, Hillsborough County, N. H | Lawyer | Lawyer | Bowdoin | 1824 |
| 15. | Buchanan | April 23, 1791 | Cove Gap, Franklin County, Pa | Lawyer | Lawyer | Dickinson | 1809 |
| 16. | Lincoln | February 12, 1809 | Near Hodgenville, Larue County, Ky | Farmhand | Lawyer | None | |
| 17. | Johnson | December 29, 1808 | Raleigh, Wake County, N. C | Tailor | Statesman | None | |
| 18. | Grant | April 27, 1822 | Point Pleasant, Clermont County, O | Soldier | Soldier | West Point | 1843 |
| 19. | Hayes | October 4, 1822 | Delaware, Delaware County, O | Lawyer | Lawyer | Kenyon | 1842 |
| 20. | Garfield | November 19, 1831 | Orange Township, Cuyahoga County, O | Teacher | Lawyer | Williams | 1856 |
| 21. | Arthur | October 5, 1830 | Fairfield, Franklin County, Vt | Teacher | Lawyer | Union | 1848 |
| 22, 24. | Cleveland | March 18, 1837 | Caldwell, Essex County, N. J | Teacher | Lawyer | None | |
| 23. | B. Harrison | August 20, 1833 | North Bend, Hamilton County, O | Lawyer | Lawyer | Miami University | 1853 |
| 25. | McKinley | January 29, 1843 | Niles, Trumbull County, O | Lawyer | Lawyer | None | |
| 26. | Roosevelt | October 27, 1858 | 28 E. 20th St., New York City, N. Y | Publicist | Pub. official | Harvard | 1880 |
| 27. | Taft | September 15, 1857 | Cincinnati, O | Lawyer | Lawyer | Yale | 1878 |
| 28. | Wilson | December 28, 1856 | Staunton, Va | Teacher | Statesman | Princeton | 1879 |
| 29. | Harding | November 2, 1865 | Near Blooming Grove, Morrow Co., Ohio | Editor | Publisher | Ohio Central | 1884 |

| No. | President. | Married. | Wife's Name. | Wife Born. | Wife Died. | Sons. | Dau. | Home When Elected. |
|---|---|---|---|---|---|---|---|---|
| 1.. | Washington. | 1759.. | Martha (Dandridge) Custis§.... | 1732. | 1802. | ..... | ..... | Mount Vernon, Va. |
| 2.. | J. Adams... | 1764.. | Abigail Smith..... | 1744. | 1818. | 3 | 2 | Quincy, Mass. |
| 3.. | Jefferson... | 1772.. | Martha (Wayles) Skelton§..... | 1748. | 1782. | 1 | 5 | Monticello, Va. |
| 4.. | Madison.... | 1794.. | Dolly (Payne) Todd§..... | 1772. | 1849. | ..... | ..... | Montpelier, Va. |
| 5.. | Monroe..... | 1786.. | Eliza Kortwright..... | 1768 | 1830. | ..... | 2 | Oak Hill, Va. |
| 6.. | J. Q. Adams | 1797.. | Louisa Catherine Johnson..... | 1775. | 1852. | 3 | 1 | Quincy, Mass. |
| 7.. | Jackson.... | 1791.. | Rachel (Donelson) Robards¶... | 1767. | 1828. | ..... | ..... | Hermitage, Tenn. |
| 8.. | Van Buren.. | 1807.. | Hannah Hoes..... | 1783. | 1819. | 4 | ..... | Kinderhook, N. Y. |
| 9.. | Harrison... | 1795.. | Anna Symmes..... | 1775. | 1864. | 6 | 4 | North Bend, O. |
| 10.. | Tyler..... | 1813.. | Letitia Christian..... | 1790. | 1842. | 3 | 4 | Williamsburg, Va. |
| | | 1844.. | Julia Gardiner..... | 1820. | 1889. | 5 | 2 | |
| 11.. | Polk..... | 1824.. | Sarah Childress..... | 1803. | 1891. | ..... | ..... | Nashville, Tenn. |
| 12.. | Taylor..... | 1810.. | Margaret Smith..... | 1788. | 1852. | 1 | 5 | Baton Rouge, La. |
| 13.. | Fillmore.... | 1826.. | Abigail Powers..... | 1798. | 1853. | 1 | 1 | Buffalo, N. Y. |
| | | 1858.. | Caroline (Carmichael) McIntosh§ | 1813. | 1881. | ..... | ..... | |
| 14.. | Pierce..... | 1834.. | Jane Means Appleton..... | 1806. | 1863. | 3 | ..... | Concord, N. H. |
| 15.. | Buchanan.. | ..... | ..... | ..... | ..... | ..... | ..... | Wheatland, Pa. |
| 16.. | Lincoln.... | 1842.. | Mary Todd..... | 1818. | 1882. | 4 | ..... | Springfield, Ill. |
| 17.. | Johnson.... | 1827.. | Eliza McCardle..... | 1810. | 1876. | 3 | 2 | Greenville, Tenn. |
| 18.. | Grant..... | 1848.. | Julia Dent..... | 1826. | 1902. | 3 | 1 | Washington, D. C. |
| 19.. | Hayes..... | 1852.. | Lucy Ware Webb..... | 1831. | 1889. | 7 | 1 | Fremont, O. |
| 20.. | Garfield.... | 1858.. | Lucretia Rudolph..... | 1833. | 1918. | 4 | 1 | Mentor, O. |
| 21.. | Arthur..... | 1859.. | Ellen Lewis Herndon..... | 1837. | 1880. | 1 | 1 | New York City. |
| 22,24.. | Cleveland... | 1886.. | Frances Folsom..... | 1864. | ..... | 1 | 3 | Buffalo, N. Y. |
| 23.. | B. Harrison. | 1853.. | Caroline Lavinia Scott..... | 1832. | 1892. | 1 | 1 | Indianapolis, Ind. |
| | | 1896.. | Mary Scott (Lord) Dimmick§.... | 1858. | ..... | ..... | 1 | |
| 25.. | McKinley.. | 1871.. | Ida Saxton..... | 1844. | 1907. | ..... | 2 | Canton, O. |
| 26.. | Roosevelt... | 1883.. | Alice Lee..... | ..... | 1884. | ..... | 1 | Oyster Bay, N. Y. |
| | | 1886.. | Edith Kermit Carow..... | 1861. | ..... | 4 | 1 | |
| 27.. | Taft..... | 1886.. | Helen Herron..... | 1861. | ..... | 2 | 1 | Cincinnati, O. |
| 28.. | Wilson..... | 1885.. | Ellen Louise Axson..... | 1860. | 1914. | ..... | 3 | Princeton, N. J. |
| | | 1915.. | Edith (Bolling) Galt§..... | 1872. | ..... | ..... | ..... | Washington, D. C. |
| 29.. | Harding.... | 1891.. | Florence Kling..... | 1850. | ..... | ..... | ..... | Marion, O. |

| No. | President. | Politics. | Inaug. | Age. | Years Served. | Religious Connection. | Time of Death. | Age. |
|---|---|---|---|---|---|---|---|---|
| 1.. | Washington. | Federalist.... | 1789 | 57 | 7 y. 10 mo. 4 d. | Episcopalian.... | December 14, 1799. | 67 |
| 2.. | J. Adams... | Federalist.... | 1797 | 61 | 4 | Unitarian..... | July 4, 1826..... | 90 |
| 3.. | Jefferson... | Republican (a) | 1801 | 57 | 8 | Liberal (c)..... | July 4, 1826..... | 83 |
| 4.. | Madison.... | Republican... | 1809 | 57 | 8 | Episcopalian.... | June 28, 1836..... | 85 |
| 5.. | Monroe..... | Republican... | 1817 | 58 | 8 | Episcopalian.... | July 4, 1831..... | 73 |
| 6.. | J. Q. Adams | Republican (b) | 1825 | 57 | 4 | Unitarian..... | February 23, 1848.. | 80 |
| 7.. | Jackson.... | Democrat.... | 1829 | 61 | 8 | Presbyterian.... | June 8, 1845..... | 78 |
| 8.. | Van Buren.. | Democrat.... | 1837 | 54 | 4 | Reformed Dutch | July 24, 1862..... | 79 |
| 9.. | Harrison... | Whig..... | 1841 | 68 | 1 mo. | Episcopalian.... | April 4, 1841..... | 68 |
| 10.. | Tyler..... | Democrat.... | 1841 | 51 | 3 y. 11 mo. | Episcopalian.... | January 17, 1862.. | 71 |
| 11.. | Polk..... | Democrat.... | 1845 | 49 | 4 | Presbyterian.... | June 15, 1849..... | 53 |
| 12.. | Taylor..... | Whig..... | 1849 | 64 | 1 y. 4 mo. 5 d. | Episcopalian.... | July 9, 1850..... | 65 |
| 13.. | Fillmore.... | Whig..... | 1850 | 50 | 2 y. 7 mo. 26 d. | Unitarian..... | March 8, 1874.... | 74 |
| 14.. | Pierce..... | Democrat.... | 1853 | 48 | 4 | Episcopalian.... | October 8, 1869... | 64 |
| 15.. | Buchanan .. | Democrat.... | 1857 | 65 | 4 | Presbyterian.... | June 1, 1868..... | 77 |
| 16.. | Lincoln.... | Republican... | 1861 | 52 | 4 y. 1 mo. 11 d. | Presbyterian.... | April 15, 1865..... | 56 |
| 17.. | Johnson.... | Republican... | 1865 | 56 | 3 y. 10 mo. 19 d. | Methodist (d)... | July 31, 1875..... | 66 |
| 18.. | Grant..... | Republican... | 1869 | 46 | 8 | Methodist..... | July 23, 1885..... | 63 |
| 19.. | Hayes..... | Republican... | 1877 | 54 | 4 | Methodist..... | January 17, 1893.. | 70 |
| 20.. | Garfield.... | Republican... | 1881 | 49 | 6½ mo. | Disciples..... | September 19, 1881 | 49 |
| 21.. | Arthur..... | Republican... | 1881 | 50 | 3 y. 5½ mo. | Episcopalian.... | November 18, 1886 | 56 |
| 22.. | Cleveland... | Democrat.... | 1885 | 47 | 4 | Presbyterian.... | June 24, 1908..... | 71 |
| 23.. | B. Harrison. | Republican... | 1889 | 55 | 4 | Presbyterian.... | March 13, 1901... | 67 |
| 24.. | Cleveland... | Democrat.... | 1893 | 55 | 4 | Presbyterian.... | June 24, 1908..... | 71 |
| 25.. | McKinley.. | Republican... | 1897 | 54 | 4 y. 6 mo. 10 d. | Methodist..... | September 14, 1901 | 58 |
| 26.. | Roosevelt... | Republican... | 1901 | 42 | 7 y. 5 mo. 18 d. | Reformed Dutch | January 6, 1919... | 61 |
| 27.. | Taft..... | Republican... | 1909 | 51 | 4 | Unitarian..... | ..... | .... |
| 28.. | Wilson..... | Democrat.... | 1913 | 56 | 8 | Presbyterian.... | ..... | .... |
| 29.. | Harding.... | Republican... | 1921 | 55 | ..... | Baptist..... | ..... | .... |

| No. | President. | Cause of Death. | Place of Death. | Place of Burial. |
|---|---|---|---|---|
| 1.. | Washington. | Laryngitis..... | Mount Vernon, Va... | Mount Vernon, Va. |
| 2.. | J. Adams... | Debility..... | Quincy, Mass..... | First Cong. Church, Quincy, Mass. |
| 3.. | Jefferson... | Chronic Diarrhœa..... | Monticello, Va..... | Monticello, Albemarle Co., Va. |
| 4.. | Madison.... | Debility..... | Montpelier, Va..... | Montpelier, Orange Co., Va. |
| 5.. | Monroe..... | Debility..... | New York City..... | Hollywood Cemetery, Richmond, Va. |
| 6.. | J. Q. Adams | Paralysis..... | Washington, D. C... | First Cong. Church, Quincy, Mass. |
| 7.. | Jackson.... | Consumption..... | Hermitage, Tenn.... | Hermitage, near Nashville, Tenn. |
| 8.. | Van Buren.. | Asthmatic Catarrh.... | Lindenwold, N. Y... | Cemetery, Kinderhook, N. Y. |
| 9.. | Harrison... | Bilious Pleurisy..... | Washington, D. C... | North Bend, Hamilton Co., O. |
| 10.. | Tyler..... | Bilious Attack..... | Richmond, Va..... | Hollywood Cemetery, Richmond, Va. |
| 11.. | Polk..... | Chronic Diarrhœa..... | Nashville, Tenn.... | Polk Place, Nashville, Tenn. |
| 12.. | Taylor..... | Bilious Fever..... | Washington, D. C... | Springfield, near Louisville, Ky. |
| 13.. | Fillmore.... | Debility..... | Buffalo, N. Y..... | Forest Lawn Cemetery, Buffalo, N. Y. |
| 14.. | Pierce..... | Inflammation of Stomach | Concord, N. H..... | Minot Lot, Old Cem., Concord, N. H. |
| 15.. | Buchanan.. | Rheumatic Gout..... | Wheatland, Pa..... | Woodward Hill Cem., Lancaster, Pa. |
| 16.. | Lincoln.... | Assassination..... | Washington, D. C... | Oak Ridge Cemetery, Springfield, Ill. |
| 17.. | Johnson.... | Paralysis..... | Carter's Depot, Tenn. | Greenville, Greene Co., Tenn. |
| 18.. | Grant..... | Cancer..... | Mt. McGregor, N. Y. | Riverside Park, New York City. |
| 19.. | Hayes..... | Paralysis of the Heart... | Fremont, O..... | Private ground, Fremont, O. |
| 20.. | Garfield.... | Assassination..... | Long Branch, N. J... | Lake View Cemetery, Cleveland, O. |
| 21 | Arthur..... | Bright's Disease..... | New York City..... | Rural Cemetery, Albany, N. Y. |
| 22,24.. | Cleveland... | Debility..... | Princeton, N. J..... | Cemetery, Princeton, N. J. |
| 23.. | B. Harrison. | Pneumonia..... | Indianapolis, Ind.... | Crown Hill Cem., Indianapolis, Ind. |
| 25.. | McKinley.. | Assassination..... | Buffalo, N. Y..... | Cemetery, Canton, O. |
| 26.. | Roosevelt.. | Rheumatism..... | Oyster Bay, N. Y.... | Cemetery, Oyster Bay, N. Y. |

NOTES TO THE TABLES OF THE PRESIDENTS ON FOREGOING PAGES.

*Monroe abandoned the profession of law when a young man, and was afterward, and until his election, always holding public office. †Jackson called himself a South Carolinian, and his biographer, Kendall, recorded his birthplace in Lancaster Co., S. C.; Jas. Parton has published evidence in a contention that Jackson was born in Union Co., N. C., less than a quarter mile from the South Carolina line. ‡Or of departure from college.

§Widows. Their maiden names are in parentheses. ¶ She was the divorced wife of Captain Robards. (*a*) The Democratic Party of to-day claims lineal descent from the first Republican Party, and President Jefferson as its founder. (*b*) Political parties were disorganized at the time of the election of John Quincy Adams. He claimed to be a Republican, but his doctrines were decidedly Federalistic. The opposition to his Administration took the name of Democrats, and elected Jackson President.

(*c*) Randall, the biographer of Jefferson, declares that he was a believer in Christianity, although not a sectarian. (*d*) While President Johnson was not a church member, he was a Christian believer. His wife was a Methodist.

Washington's first inauguration was in New York, and his second in Philadelphia. Adams was inaugurated in Philadelphia, and Jefferson and the Presidents following elected by the people, in the city of Washington. Arthur took the Presidential oath of office first in New York City. John Adams and Jefferson died on the same day, the Fourth of July, 1826, and Monroe died on the Fourth of July five years later. John Quincy Adams was a Representative and Andrew Johnson a Senator in Congress after the expiration of their Presidential terms, and both died while holding these offices. Tyler was a Representative in the Confederate Congress from Virginia, and died in office.

Lincoln, Garfield and McKinley were assassinated while in office. Lincoln at Ford's Theatre, Washington, D. C., April 14, 1865, from a pistol shot fired by John Wilkes Booth, who was killed near Fredericksburg, Va., April 26, 1865, by Sergeant Boston Corbett. Garfield was shot in the Pennsylvania Railroad Depot, Washington, D. C., July 2, 1881, and died at Elberon, Long Branch, N. J., September 19, 1881. The assassin was Charles Jules Guiteau, who was hanged at Washington, D. C., June 30, 1882. McKinley was shot twice September 6, 1901, while in the Temple of Music of the Pan-American Exposition, Buffalo, N. Y., and died from his wounds at the home of John G. Milburn, Buffalo, September 14, 1901. The assassin was Louis Czolgosz, who was electrocuted at Auburn State Prison, New York, October 29, 1901.

Jackson was shot at in the Capitol at Washington, D. C., January 29, 1835, by a house painter named Richard Lawrence, escaping because the pistol of the assassin missed fire. Ex-President Roosevelt was shot and wounded by John Schrank, an insane man, at Milwaukee, Wis., October 14, 1912.

Cleveland, after taking the oath as President, kissed the open Bible, his lips touching Psalm cxii., verses 5-10, inclusive. Garfield's first act after taking the oath was to kiss his mother.

The sixth President was the son of the second President, and the twenty-third President was the grandson of the ninth President. William Henry Harrison was the eighth and Benjamin Harrison the tenth in descent from Pocahontas and John Rolfe. Lincoln was the first President wearing a full beard. Grant the first wearing a mustache. Buchanan and Cleveland were bachelors when they entered the White House as Presidents, but Cleveland surrendered during his first term. Washington, Monroe, Pierce and Hayes were born on Friday, J. Q. Adams, Pierce and Garfield were inaugurated on Friday. Tyler, Polk and Pierce died on Friday. Lincoln was assassinated on Friday.

There were remarkable coincidences in the lives of Abraham Lincoln and Jefferson Davis. Both were born in Kentucky; Lincoln in 1809, Davis in 1808. Both removed from their native State in childhood, Lincoln to the Northwest, Davis to the Southwest. Lincoln was a Captain of Volunteers and Davis a Second Lieutenant of Regulars in the Black Hawk war of 1832. They began their political careers the same year, 1844, Lincoln being a Presidential Elector for Clay, and Davis for Polk. They were elected to Congress about the same time, 1845 and 1846. They were called to preside over their respective governments the same year and within a few days; Davis, February 8, 1861; Lincoln, March 4, 1861.

Washington, Monroe, and Jackson were soldiers in the Revolutionary war; Jackson, W. H. Harrison, Tyler, Taylor, and Buchanan in the war of 1812-15; Lincoln in the Black Hawk war; Taylor, Pierce, and Grant in the Mexican war; Grant, Hayes, Garfield, Arthur, B. Harrison, and McKinley in the Civil War, and Roosevelt was in the war with Spain. Adams and Jefferson were signers of the Declaration of Independence, and Washington and Madison of the Constitution.

Grant was christened Hiram Ulysses and Cleveland Stephen Grover. W. H. Harrison was the oldest man elected to the Presidency, and Roosevelt the youngest, Grant being the next youngest by six months. Cleveland was the only President married in the White House, and his second daughter the only President's child born therein. Monroe's daughter (Mrs. Gouverneur), Tyler's daughter (Mrs. Waller), Grant's daughter (Mrs. Sartoris), Roosevelt's daughter (Mrs. Longworth) and Wilson's daughters, Jessie (Mrs. Sayre) and Eleanor (Mrs. McAdoo) were the only children of Presidents married therein. Wives of Tyler, Benjamin Harrison, and Wilson died in the White House. John Tyler was father of the largest family, eight sons and six daughters. Eight Presidents: Washington, Jefferson, Madison, Monroe, W. H. Harrison, Tyler, Taylor, and Wilson, were Virginians by birth. Six Presidents: Grant, Hayes, Garfield, B. Harrison, McKinley, and Taft, were Ohioans by birth.

## VICE-PRESIDENTS OF THE UNITED STATES.

| | Name. | Birthplace. | Yr. | Residence. | Qualified | Politics. | Place of Death. | Yr. | Age at D'th |
|---|---|---|---|---|---|---|---|---|---|
| 1 | John Adams | Quincy, Mass | 1735 | Mass. | 1789 | Fed | Quincy, Mass | 1826 | 90 |
| 2 | Thomas Jefferson | Shadwell, Va | 1743 | Va | 1797 | Rep | Mintlcello, Va | 1826 | 83 |
| 3 | Aaron Burr | Newark, N. J | 1756 | N. Y. | 1801 | Rep | Staten Island, N. Y | 1836 | 80 |
| 4 | George Clinton | Ulster Co., N. Y | 1739 | N. Y. | 1805 | Rep | Washington, D. C | 1812 | 73 |
| 5 | Elbridge Gerry | Marblehead, Mass | 1744 | Mass. | 1813 | Rep | Washington, D. C | 1814 | 70 |
| 6 | Daniel D. Tompkins | Scarsdale, N. Y | 1774 | N. Y. | 1817 | Rep | Staten Island, N. Y | 1825 | 51 |
| 7 | John C. Calhoun | Abbeville, S. C | 1782 | S. C. | 1825 | Rep | Washington, D. C | 1850 | 68 |
| 8 | Martin Van Buren | Kinderhook, N. Y | 1782 | N. Y. | 1833 | Dem | Kinderhook, N. Y | 1862 | 79 |
| 9 | Richard M. Johnson | Louisville, Ky | 1780 | Ky | 1837 | Dem | Frankfort, Ky | 1850 | 70 |
| 10 | John Tyler | Greenway, Va | 1790 | Va | 1841 | Dem | Richmond, Va | 1862 | 72 |
| 11 | George M. Dallas | Philadelphia, Pa | 1792 | Pa | 1845 | Dem | Philadelphia, Pa | 1864 | 72 |
| 12 | Millard Fillmore | Summerhill, N. Y | 1800 | N. Y. | 1849 | Whig | Buffalo, N. Y | 1874 | 74 |
| 13 | William R. King | Sampson Co., N. C | 1786 | Ala | 1853 | Dem | Dallas Co., Ala | 1853 | 67 |
| 14 | John C. Breckinridge | Lexington, Ky | 1821 | Ky | 1857 | Dem | Lexington, Ky | 1875 | 54 |
| 15 | Hannibal Hamlin | Paris, Me | 1809 | Me | 1861 | Rep | Bangor, Me | 1891 | 81 |
| 16 | Andrew Johnson | Raleigh, N. C | 1808 | Tenn | 1865 | Rep | Carter Co., Tenn | 1875 | 66 |
| 17 | Schuyler Coltax | New York City, N. Y | 1823 | Ind | 1869 | Rep | Mankato, Minn | 1885 | 62 |
| 18 | Henry Wilson | Farmington, N. H | 1812 | Mass. | 1873 | Rep | Washington, D. C | 1875 | 63 |
| 19 | William A. Wheeler | Malone, N. Y | 1819 | N. Y. | 1877 | Rep | Malone, N. Y | 1887 | 68 |
| 20 | Chester A. Arthur | Fairfield, Vt | 1830 | N. Y. | 1881 | Rep | New York City, N. Y | 1886 | 56 |
| 21 | Thos. A. Hendricks | Muskingum Co., Ohio | 1819 | Ind | 1885 | Dem | Indianapolis, Ind | 1885 | 66 |
| 22 | Levi P. Morton | Shoreham, Vt | 1824 | N. Y. | 1889 | Rep | Rhinebeck, N. Y | 1920 | 96 |
| 23 | Adlai E. Stevenson | Christian Co., Ky | 1835 | Ill | 1893 | Dem | Chicago, Ill | 1914 | 78 |
| 24 | Garrett A. Hobart | Long Branch, N. J | 1844 | N. J. | 1897 | Rep | Paterson, N. J | 1899 | 55 |
| 25 | Theodore Roosevelt | New York City, N. Y | 1858 | N. Y. | 1901 | Rep | Oyster Bay, N. Y | 1919 | 61 |
| 26 | Chas. W. Fairbanks | Unionville Centre, Ohio | 1852 | Ind | 1905 | Rep | Indianapolis, Ind | 1918 | 66 |
| 27 | James S. Sherman | Utica, N. Y | 1855 | N. Y. | 1909 | Rep | Utica, N. Y | 1912 | 57 |
| 28 | Thos. R. Marshall | No. Manchester, Ind | 1854 | Ind | 1913 | Dem | | | |
| 29 | Calvin Coolidge | Plymouth, Vt | 1872 | Mass. | 1921 | Rep | | | |

## JUSTICES OF THE UNITED STATES SUPREME COURT.

(Chief Justices are in italics.)

| NAME. | SERVICE. Term. | Yrs | Born. | Died. | NAME. | SERVICE. Term. | Yrs | Born. | Died. |
|---|---|---|---|---|---|---|---|---|---|
| *John Jay*, N. Y. | 1789–1795 | 6 | 1745 | 1829 | Samuel F. Miller, Iowa | 1862–1890 | 28 | 1816 | 1890 |
| John Rutledge, S. C. | 1789–1791 | 2 | 1739 | 1800 | David Davis, Ill. | 1862–1877 | 15 | 1815 | 1886 |
| William Cushing, Mass. | 1789–1810 | 21 | 1733 | 1810 | Stephen J. Field, Cal. | 1863–1897 | 34 | 1816 | 1899 |
| James Wilson, Pa. | 1789–1798 | 9 | 1742 | 1798 | *Salmon P. Chase*, Ohio | 1864–1873 | 9 | 1808 | 1873 |
| John Blair, Va. | 1789–1796 | 7 | 1732 | 1800 | William Strong, Pa. | 1870–1880 | 10 | 1808 | 1895 |
| Robert H. Harrison, Md. | 1789–1790 | 1 | 1745 | 1790 | Joseph P. Bradley, N. J. | 1870–1892 | 22 | 1813 | 1892 |
| James Iredell, N. C. | 1790–1799 | 9 | 1751 | 1799 | Ward Hunt, N. Y. | 1872–1882 | 10 | 1811 | 1886 |
| Thomas Johnson, Md. | 1791–1793 | 2 | 1732 | 1819 | *Morrison R. Waite*, Ohio | 1874–1888 | 14 | 1816 | 1888 |
| William Paterson, N. J. | 1793–1806 | 13 | 1745 | 1806 | John M. Harlan, Ky. | 1877–1911 | 34 | 1833 | 1911 |
| *John Rutledge*, S. C. | 1795–1795 | .. | 1739 | 1800 | William B. Woods, Ga. | 1880–1887 | 7 | 1824 | 1887 |
| Samuel Chase, Md. | 1796–1811 | 15 | 1741 | 1811 | Stanley Matthews, Ohio | 1881–1889 | 8 | 1824 | 1889 |
| *Oliver Ellsworth*, Conn. | 1796–1800 | 4 | 1745 | 1807 | Horace Gray, Mass. | 1881–1902 | 21 | 1828 | 1902 |
| Bushrod Washington, Va. | 1798–1829 | 31 | 1762 | 1829 | Samuel Blatchford, N. Y. | 1882–1893 | 11 | 1820 | 1893 |
| Alfred Moore, N. C. | 1799–1804 | 5 | 1755 | 1810 | Lucius Q. C. Lamar, Miss. | 1888–1893 | 5 | 1825 | 1893 |
| *John Marshall*, Va. | 1801–1835 | 34 | 1755 | 1835 | *Melville W. Fuller*, Ill. | 1888–1910 | 22 | 1833 | 1910 |
| William Johnson, S. C. | 1804–1834 | 30 | 1771 | 1834 | David J. Brewer, Kan. | 1889–1910 | 21 | 1837 | 1910 |
| Brock. Livingston, N. Y. | 1806–1823 | 17 | 1757 | 1823 | Henry B. Brown, Mich. | 1890–1906 | 16 | 1836 | 1913 |
| Thomas Todd, Ky. | 1807–1826 | 19 | 1765 | 1826 | George Shiras, Jr., Pa. | 1892–1903 | 11 | 1832 | .... |
| Joseph Story, Mass. | 1811–1845 | 34 | 1779 | 1845 | Howell E. Jackson, Tenn. | 1893–1895 | 2 | 1832 | 1895 |
| Gabriel Duval, Md. | 1811–1836 | 25 | 1752 | 1844 | Edward D. White, La. | 1894–1910 | 16 | 1845 | .... |
| Smith Thompson, N. Y. | 1823–1843 | 20 | 1767 | 1843 | Rufus W. Peckham, N. Y. | 1895–1909 | 14 | 1838 | 1909 |
| Robert Trimble, Ky. | 1826–1828 | 2 | 1777 | 1828 | Joseph McKenna, Cal. | 1898– | ... | 1843 | .... |
| John McLean, Ohio | 1829–1861 | 32 | 1785 | 1861 | Oliver W. Holmes, Mass. | 1902– | ... | 1841 | .... |
| Henry Baldwin, Pa. | 1830–1846 | 16 | 1779 | 1844 | William R. Day, Ohio | 1903–1922 | ... | 1849 | .... |
| James M. Wayne, Ga. | 1835–1867 | 32 | 1790 | 1867 | William H. Moody, Mass. | 1906–1910 | 4 | 1853 | 1917 |
| *Roger B. Taney*, Md. | 1836–1864 | 28 | 1777 | 1864 | Horace H. Lurton, Tenn. | 1909–1914 | 5 | 1844 | 1914 |
| Philip P. Barbour, Va. | 1836–1841 | 5 | 1783 | 1841 | Charles E. Hughes, N. Y. | 1910–1916 | 6 | 1862 | .... |
| John Catron, Tenn. | 1837–1865 | 28 | 1786 | 1865 | Willis Van Devanter, Wyo. | 1910– | ... | 1859 | .... |
| John McKinley, Ala. | 1837–1852 | 15 | 1780 | 1852 | Joseph R. Lamar, Ga. | 1910–1916 | 6 | 1857 | 1916 |
| Peter V. Daniel, Va. | 1841–1860 | 19 | 1784 | 1860 | *Edward D. White*, La. | 1910–1921 | 11 | 1845 | 1921 |
| Samuel Nelson, N. Y. | 1845–1872 | 27 | 1792 | 1873 | Manlon Pitney, N. J. | 1912– | ... | 1858 | .... |
| Levi Woodbury, N. H. | 1845–1851 | 6 | 1789 | 1851 | Jas. C. McReynolds, Tenn. | 1914– | ... | 1862 | .... |
| Robert C. Grier, Pa. | 1846–1870 | 24 | 1794 | 1870 | Louis D. Brandeis, Mass. | 1916– | ... | 1856 | .... |
| Benj. R. Curtis, Mass. | 1851–1857 | 6 | 1809 | 1874 | John H. Clarke, Ohio | 1916–1922 | ... | 1857 | .... |
| John A. Campbell, Ala. | 1853–1861 | 8 | 1811 | 1889 | *William H. Taft*, Conn. | 1921– | ... | 1857 | .... |
| Nathan Clifford, Me. | 1858–1881 | 23 | 1803 | 1881 | George Sutherland, Utah. | 1922– | ... | 1862 | .... |
| Noah H. Swayne, Ohio | 1861–1881 | 20 | 1804 | 1884 | | | | | |

## SPEAKERS OF THE HOUSE OF REPRESENTATIVES.

| NAME. | State. | Time. | NAME. | State. | Time. | NAME. | State. | Time. |
|---|---|---|---|---|---|---|---|---|
| F. A. Muhlenburg | Pa. | 1789-1791 | And. Stephenson | Va. | 1827-1834 | Schuyler Colfax | Ind. | 1863-1869 |
| J. Trumbell | Ct. | 1791-1793 | John Bell | Tenn. | 1834-1835 | James G. Blaine | Me. | 1869-1875 |
| F. A. Muhlenburg | Pa. | 1793-1795 | James K. Polk | Tenn. | 1835-1839 | Michael C. Kerr | Ind. | 1875-1876 |
| Jonathan Dayton | N. J. | 1795-1799 | R. M. T. Hunter | Va. | 1839-1841 | Samuel J. Randall | Pa. | 1876-1881 |
| Theo. Sedgwick | Mass. | 1799-1801 | John White | Ky. | 1841-1843 | Joseph W. Keifer | Ohio | 1881-1883 |
| Nathaniel Macon | N. C. | 1801-1807 | John W. Jones | Va. | 1843-1845 | John G. Carlisle | Ky. | 1883-1889 |
| Joseph B. Varnum | Mass. | 1807-1811 | John W. Davis | Ind. | 1845-1847 | Thomas B. Reed | Me. | 1889-1891 |
| Henry Clay | Ky. | 1811-1814 | R. C. Winthrop | Mass. | 1847-1849 | Charles F. Crisp | Ga. | 1891-1895 |
| Langdon Cheves | S. C. | 1814-1815 | Howell Cobb | Ga. | 1849-1851 | Thomas B. Reed | Me. | 1895-1899 |
| Henry Clay | Ky. | 1815-1820 | Linn Boyd | Ky. | 1851-1855 | D. B. Henderson | Ia. | 1899-1903 |
| John W. Taylor | N. Y. | 1820-1821 | N. P. Banks | Mass. | 1856-1857 | Joseph G. Cannon | Ill. | 1903-1910 |
| Philip P. Barbour | Va. | 1821-1823 | James L. Orr | S. C. | 1857-1859 | Champ Clark | Mo. | 1911-1919 |
| Henry Clay | Ky. | 1823-1825 | Wm. Pennington | N. J. | 1860-1861 | Fred'k H. Gillett | Mass. | 1919 |
| John W. Taylor | N. Y. | 1825-1827 | Galusha A. Grow | Pa. | 1861-1863 | | | |

Dayton of New Jersey presided over the 4th and 5th Congresses, Macon of North Carolina, the 7th, 8th and 9th; Varnum of Massachusetts, 10th and 11th; Henry Clay of Kentucky, 12th, 13th, 14th, 15th, 16th and 18th; Taylor of New York, 16th and 19th; Stephenson of Virginia, 20th, 21st, 22d and 23d; Polk of Tennessee, 24th and 25th; Reed of Maine, 51st, 54th and 55th; Henderson of Iowa, 56th and 57th; Cannon of Illinois, 58th, 59th, 60th and 61st, and Champ Clark of Missouri, 62d, 63d, 64th and 65th.

## SECRETARIES OF STATE.

| PRESIDENTS. | Cabinet Officers. | Residences. | Date Appointed. | PRESIDENTS. | Cabinet Officers. | Residences. | Date Appointed. |
|---|---|---|---|---|---|---|---|
| Washington | John Jay | N. Y. | .... | Buchanan | Jeremiah S. Black | Pa. | 1860 |
| " | Thomas Jefferson | Va. | 1789 | Lincoln | William H. Seward | N. Y. | 1861 |
| " | Edmund Randolph | " | 1794 | Johnson | " | " | 1865 |
| " | Timothy Pickering | Mass. | 1795 | Grant | Elihu B. Washburn | Ill. | 1869 |
| Adams | " | " | 1797 | " | Hamilton Fish | N. Y. | 1869 |
| " | John Marshall | Va. | 1800 | Hayes | William M. Evarts | " | 1877 |
| Jefferson | James Madison | " | 1801 | Garfield | James G. Blaine | Me. | 1881 |
| Madison | Robert Smith | Md. | 1809 | Arthur | " | " | 1881 |
| " | James Monroe | Va. | 1811 | " | F. T. Frelinghuysen | N. J. | 1881 |
| Monroe | John Quincy Adams | Mass. | 1817 | Cleveland | Thomas F. Bayard | Del. | 1885 |
| J. Q. Adams | Henry Clay | Ky. | 1825 | B. Harrison | James G. Blaine | Me. | 1889 |
| Jackson | Martin Van Buren | N. Y. | 1829 | " | John W. Foster | Ind. | 1892 |
| " | Edward Livingston | La. | 1831 | Cleveland | Walter Q. Gresham | Ill. | 1893 |
| " | Louis McLane | Del. | 1833 | " | Richard Olney | Mass. | 1895 |
| " | John Forsyth | Ga. | 1834 | McKinley | John Sherman | Ohio | 1897 |
| Van Buren | " | " | 1837 | " | William R. Day | " | 1898 |
| Harrison | Daniel Webster | Mass. | 1841 | " | John Hay | " | 1898 |
| Tyler | Hugh S. Legaré | S. C. | 1843 | Roosevelt | " | " | 1901 |
| " | Abel P. Upshur | Va. | 1843 | " | Elihu Root | N. Y. | 1905 |
| " | John C. Calhoun | S. C. | 1844 | " | Robert Bacon | " | 1909 |
| Polk | James Buchanan | Pa. | 1845 | Taft | Philander C. Knox | Pa. | 1909 |
| Taylor | John M. Clayton | Del. | 1849 | Wilson | William J. Bryan | Neb. | 1913 |
| Fillmore | Daniel Webster | Mass. | 1850 | " | Robert Lansing | N. Y. | 1915 |
| " | Edward Everett | " | 1852 | " | Bainbridge Colby | " | 1920 |
| Pierce | William L. Marcy | N. Y. | 1853 | Harding | Charles E. Hughes | " | 1921 |
| Buchanan | Lewis Cass | Mich. | 1857 | | | | |

NOTE—John Jay was Secretary for Foreign Affairs under the Confederation, and continued to act at the request of Washington, until Jefferson's arrival, March 21, 1790.

## SECRETARIES OF THE TREASURY.

| PRESIDENTS. | Cabinet Officers. | Residences. | Date Appointed. |
|---|---|---|---|
| Washington. | Alexander Hamilton | N. Y. | 1789 |
| " | Oliver Wolcott jr. | Ct. | 1795 |
| Adams | " " | " | 1797 |
| " | Samuel Dexter | Mass. | 1801 |
| Jefferson | " " | " | 1801 |
| " | Albert Gallatin | Pa. | 1801 |
| Madison | " " | " | 1809 |
| " | George W. Campbell | Tenn. | 1814 |
| " | Alexander J. Dallas | Pa. | 1814 |
| " | William H. Crawford | Ga. | 1816 |
| Monroe | " " | " | 1817 |
| J. Q. Adams. | Richard Rush | Pa. | 1825 |
| Jackson | Samuel D. Ingham | " | 1829 |
| " | Louis McLane | Del. | 1831 |
| " | William J. Duane | Pa. | 1833 |
| " | Roger B. Taney | Md. | 1833 |
| " | Levi Woodbury | N. H. | 1834 |
| Van Buren | " " | " | 1837 |
| Harrison | Thomas Ewing | Ohio. | 1841 |
| Tyler | " " | " | 1841 |
| " | Walter Forward | Pa. | 1841 |
| " | John C. Spencer | N. Y. | 1843 |
| " | George M. Bibb | Ky. | 1844 |
| Polk | Robert J. Walker | Miss. | 1845 |
| Taylor | William M. Meredith | Pa. | 1849 |
| Fillmore | Thomas Corwin | Ohio. | 1850 |
| Pierce | James Guthrie | Ky. | 1853 |
| Buchanan | Howell Cobb | Ga. | 1857 |
| " | Philip F. Thomas | Md. | 1860 |
| Buchanan | John A. Dix | N. Y. | 1861 |
| Lincoln | Salmon P. Chase | Ohio. | 1861 |
| " | William P Fessenden | Me. | 1864 |
| " | Hugh McCulloch | Ind. | 1865 |
| Johnson | " " | " | 1865 |
| Grant | George S. Boutwell | Mass. | 1869 |
| " | Wm. A. Richardson | " | 1873 |
| " | Benjamin H. Bristow | Ky. | 1874 |
| " | Lot M. Morrill | Me. | 1876 |
| Hayes | John Sherman | Ohio. | 1877 |
| Garfield | William Windom | Minn. | 1881 |
| Arthur | " " | " | 1881 |
| " | Charles J. Folger | N. Y. | 1881 |
| " | Walter Q. Gresham | Ind. | 1884 |
| " | Hugh McCulloch | " | 1884 |
| Cleveland | Daniel Manning | N. Y. | 1885 |
| " | Charles S. Fairchild | " | 1887 |
| B. Harrison. | William Windom | Minn. | 1889 |
| " | Charles Foster | Ohio. | 1891 |
| Cleveland | John G. Carlisle | Ky. | 1893 |
| McKinley | Lyman J. Gage | Ill. | 1897 |
| Roosevelt | " " | " | 1901 |
| " | Leslie M. Shaw | Ia. | 1902 |
| " | George B. Cortelyou | N. Y. | 1907 |
| Taft | Franklin MacVeagh | Ill. | 1909 |
| Wilson | William G. McAdoo | N. Y. | 1913 |
| " | Carter Glass | Va. | 1919 |
| " | David F. Houston | Mo. | 1920 |
| Harding | Andrew W. Mellon | Pa. | 1921 |

## SECRETARIES OF WAR.

| | | | |
|---|---|---|---|
| Washington. | Henry Knox | Mass. | 1789 |
| " | Timothy Pickering | " | 1795 |
| " | James McHenry | Md. | 1796 |
| Adams | " " | " | 1797 |
| " | Samuel Dexter | Mass. | 1800 |
| Jefferson | Henry Dearborn | " | 1801 |
| Madison | William Eustis | " | 1809 |
| " | John Armstrong | N. Y. | 1813 |
| " | James Monroe | Va. | 1814 |
| " | William H. Crawford | Ga. | 1815 |
| Monroe | Geo. Graham (*ad. in*) | Va. | 1817 |
| " | John C. Calhoun | S. C. | 1817 |
| J. Q. Adams. | James Barbour | Va. | 1825 |
| " | Peter B. Porter | N. Y. | 1828 |
| Jackson | John H. Eaton | Tenn. | 1829 |
| " | Lewis Cass | Ohio. | 1831 |
| " | Benjamin F. Butler | N. Y. | 1837 |
| Van Buren. | Joel R. Poinsett | S. C. | 1837 |
| Harrison | John Bell† | Tenn. | 1841 |
| Tyler | John C. Spencer | N. Y. | 1841 |
| " | James M. Porter | Pa. | 1843 |
| " | William Wilkins | " | 1844 |
| Polk | William L. Marcy | N. Y. | 1845 |
| Taylor | George W. Crawford | Ga. | 1849 |
| Fillmore | Charles M. Conrad | La. | 1850 |
| Pierce | Jefferson Davis | Miss. | 1853 |
| Buchanan | John B. Floyd | Va. | 1857 |
| " | Joseph Holt | Ky. | 1861 |
| Lincoln | Simon Cameron | Pa. | 1861 |
| " | Edwin M. Stanton | " | 1862 |
| Johnson | U. S. Grant (*ad. in*) | Ill. | 1867 |
| " | John M. Schofield | " | 1868 |
| Grant | John A. Rawlins | " | 1869 |
| " | William T. Sherman | Ohio. | 1869 |
| " | William W. Belknap | Ia. | 1869 |
| " | Alphonso Taft | Ohio. | 1876 |
| " | James Don. Cameron | Pa. | 1876 |
| Hayes | George W. McCrary | Ia. | 1877 |
| " | Alexander Ramsey | Minn. | 1879 |
| Garfield | Robert T. Lincoln | Ill. | 1881 |
| Arthur | " " | " | 1881 |
| Cleveland | William C. Endicott | Mass. | 1885 |
| B. Harrison. | Redfield Proctor | Vt. | 1889 |
| " | Stephen B. Elkins | W. Va. | 1891 |
| Cleveland | Daniel S. Lamont | N. Y. | 1893 |
| McKinley | Russell A. Alger | Mich. | 1897 |
| " | Elihu Root | N. Y. | 1899 |
| Roosevelt | " " | " | 1901 |
| " | William H. Taft | Ohio. | 1904 |
| " | Luke E. Wright | Tenn. | 1908 |
| Taft | Jacob M. Dickinson | " | 1909 |
| " | Henry L. Stimson | N. Y. | 1911 |
| Wilson | Lindley M. Garrison | N. J. | 1913 |
| " | Newton D. Baker | Ohio. | 1916 |
| Harding | John W. Weeks | Mass. | 1921 |

Stanton continued also in Johnson's Cabinet.

## ATTORNEYS-GENERAL.

| | | | |
|---|---|---|---|
| Washington. | Edmund Randolph | Va. | 1789 |
| " | William Bradford | Pa. | 1794 |
| " | Charles Lee | Va. | 1795 |
| Adams | " " | " | 1797 |
| Jefferson | Levi Lincoln | Mass. | 1801 |
| " | John Breckinridge | Ky. | 1805 |
| " | Cæsar A. Rodney | Del. | 1807 |
| Madison | " " | " | 1809 |
| " | William Pinkney | Md. | 1811 |
| " | Richard Rush | Pa. | 1814 |
| Monroe | " " | " | 1817 |
| " | William Wirt | Va. | 1817 |
| J. Q. Adams. | William Wirt | Va. | 1825 |
| Jackson | John McP. Berrien | Ga. | 1829 |
| " | Roger B. Taney | Md. | 1831 |
| " | Benjamin F. Butler | N. Y. | 1833 |
| Van Buren. | " " | " | 1837 |
| " | Felix Grundy | Tenn. | 1838 |
| " | Henry D. Gilpin | Pa. | 1840 |
| Harrison | John J. Crittenden | Ky. | 1841 |
| Tyler | " " | " | 1841 |
| " | Hugh S. Legare | S. C. | 1841 |
| " | John Nelson | Md. | 1843 |
| Polk | John Y. Mason | Va. | 1845 |
| " | Nathan Clifford | Me. | 1846 |
| " | Isaac Toucey | Ct. | 1848 |
| Taylor | Reverdy Johnson | Md. | 1849 |
| Fillmore | John J. Crittenden | Ky. | 1850 |
| Pierce | Caleb Cushing | Mass. | 1853 |
| Buchanan | Jeremiah S. Black | Pa. | 1857 |
| Buchanan | Edwin M. Stanton | Pa. | 1860 |
| Lincoln | Edward Bates | Mo. | 1861 |
| " | James Speed | Ky. | 1864 |
| Johnson | " " | " | 1865 |
| " | Henry Stanbery | Ohio. | 1866 |
| " | William M. Evarts | N. Y. | 1868 |
| Grant | Ebenezer R. Hoar | Mass. | 1869 |
| " | Amos T. Akerman | Ga. | 1870 |
| " | George H. Williams | Ore. | 1871 |
| " | Edwards Pierrepont | N. Y. | 1875 |
| " | Alphonso Taft | Ohio. | 1876 |
| Hayes | Charles Devens | Mass. | 1877 |
| Garfield | Wayne MacVeagh | Pa. | 1881 |
| Arthur | " " | " | 1881 |
| " | Benjamin H. Brewster | " | 1881 |
| Cleveland | Augustus H. Garland | Ark. | 1885 |
| B. Harrison. | William H. H. Miller | Ind. | 1889 |
| Cleveland | Richard Olney | Mass. | 1893 |
| " | Judson Harmon | Ohio. | 1895 |
| McKinley | Joseph McKenna | Cal. | 1897 |
| " | John W. Griggs | N. J. | 1898 |
| " | Philander C. Knox | Pa. | 1901 |
| Roosevelt | " " | " | 1901 |
| " | William H. Moody | Mass. | 1904 |
| " | Charles J. Bonaparte | Md. | 1906 |
| Taft | Geo. W. Wickersham | N. Y. | 1909 |
| Wilson | James C. McReynolds | Tenn. | 1913 |
| " | Thomas W. Gregory | Texas. | 1914 |
| " | A. M. Palmer | Penn. | 1919 |
| Harding | Harry M. Daugherty | Ohio. | 1921 |

## POSTMASTERS-GENERAL.

| PRESIDENTS. | Cabinet Officers. | Residences. | Date Appointed. | PRESIDENTS. | Cabinet Officers. | Residences. | Date Appointed. |
|---|---|---|---|---|---|---|---|
| Washington. | Samuel Osgood | Mass. | 1789 | Johnson | Alexander W. Randall | Wis. | 1866 |
| " | Timothy Pickering | " | 1791 | Grant | John A. J. Creswell | Md. | 1869 |
| " | Joseph Habersham | Ga. | 1795 | " | James W. Marshall | Va. | 1874 |
| Adams. | " | " | 1797 | " | Marshall Jewell | Ct. | 1874 |
| Jefferson | " | " | 1801 | " | James N. Tyner | Ind. | 1876 |
| " | Gideon Granger | Ct. | 1801 | Hayes | David McK. Key | Tenn. | 1877 |
| Madison | " | " | 1809 | " | Horace Maynard | " | 1880 |
| " | Return J. Meigs jr. | Ohio. | 1814 | Garfield | Thomas L. James | N. Y. | 1881 |
| Monroe | " | " | 1817 | Arthur | " | " | 1881 |
| " | John McLean | " | 1823 | " | Timothy O. Howe | Wis. | 1881 |
| J. Q. Adams. | " | " | 1825 | " | Walter Q. Gresham | Ind. | 1883 |
| Jackson | William T. Barry | Ky. | 1829 | " | Frank Hatton | Ia. | 1884 |
| " | Amos Kendall | " | 1835 | Cleveland | William F. Vilas | Wis. | 1885 |
| Van Buren. | " | " | 1837 | " | Don M. Dickinson | Mich. | 1888 |
| " | John M. Niles | Ct. | 1840 | B. Harrison. | John Wanamaker | Pa. | 1889 |
| Harrison | Francis Granger | N. Y. | 1841 | Cleveland | Wilson S. Bissel | N. Y. | 1893 |
| Tyler | " | " | 1841 | " | William L. Wilson | W. Va. | 1895 |
| " | Charles A. Wickliffe | Ky. | 1841 | McKinley | James A. Gary | Md. | 1897 |
| Polk | Cave Johnson | Tenn. | 1845 | " | Charles Emory Smith | Pa. | 1898 |
| Taylor | Jacob Collamer | Vt. | 1849 | Roosevelt | " | " | 1901 |
| Fillmore | Nathan K. Hall | N. Y. | 1850 | " | Henry C. Payne | Wis. | 1902 |
| " | Samuel D. Hubbard | Ct. | 1852 | " | Robert J. Wynne | Pa. | 1904 |
| Pierce. | James Campbell | Pa. | 1853 | " | George B. Cortelyou | N. Y. | 1905 |
| Buchanan | Aaron V. Brown | Tenn. | 1857 | " | George von L. Meyer | Mass. | 1907 |
| " | Joseph Holt | Ky. | 1859 | Taft. | Frank H. Hitchcock | " | 1909 |
| " | Horatio King | Me. | 1861 | Wilson | Albert S. Burleson | Tex. | 1913 |
| Lincoln. | Montgomery Blair | Md. | 1861 | Harding | Will H. Hays | Ind. | 1921 |
| " | William Dennison | Ohio. | 1864 | " | Hubert Work | " | 1922 |
| Johnson | William Dennison | Ohio. | 1865 | | | | |

The Postmaster General was not considered a Cabinet officer until 1829.

## SECRETARIES OF THE NAVY.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Adams. | Benjamin Stoddert | Md. | 1798 | Fillmore | John P. Kennedy | Md. | 1852 |
| Jefferson | " | " | 1801 | Pierce | James C. Dobbin | N. C. | 1853 |
| " | Robert Smith | " | 1801 | Buchanan | Isaac Toucey | Ct. | 1857 |
| Madison | Paul Hamilton | S. C. | 1809 | Lincoln | Gideon Welles | " | 1861 |
| " | William Jones | Pa. | 1813 | Johnson | " | " | 1865 |
| " | B. W. Crowninshield | Mass. | 1814 | Grant | Adolph E. Borie | Pa. | 1869 |
| Monroe | " | " | 1817 | " | George M. Robeson | N. J. | 1869 |
| " | Smith Thompson | N. Y. | 1818 | Hayes | Richard W. Thompson | Ind. | 1877 |
| " | Samuel L. Southard | N. J. | 1823 | " | Nathan Goff jr. | W. Va. | 1881 |
| J. Q. Adams. | " | " | 1825 | Garfield | William H. Hunt | La. | 1881 |
| Jackson | John Branch | N. C. | 1829 | Arthur | " | " | 1881 |
| " | Levi Woodbury | N. H. | 1831 | " | William E. Chandler | N. H. | 1882 |
| " | Mahlon Dickerson | N. J. | 1834 | Cleveland | William C. Whitney | N. Y. | 1885 |
| Van Buren. | " | " | 1837 | B. Harrison | Benjamin F. Tracy | " | 1889 |
| " | James K. Paulding | N. Y. | 1838 | Cleveland | Hilary A. Herbert | Ala. | 1893 |
| Harrison | George E. Badger | N. C. | 1841 | McKinley | John D. Long | Mass. | 1897 |
| Tyler | " | " | 1841 | Roosevelt | " | " | 1901 |
| " | Abel P. Upshur | Va. | 1841 | " | William H. Moody | " | 1902 |
| " | David Henshaw | Mass. | 1843 | " | Paul Morton | Ill. | 1904 |
| " | Thomas W. Gilmer | Va. | 1844 | " | Charles J Bonaparte | Md. | 1905 |
| " | John Y. Mason | " | 1844 | " | Victor H. Metcalf | Cal. | 1906 |
| Polk | George Bancroft | Mass. | 1845 | " | Truman H. Newberry | Mich. | 1908 |
| " | John Y. Mason | Va. | 1846 | Taft | George von L. Meyer | Mass. | 1909 |
| Taylor | William B. Preston | " | 1849 | Wilson | Josephus Daniels | N. C. | 1913 |
| Fillmore | William A. Graham | N. C. | 1850 | Harding | Edwin Denby | Mich. | 1921 |

## SECRETARIES OF THE INTERIOR.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Taylor | Thomas Ewing | Ohio. | 1849 | Arthur | Henry M. Teller | Col. | 1882 |
| Fillmore | Thos. M. T. McKennan | Pa. | 1850 | Cleveland | Lucius Q. C. Lamar | Miss. | 1885 |
| " | Alexander H. H. Stuart | Va. | 1850 | " | William F. Vilas | Wis. | 1888 |
| Pierce. | Robert McClelland | Mich. | 1853 | B. Harrison | John W. Noble | Mo. | 1889 |
| Buchanan | Jacob Thompson | Miss. | 1857 | Cleveland | Hoke Smith | Ga. | 1893 |
| Lincoln. | Caleb B. Smith | Ind. | 1861 | " | David R. Francis | Mo. | 1896 |
| " | John P. Usher | " | 1863 | McKinley | Cornelius N. Bliss | N. Y. | 1897 |
| Johnson | " | " | 1865 | " | Ethan A. Hitchcock | Mo. | 1898 |
| " | James Harlan | Iowa. | 1865 | Roosevelt | " | " | 1901 |
| " | Orville H. Browning | Ill. | 1866 | " | James R. Garfield | Ohio. | 1907 |
| Grant | Jacob D. Cox | Ohio. | 1869 | Taft | Richard A. Ballinger | Wash. | 1909 |
| " | Columbus Delano | " | 1870 | " | Walter L. Fisher | Ill. | 1911 |
| " | Zachariah Chandler | Mich. | 1875 | Wilson | Franklin K. Lane | Cal. | 1913 |
| Hayes. | Carl Schurz | Mo. | 1877 | " | John B. Payne | Va. | 1920 |
| Garfield | Samuel J. Kirkwood | Iowa. | 1881 | Harding | Albert B. Fall | N. M. | 1921 |
| Arthur | Samuel J. Kirkwood | Iowa. | 1881 | | | | |

## SECRETARIES OF AGRICULTURE.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cleveland | Norman J. Colman | Mo. | 1889 | Taft | James Wilson | Ia. | 1909 |
| B. Harrison | Jeremiah M. Rusk | Wis. | 1889 | Wilson | David F. Houston | Mo. | 1913 |
| Cleveland | J. Sterling Morton | Neb. | 1893 | " | Edw. T. Meredith | Ia. | 1920 |
| McKinley | James L. Wilson | Ia. | 1897 | Harding | Henry C. Wallace | " | 1921 |
| Roosevelt | James Wilson | Ia. | 1901 | | | | |

## SECRETARIES OF COMMERCE AND LABOR.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Roosevelt | George B. Cortelyou | N. Y. | 1903 | Roosevelt | Oscar S. Straus | N. Y. | 1906 |
| " | Victor H. Metcalf | Cal. | 1904 | Taft | Charles Nagel | Mo. | 1909 |

Above department divided in 1913 into Department of Commerce and Department of Labor as follows;

## SECRETARIES OF COMMERCE.

| | | | |
|---|---|---|---|
| Wilson | William C. Redfield | N. Y. | 1913 |
| " | Josh. W. Alexander | Mo. | 1919 |
| Harding | Herbert C. Hoover | Cal. | 1921 |

## SECRETARIES OF LABOR.

| | | | |
|---|---|---|---|
| Wilson | William B. Wilson | Pa. | 1913 |
| Harding | James J. Davis | " | 1921 |

## TREASURERS OF THE UNITED STATES.

The germ of the Treasury Department was planted when, on July 29, 1775, the Continental Congress appointed two Treasurers. The appointments were Michael Hillegas and George Clymer. The latter soon resigned to accept his seat as delegate to the Congress. Mr. Hillegas discharged the duties of Treasurer until September 11, 1789. The Treasury Department was organized under the act of September 2, 1789. Strictly speaking, it was reorganized, for the department under various names had been in existence since 1775. The Constitution went into effect March 4, 1789. Washington was inaugurated as the first President of the United States April 30, 1789. It will thus be seen that Mr. Hillegas was Treasurer for nearly five months after the inauguration of Washington, and for nine days after the Treasury Department was organized under the Constitution.

| NAME. | Whence App't'd | Date of Commission. | Expiration of Service. | NAME. | Whence App't'd | Date of Commission. | Expiration of Service. |
|---|---|---|---|---|---|---|---|
| M. Hillegas | Pa. | July 29, 1775 | Sept. 11, 1789 | A. U. Wyman | Wis. | Apr. 1, 1883 | Apr. 30, 1885 |
| Sam'l Meredith | Pa. | Sept. 11, 1789 | Oct. 31, 1801 | C. N. Jordan | N. Y. | May 1, 1885 | May 23, 1887 |
| T. T. Tucker | S. C. | Dec. 1, 1801 | May 2, 1828 | Jas. W. Hyatt | Conn. | May 24, 1887 | May 10, 1889 |
| William Clark | Pa. | June 4, 1828 | May 31, 1829 | J. N. Huston | Ind. | May 11, 1889 | Apr. 24, 1891 |
| John Campbell | Va. | May 26, 1829 | July 20, 1839 | E. H. Nebeker | Ind. | Apr. 25, 1891 | May 31, 1893 |
| Wm. Selden | Va. | July 22, 1839 | Nov. 23, 1850 | D. N. Morgan | Conn. | June 1, 1893 | June 30, 1897 |
| John Sloane | Ohio | Nov. 27, 1850 | April 6, 1852 | E. H. Roberts | N. Y. | July 1, 1897 | June 30, 1905 |
| Sam'l Casey | Ky. | April 4, 1853 | Dec. 22, 1859 | Chas. H. Treat | N. Y. | July 1, 1905 | Oct. 31, 1909 |
| Wm. C. Price | Mo. | Feb. 28, 1860 | Mar. 21, 1861 | Lee McClung | Tenn. | Nov. 1, 1909 | Nov. 14, 1912 |
| F. E. Spinner | N. Y. | Mar. 16, 1861 | June 30, 1875 | C. A. Thompson | Ohio | Nov. 20, 1912 | Mar. 31, 1913 |
| John C. New | Ind. | June 30, 1875 | July 1, 1876 | John Burke | N. D. | Apr. 1, 1913 | Jan. 5, 1921 |
| A. U. Wyman | Wis. | July 1, 1876 | June 30, 1877 | Frank White | N. D. | Apr. 18, 1921 | ..... |
| Jas. Gilfillan | Conn. | July 1, 1877 | Mar. 1, 1883 | | | | |

Mr. White assumed duties on May 2, 1921.

## COMMISSIONERS OF PENSIONS SINCE 1833.

| NAMES. | By whom appointed | Residence. | Date of commission. | NAMES. | By whom appointed | Residence. | Date of commission. |
|---|---|---|---|---|---|---|---|
| Edwards, James L. | Jackson | Va. | Mar. 3, 1833 | Clarke, Otis P. G. | Arthur | R. I. | Nov. 15, 1884 |
| Heath, James | Fillmore | " | Nov. 27, 1850 | Black, John C. | Cleveland | Ill. | Mar. 19, 1885 |
| Waldo, Loren P. | Pierce | Ct. | Mar. 17, 1853 | Tanner, James | Harrison | N. Y. | Mar. 27, 1889 |
| Minot, Josiah | " | N. H. | Aug. 1, 1855 | Raum, Green B. | " | Ill. | Oct. 19, 1889 |
| Whiting, George C. | " | Va. | Jan. 19, 1857 | Lochren, William | Cleveland | Minn. | Apr. 13, 1893 |
| Barrett, Joseph H. | Lincoln | Ohio | April 15, 1861 | Murphy, Dominic I. | " | Pa. | May 28, 1896 |
| Cox, Christopher C. | Johnson | Md. | July 28, 1868 | Evans, Henry Clay | McKinley | Tenn. | Apr. 1, 1897 |
| Van Aernam, Henry | Grant | N. Y. | May 1, 1869 | Ware, Eugene F. | Roosevelt | Kan. | May 10, 1902 |
| Baker, James H. | " | Minn. | Apr. 20, 1871 | Warner, Vespasian | " | Ill. | Mar. 4, 1905 |
| Atkinson, Henry M. | " | Neb. | Mar. 26, 1875 | Davenport, James L. | Taft | N. H. | Nov. 26, 1909 |
| Gill, Charles R. | " | Wis. | Feb. 10, 1876 | Saltzgaber, G. M. | Wilson | Ohio | May 20, 1913 |
| Bentley, John A. | " | Wis. | Mar. 28, 1876 | Gardner, Wash'n | Harding | Mich. | Mar. 22, 1921 |
| Dudley, William W. | Garfield | Ind. | June 27, 1881 | | | | |

## SUPERINTENDENTS OF U. S. MILITARY ACADEMY AT WEST POINT.

| NAME. | TERM OF SERVICE. | | NAME. | TERM OF SERVICE. | |
|---|---|---|---|---|---|
| | From | To | | From | To |
| Jonathan Williams | April 15, 1802 | June 20, 1803 | Thomas G. Pitcher | Aug. 28, 1866 | Sept. 1, 1871 |
| Jonathan Williams | April 19, 1805 | July 31, 1812 | Thomas H. Ruger | Sept. 1, 1871 | Sept. 1, 1876 |
| Joseph G. Swift | July 31, 1812 | Mar. 24, 1814 | John M. Schonfield | Sept. 1, 1876 | Jan. 21, 1881 |
| Alden Partridge | Jan. 3, 1815 | July 28, 1817 | Oliver O. Howard | Jan. 21, 1881 | Sept. 1, 1882 |
| Sylvanus Thayer | July 28, 1817 | July 1, 1833 | Wesley Merritt | Sept. 1, 1882 | July 1, 1887 |
| Rene E. DeRussy | July 1, 1833 | Sept. 1, 1838 | John G. Parke | Aug. 28, 1887 | June 24, 1889 |
| Richard Delafield | Sept. 1, 1838 | Aug. 15, 1845 | John M. Wilson | Aug. 26, 1889 | Mar. 31, 1893 |
| Henry Brewerton | Aug. 15, 1845 | Sept. 1, 1852 | Oswald H. Ernst | Mar. 31, 1893 | Aug. 21, 1898 |
| Robert E. Lee | Sept. 1, 7852 | Mar. 31, 1865 | Albert L. Mills | Aug. 22, 1898 | Aug. 31, 1906 |
| John G. Barnard | Mar. 31, 1855 | Sept. 8, 1856 | Hugh L. Scott | Aug. 31, 1906 | Aug. 31, 1910 |
| Richard Delafield | Sept. 8, 1855 | Jan. 23, 1831 | Thomas H. Barry | Aug. 31, 1910 | Aug. 31, 1912 |
| Peter G. T. Beauregard | Jan. 23, 1861 | Jan. 28, 1861 | Clarence P. Townsley | Aug. 31, 1912 | June 30, 1916 |
| Richard Delafield | Jan. 28, 1861 | Mar. 1 1861 | John Biddle | July 1, 1916 | May 31, 1917 |
| Alexander H. Bowman | Mar. 1, 1861 | July 8, 1864 | Samuel E. Tillman | June 13, 1917 | June 12, 1919 |
| Zealous B. Tower | July 8, 1854 | Sept. 8, 1864 | Douglas MacArthur | June 12, 1919 | June 30, 1922 |
| George W. Cullem | Sept. 8, 1861 | Aug. 28, 1866 | Fred W. Sladen | June 30, 1922 | ..... |

Note—The selection of the Superintendent of the Military Academy was confined to the Corps of Engineers from the establishment of the Institution, March 16, 1902, till the passage of the law of July 13, 1866, which opened it to the entire Army. By the Act of June 12, 1868, the local rank of Colonel was conferred upon the Superintendent.

Major Williams resigned June 20, 1803, on a point of command, and pending its settlement until April 19, 1805, when he again returned to service as Chief Engineer, no permanent Superintendent of the Military Academy was appointed, the command devolving upon the senior officer of the Corps of Engineers present for duty.

But Major P. G. T. Beauregard, Corps of Engineers, by order of John B. Floyd, Secretary of War, relieved Col. Delafield, Jan. 23, 1851, from the superintendency of the Military Academy, but was himself displaced five days later, Jan. 28, 1861, by direction of the succeeding Secretary of War, Joseph Holt, the command again devolving upon Col. Delafield.

## SUPERINTENDENTS U. S. NAVAL ACADEMY AT ANNAPOLIS.

| | | | |
|---|---|---|---|
| Commander Franklin Buchanan | Sept. 3, 1845 | Capt. Robert L. Pythian | June 13, 1890 |
| Commander George P. Upshur | Mar. 15, 1847 | Capt. Philip H. Cooper | Nov. 15, 1894 |
| Commander Cornelius K. Stribling | July 1, 1850 | Rear Admiral Frederick V. McNair | July 15, 1898 |
| Commander Louis M. Goldsborough | Nov. 1, 1853 | Commander Richard Wainwright | Mar. 15, 1900 |
| Capt. George S. Blake | Sept. 15, 1857 | Capt. Willard H. Brownson | Nov. 6, 1902 |
| Rear Admiral David D. Porter | Sept. 9, 1865 | Rear Admiral James H. Sands | July 1, 1905 |
| Commodore John L. Worden | Dec. 1, 1869 | Capt. Charles J. Badger | July 15, 1907 |
| Rear Admiral Chris. R. P. Rodgers | Sept. 22, 1874 | Capt. John M. Bowyer | June 10, 1909 |
| Commodore Foxhall A. Parker | July 1, 1878 | Capt. John H. Gibbons | May 15, 1911 |
| Rear Admiral George B. Balch | Aug. 2, 1879 | Capt. William F. Fullam | Feb. 7, 1914 |
| Rear Admiral Chris. R. P. Rodgers | June 13, 1881 | Capt. Edward W. Eberle | Sept. 20, 1915 |
| Capt. Francis M. Ramsay | Nov. 14, 1881 | Capt. Archibald H. Scales | Feb. 12, 1919 |
| Commander William T. Sampson | Sept. 9, 1886 | Rear Admiral Henry B. Wilson | July 5, 1921 |

## UNITED STATES ENVOYS TO GREAT BRITAIN.

| PRESIDENT. | Representative | State. | Yr. |
|---|---|---|---|
| Washington. | Thomas Pinckney | S. C. | 1792 |
| " | Rufus King | N. Y. | 1796 |
| John Adams | " | " | 1796 |
| Jefferson | James Monroe | Va. | 1803 |
| " | William Pinckney | Md. | 1806 |
| Madison | Jonathan Russell, ch. d'aff. | R. I. | 1811 |
| " | John Quincy Adams | Mass. | 1815 |
| Monroe | J. Adams Smith, ch. d'aff. | " | 1817 |
| " | Richard Rush | Pa. | 1817 |
| J. Q. Adams | Rufus King | N. Y. | 1825 |
| " | Albert Gallatin | Pa. | 1826 |
| " | W. B. Lawrence, ch. d'aff. | N. Y. | 1827 |
| " | James Barbour | Va. | 1828 |
| Jackson | Louis McLane | Del. | 1829 |
| " | Wash'gton Irving, ch. d'aff. | N. Y. | 1831 |
| " | Martin Van Buren | " | 1831 |
| " | Aaron Vail, ch. d'aff. | " | 1832 |
| " | Andrew Stevenson | Va. | 1836 |
| Tyler | Edward Everett | Mass. | 1841 |
| Polk | Louis McLane | Md. | 1845 |
| " | George Bancroft | N. Y. | 1846 |
| Taylor | J. C. B. Davis, ch. d'aff. | Mass. | 1849 |
| " | Abbott Lawrence | " | 1849 |
| Fillmore | Joseph R. Ingersoll | Pa. | 1852 |
| Pierce | James Buchanan | " | 1853 |
| Pierce | George M. Dallas | Pa. | 1856 |
| Buchanan | " " " | " | 1856 |
| Lincoln | Charles Francis Adams | Mass. | 1861 |
| Johnson | " " " | " | 1861 |
| " | Reverdy Johnson | Md. | 1868 |
| Grant | John Lothrop Motley | Mass. | 1869 |
| " | Robert C. Schenck | Ohio. | 1870 |
| " | Edwards Pierrepont | N. Y. | 1876 |
| Hayes | John Welsh | Pa. | 1877 |
| " | Wm. J. Hoppin, ch. d'aff. | N. Y. | 1879 |
| " | James Russell Lowell | Mass. | 1880 |
| Garfield | " " " | " | 1880 |
| Arthur | " " " | " | 1880 |
| Cleveland | Edward J. Phelps | Vt. | 1885 |
| B. Harrison | Robert T. Lincoln | Ill. | 1889 |
| Cleveland | Thos. F. Bayard, amb. | Del. | 1893 |
| McKinley | John Hay, amb. | Ohio. | 1897 |
| " | Henry White, ch. d'aff. | R. I. | 1898 |
| " | Joseph H. Choate, amb. | N. Y. | 1899 |
| Roosevelt | " " " | " | 1899 |
| " | Whitelaw Reid, amb. | " | 1905 |
| Taft | " " " | " | 1909 |
| Wilson | Walter H. Page, amb. | " | 1913 |
| " | John W. Davis, amb. | W.Va | 1918 |
| Harding | George B. M. Harvey, amb. | N. Y. | 1921 |

Monroe was appointed alone in 1803, and then jointly with Pinckney in 1806.

## BRITISH ENVOYS TO THE UNITED STATES.

| SOVEREIGN. | Representative. | Yr. |
|---|---|---|
| George III | George Hammond | 1791 |
| " | Phineas Bond, ch. d'aff. | 1795 |
| " | Robert Liston | 1796 |
| " | Edward Thornton, ch. d'aff. | 1800 |
| " | Anthony Merry | 1803 |
| " | David M. Erskine | 1806 |
| " | Francis James Jackson | 1809 |
| " | John Philip Morier, ch. d'aff. | 1810 |
| " | Augustus John Foster | 1811 |
| " | Anthony St. J. Baker, ch. d'aff. | 1815 |
| " | Charles Bagot | 1816 |
| George IV | Gibbs C. Antrobus, ch. d'aff. | 1819 |
| " | Sir Stratford Canning | 1820 |
| " | Henry U. Addington, ch. d'aff. | 1823 |
| " | Charles Richard Vaughan | 1825 |
| William IV | " " " | 1825 |
| " | Charles Bankhead, ch. d'aff. | 1835 |
| Victoria | Henry Stephen Fox | 1836 |
| " | Richard Pakenham | 1844 |
| " | John F. T. Crampton, ch. d'aff. | 1847 |
| " | Sir Henry Lytton Bulwer | 1849 |
| " | John F. T. Crampton, ch. d'aff. | 1851 |
| Victoria | John F. T. Crampton, env. & m. | 1852 |
| " | Philip Griffith, ch. d'aff. | 1853 |
| " | John Saville Lumley, ch. d'aff. | 1855 |
| " | Lord Napier | 1857 |
| " | Lord Lyons | 1859 |
| " | Jos. Hume Burnley, ch. d'aff. | 1864 |
| " | Sir Frederick W. A. Bruce | 1865 |
| " | Francis Clark Ford, ch. d'aff. | 1867 |
| " | Sir Edward Thornton | 1868 |
| " | Lionel S. Sackville West | 1881 |
| " | Sir Julian Pauncefote | 1889 |
| " | " " " amb. | 1893 |
| Edward VII | " " " " | 1893 |
| " | Hon. Sir Mich'l H. Herbert, amb. | 1902 |
| " | Sir Henry M. Durand, amb. | 1903 |
| " | James Bryce, amb. | 1907 |
| George V | " " " | 1910 |
| " | Sir Cecil A. Spring-Rice, amb. | 1912 |
| " | Earl Reading (spec. miss.), amb. | 1918 |
| " | Earl Grey (spec. miss.), amb. | 1919 |
| " | Sir Auckland Geddes, amb. | 1920 |

Sackville West's career as the British envoy at Washington was ended by his letter of Sept. 13, 1888, from Beverly, Mass., to Charles F. Murchison, Pomona, Cal., advising Murchison, who was an Americanized Briton, to vote against Grover Cleveland in the oncoming Presidential election.

## UNITED STATES ENVOYS TO FRANCE.

| PRESIDENT. | Representative. | State. | Yr. |
|---|---|---|---|
| Confed'at'n. | Thomas Jefferson | Va. | |
| Washington. | William Short, ch. d'aff. | " | 1790 |
| " | Gouverneur Morris | N. Y. | 1792 |
| " | James Monroe | Va. | 1794 |
| " | Charles C. Pinckney | S. C. | 1796 |
| John Adams | Charles C. Pinckney | " | 1797 |
| | John Marshall | Va. | 1797 |
| | Elbridge Gerry | Mass. | 1797 |
| | Oliver Ellsworth | Ct. | 1799 |
| " | William Vans Murray | Md. | 1799 |
| | William R. Davie | N. C. | 1799 |
| Jefferson | Robert R. Livingston | N. Y. | 1801 |
| " | John Armstrong | " | 1804 |
| Madison | Jonathan Russell, ch. d'aff. | R. I. | 1810 |
| " | Joel Barlow | Ct. | 1811 |
| " | William H. Crawford | Ga. | 1813 |
| " | Henry Jackson, ch. d'aff. | Ky. | 1815 |
| " | Albert Gallatin | Pa. | 1816 |
| Monroe | James Brown | La. | 1823 |
| Jackson | William C. Rives | Va. | 1829 |
| " | Nathaniel Niles, ch. d'aff. | Vt. | 1832 |
| " | Edward Livingston | La. | 1833 |
| " | Thos. P. Barton, ch. d'aff. | Pa. | 1835 |
| " | Lewis Cass | Ohio. | 1836 |
| Van Buren | " " | " | 1836 |
| Tyler | " " | " | 1836 |
| " | Henry Ledyard, ch. d'aff. | Mich. | 1842 |
| " | William R. King | Ala. | 1844 |
| Polk | J. L. Martin, ch. d'aff. | N. C. | 1846 |
| " | Richard Rush | Pa. | 1847 |
| Taylor | William C. Rives | Va. | 1849 |
| Fillmore | " " " | " | 1849 |
| Pierce | Henry S. Sanford, ch. d'aff. | Ct. | 1853 |
| " | John Y. Mason | Va. | 1853 |
| Buchanan | W. R. Calhoun, ch. d'aff. | S. C. | 1859 |
| " | Charles J. Faulkner | Va. | 1860 |
| Lincoln | William L. Dayton | N. J. | 1861 |
| " | John Bigelow | N. Y. | 1864 |
| Johnson | John Hay, ch. d'aff. | Ill. | 1866 |
| " | John A. Dix | N. Y. | 1866 |
| Grant | Elihu B. Washburne | Ill. | 1869 |
| Hayes | Edward F. Noyes | Ohio. | 1877 |
| Garfield | Levi P. Morton | N. Y. | 1881 |
| Arthur | " " " | " | 1881 |
| Cleveland | Robert M. McLane | Md. | 1885 |
| B. Harrison. | Whitelaw Reid | N. Y. | 1889 |
| " | T. Jefferson Coolidge | Mass. | 1892 |
| Cleveland | Jas. B. Eustis, amb. | La. | 1893 |
| McKinley | Horace Porter, amb. | N. Y. | 1897 |
| Roosevelt | " " " | " | 1897 |
| " | Robert S. McCormick, amb. | Ill. | 1905 |
| " | Henry White, amb. | R. I. | 1907 |
| Taft | " " " | " | 1909 |
| " | Robert Bacon, amb. | N. Y. | 1909 |
| " | Myron T. Herrick, amb. | Ohio. | 1912 |
| Wilson | " " " | " | 1913 |
| " | William G. Sharp, " | " | 1914 |
| " | Hugh C. Wallace, " | Wash | 1919 |
| Harding | Myron T. Herrick, " | Ohio. | 1921 |

## FRENCH ENVOYS TO THE UNITED STATES.

| Government. | Representative. | Yr. |
|---|---|---|
| Louis XVI | Count de Moustier | 1788 |
| " | M. Otto, ch. d'aff | 1789 |
| " | Colonel Ternant | 1791 |
| Convention | Edmond C. Genet | 1793 |
| Directory | Joseph Fauchet | 1794 |
| " | Pierre Auguste Adet | 1795 |
| Consulate | " " " | 1795 |
| " | L. A. Pichon, ch. d'aff | 1801 |
| Napoleon I | General Turreau | 1805 |
| " | M. Serurier | 1811 |
| Louis XVIII | " " | 1811 |
| " | G. Hyde de Neuville | 1816 |
| " | Count de Menou, ch. d'aff | 1822 |
| Charles X | Baron de Mareuil | 1824 |
| " | Count de Menou, ch. d'aff | 1827 |
| " | Roux de Rochelle | 1830 |
| L. Philippe | M. Serurier | 1831 |
| " | Alphonse Pageot, ch. d'aff | 1835 |
| " | Edouard Pontois | 1837 |
| " | Alphonse Pageot, ch. d'aff | 1839 |
| " | L. A. A. Fourier de Bacourt | 1842 |
| " | Alphonse Joseph Yver Pageot | 1842 |
| L. Napoleon | Guillaume T. L. Poussin | 1848 |
| " | E. A. O. Sain de Boislecomte | 1850 |
| Napoleon III | Count de Sartiges | 1851 |
| " | Visc't J. Treilhard, ch. d'aff | 1859 |
| Napoleon III | Henri Mercier | 1860 |
| " | Visc't J. Treilhard, ch. d'aff | 1863 |
| " | Louis de Geofroy, ch. d'aff | 1864 |
| " | Marquis de Montholon | 1865 |
| " | Jules Berthemy | 1866 |
| " | Count de Faverney, ch. d'aff | 1869 |
| " | Prevost Paradol | 1870 |
| " | Jules Berthemy | 1870 |
| Nat. Defense | Viscount Jules Treilhard | 1870 |
| Pres. Thiers | Henry de Bellonet, ch. d'aff | 1871 |
| " | Marquis de Noailles | 1872 |
| Pr. MacMahon | A. Bartholdi | 1874 |
| " | F. de Vaugelas, ch. d'aff | 1876 |
| " | Mamime Outrey | 1877 |
| " | Theodore J. D. Roustan | 1882 |
| Pres. Grevy | J. Patenotre | 1891 |
| Pres. Carnot | " | 1891 |
| " | " amb | 1893 |
| Pres. Faure | " " " | 1893 |
| " | Jules Cambon, amb | 1898 |
| Pres. Loubet | " " " | 1898 |
| " | Jean J. Jusserand, amb | 1902 |
| Pres. Fallieres | " " " " | 1906 |
| Pres. Poincare | " " " " | 1913 |
| Pr. Deschanel | " " " " | 1920 |
| Pr. Millerand | " " " " | 1920 |

## UNITED STATES ENVOYS TO GERMANY.

| President. | Representative. | State. | Yr. |
|---|---|---|---|
| Grant | George Bancroft | N. Y. | 1871 |
| " | Nicholas Fish, ch. d'aff | " | 1874 |
| " | J. C. Bancroft Davis | " | 1874 |
| Hayes | R. Sidney Everett, ch. d'aff. | Mass. | 1877 |
| " | Bayard Taylor | Pa. | 1878 |
| " | H. Sidney Everett, ch. d'aff. | Mass. | 1878 |
| " | Andrew D. White | N. Y. | 1879 |
| Garfield | H. Sidney Everett, ch. d'aff. | Mass. | 1881 |
| Arthur | A. A. Sargent | Cal. | 1882 |
| " | John A. Kasson | Ia. | 1884 |
| Cleveland | George H. Pendleton | Ohio. | 1885 |
| B. Harrison | William Walter Phelps | N. J. | 1889 |
| Cleveland | Theodore Runyon, amb | " | 1893 |
| " | Edwin F. Uhl, amb | Mich. | 1896 |
| McKinley | Andrew D. White, amb | N. Y. | 1897 |
| Roosevelt | " " " | " | 1897 |
| " | Charlemagne Tower, amb | Pa. | 1902 |
| " | David J. Hill, amb | N. Y. | 1907 |
| Taft | " " " | " | 1909 |
| " | John G. A. Leishman, amb | Pa. | 1911 |
| Wilson | James W. Gerard, amb | N. Y. | 1913 |
| Harding | Alanson B. Houghton, amb | " | 1922 |

## GERMAN ENVOYS TO THE UNITED STATES.

| Emperor. | Representative. | Yr. |
|---|---|---|
| William I | Kurd von Schlozer | 1871 |
| " | Count von Beust, ch. d'aff | 1882 |
| " | Karl von Eisen Decher | 1883 |
| " | H. von Alvensleben | 1884 |
| William II | Count Arco Valley | 1888 |
| " | A. von Mumm, ch. d'aff | 1891 |
| " | Theodore von Holleben | 1892 |
| William II | Baron von Saurma-Jeltsch, amb | 1893 |
| " | Baron M. von Thielmann, amb | 1895 |
| " | Herr von Holleben, amb | 1898 |
| " | Baron S. von Sternburg, amb | 1904 |
| " | Johann H. von Bernstorff, amb | 1908 |
| Republic | Dr. Otto Wiedfeldt, amb | 1922 |

## UNITED STATES ENVOYS TO AUSTRIA-HUNGARY.

| President. | Representative. | State. | Yr. |
|---|---|---|---|
| Van Buren | Henry A. Muhlenberg | Pa. | 1838 |
| " | J. R. Clay, ch. d'aff | " | 1840 |
| Tyler | Daniel Jenifer | Md. | 1841 |
| Polk | Wm. H. Stiles, ch. d'aff | Ga. | 1845 |
| Taylor | J. Watson Webb, ch. d'aff | N. Y. | 1849 |
| Fillmore | C. J. McCurdy, ch. d'aff | Ct. | 1850 |
| " | T. M. Foote, ch. d'aff | N. Y. | 1852 |
| Pierce | H. R. Jackson, min. res | Ga. | 1853 |
| Buchanan | J. Glancy Jones | Pa. | 1858 |
| Lincoln | Anson Burlingame | Mass. | 1861 |
| " | John Lothrop Motley | " | 1861 |
| Johnson | George W. Lippitt, ch. d'aff. | R. I. | 1867 |
| " | John Hay, ch. d'aff | Ill. | 1867 |
| " | Henry M. Watts | Pa. | 1868 |
| Grant | John Jay | N. Y. | 1869 |
| " | Godlove S. Orth | Ind. | 1875 |
| " | Edward F. Beale | D. C. | 1876 |
| Hayes | John A. Kasson | Ia. | 1877 |
| Garfield | William Walter Phelps | N. J. | 1881 |
| Arthur | Alphonso Taft | Ohio. | 1882 |
| " | John M. Francis | N. Y. | 1884 |
| Cleveland | A. M. Kiely | Va. | 1885 |
| " | James Fenner Lee, ch. d'aff. | Md. | 1885 |
| " | Alexander R. Lawton | Ga. | 1887 |
| B. Harrison | Frederick D. Grant | N. Y. | 1889 |
| Cleveland | Bartlett Tripp | S. D. | 1893 |
| McKinley | Charlemagne Tower | Pa. | 1897 |
| " | Addison C. Harris | Ind. | 1899 |
| " | Robert S. McCormick | Ill. | 1901 |
| Roosevelt | " " " | " | 1901 |
| " | Bellamy Storer, amb | Ohio. | 1902 |
| " | Charles S. Francis, amb | N. Y. | 1906 |
| Taft | " " " | " | 1909 |
| " | Richard C. Kerens, amb | Mo. | 1909 |
| Wilson | Frederic C. Penfield, amb | Pa. | 1913 |
| Harding | Albert H. Washburn, min. | Mass. | 1922 |

## AUSTRO-HUNGARIAN ENVOYS TO THE UNITED STATES.

| Emperor. | Representative. | Yr. |
|---|---|---|
| Ferdinand I | Baron de Mareschal | 1838 |
| " | Chevalier Hulsemann, ch. d'aff | 1841 |
| Franz Joseph | " " " | 1841 |
| " | " " min. res | 1855 |
| " | Count Nicholas Giorgi min. res | 1863 |
| " | Count Wydenbruck | 1865 |
| " | Baron de Frankenstein, ch. d'aff. | 1867 |
| " | Baron Charles de Lederer | 1868 |
| " | Baron von Schwartz Senborn | 1874 |
| " | Count Ladislaus Hoyos | 1875 |
| " | Chev. E. S. von Tavera, ch. d'aff. | 1877 |
| Franz Joseph | Baron Ernest von Mayr | 1879 |
| " | C't Lippe-Weissenfeld, ch. d'aff. | 1881 |
| " | Baron Ignatz von Schaeffer | 1882 |
| " | C't Lippe-Weissenfeld, ch. d'aff. | 1885 |
| " | Chevalier E. S. von Tavera | 1887 |
| " | L. Hengelmuller von Hengervar | 1895 |
| " | " " " amb | 1902 |
| " | Dr. K. Theodor Dumba, amb | 1912 |
| " | Count Adam von Tarnow Tarnowski, amb | 1916 |
| Republic | E. L. G. Prochnik, ch. d'aff | 1922 |

Dumba was recalled in 1915.

On the separation of Austria and Hungary and the return of peace, the United States sent and received separate envoys in the cases of the Republic of Austria and the Kingdom of Hungary, Albert H. Washburn being the first United States Minister to *Austria*, and Theodore Brentano the first to *Hungary*, which latter country has sent as its first Minister to the United States, Count Laszlo Szechenyi.

## UNITED STATES ENVOYS TO ITALY.

| PRESIDENT. | Representative. | State. | Yr. |
|---|---|---|---|
| Lincoln | George P. Marsh | Vt. | 1861 |
| Johnson | " " " | " | 1861 |
| Grant | " " " | " | 1861 |
| Hayes | " " " | " | 1861 |
| Garfield | " " " | " | 1861 |
| Arthur | " " " | " | 1861 |
| " | William Waldorf Astor | N. Y. | 1882 |
| Cleveland | John B. Stallo | Ohio. | 1885 |
| B. Harrison | Albert G. Porter | Ind. | 1889 |
| " | William Potter | Pa. | 1892 |
| Cleveland | J. J. Van Alen, amb. | R. I. | 1893 |
| Cleveland | Wayne MacVeagh, amb. | Pa. | 1893 |
| McKinley | William F. Draper, amb. | Mass. | 1897 |
| " | George von L. Meyer, amb. | " | 1901 |
| Roosevelt | " " " | " | 1901 |
| " | Henry White, amb. | R. I. | 1905 |
| " | Lloyd C. Griscom, amb. | Pa. | 1907 |
| Taft | John G. A. Leishman, amb. | " | 1909 |
| " | Thomas J. O'Brien, amb. | Mich. | 1911 |
| Wilson | Thomas Nelson Page, amb. | Va. | 1913 |
| " | Robert V. Johnson, amb. | N. Y. | 1920 |
| Harding | Richard W. Child, amb. | Mass. | 1921 |

Mr. Van Alen was confirmed by the Senate but declined, and Mr. MacVeagh was appointed.

## ITALIAN ENVOYS TO THE UNITED STATES.

| KING. | Representative. | Yr. |
|---|---|---|
| V. Emmanuel | Chevalier Joseph Bertinatti | 1861 |
| " | Romeo Cantagalli, ch. d'aff. | 1866 |
| " | Chevalier Marcello Cerruti | 1867 |
| " | C't Luigi Colobiano, ch. d'aff. | 1869 |
| " | Count Luigi Corti | 1870 |
| " | Count Litta, ch. d'aff. | 1874 |
| " | Baron Alberto Blanc | 1875 |
| Humbert | Prince Camporeale, ch. d'aff. | 1880 |
| " | Baron de Fava | 1881 |
| Humbert | Marquis Imperiali, ch. d'aff. | 1891 |
| " | Baron de Fava | 1892 |
| " | " " " amb. | 1893 |
| V. Em'an'l III. | " " " " | 1893 |
| " | E. Mayor des Planches, amb. | 1901 |
| " | Marquis C. Confalonieri, amb. | 1910 |
| " | Count v Macchi di Cellere, amb. | 1913 |
| " | Senator V. R. Ricci, amb. | 1921 |

## UNITED STATES ENVOYS TO SPAIN.

| PRESIDENT. | Representative. | State. | Yr. |
|---|---|---|---|
| Washington | W. Carmichael, ch. d'aff. | Md. | 1790 |
| " | William Short, min. res. | Va. | 1794 |
| " | Thomas Pinckney | S. C. | 1794 |
| " | David Humphreys | Ct. | 1796 |
| Jefferson | Charles Pinckney | S. C. | 1801 |
| " | G. W. Erving, ch. d'aff. | Mass. | 1805 |
| | Official relations with Spain were broken off from 1808 to 1814. | | |
| Madison | G. W. Erving | Mass. | 1814 |
| Monroe | John Forsyth | Ga. | 1819 |
| " | Hugh Nelson | Va. | 1823 |
| J. Q. Adams | Alexander H. Everett | Mass. | 1825 |
| Jackson | Cornelius P. Van Ness | Vt. | 1829 |
| " | A. Middleton, Jr., ch. d'aff. | S. C. | 1836 |
| Van Buren | John H. Eaton | Tenn. | 1837 |
| " | Aaron Vail, ch. d'aff. | N. Y. | 1840 |
| Tyler | Washington Irving | " | 1842 |
| Polk | Romulus M. Saunders | N. C. | 1846 |
| Taylor | Daniel M. Barringer | " | 1849 |
| Pierce | Pierre Soule | La. | 1853 |
| " | Augustus C. Dodge | Ia. | 1855 |
| Buchanan | William Preston | Ky. | 1858 |
| Lincoln | Carl Schurz | Wis. | 1861 |
| " | Gustavus Koerner | Ill. | 1862 |
| " | H. J. Perry, ch. d'aff. | N. H. | 1864 |
| Lincoln | John P. Hale | N. H. | 1865 |
| Grant | Daniel E. Sickles | N. Y. | 1869 |
| " | Alvey A. Adee, ch. d'aff. | " | 1873 |
| " | Caleb Cushing | Mass. | 1874 |
| Hayes | James Russell Lowell | " | 1877 |
| " | Lucius Fairchild | Wis. | 1880 |
| Garfield | " " | " | 1880 |
| Arthur | Hannibal Hamlin | Me. | 1881 |
| " | John W. Foster | Ind. | 1883 |
| Cleveland | Jabez L. M. Curry | Va. | 1885 |
| " | Perry Belmont | N. Y. | 1889 |
| B. Harrison | Thomas W. Palmer | Mich. | 1889 |
| " | E. Burd Grubb | N. J. | 1890 |
| " | A. Loudon Snowden | Pa. | 1892 |
| Cleveland | Hannis Taylor | Ala. | 1893 |
| McKinley | Stewart L. Woodford | N. Y. | 1897 |
| | Official relations with Spain were broken off, April, 1898, to April, 1899. | | |
| " | Bellamy Storer | Ohio. | 1899 |
| Roosevelt | " " | " | 1899 |
| " | Arthur S. Hardy | N. H. | 1902 |
| " | William M. Collier | N. Y. | 1906 |
| Taft | Henry Clay Ide | Vt. | 1909 |
| Wilson | Joseph E. Willard, amb. | Va. | 1913 |
| Harding | Cyrus E. Woods, amb. | Pa. | 1921 |

## SPANISH ENVOYS TO THE UNITED STATES.

| SOVEREIGN. | Representative. | Yr. |
|---|---|---|
| Carlos IV | Jose Ignacio deViar, ch. d'aff. | 1789 |
| " | Jose Ignacio deViar, joint | 1791 |
| " | Jose de Jaudenes, ch. d'aff. | 1791 |
| " | Carlos M. de Irujo | 1796 |
| " | Valentin de Foronda, ch. d'aff. | 1807 |
| | Official relations with Spain were broken off from 1808 to 1814. | |
| Fernan. VII | Luis de Onis | 1809 |
| " | Mateo de la Serna, ch. d'aff. | 1819 |
| " | Francisco Dionisio Vives | 1820 |
| " | Joaquin de Anduaga | 1821 |
| " | F. H. Rivas y Salmon, ch. d'aff. | 1823 |
| " | Francisco Tacon | 1827 |
| M. Christina | " " | 1827 |
| Isabella II | Angel Calderon de la Barca | 1835 |
| " | Pedro Alcantara Argaiz | 1839 |
| " | Fidencio Bourman, ch. d'aff. | 1844 |
| " | A. Calderon de la Barca, min. res. | 1844 |
| " | Jose Maria Margallon, ch. d'aff. | 1853 |
| " | Leopoldo Augusto de Cueto | 1854 |
| " | Alfonso Escalante | 1855 |
| " | Gabriel Garcia y Tassara | 1857 |
| " | Facundo Goni | 1867 |
| Provis. Gov | Mauricio Lopez Roberts | 1869 |
| Amadeo I | Adm. Don Jose Polo de Bernabe | 1872 |
| Pr. Figueras | " " " " " | 1872 |
| " Castelar | " " " " " " | 1872 |
| " Serrano | Antonio Mantilla | 1874 |
| Alfonso XII | Jose Brunetti, ch. d'aff. | 1878 |
| " | Felipe Mendez de Vigo y Osorio | 1879 |
| " | Francisco Barca del Corral | 1881 |
| " | Enrique Dupuy de Lome, ch. d'aff. | 1883 |
| " | Juan Valera y Alcala Galiano | 1884 |
| Alfonso XIII | Emilio de Muruaga | 1886 |
| " | Miguel Suarez Guanes | 1890 |
| " | Jose Felipe Segario, ch. d'aff. | 1891 |
| " | Enrique Dupuy de Lome | 1892 |
| " | Emilio de Muruaga | 1893 |
| " | Enrique Dupuy de Lome | 1896 |
| " | Louis Polo y Bernabe | 1898 |
| | Diplomatic intercourse broken off by the war. | |
| " | Jose Brunetti, Duke of Arcos | 1899 |
| " | Emilio de Ojeda | 1902 |
| " | Bernardo J. de Cologan | 1906 |
| " | Ramon Pina | 1907 |
| " | Marquis of Villalobar | 1909 |
| " | Don Juan Riano y Gayangos | 1913 |

## UNITED STATES ENVOYS TO RUSSIA.

| PRESIDENT. | Representative. | State. | Yr. |
|---|---|---|---|
| Madison | John Quincy Adams | Mass. | 1809 |
| " | Levett Harris, ch. d'aff | Pa. | 1814 |
| " | William Pinkney | Md. | 1816 |
| Monroe | George W. Campbell | Tenn. | 1818 |
| " | Henry Middleton | S. C. | 1820 |
| J. Q. Adams | " " | " | 1820 |
| Jackson | John Randolph | Va. | 1830 |
| " | James Buchanan | Pa. | 1832 |
| " | John R. Clay, ch. d'aff | " | 1833 |
| " | William Wilkins | " | 1834 |
| " | John R. Clay, ch. d'aff | " | 1835 |
| Van Buren | George M. Dallas | " | 1837 |
| " | W. W. Chew, ch. d'aff | " | 1839 |
| " | Churchill C. Cambreleng | N. Y. | 1840 |
| Tyler | Charles S. Todd | Ky. | 1841 |
| Polk | Ralph J. Ingersoll | Ct. | 1846 |
| " | Arthur P. Bagby | Ala. | 1848 |
| Fillmore | Nell S. Brown | Tenn. | 1850 |
| Pierce | Thomas H. Seymour | Ct. | 1853 |
| Buchanan | Francis W. Pickens | S. C. | 1858 |
| " | John Appleton | Me. | 1860 |
| Lincoln | Cassius M. Clay | Ky. | 1861 |
| " | Simon Cameron | Pa. | 1862 |
| " | Bayard Taylor | N. Y. | 1862 |
| " | Cassius M. Clay | Ky. | 1863 |
| Grant | Andrew G. Curtin | Pa. | 1869 |
| Grant | James L. Orr | S. C. | 1872 |
| " | Marshall Jewell | Ct. | 1873 |
| " | Eugene Schuyler, ch. d'aff | N. Y. | 1874 |
| " | George H. Boker | Pa. | 1875 |
| Hayes | E. W. Stoughton | N. Y. | 1878 |
| " | Wickham Hoffman, ch. d'aff | " | 1879 |
| " | "&Garf'd John W. Foster | Ind. | 1880 |
| Arthur | Wickham Hoffman, ch. d'aff | N. Y. | 1881 |
| " | William H. Hunt | La. | 1882 |
| " | Alphonso Taft | Ohio | 1884 |
| Cleveland | George V. M. Lothrop | Mich. | 1885 |
| " | Lambert Tree | Ill. | 1888 |
| B. Harrison | George W. Wurts, ch. d'aff | Pa. | 1889 |
| " | Charles Emory Smith | " | 1890 |
| " | Andrew D. White | N. Y. | 1892 |
| Cleveland | Clifton R. Breckinridge | Ark. | 1894 |
| McKinley | Ethan A. Hitchcock | Mo. | 1897 |
| " | " " amb | " | 1898 |
| " | Charlemagne Tower, amb | Pa. | 1899 |
| Roosevelt | " " " | " | 1899 |
| " | Robt. S. McCormick, amb | Ill. | 1902 |
| " | George von L. Meyer, amb | Mass. | 1905 |
| " | John W. Riddle, amb | " | 1907 |
| Taft | William W. Rockhill, amb | D. C. | 1909 |
| " | Curtis Guild, amb | Mass. | 1911 |
| Wilson | David R. Francis, amb | Mo. | 1914 |

## RUSSIAN ENVOYS TO THE UNITED STATES.

| EMPEROR. | Representative. | Yr. |
|---|---|---|
| Alexander I | Andre de Daschkoff, ch. d'aff | 1809 |
| " | Count Theodore de Pahlen | 1810 |
| " | Andre de Daschkoff | 1811 |
| " | Chevalier Pierra de Poletica | 1819 |
| " | Georg Ellisen, ch. d'aff | 1822 |
| " | Baron de Tuyll | 1823 |
| Nicholas I | Baron de Maltitz, ch. d'aff | 1826 |
| " | Baron de Krudener | 1827 |
| " | George Krehmer, ch. d'aff | 1838 |
| " | Alexander de Bodisco | 1838 |
| Alexander II | Edward de Stoeckl | 1854 |
| " | Waldemar Bodisco, ch. d'aff | 1868 |
| " | Constantine Catacazy | 1869 |
| " | Alexander Gorloff, ch. d'aff | 1871 |
| Alexander II | Baron Henri d'Offenberg | 1872 |
| " | Nicholas de Voigt, ch. d'aff | 1874 |
| " | Nicholas Shishkin | 1875 |
| " | Michel Bartholomei | 1880 |
| Alexander III | Charles de Struve | 1882 |
| " | Baron G. Schilling, ch. d'aff | 1892 |
| " | Prince Cantacuzene | 1893 |
| Nicholas II | " " | 1893 |
| " | E. de Kotzebue | 1896 |
| " | Count Cassini, amb | 1898 |
| " | Baron Rosen, amb | 1905 |
| " | George Bakhmeteff, amb | 1911 |
| Post-Revol | Boris Bakhmeteff, amb | 1917 |
| R. S. F. S. R. | No diplomatic relations. | |

## SOBRIQUETS OR BY-NAMES OF CITIES IN THE UNITED STATES.

Albany—The Capital City.
Atlanta—Gate City of the South.
Baltimore—The Monumental City.
Birmingham—The City Beautiful.
Boston—The Hub, Bean Town, Athens of America.
Brooklyn—The City of Churches.
Buffalo—Queen City of the Lake.
Charleston, S. C.—Palmetto City.
Chicago—Windy City, Garden City.
Cincinnati—Queen City, Porkopolis
Cleveland—The Forest City.
Dallas—The City of the Hour.
Dayton—The Gem City.
Denver—Queen City of the Plains.
Des Moines—City of Certainties.
Detroit—The City of the Straits.
Duluth—The Zenith City of the Unsalted Sea.
Galveston—The Oleander City.
Hannibal, Mo.—The Bluff City.
Hartford—Charter Oak City.
Indianapolis—The Railroad City.
Jacksonville—The Gateway City.
Kansas City, Mo.—Heart of U. S.
Keokuk, Iowa—The Gate City.
Little Rock—The City of Roses.
Los Angeles—The Metropolis of the West and City of the Angels.
Louisville—The Falls City.
Lowell—The City of Spindles.
Lynn—The City of Shoes.
Madison, Wis.—The Lake City.
Memphis—The Bluff City.
Milwaukee—Milwaukee the Bright Spot and The Cream City.
Minneapolis—The Flour City.
Nashville—The City of Rocks.
Newark—Newark Knows How.
New Bedford—The Whaling City.
New Haven—The City of Elms.
New Orleans—The Crescent City.
New York—Father Knickerbocker, The Empire City, Gotham, The Metropolis.
Omaha—Gate City of West.
Paterson—The Silk City.
Philadelphia—The City of Brotherly Love and The Quaker City.
Pittsburgh—Iron City, Smoky City.
Portland, Me.—The Forest City.
Portland, Ore.—The Rose City.
Providence—Gateway of Southern New England.
Reading—The Pretzel City.
Rochester—The Flour City.
St. Joseph—The City Worth While.
St. Louis—The Mound City.
St. Paul, Minn.—The Saintly City, Gem City.
Salt Lake City—City of Saints.
San Francisco—Golden Gate City.
Savannah, Ga.—Forest City of South
Scranton—The Electric City.
Seattle—The Queen City.
Springfield, Ill.—The Flower City.
Springfield, Mass.—City of Homes.
Syracuse—The Salt City.
Toledo—The Corn City.
Troy—The Collar City.
Washington—The City of Magnificent Distances.

## IS THIS A RECORD PASSAGE?

The following log of a voyage of the steamship Santa Catalina, from New York to San Francisco, in 1914, by way of the Strait of Magellan, is compiled from the records of the owners of the ship, W. R. Grace & Co., of New York. The log of a trip in the same year over the same route by the steamship Santa Cruz, owned by the same firm, is also here presented. These two records are to be compared with others which will be found on page 723.

Steamship *Santa Catalina*—Sailed from New York April 13th, 1914, at 7 A. M., arriving at San Pedro, May 27th, 9.40 P. M., with a total steaming time of 44 days, 14 hrs. and 40 min., and covering a total mileage of 12,649 miles, thus giving an average of 11.8 nautical miles per hour. She left San Pedro May 29th, at 12.25 P. M., arriving in San Francisco May 30th, at 7.35 P. M., steaming time being 1 day, 7 hrs. and 10 min. The total time from New York to San Francisco, via San Pedro, being 45 days, 21 hrs. and 50 min., covering a total distance of 12,929 miles or an average of 11.8 miles per hour.

Steamship *Santa Cruz*—Sailed from New York January 28th, 1914, 4.55 P. M., arrived at San Pedro March 16th, 8.50 P. M. Total sailing time 47 days, 3 hrs. and 55 min. The log books indicate a distance of 12,819 miles, thus giving this vessel an average of 11.3 nautical miles per hour. She sailed from San Pedro March 17th, 5 P. M. and arrived in San Francisco March 19th at 12.50 A. M., this being the steaming time of 1 day, 19 hrs. and 50 min. Thus the entire voyage from New York to San Francisco, via San Pedro, was 48 days, 23 hrs. and 45 min., covering a total distance of 13,042 miles or an average of 11.1 miles per hour.

## SHORT DICTIONARY OF AMERICAN BIOGRAPHY.

| Born. | Died. | Name. | Occupation. |
|---|---|---|---|
| 1807 | 1873 | Agassiz, L. J. R. | Scientist. |
| 1763 | 1848 | Astor, John Jacob | Merchant. |
| 1810 | 1891 | Barnum, P. T. | Showman. |
| 1813 | 1887 | Beecher, Henry W. | Preacher. |
| 1775 | 1863 | Beecher, Lyman | Preacher. |
| 1800 | 1872 | Bennett, James Gordon | Newspaper. |
| 1841 | 1918 | Bennett, J. G., 2d | Newspaper. |
| 1830 | 1893 | Blaine, James G. | Statesman. |
| 1735 | 1820 | Boone, Daniel | Hunter. |
| 1800 | 1859 | Brown, John | Abolitionist. |
| 1756 | 1836 | Burr, Aaron | Statesman. |
| 1829 | 1894 | Childs, Geo. W. | Newspaper. |
| 1808 | 1873 | Chase, Salmon P. | Jurist. |
| 1799 | 1859 | Choate, Rufus | Lawyer. |
| 1832 | 1917 | Choate, Joseph H. | Lawyer. |
| 1777 | 1852 | Clay, Henry | Statesman. |
| 1796 | 1856 | Clayton, John M. | Statesman. |
| 1845 | 1917 | Cody, William F. | Scout. |
| 1829 | 1888 | Conkling, Roscoe | Lawyer. |
| 1791 | 1883 | Cooper, Peter | Philanthropist |
| 1786 | 1836 | Crockett, David | Hunter. |
| 1839 | 1876 | Custer, Geo. A. | Soldier. |
| 1819 | 1897 | Dana, Chas. A. | Newspaper. |
| 1808 | 1889 | Davis, Jefferson | Confederate. |
| 1779 | 1820 | Decatur, Stephen | Naval. |
| 1838 | 1917 | Dewey, George | Admiral. |
| 1817 | 1895 | Douglass, Fred. (colored) | Freedman. |
| 1804 | 1897 | Dow, Neal | Prohibitionist |
| 1820 | 1887 | Eads, James B. | Bridge builder |
| 1604 | 1690 | Eliot, John | Missionary. |
| 1803 | 1889 | Ericsson, John | Inventor. |
| 1818 | 1901 | Evarts, William M. | Statesman. |
| 1801 | 1870 | Farragut, David G. | Admiral. |
| 1819 | 1892 | Field, Cyrus W. | Atlantic Cable |
| 1813 | 1890 | Fremont, John C. | Explorer. |
| 1765 | 1815 | Fulton, Robert | Inventor. |
| 1805 | 1879 | Garrison, W. Lloyd | Abolitionist. |
| 1750 | 1831 | Girard, Stephen | Merchant. |
| 1836 | 1892 | Gould, Jay | Railways. |
| 1810 | 1888 | Gray, Asa | Botanist. |
| 1811 | 1872 | Greeley, Horace | Newspaper. |
| 1757 | 1804 | Hamilton, Alexander | Statesman. |
| 1737 | 1793 | Hancock, John | Signer. |
| 1838 | 1905 | Hay, John | Statesman |
| 1832 | 1881 | Hayes, I. I. | Explorer. |
| 1736 | 1799 | Henry, Patrick | Statesman. |
| 1812 | 1886 | Hoe, R. M. | Inventor. |
| 1819 | 1867 | Howe, Elias | Inventor. |
| 1833 | 1899 | Ingersoll, Robert G. | Agnostic. |
| 1747 | 1792 | Jones, Paul | Naval. |
| 1807 | 1870 | Lee, Robert E. | Soldier. |
| 1663 | 1728 | Mather, Cotton | Preacher. |
| 1734 | 1806 | Morris, Robert | Financier. |
| 1791 | 1872 | Morse, S. F. B. | Inventor. |
| 1795 | 1869 | Peabody, George | Philanthropist |
| 1644 | 1718 | Penn, William | Founder. |
| 1811 | 1884 | Phillips, Wendell | Abolitionist. |
| 1847 | 1911 | Pulitzer, Joseph | Newspaper. |
| 1718 | 1790 | Putnam, Israel | Soldier. |
| 1733 | 1833 | Randolph, John | Statesman. |
| 1754 | 1832 | Red Jacket (Indian) | Chief. |
| 1735 | 1818 | Revere, Paul | Patriot. |
| 1786 | 1866 | Scott, Winfield | Soldier. |
| 1820 | 1891 | Sherman, William T. | Soldier. |
| 1823 | 1900 | Sherman, John | Statesman. |
| 1797 | 1874 | Smith, Gerrit | Abolitionist. |
| 1580 | 1631 | Smith, Capt. John | Adventurer. |
| 1816 | 1902 | Stanton, Elizabeth C. | Suffrage. |
| 1812 | 1883 | Stephens, Alex. | Statesman. |
| 1803 | 1876 | Stewart, Alexander T. | Merchant. |
| 1779 | 1845 | Story, Joseph | Jurist. |
| 1859 | 1918 | Sullivan, John L. | Pugilist. |
| 1832 | 1902 | Talmage, T. de Witt | Preacher. |
| 1768 | 1813 | Tecumseh (Indian) | Chief. |
| 1814 | 1886 | Tilden, Samuel J. | Statesman. |
| 1740 | 1809 | Trumbull, Jonathan | Soldier. |
| 1823 | 1878 | Tweed, William M. | Politician. |
| 1794 | 1877 | Vanderbilt, Cornelius | Railways. |
| 1782 | 1852 | Webster, Daniel | Statesman. |
| 1765 | 1825 | Whitney, Eli | Inventor. |
| 1839 | 1898 | Willard, Frances E. | Prohibitionist. |
| 1801 | 1877 | Young, Brigham | Mormon. |

## PAINTERS AND SCULPTORS.

### AMERICAN.

| B'n. | D'd. | Name. |
|---|---|---|
| 1779 | 1843 | Allston, Wash. |
| 1814 | 1893 | Beard, Jas. H. |
| 1828 | 1902 | Bierstadt, Albert |
| 1833 | 1905 | Boughton, Geo. H. |
| 1827 | 1892 | Bradford, Wm. |
| 1814 | 1889 | Brown, Geo. L. |
| 1808 | 1889 | Chapman, J. G. |
| 1826 | 1900 | Church, F. E. |
| 1801 | 1848 | Cole, Thos. |
| 1737 | 1815 | Copley, John |
| 1814 | 1857 | Crawford, Thos. |
| 1812 | 1868 | Elliott, Chas. L. |
| 1846 | 1917 | Ezekiel, Sir Moses |
| 1808 | 1884 | Freeman, Jas. E. |
| 1823 | 1880 | Gifford, S. R. |
| 1825 | 1857 | Glass, Jas. W. |
| 1805 | 1852 | Greenough, Horatio |
| 1828 | 1901 | Hart, Jas. M. |
| 1824 | 1879 | Hunt, Wm. M. |
| 1816 | 1906 | Huntington, Dan |
| 1801 | 1846 | Inman, Henry |
| 1825 | 1894 | Inness, Geo. |
| 1824 | 1906 | Johnson, Eastman |
| 1818 | 1872 | Kensett, J. F. |
| 1816 | 1868 | Leutze, E. |
| 1777 | 1807 | Malbone, Ed. G. |
| 1813 | 1884 | Matteson, T. |
| 1824 | 1887 | May, Edn. H. |
| 1828 | 1891 | McEntee, J. |
| 1815 | 1883 | Mills, Clark |
| 1829 | 190[illegible] | Moran, Edw. |
| 1811 | 1885 | Page, Wm. |
| 1741 | 1826 | Peale, Chas. W. |
| 1778 | 1860 | Peale, Remb. |
| 1805 | 1873 | Powers, Hiram |
| 1850 | 1914 | Ream, Vinnie |
| 1829 | 1904 | Rogers, John |
| 1848 | 1907 | Saint-Gaudens, Aug. |
| 1817 | 1881 | Staigg, Rich. M. |
| 1819 | 1895 | Story, Wm. W. |
| 1756 | 1828 | Stuart, Gilbert |
| 1783 | 1872 | Sully, Thos. |
| 1756 | 1843 | Trumbull, John |
| 1776 | 1852 | Vanderlyn, John |
| 1830 | 1910 | Ward, J. Q. A. |
| 1803 | 1889 | Weir, Rob. W. |
| 1738 | 1820 | West, Benj. |
| 1835 | 1903 | Whistler, J. A. M. |
| 1825 | 1855 | Woodville, R. C. |

### ENGLISH.

| B'n. | D'd. | Name. |
|---|---|---|
| 1833 | 1898 | Burne-Jones, Edw. |
| 1776 | 1837 | Constable, John |
| 1793 | 1865 | Eastlake, Chas. |
| 1755 | 1826 | Flaxman, John |
| 1825 | 1899 | Foster, Birket |
| 1727 | 1788 | Gainsborough, T. |
| 1791 | 1866 | Gibson, John |
| 1679 | 1764 | Hogarth, Wm. |
| 1802 | 1873 | Landseer, Edwin |
| 1830 | 1896 | Leighton, Fred. |
| 1811 | 1870 | Maclise, Daniel |
| 1829 | 1896 | Millais, J. E. |
| 1839 | 1894 | Pettie, John |
| 1756 | 1823 | Raeburn, Henry |
| 1723 | 1792 | Reynolds, Sir Joshua |
| 1734 | 1802 | Romney, Geo. |
| 1828 | 1882 | Rossetti, D. G. |
| 1775 | 1851 | Turner, J. M. U. |
| 1817 | 1904 | Watts, Geo. F. |
| 1775 | 1856 | Westmacott, Sir R. |
| 1785 | 1841 | Wilkie, David |

### FRENCH.

| B'n. | D'd. | Name. |
|---|---|---|
| 1834 | 1904 | Bartholdi, F. A. |
| 1795 | 1875 | Barge, A. L. |
| 1822 | 1899 | Bonheur, Rosa |
| 1825 | 1905 | Bougereau, A. U. |
| 1845 | 1902 | Constant, Benj. |
| 1796 | 1875 | Corot, J. B. C. |
| 1819 | 1877 | Courbet, Gustave |
| 1817 | 1878 | Daubigny, C. F. |
| 1748 | 1825 | David, Louis J. |
| 1789 | 1856 | David, P. J. |
| 1799 | 1863 | Delacroix, Eugene |
| 1797 | 1856 | Delaroche, Paul |
| 1807 | 1876 | Diaz, N. Virgil |
| 1833 | 1883 | Dore, Gustave |
| 1811 | 1889 | Dupre, Jules |
| 1820 | 1876 | Fromentin, Eugene |
| 1824 | 1904 | Gerome, J. L. |
| 1628 | 1715 | Girardon, Fr. |
| 1741 | 1828 | Houdon, J. A. |
| 1798 | 1880 | Lemaire, Ph. H. |
| 1848 | 1884 | Lepage, J. B. |
| 1600 | 1682 | Lorraine, Claude |
| 1815 | 1891 | Meissonier, J. L. E. |
| 1814 | 1875 | Millet, J. F. |
| 1594 | 1665 | Poussin, Nicolas |
| 1758 | 1823 | Prudhon, Pierre |
| 1840 | 1917 | Rodin, Aug. |
| 1812 | 1867 | Rousseau, P. E. T. |
| 1795 | 1858 | Scheffer, Ary |
| 1810 | 1865 | Troyon, Constant |
| 1789 | 1863 | Vernet, Carlo |
| 1714 | 1789 | Vernet, Claude J. |
| 1684 | 1721 | Watteau, Ant. |

### GERMAN.

| B'n. | D'd. | Name. |
|---|---|---|
| 1783 | 1867 | Cornelius, Peter von |
| 1805 | 1882 | Drake, Friedrich |
| 1471 | 1528 | Durer, Albert |
| 1853 | 1918 | Hodler, Ferd. |
| 1497 | 1543 | Holbein, Hans |
| 1805 | 1874 | Kaulbach, Wilm. von |
| 1648 | 1722 | Kneller, Godfrey |
| 1617 | 1680 | Lely, Peter |
| 1840 | 1884 | Makart, Hans |
| 1789 | 1869 | Overbeck, John F. |
| 1777 | 1857 | Rauch, C. D. |
| 1804 | 1861 | Rietschel, Ernst |
| 1828 | 1899 | Schreyer, Adolphe |
| 1802 | 1848 | Schwanthaler, L. M. |

## ITALIAN.

| B'N. | D'd. | Name. | B'N. | D'd. | Name. | B'N. | D'd. | Name. |
|---|---|---|---|---|---|---|---|---|
| 1400 | 1474 | Amadeo, G. A. | 1500 | 1571 | Cellini, Benvenuto | 1488 | 1537 | Lombardi, Alf. |
| 1487 | 1531 | Andrea del Sarto. | 1494 | 1534 | Correggio, A. A. | 1483 | 1520 | Raphael (Sanzio) |
| 1475 | 1517 | Bartolommeo, Fra. | 1616 | 1686 | Dolci, Carlo | 1575 | 1642 | Reni, Guido |
| 1481 | 1559 | Benvenuto, Tisio G. | 1581 | 1641 | Domenichino | 1400 | 1481 | Robbia, Lucca della |
| 1475 | 1564 | Buonarotti (Michael Angelo). | 1449 | 1494 | Domenico (Ghir) | 1615 | 1673 | Salvator Rosa |
| | | | 1400 | 1486 | Flesole, Minoda | 1512 | 1594 | Tintoretto |
| 1697 | 1768 | Canale, Ant. | 1477 | 1511 | Giorgione | 1477 | 1576 | Titian |
| 1757 | 1822 | Canova, Ant. | 1276 | 1336 | Giotto (di Bordone) | 1528 | 1588 | Veronese, Paul |
| 1560 | 1609 | Carracl, Annibale | 1240 | 1302 | Giovanni (Cimabue) | 1452 | 1519 | Vinci, Leonardo da |

## FLEMISH AND DUTCH.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1836 | .... | Alma-Tadema, L. | 1632 | 1696 | Meer Jan, ver | 1625 | 1681 | Ruysdael, Jacob |
| 1605 | 1691 | Cuyp, Albert | 1610 | 1685 | Ostade, Adr. van | 1610 | 1694 | Teniers, David |
| 1613 | 1680 | Dow, Gerard | 1625 | 1654 | Potter, Paul | 1599 | 1641 | Vandyck, Anton |
| 1584 | 1666 | Hals, Franz | 1608 | 1699 | Rembrandt, Paul | 1633 | 1707 | Van de Velde, Wm. |
| 1460 | 1531 | Matsys, Quintin | 1577 | 1640 | Rubens, Peter P. | 1366 | 1440 | Van Eyck, Hubert & Jan |

## SPANISH.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1786 | 1827 | Alvarez, Don Jose | 1838 | 1874 | Fortuny, Mariano | 1599 | 1660 | Velasquez, Diego |
| 1601 | 1667 | Cano, Alonzo | 1618 | 1682 | Murillo, B. E. | 1598 | 1662 | Zurbaran, Franc. |

## MUSICAL COMPOSERS.

| B'N. | D'd. | Name. | Nat. | B'N. | D'd. | Name. | Nat. | B'N. | D'd. | Name. | Nat. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1710 | 1778 | Arne, Thos. A... | Eng. | 1797 | 1848 | Donizetti, Gaet'o | It. | 1756 | 1791 | Mozart, Wolfg... | Ger. |
| 1740 | 1802 | Arnold, Sam'l... | Eng. | 1812 | 1883 | Flotow, F. von.. | Ger. | 1819 | 1880 | Offenbach, Jac... | Ger. |
| 1767 | 1838 | Attwood, Thos.. | Eng. | 1583 | 1625 | Gibbons, Orlan.. | Eng. | 1825 | 1889 | Ouseley, Sir F. A. | Eng. |
| 1685 | 1750 | Bach, Jo..... | Ger. | 1714 | 1787 | Gluck, Chris.... | Ger. | 1514 | 1594 | Palestrina, Giov. | It. |
| 1770 | 1827 | Beethoven, L. von | Ger. | 1818 | 1893 | Gounod, Chas.... | Fr. | 1561 | 1594 | Peri, Jacopo.... | It. |
| 1802 | 1835 | Bellini, Vinc.... | It. | 1701 | 1759 | Graun, C. H.... | Ger. | 1728 | 1800 | Piccinni, Nicola.. | It. |
| 1803 | 1869 | Berlioz, Hector.. | Fr. | 1741 | 1813 | Gretry, Andro... | Fr. | 1757 | 1831 | Pleyel, I. J..... | Aus. |
| 1804 | 1885 | Benedict, Sir J... | Ger. | 1843 | 1907 | Grieg, Edvard... | Nor. | 1658 | 1695 | Purcell, Henry... | Eng. |
| 1808 | 1870 | Balfe, M. W.... | Ir. | 1685 | 1759 | Handel, G. F.... | Sax. | 1822 | 1882 | Raff, J. J..... | Swiss. |
| 1816 | 1875 | Bennett, Sir Wm. | Eng. | 1799 | 1868 | Halevy, J. E.... | Fr. | 1683 | 1764 | Rameau, J. P.... | Fr. |
| 1838 | 1897 | Bendl, Karl..... | Boh. | 1732 | 1809 | Haydn, Joseph.. | Aus. | 1767 | 1821 | Romberg, Andr.. | Fr. |
| 1839 | 1875 | Bizet, Leo..... | Fr. | 1791 | 1833 | Herold, Louis... | Fr. | 1868 | 1918 | Rostand, Edm... | Fr. |
| 1722 | 1795 | Benda, Georg... | Boh. | 1728 | 1804 | Hiller, Joh..... | Prus. | 1792 | 1868 | Rossini, Giaco... | It. |
| 1842 | 1918 | Bolto, Arrigo.... | It. | 1673 | 1739 | Keiser, Reinh.. | Ger. | 1829 | 1894 | Rubinstein, A. G.. | Russ. |
| 1710 | 1779 | Boyce, Wm..... | Eng. | 1832 | 1911 | Lecocq, Chas.... | Fr. | 1659 | 1725 | Scarlatti, Aleso.. | It. |
| 1740 | 1806 | Boccherini..... | It. | 1694 | 1746 | Leo, Leonardo... | It. | 1797 | 1828 | Schubert, Franz.. | Aus. |
| 1786 | 1855 | Bishop, Sir H. R. | Eng. | 1811 | 1886 | Liszt, Franz..... | Hung. | 1810 | 1856 | Schumann, Rob't | Sax. |
| 1833 | 1897 | Brahms, Joh.... | Ger. | 1620 | 1677 | Lock, Matt..... | Eng. | 1585 | 1672 | Schutz, Heinr... | Ger. |
| 1538 | 1623 | Byrde, Wm..... | Eng. | 1633 | 1687 | Lully, J. B..... | It. | 1778 | 1851 | Spontini, Gasp... | It. |
| 1604 | 1674 | Carissimi, Giac.. | It. | 1813 | 1887 | Macfarren, G. A. | Eng. | 1784 | 1859 | Spour, Ludwig... | Ger. |
| 1550 | 1600 | Cavaliere, Emil.. | It. | 1792 | 1872 | Mason, Lowell... | Amer. | 1804 | 1849 | Strauss, Joh..... | Aus. |
| 1844 | 1891 | Cellier, Alfred... | Eng. | 1809 | 1847 | Mend's'n-B'. th'y | Ger. | 1842 | 1900 | Sullivan, Sir Arth | Eng. |
| 1760 | 1842 | Cherubini, Maria | It. | 1797 | 1870 | Mercadante, Sav. | It. | 1523 | 1585 | Tallis, Thos..... | Eng. |
| 1809 | 1849 | Chopin, Francis.. | Pol. | 1794 | 1864 | Meyerbeer, Jac.. | Ger. | 1840 | 1893 | Tschaikowsky, P.I | Rus. |
| 1752 | 1832 | Clementi, Muzio. | It. | 1566 | 1651 | Monteverde, C... | It. | 1500 | 1560 | Tye, Chris..... | Eng. |
| 1810 | 1884 | Costa, Sir Mich.. | It. | 1563 | 1604 | Morley, Thos... | Eng. | 1813 | 1901 | Verdi, Giusep... | It. |
| 1677 | 1727 | Croft, Wm..... | Eng. | 1794 | 1870 | Moschelles, Ign.. | Ger. | 1813 | 1883 | Wagner, Rich... | Ger. |

## SINGERS.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1823 | 1894 | Alboni, Marie... | It. | 1820 | 1887 | Lind, Jenny..... | Swdn. | 1833 | 1882 | Phillips, Adel.... | Eng. |
| 1857 | 1921 | Bispham, David. | Amer. | 1808 | 1836 | Malibran, M.... | Fr. | 1818 | 1900 | Reeves, Sims.... | Eng. |
| 1788 | 1856 | Bordogni, G..... | It. | 1749 | 1833 | Maria, Gertr.... | Ger. | 1810 | 1890 | Ronconi, G..... | It. |
| 1846 | 1896 | Campanini, I.... | It. | 1810 | 1883 | Mario, Cav..... | It. | 1795 | 1854 | Rubini, Giov.... | It. |
| 1873 | 1921 | Caruso, Enrico.. | It. | 1836 | 1889 | Murska, Ilma de. | It. | 1822 | 1882 | Rudersdorf, H... | Russ. |
| 1855 | 1917 | De Reszke, Edw. | Pol. | 1781 | 1861 | Novello, Vinc... | Eng. | 1806 | 1854 | Sontag, Hetty... | Ger. |
| 1816 | 1889 | Formes, Karl.... | Ger. | 1836 | 1874 | Parepa-Rosa, Eu. | Scot. | 1800 | 1876 | Tamburini, A.... | It. |
| 1811 | 1869 | Grisi, G..... | It. | 1798 | 1865 | Pasta, Guid..... | Eng. | 1807 | 1886 | Tichatscheck, J.. | Ger. |
| 1794 | 1858 | La Blache, L.... | It. | 1843 | 1919 | Patti, Adelina... | Span. | 1753 | 1833 | Todi, Luisa..... | Port. |

## VIOLINISTS.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1810 | 1880 | Bull, Ole..... | Nor. | 1884 | 1908 | Sarasate, P. M.. | Span. | 1819 | 1895 | Halle, Sir Chas.. | Ger. |
| 1653 | 1713 | Corelli, Arc..... | It. | 1815 | 1894 | Sivori, Ern..... | It. | 1814 | 1889 | Henselt, Adolf... | Bav. |
| 1824 | 1893 | Eichberg, J..... | Ger. | 1692 | 1770 | Tartini, G..... | It. | 1806 | 1888 | Herz, Henry..... | Aus. |
| 1716 | 1796 | Giardini, F..... | It. | 1753 | 1824 | Viotti, Jean.... | It. | 1788 | 1837 | Hummel, J..... | Ger. |
| 1831 | 1907 | Joachim, Jos.... | Ger. | 1820 | 1881 | Vieuxtemps, H.. | Bel. | 1832 | 1882 | Joell, Alfred.... | It. |
| 1832 | 1875 | Laub, Ferd..... | Ger. | 1845 | 1908 | Wilhelmji, A. D. | Ger. | 1784 | 1849 | Kalkbrenner, F.. | Ger. |
| 1697 | 1764 | Le Clair, J. M... | Fr. | 1840 | 1884 | Brassin, Louis... | Fr. | 1713 | 1780 | Krebs, Joh..... | Sax. |
| 1819 | 1890 | Leonhard, Hub.. | Bel. | 1809 | 1886 | D'Albert, Chas.. | Ger. | 1799 | 1862 | Mayer, Chas.... | Ger. |
| 1790 | 1861 | Lipinski, Karl... | Pol. | 1811 | 1850 | Duicken, Louise. | Ger. | 1838 | 1898 | Mills, S. B..... | Eng. |
| 1781 | 1840 | Paganini, Nic... | It. | 1761 | 1812 | Dussek, L..... | Boh. | 1784 | 1838 | Ries, Ferd..... | Swiss. |
| 1831 | 1903 | Rappoldi, Ed.... | Aus. | 1829 | 1869 | Gottschalk, L... | U. S. | 1797 | 1843 | Schoberlechner, F | Aus. |
| 1830 | 1898 | Remenyi, Edw... | Hung. | 1813 | 1869 | Haberbier, E.... | Ger. | 1830 | 1894 | Von Bulow, Hans | Ger. |

## BYGONE STAGE STARS.

| B'N. | D'd. | Name. | B'N. | D'd. | Name. | B'N. | D'd. | Name. |
|---|---|---|---|---|---|---|---|---|
| 1838 | 1891 | Barrett, Lawr. | 1832 | 1918 | Mitchell, Maggie | 1847 | 1920 | O'Neill, James |
| 1833 | 1893 | Booth, Edwin | 1859 | 1919 | Goodwin, Nat. C. | 1871 | 1921 | Opp, Julie |
| 1796 | 1852 | Booth, Junius B. | 1873 | 1918 | Held, Anna | 1821 | 1858 | Rachel, Mlle. |
| 1887 | 1918 | Castle, Vernon | 1838 | 1905 | Irving, Henry | 1860 | 1916 | Rehan, Ada |
| 1838 | 1899 | Daly, Augustin | 1829 | 1905 | Jefferson, Joseph | 1836 | 1903 | Robson, Stuart |
| 1850 | 1898 | Davenport, Fanny | 1787 | 1833 | Kean, Edmund | 1861 | 1922 | Russell, Lillian |
| 1820 | 1897 | Drew, Mrs. John | 1811 | 1868 | Kean, Charles | 1755 | 1831 | Siddons, Mrs. Sarah |
| 1823 | 1918 | Ellsler, Effie (1st) | 1843 | 1917 | Kendall, Wm. H. | 1853 | 1917 | Tree, Sir Beerbohm |
| 1824 | 1879 | Fechter, Charles | 1793 | 1873 | Macready, Wm. Chas. | 1819 | 1888 | Wallack, Lester |
| 1806 | 1872 | Forrest, Edwin | 1837 | 1885 | McCullough, John | 1838 | 1922 | Ward, Genevieve |
| 1716 | 1779 | Garrick, David | 1857 | 1907 | Mansfield, Richard | 1841 | 1919 | Wyndham, Sir Chas. |

## STAGE FAVORITES.

| Name. | Birthplace. | Born. |
|---|---|---|
| Adams, Maude | Salt Lake City, Utah | 1872 |
| Albani, Emma | Chambly, Canada | 1852 |
| Alda, Frances | New Zealand | 1882 |
| Allen, Viola | Alabama | 1869 |
| Ames, Winthrop | North Easton, Mass. | 1871 |
| Anderson, Mary | Sacramento, Cal. | 1859 |
| Anglin, Margaret | Ottawa, Canada | 1876 |
| Arbuckle, Maclyn | San Antonio, Tex. | 1866 |
| Arthur, Julia | Hamilton, Ontario | 1869 |
| Ashwell, Lena | England | 1872 |
| Barrymore, Ethel | Philadelphia | 1879 |
| Barrymore, John | | 1882 |
| Bates, Blanche | Portland, Ore. | 1873 |
| Bentley, Irene | Baltimore | |
| Bernard, Sam | Birmingham, England. | 1863 |
| Bernhardt, Sarah | Paris | 1845 |
| Bingham, Amelia | Hicksville, Ohio | 1869 |
| Blauvelt, Lillian Evans | Brooklyn | 1874 |
| Bodanzky, Artur | Vienna, Austria | 1877 |
| Bonci, Alessandro | Cesena, Italy | 1870 |
| Burke, Billie | Washington, D. C. | 1886 |
| Burt, Laura | Isle of Man | 1875 |
| Butt, Clara | Southwick, England | 1873 |
| Cahill, Marie | Brooklyn | |
| Calvé, Emma | Aveyron, France | 1866 |
| Cameron, Beatrice | Troy, N. Y. | 1868 |
| Cameron, Violet | England | 1862 |
| Campbell, Mrs. Patrick | London | 1865 |
| Carter, Mrs. Leslie | Lexington, Ky. | 1862 |
| Carus, Emma | Berlin | 1879 |
| Cavalieri, Lina | Rome | 1884 |
| Cawthorn, Joseph | New York | 1868 |
| Chase, Pauline | Washington, D. C. | 1885 |
| Claire, Ina | Washington, D. C. | 1892 |
| Claxton, Kate | New York | 1850 |
| Coghlan, Rose | England | 1853 |
| Cohan, George M. | Providence, R. I. | 1878 |
| Collier, William | New York | 1868 |
| Conquest, Ida | New York | 1876 |
| Courtenay, William L. | Worcester, Mass. | 1875 |
| Courtleigh, William L. | Guelph, Ontario | 1869 |
| Cowl, Jane | Boston | 1884 |
| Crane, William H. | Leicester, Mass. | 1845 |
| Crosman, Henrietta | Wheeling, W. Va. | 1865 |
| Daly, Arnold | Brooklyn | 1875 |
| Daniels, Frank | Boston | 1860 |
| Dawn, Hazel | Ogden, Utah | 1891 |
| Destinn, Emmy | Prague | 1878 |
| De Angelis, Jefferson | San Francisco | 1859 |
| D'Arville, Camille | Holland | 1863 |
| De Belleville, Frederic | Belgium | 1857 |
| De Merode, Cleo | Paris | 1874 |
| D'Orsay, Lawrance | North'ptons're, Eng. | |
| De Reszke, Jean | Warsaw, Poland | 1850 |
| De Silva, N | | 1868 |
| De Wolfe, Elsie | New York | 1865 |
| Dixey, Henry E. | Boston | 1859 |
| Dressler, Marie | Cobourg, Canada | 1869 |
| Drew, John | Philadelphia | 1853 |
| Duse, Eleonora | Italy | 1859 |
| Eames, Emma Hayden | Shanghai | 1867 |
| Earle, Virginia | Cincinnati | 1875 |
| Edeson, Robert | New Orleans | 1868 |
| Elliott, Maxine | Rockland, Me. | 1871 |
| Elsler, Effie | Philadelphia | 1858 |
| Eltinge, Julian | Boston | 1883 |
| Evesson, Isabel | St. Louis | 1870 |
| Fairbanks, Douglas | Denver | 1883 |
| Farnum, Dustin | Hampton Beach, N. H. | 1876 |
| Farnum, William | Buckport, Me. | 1876 |
| Farrar, Geraldine | Melrose, Mass. | 1882 |
| Faversham, William | London | 1868 |
| Ferguson, Elsie L. | New York | 1883 |
| Fernandez, Bijou | New York | |
| Fields, Lew | New York | 1867 |
| Filkins, Grace | Philadelphia | |
| Fischer, Alice | Indiana | 1875 |
| Fiske, Minnie Maddern | New Orleans | 1865 |
| Forbes-Robertson, Sir J. | London | 1853 |
| Foy, Eddie | New York | 1854 |
| Frederick, Pauline | Boston | 1884 |
| Friganza, Trixie | Cincinnati | 1870 |
| Gadski, Johanna | Anklam, Prussia | 1872 |
| Galland, Bertha | New York | 1877 |
| Garden, Mary | Scotland | 1877 |
| Genée, Adeline | Jutland, Denmark | 1882 |
| George, Grace | New York | 1880 |
| Gillette, William | Hartford, Ct. | 1855 |
| Gilman, Mabelle | New York | 1880 |
| Glaser, Lulu | Allegheny City, Pa. | 1876 |
| Gluck, Alma | Roumania | 1886 |
| Goodrich, Edna | Logansport, Ind. | 1883 |
| Gordon, Kitty | England | 1878 |
| Granville, Lillian | Canada | 1887 |
| Guilbert, Yvette | Paris | 1868 |
| Hackett, James K. | Wolfe Island, Ont. | 1869 |
| Hading, Jane | Marseilles | 1859 |
| Hare, Sir John | London | 1844 |
| Harned, Virginia | Boston | 1868 |
| Hauptmann, Gerhart | Salzbrunn, Austria | 1862 |
| Hawtrey, Charles | Eton, England | 1858 |
| Hedman, Martha | Ostersund, Sweden | 1888 |
| Hempel, Frieda | Leipzig | 1885 |
| Herne, Chrystal | Boston | 1883 |
| Heron, Bijou | New York | 1863 |
| Hilliard, Robert C. | New York | 1857 |
| Hitchcock, Raymond | Auburn, N. Y. | 1870 |
| Hofmann, Josef | Casimir, Cracow | 1877 |
| Holland, Joseph J. | New York | 1860 |
| Hopper, De Wolf | New York | 1858 |
| Hopper, Edna Wallace | San Francisco | 1874 |
| Houdini, Harry | Appleton, Wis. | 1873 |
| Illington, Margaret | Bloomington, Ill. | 1881 |
| Irving, H. B. | London | 1870 |
| Irving, Isabel | Bridgeport, Ct. | 1871 |
| Irwin, May | Whitby, Ont. | 1862 |
| Janis, Elsie | Delaware, O. | 1889 |
| Jeffreys, Ellis | Ireland | 1868 |
| Jerome, Jerome K. | Walsall, England | 1859 |
| Jorn, Carl | Riga, Russia | 1873 |
| Kalich, Bertha | Lemberg, Galicia | 1874 |
| Keane, Doris | Michigan | 1885 |
| Kendal, William H. | London | 1843 |
| Kendal, Mrs. W. H. | Lincolnshire, Eng. | 1849 |
| Kidder, Kathryn | Newark | 1868 |
| Kreisler, Fritz | Vienna | 1875 |
| Kubelik, Jan | Michle, Bohemia | 1880 |
| Labia, Maria | Italy | 1883 |
| Lackaye, Wilton | Loudoun County, Va. | 1862 |
| Langtry, Lily | St. Saviour's, Eng. | 1852 |
| Lauder, Harry | Portobello, Scotland | 1870 |
| Levey, Ethel | San Francisco | 1881 |
| Lipman, Clara | Chicago | 1869 |
| Lloyd, Alice | London | 1873 |
| Lloyd, Marie | London | 1870 |
| Loftus, Cecilia | Glasgow | 1876 |
| Lohr, Marie | Sydney | 1890 |
| Lotta (Crabtree) | New York | 1847 |
| Lou-Tellegen, M. | Amsterdam | 1885 |
| Mack, Andrew | Boston | 1863 |
| Mann, Louis | New York | 1865 |
| Mannering, Mary | London | 1876 |
| Mantell, Robert B. | Ayrshire, Scotland | 1854 |
| Marlowe, Julia | Caldbeck, England | 1870 |
| Martin, Riccardo | Hopkinsville, Ky. | 1879 |
| Martinot, Sadie | Yonkers, N. Y. | 1861 |
| Maude, Cyril | London | 1862 |
| May, Edna | Syracuse | 1875 |
| Mayo, Margaret | Illinois | 1882 |
| McCormack, John | Athlone, Ireland | 1885 |
| McDonald, Christie | Picton, N. S. | 1875 |
| McIntyre, Frank | Ann Arbor, Mich. | 1879 |
| McLean, R. D. | New Orleans | 1859 |
| McRae, Bruce | India | 1867 |
| Melba, Nellie | Melbourne | 1866 |
| Millard, Evelyn | England | 1873 |
| Miller, Henry | London | 1860 |
| Millward, Jessie | England | 1861 |
| Morris, Clara | Toronto | 1849 |
| Nazimova, Alla | Yalta, Crimea, Russia | 1879 |
| Neilson-Terry, Phyllis | London | 1892 |
| Nethersole, Olga | London | 1870 |
| Nielson, Alice | Nashville | 1876 |
| Nilsson, Christine | Wederslof, Sweden | 1843 |
| Norworth, Jack | Philadelphia | 1879 |
| Olcott, Chauncey | Providence, R. I. | 1860 |
| O'Neill, Nance | Oakland, Cal. | 1875 |
| Paderewski, Ignace J. | Poland | 1860 |
| Palmer, Minnie | Philadelphia | 1860 |
| Pavlowa, Anna | Russia | 1885 |
| Phillips, Frank | Russia | 1888 |
| Power, Tyrone | London | 1869 |
| Powers, James T. | New York | 1862 |
| Prince, Adelaide | London | 1866 |
| Rankin, Phyllis | | 1874 |
| Reeve, Ada | London | 1876 |
| Ring, Blanche | Boston | 1876 |
| Ritchie, Adele | Philadelphia | 1874 |
| Roberts, Florence | New York | 1871 |
| Robson, May | Australia | 1868 |
| Rockwell, Florence | St. Louis | 1883 |
| Rorke, Kate | London | 1866 |
| Rorke, Mary | London | 1858 |
| Russell, Annie | Liverpool | 1864 |
| Sanderson, Julia | Springfield, Mass. | 1887 |
| Scheff, Fritzi | Vienna | 1880 |
| Schumann-Heink, E. | Lieben, Austria | 1861 |
| Scott, Cyril | Ireland | 1866 |
| Scotti, Antonio | Naples | 1866 |
| Sembrich, Marcella | Lemberg, Austria | 1858 |
| Shannon, Effie | Cambridge, Mass. | 1867 |
| Shattuck, Truly | San Miguel, Cal. | 1876 |
| Shaw, Mary | Wolfboro, N. H. | 1860 |
| Skinner, Otis | Cambridge, Mass. | 1858 |
| Slezak, Leo | Schonberg, Austria | 1876 |
| Sothern, Edward H. | New Orleans | 1859 |

## STAGE FAVORITES.

| NAME. | Birthplace. | Born. | NAME. | Birthplace. | Born |
|---|---|---|---|---|---|
| Sousa, John Philip.... | Washington, D. C.... | 1854 | Vanbrugh, Irene..... | Exeter, England..... | 1872 |
| Spong, Hilda..... | Australia..... | 1875 | Vanbrugh, Violet..... | Exeter, England..... | 1867 |
| Stahl, Rose..... | Montreal..... | 1875 | Victoria, Vesta..... | Leeds, England..... | 1873 |
| Stanhope, Adelaide.... | Paris..... | 1858 | Wainwright, Marie.... | Philadelphia..... | 1853 |
| Starr, Frances..... | Oneonta, N. Y..... | 1886 | Walcot, Charles..... | New York..... | 1840 |
| Stevenson, Charles A.. | Dublin..... | 1850 | Walker, Charlotte.... | Galveston..... | 1878 |
| Stone, Fred Andrew... | Denver..... | 1873 | Ward, Fannie..... | St. Louis..... | 1875 |
| Summerville, Amelia.. | Kildare, Ireland..... | ..... | Warde, Frederick..... | Warrington, England.. | 1851 |
| Taliaferro, Edith..... | Boston..... | 1892 | Ware, Helen..... | San Francisco..... | 1877 |
| Taliaferro, Mabel..... | New York..... | 1887 | Warfield, David..... | San Francisco..... | 1866 |
| Tanguay, Eva..... | Marbleton, Canada... | 1878 | Waring, Herbert..... | London..... | 1857 |
| Taylor, Laurette..... | New York..... | 1887 | Warner, Henry Byron. | London..... | 1876 |
| Tempest, Marie..... | London..... | 1866 | Weber, Joseph..... | New York..... | 1867 |
| Templeton, Fay..... | Little Rock, Ark..... | 1865 | Wheatley, Walter..... | Joplin, Mo..... | 1885 |
| Terriss, Ellaline..... | Falkland Islands..... | 1872 | Williams, Fritz..... | Boston..... | 1865 |
| Terry, Ellen (Alice) .. | Coventry, England.... | 1848 | Wilson, Francis..... | Philadelphia..... | 1854 |
| Tetrazzini, Luisa..... | Florence..... | 1874 | Wise, Thomas A..... | Feversham, England.. | 1865 |
| Teyte, Maggie..... | Wolverhampton, Eng.. | 1891 | Wright, Huntley..... | London..... | 1869 |
| Thursby, Emma..... | Brooklyn..... | 1857 | Wyndham, Sir Charles | England..... | 1841 |
| Tilley, Vesta..... | Worcester, England... | 1864 | Yohe, May..... | Pennsylvania..... | 1869 |
| Tyler, Odette..... | Savannah..... | 1869 | Ysaye, Eugene..... | Liege, Belgium..... | 1858 |
| Tynan, Brandon..... | Dublin..... | 1879 | | | |

## FORM OF ADDRESS FOR PERSONS OF RANK.

An *Emperor* is to be addressed, in a letter, as "Sire," or "Your Imperial Majesty."

A *King* or *Queen* is to be addressed, in a letter, as "Sire" (or "Madam"), or "Your Majesty." The envelope is to be addressed, "The King's (or Queen's) Most Excellent Majesty."

*Princes* and *Princesses*, and other persons of royal blood, are addressed as "His (or Her) Royal Highness." Here, as in the cases above, a letter may begin "May it please," following with the words "Your Majesty" or "Your Royal Highness." "May it please" goes well at the start of any letter.

A *Duke* or *Marquis* is "My Lord Duke" (or "Marquis"), a Duke is "His (or Your) Grace." A Marquis is also "My Lord," or "Your Lordship."

An *Earl* or a *Baron* is "My Lord," or "Your Lordship," as "the Right Honorable."

A *Viscount* is "the Right Honorable."

A *Baronet* or a *Knight* is "Sir."

Wives of any peer may be addressed as "Madam," with the further alternative of "Your Ladyship," or "Your Grace," if she is of high rank. Women of peers may be addressed also as "the Right Honorable," or "the Honorable," according to the rank. The wife of an Earl is a *Countess*.

A *Cardinal* is "Your (or His) Eminence." An *Archbishop* is "My Lord" or "His Grace." A *Bishop* is "My Lord." An *Archdeacon* is "Venerable Sir."

An *Ambassador* is "Your Excellency." A *Minister Plenipotentiary* is "Sir."

## WHEAT, LAND AND POPULATION.

(By the United States Department of Agriculture.)

That wheat consumption was overtaking wheat production, both per capita, after 1875-1894, is indicated by the last column of the accompanying table down to the World War period, during a portion of which period wheat production was specially stimulated. It may be suspected that the high percentage of the wheat crop going into consumption in 1866-1875 is due to underestimation of the production at a time when it was impossible for estimation to keep up with the expanding production on new land.

The crux of the problem of the production of wheat in relation to population is found in the per capita production per acre. Although it is known that wheat yield per acre has been increasing in the United States for many years, it is not so well known that population has been gaining at a faster rate and that this fact has had to be counterbalanced, more or less, by taking more acreage into the national wheat field. This remedy cannot be continued indefinitely. Diminished immigration and a diminishing birth rate, with some help from increasing yield per acre, are apparently the only factors of the problem that may prevent a partial dependence in this country on imported wheat at some future time.

The total wheat production on which the per capita production of the accompanying table is based is partly the result of adjusting the department's estimates of wheat acreage for each year.

PRODUCTION AND CONSUMPTION OF WHEAT IN THE UNITED STATES.

| PERIOD BEGINNING WITH JULY. | PRODUCTION. | | CONSUMPTION. | | PERIOD BEGINNING WITH JULY. | PRODUCTION. | | CONSUMPTION. | |
|---|---|---|---|---|---|---|---|---|---|
| | Per Capita. | Per Acre per 1,000,000 Pop. | Per Capita. | Per-centage of Prod. | | Per Capita. | Per Acre per 1,000,000 Pop. | Per Capita. | Per-centage of Prod. |
| | *Bushels.* | *Bushels.* | *Bushels.* | *Pct.* | | *Bushels.* | *Bushels.* | *Bushels.* | *Pct.* |
| 1866-1874..... | 6.208 | 0.308 | 5.048 | 81.3 | 1895-1904..... | 8.605 | .176 | 6.330 | 73.6 |
| 1875-1884..... | 8.415 | .248 | 5.908 | 70.2 | 1905-1914..... | 7.723 | .161 | 6.210 | 80.4 |
| 1885-1894..... | 7.308 | .198 | 5.068 | 69.3 | 1915-1920..... | 7.951 | .138 | 5.804 | 73.0 |

NOTE—Carry-over not taken into the reckoning, but the error is not perceptible in the groups of years.

## GIANT STAR BETELGEUSE NOT AS BIG AS IT LOOKS?

The bigness of Betelgeuse does not lie in its body but in the immense extent of the luminous atmosphere which surrounds it, according to the theory advanced by M. Verronet, the astronomer of the Strasburg Observatory, July 25, 1922, at the Congress for the Advancement of Science at Montpelier, France.

M. Verronet stated that no star as big as Betelgeuse could exist in a solid mass. According to the measurements of Professor Michelson at Mt. Wilson Observatory, it is 300 times greater in diameter than the sun, with a circumference greater than the whole orbit of the earth, whereas Sirius, the most brilliant normal star in the sky, is only twice as big as the sun.

M. Verronet cited measurements of other giant stars, such as Antares, which has forty times the diameter of the sun, in support of his theory. The established laws, he said, did not admit an explanation of the physical equilibrium of these giant stars, and he quoted determined laws of correlation, mass and temperature to show that in no case could one of these giant stars exceed in actual mass two or three times the size of the sun.

What gave them their gigantic appearance, he said, was that their mass was surrounded by an immense luminous envelope forming a photosphere. Something analogous to this envelope, but much less brilliant, was to be found in the sun's corona. If an effulgent photosphere stretched beyond the sun's atmosphere at the level of the corona, something like a giant star of the Betelgeuse kind would be produced. But to produce this effect the sun's superficial heat would have to be raised to 300,000 degrees. An outside stable envelope with diameter equal to 300 times that of the sun would then be formed.

Ultimately, says M. Verronet, these giant stars become normal as their envelopes contract with the decline of heat, turning successively yellow and blue.

# Washington Arms Conference; Treaties.

IN pursuance of a resolution of Congress (passed by the Senate, May 26, 1921, and by the House, June 29) calling for an International Conference on Armament Limitation. President Harding, after informally sounding the big powers and finding them agreeable, sent forth, on Aug. 11, 1921, the formal call for the Conference, on the part of the United States to the British Empire, Belgium, China, France, Italy, Japan, Netherlands, and Portugal. The opening was set for Nov. 11, 1921 (Armistice Day), at Washington, but, owing to the burial of America's unknown soldier on that day at Arlington, Va., National Cemetery, just outside the Capital, the formal sessions did not begin until Nov. 12. For further details including the speeches, etc., see the 1922 WORLD ALMANAC.

The agenda or official U. S. programme for the Conference, was as follows:

AGENDA.

1. Limitation of naval armament; basis of limitation; extent of limitation; fulfilment of conditions.
2. Rules for control of new agencies of warfare.
3. Limitation of land armament.

Pacific and Far Eastern questions:

1. Questions relating to China; principles to be applied.
2. Application to subjects.
   A. Territorial integrity.
   B. Administrative integrity.
   C. Open door; equality of administrative and industrial opportunity.
   D. Concessions, monopolies and other economic privileges.
   E. Development of railways.
   F. Preferential railroad rates.
   G. Status of existing commitments.

Questions relating to Siberia; similar to questions relating to China.

3. Mandated islands.

Japan at first raised some objection to the consideration of her interests in the Far East, but later agreed to the agenda.

DELEGATES PLENIPOTENTIARY TO THE CONFERENCE.

*United States.*

Secretary of State Charles E. Hughes, *Chairman of the Conference;* U. S. Senator Henry Cabot Lodge of Mass., ex-Secretary of State Elihu Root, of N. Y.; U. S. Senator Oscar W. Underwood, of Ala.

*Belgium.*

Ambassador to the U. S., Baron de Cartier.

*British Empire.*

Great Britain—Premier David Lloyd George (unable to attend), Lord President of the Council, Right Hon. A. J. Balfour; Right Hon. Lord Lee of Fareham; Ambassador to the U. S., Sir Auckland Geddes.

Canada—Right Hon. Sir Robert Borden.

Australia—Minister for Defense, Hon. G. F; Pearce.

New Zealand—Judge Sir John Salmond.

India—Right Hon. Srinivasa Sastri.

*China.*

Minister to the U. S., Mr. Sao-Ke Alfred Sze; Minister to Great Britain, Mr. V. K. Wellington Koo; Chief Justice Chung-Hui Wang; Mr. Chao-Chu Wu.

*France.*

Premier Aristide Briand; ex-Premier Rene Viviani; Minister of Colonies, M. Albert Sarraut; Ambassador to the U. S., M. Jules Jusserand.

*Italy.*

Senator Carlo Schanzer; Ambassador to the U. S., Vittorio Rolandi-Ricci; Senator Luigi Albertini; Representative Filippo Meda.

*Japan.*

Minister of the Navy, Baron Tomosaburo Kato; Ambassador to the U. S., Baron Kijuro Shidehara; Pres. of the House of Peers, Prince Iyesato Tokugawa; Vice Minister for Foreign Affairs, Mr. Masanao Hanihara.

*Netherlands.*

Foreign Minister Jonkheer H. A. van Karnebeek; Jonkheer F. Beelaerts van Blokland; Dr. E. Moresco. Alternate delegates—Minister to the U. S., Dr. J. C. A. Everwijn; Jonkheer W. H. de Beaufort.

*Portugal.*

Minister to the U. S., Viscount d'Alte; Capt. E. de Vasconcellos.

*Secretariat General of the Conference*—John W. Garrett.

The Advisory Committee of the U. S. delegates was composed of: *Chairman,* George Sutherland; Charles S. Barrett, Mrs. Charles Sumner Bird, Mrs. Katherine Phillips Edson, Mrs. Eleanor Franklin Egan, Under Sec. of State Henry P. Fletcher, Samuel Gompers, Sec. of Commerce Herbert C. Hoover, John L. Lewis, Gov. John M. Parker of La., Gen. John J. Pershing, Congressman Stephen G. Porter, Rear Admiral W. L. Rodgers, Asst. Sec. of the Navy Theodore Roosevelt, Willard Saulsbury, Harold M. Sewall, Walter George Smith, Carmi A. Thompson, William Boyce Thompson, Asst. Sec. of War J. Mayhew Wainwright, and Mrs. Thomas G. Winter.

The Conference ended on Feb. 6, 1922, and on Feb. 10, President Harding submitted to the Senate these treaties negotiated at the Conference:

The covenant of limitation to naval armament between the United States, the British Empire, France, Italy, and Japan.

The treaty between the same powers in relation to the use of submarines and noxious gases in warfare.

The treaty between the United States, the British Empire, France, and Japan relating to their insular possessions and their insular dominions in the Pacific.

A declaration accompanying the four-power treaty reserving American rights in mandated territory.

An agreement supplementary to the four-power treaty defining the application of the term "insular possessions and insular dominions" as relating to Japan.

A treaty between the nine powers in the conference relating to principles and policies to be followed in matters concerning China.

A treaty between the nine powers relating to Chinese customs tariff.

France declined to consider land armament reduction, and that part of the Agenda fell through.

NO ALLIANCE IN THE TREATIES, SAYS HARDING.

In submitting the treaties to the Senate President Harding said: "I can bring you every assurance that nothing in any of these treaties commits the United States, or any other power, to any kind of an alliance, entanglement, or involvement. It does not require us or any power to surrender a worthwhile tradition. It has been said, if this be true, these are mere meaningless treaties, and therefore valueless. Let us accept no such doctrine of despair as that. If nations may not establish by mutual understanding the rules and principles which are to govern their relationship; if a sovereign and solemn plight of faith by leading nations of the earth is valueless; if nations may not trust one another, then, indeed, there is little on which to hang our faith in advancing civilization or the furtherance of peace. Either we must live and aspire and achieve under a free and common understanding among peoples, with mutual trust, respect, andforbearance, and exercising full sovereignty, or else brutal, armed force will dominate, and the sorrows and burdens of war in this decade will be turned to the chaos and hopelessness of the next."

As to the Pacific treaty he said: "We crave peace there as we do on the continent, and we should be remiss in performing a national duty if we did not covenant the relations which tend to guarantee it. For more than a half century we have had a part in influencing the affairs of the Pacific, and our present proposed commitments are not materially different in character, nor materially greater in extent, though fraught with vastly less danger, than our undertakings in the past.

"We have convinced the on-looking and interested powers that we covet the possessions of no other power in the Far East, and we know for ourselves that we crave no further or greater governmental or territorial responsibilities there. Contemplating what is admittedly ours, and mindful of a long-time and reciprocal friendship with China, we do wish the opportunity to continue the development of our trade peacefully, and on equality with other nations, to strengthen our ties of friendship, and to make sure the righteous and just relationships of peace. Holding the possessions we do, entertaining these views, and confessing these ambitions, why should we not make reciprocal engagements to respect the territory of others and contract their respect of ours, and thus quiet apprehension and put an end to suspicion?

"There has been concern. There has been apprehension of territorial greed, a most fruitful cause of war. The conference has dissipated both, and your ratification of the covenants made will stabilize a peace for the breaking of which there is not a shadow of reason or real excuse. We shall not have less than before. No one of us shall have less than before. There is no narrowed liberty, no hampered independence, no shattered sovereignty, no added obligation. We will have new assurances, new freedom from anxiety, and new manifestations of the sincerity of our own intentions; a new demonstration of that honesty which proclaims a righteous and powerful republic. I am ready to assume the sincerity and the dependability of the assurances of our neighbors of the Old World that they will respect our rights, just as I know we mean to respect theirs."

## TREATY ON LIMITATION OF NAVAL ARMAMENT.

FOLLOWING is the text of the Limitation of Naval Armament Treaty, between the United States, the British Empire, France, Italy, and Japan, ratified by the United States Senate (74 to 1—France of Maryland), on March 29, 1922; ratified on the part of Japan by the Prince Regent, on Aug. 5, 1922; ratified by Britain, by the King's assent, on Aug. 19, 1922. Previously, on August 9, ratifications were agreed to by Canada, India, and the Union of South Africa.

Up to Dec. 1, 1922, neither France nor Italy had ratified the treaties providing for the reduction of naval armament. Unofficial announcement, however, had been made by both Premier Poincare, of France, and Premier Mussolini, of Italy, that the treaty would surely be ratified. Premier Wang Chung Hui announced in Pekin on November 6 that the nine Washington Conference treaties affecting China had been sent to the Chinese Parliament and were certain to be ratified shortly.

### CHAPTER I.

*General provisions relating to the limitation of naval armament.*

ARTICLE I.—The contracting powers agree to limit their respective naval armament as provided in the present treaty.

ARTICLE II.—The contracting powers may retain, respectively, the capital ships which are specified in Chapter II., part 1. On the coming into force of the present treaty, but subject to the following provisions of this article, all other capital ships, built or building, of the United States, the British Empire and Japan shall be disposed of as prescribed in Chapter II., part 2.

In addition to the capital ships specified in Chapter II., part 1, the United States may complete and retain two ships of the West Virginia class now under construction. On the completion of these two ships the North Dakota and Delaware shall be disposed of as prescribed in Chapter II., part 2.

The British Empire may, in accordance with the replacement table in Chapter II., part 3, construct two new capital ships not exceeding 35,000 tons (35,560 metric tons) standard displacement each. On the completion of the said two ships, the Thunderer, King George V., Ajax, and Centurion shall be disposed of as prescribed in Chapter II., part 2.

ARTICLE III.—Subject to the provisions of Article II., the contracting powers shall abandon their respective capital ship building programmes, and no new capital ships shall be constructed or acquired by any of the contracting powers except replacement tonnage which may be constructed or acquired as specified in Chapter II., part 3.

Ships which are replaced in accordance with Chapter II., part 3, shall be disposed of as prescribed in part 2 of that chapter.

ARTICLE IV.—The total capital ship replacement tonnage of each of the contracting powers shall not exceed in standard displacement, for the United States, 525,000 tons (533,400 metric tons); for the British Empire, 525,000 tons (533,400 metric tons); for France, 175,000 tons (177,800 metric tons); for Italy, 175,000 tons (177,800 metric tons); for Japan, 315,000 tons (320,040 metric tons).

ARTICLE V.—No capital ship exceeding 35,000 tons (35,560 metric tons) standard displacement shall be acquired by, or constructed by, for, or within the jurisdiction of, any of the contracting powers.

ARTICLE VI.—No capital ship of any of the contracting powers shall carry a gun with a caliber in excess of 16 inches (406 millimeters).

ARTICLE VII.—The total tonnage for aircraft carriers of each of the contracting powers shall not exceed in standard displacement, for the United States 135,000 tons (137,160 metric tons); for the British Empire 135,000 tons (137,160 metric tons); for France 60,000 tons (60,960 metric tons); for Italy 60,000 tons (60,960 metric tons); for Japan 81,000 tons (82,296 metric tons).

ARTICLE VIII.—The replacement of aircraft carriers shall be effected only as prescribed in Chapter II., part 3, provided, however, that all aircraft carrier tonnage in existence or building on Nov. 12, 1921, shall be considered experimental, and may be replaced, within the total tonnage limit prescribed in Article VII., without regard to its age.

ARTICLE IX.—No aircraft carrier exceeding 27,000 tons (27,432 metric tons) standard displacement shall be acquired by, or constructed by, for, or within the jurisdiction of, any of the contracting powers.

However, any of the contracting powers may, provided that its total tonnage allowance of aircraft carriers is not thereby exceeded, build not more than two aircraft carriers, each of a tonnage of not more than 33,000 tons (33,528 metric tons) standard displacement, and in order to effect economy any of the contracting powers may use for this purpose any two of their ships, whether constructed or in course of construction, which would otherwise be scrapped under the provisions of Article II. The armament of any aircraft carriers exceeding 27,000 tons (27,432 metric tons) standard displacement shall be in accordance with the requirements of Article X., except that the total number of guns to be carried in case any of such guns be of a caliber exceeding 6 inches (152 millimeters), except anti-aircraft guns and guns not exceeding 5 inches (127 millimeters), shall not exceed eight.

ARTICLE X.—No aircraft carrier of any of the contracting powers shall carry a gun with a caliber in excess of 8 inches (203 millimeters). Without prejudice to the provisions of Article IX., if the armament carried includes guns exceeding 6 inches (152 millimeters) in caliber the total number of guns carried, except anti-aircraft guns and guns not exceeding 5 inches (127 millimeters), shall not exceed 10. If alternatively the armament contains no guns exceeding 6 inches (152 millimeters) in caliber, the number of guns is not limited. In either case the number of anti-aircraft guns and of guns not exceeding 5 inches (127 millimeters) is not limited.

ARTICLE XI.—No vessel of war exceeding 10,000 tons (10,160 metric tons) standard displacement, other than a capital ship or aircraft carrier, shall be acquired by, or constructed by, for, or within the jurisdiction of, any of the contracting powers. Vessels not specifically built as fighting ships nor taken in time of peace under government control for fighting purposes, which are employed on fleet duties or as troop transports or in some other way for the purpose of assisting in the prosecution of hostilities otherwise than as fighting ships, shall not be within the limitations of this article.

ARTICLE XII.—No vessel of war of any of the contracting powers hereafter laid down, other than a capital ship, shall carry a gun with a caliber in excess of 8 inches (203 millimeters).

ARTICLE XIII.—Except as provided in Article IX., no ship designated in the present treaty to be scrapped may be reconverted into a vessel of war.

ARTICLE XIV.—No preparations shall be made in merchant ships in time of peace for the installation of warlike armaments for the purpose of converting such ships into vessels of war, other than the necessary stiffening of decks for the mounting of guns not exceeding 6 inch (152 millimeters) caliber.

ARTICLE XV.—No vessel of war constructed within the jurisdiction of any of the contracting powers for a non-contracting power shall exceed the limitations as to displacement and armament prescribed by the present treaty for vessels of a similar type which may be constructed by or for any of the contracting powers: Provided, however, that the displacement for aircraft carriers constructed for a non-contracting power shall in no case exceed 27,000 tons (27,432 metric tons) standard displacement.

ARTICLE XVI.—If the construction of any vessel of war for a non-contracting power is undertaken within the jurisdiction of any of the contracting powers, such power shall promptly inform the other contracting powers of the date of the signing of the contract and the date on which the keel of the ship is laid; and shall also communicate to them the particulars relating to the ship prescribed in Chapter II., part 3, section 1 (b), (4) and (5).

ARTICLE XVII.—In the event of a contracting power being engaged in war, such power shall not use as a vessel of war any vessel of war which may be under construction within its jurisdiction for any other power, or which may have been constructed within its jurisdiction for another power and not delivered.

ARTICLE XVIII.—Each of the contracting powers undertakes not to dispose by gift, sale or any mode of transfer of any vessel of war in such a manner that such vessel may become a vessel of war in the navy of any foreign power.

ARTICLE XIX.—The United States, the British Empire, and Japan agree that the status quo at the time of the signing of the present treaty, with regard to fortifications and naval bases, shall be maintained in their respective territories and possessions specified hereunder:

(1) The insular possessions which the United States now holds or may hereafter acquire in the Pacific Ocean, except (a) those adjacent to the coast of the United States, Alaska, and the Panama Canal Zone, not including the Aleutian Islands, and (b) the Hawaiian Islands.

(2) Hongkong and the insular possessions which the British Empire now holds or may hereafter acquire in the Pacific Ocean, east of the meridian of 110° east longitude, except (a) those adjacent to the coast of Canada, (b) the Commonwealth of Australia and its territories, and (c) New Zealand.

(3) The following insular territories and possessions of Japan in the Pacific Ocean, to wit, the Kurile Islands, the Bonin Islands, Amami-Oshima, the

Loochoo Islands, Formosa, and the Pescadores, and any insular territories or possessions in the Pacific Ocean which Japan may hereafter acquire.

The maintenance of the status quo under the foregoing provisions implies that no new fortifications or naval bases shall be established in the territories and possessions specified; that no measures shall be taken to increase the existing naval facilities for the repair and maintenance of naval forces, and that no increase shall be made in the coast defenses of the territories and possessions above specified. This restriction, however, does not preclude such repair and replacement of worn-out weapons and equipment as is customary in naval and military establishments in time of peace.

ARTICLE XX.—The rules for determining tonnage displacement prescribed in Chapter II., part 4, shall apply to the ships of each of the contracting powers.

## CHAPTER II.

*Rules relating to the execution of the treaty—Definition of terms.*

PART 1—Capital Ships Which May be Retained by the Contracting Powers—In accordance with Article II. ships may be retained by each of the contracting powers as specified in this part.

*Ships which may be retained by the United States.*

| NAME. | Tonnage. | NAME. | Tonnage. |
|---|---|---|---|
| Maryland..... | 32,600 | New York..... | 27,000 |
| California..... | 32,300 | Texas..... | 27,000 |
| Tennessee..... | 32,300 | Arkansas..... | 26,000 |
| Idaho..... | 32,000 | Wyoming..... | 26,000 |
| New Mexico... | 32,000 | Florida..... | 21,825 |
| Mississippi.... | 32,000 | Utah..... | 21,825 |
| Arizona..... | 31,400 | North Dakota.. | 20,000 |
| Pennsylvania.. | 31,400 | Delaware..... | 20,000 |
| Oklahoma..... | 27,500 | | |
| Nevada..... | 27,500 | Total tonnage | 500,650 |

On the completion of the two ships of the West Virginia class and the scrapping of the North Dakota and Delaware, as provided in Article 2, the total tonnage to be retained by the United States will be 525,850 tons.

*Ships which may be retained by the British Empire.*

| NAME. | Tonnage. | NAME. | Tonnage. |
|---|---|---|---|
| Royal Sovereign | 25,750 | Iron Duke..... | 25,000 |
| Royal Oak.... | 25,750 | Marlborough... | 25,000 |
| Revenge..... | 25,750 | Hood..... | 41,200 |
| Resolution..... | 25,750 | Renown..... | 26,500 |
| Ramillies..... | 25,750 | Repulse..... | 26,500 |
| Malaya..... | 27,500 | Tiger..... | 28,500 |
| Valiant..... | 27,500 | Thunderer..... | 22,500 |
| Barham..... | 27,500 | King George V. | 23,000 |
| Queen Elizab'th | 27,500 | Ajax..... | 23,000 |
| Warspite..... | 27,500 | Centurion..... | 23,000 |
| Benbow..... | 25,000 | | |
| Emp. of India.. | 25,000 | Total tonnage | 580,450 |

On the completion of the two new ships to be constructed and the scrapping of the Thunderer, King George V., Ajax, and Centurion, as provided in Article 2, the total tonnage to be retained by the British Empire will be 558,950 tons.

*Ships which may be retained by France.*

| NAME. | Tonnage. | NAME. | Tonnage. |
|---|---|---|---|
| | *Metric.* | | *Metric.* |
| Bretagne..... | 23,500 | Courbet..... | 23,500 |
| Lorraine..... | 23,500 | Condorcet..... | 18,890 |
| Provence..... | 23,500 | Diderot..... | 18,890 |
| Paris..... | 23,500 | Voltaire..... | 18,890 |
| France..... | 23,500 | | |
| Jean Bart..... | 23,500 | Total tonnage | 221,170 |

France may lay down new tonnage in the years 1927, 1929, and 1931, as provided in part 3, section 2.

*Ships which may be retained by Italy.*

| NAME. | Tonnage. | NAME. | Tonnage. |
|---|---|---|---|
| | *Metric.* | | *Metric.* |
| Andrea Doria.. | 22,700 | Roma..... | 12,600 |
| Caio Duilio.... | 22,700 | Napoli..... | 12,600 |
| Co'te Di Cavour | 22,500 | Vittorio Em'n'le | 12,600 |
| Giulio-Cesare.. | 22,500 | Regina Elena.. | 12,600 |
| L'n'do Da Vinci | 22,500 | | |
| Dante Alighieri. | 19,500 | Total tonnage | 182,800 |

Italy may lay down new tonnage in the years 1927, 1929, and 1931, as provided in part 3, section 2.

*Ships which may be retained by Japan.*

| NAME. | Tonnage. | NAME. | Tonnage. |
|---|---|---|---|
| Mutsu..... | 33,800 | Kirishima.... | 27,500 |
| Nagato..... | 33,800 | Haruna..... | 27,500 |
| Hiuga..... | 31,260 | Hiyei..... | 27,500 |
| Ise..... | 31,260 | Kongo..... | 27,500 |
| Yamashiro.... | 30,600 | | |
| Fu-So..... | 30,600 | Total tonnage | 301,320 |

PART 2—Rules for Scrapping Vessels of War—The following rules shall be observed for the scrapping of vessels of war which are to be disposed of in accordance with Articles II. and III.:

I. A vessel to be scrapped must be placed in such condition that it can not be put to combatant use.

II. This result must be finally effected in any one of the following ways:

(a) Permanent sinking of the vessel.

(b) Breaking the vessel up. This shall always involve the destruction or removal of all machinery, boilers, and armor, and all deck, side, and bottom plating.

(c) Converting the vessel to target use exclusively. In such case all the provisions of Paragraph III. of this part, except subparagraph (6), in so far as may be necessary to enable the ship to be used as a mobile target, and except subparagraph (7), must be previously complied with. Not more than one capital ship may be retained for this purpose at one time by any of the contracting powers.

(d) Of the capital ships which would otherwise be scrapped under the present treaty in or after the year 1931, France and Italy may each retain two seagoing vessels for training purposes exclusively—that is, as gunnery or torpedo schools. The two vessels retained by France shall be of the Jean Bart class, and of those retained by Italy one shall be the Dante Alighieri, the other of the Giulio Cesare class. On retaining these ships for the purpose above stated, France and Italy, respectively, undertake to remove and destroy their conning towers, and not to use the said ships as vessels of war.

III. (a) Subject to the special exceptions contained in Article IX., when a vessel is due for scrapping, the first stage of scrapping, which consists in rendering a ship incapable of further warlike service, shall be immediately undertaken.

(b) A vessel shall be considered incapable of further warlike service when there shall have been removed and landed, or else destroyed in the ship—

(1) All guns and essential portions of guns, fire-control tops, and revolving parts of all barbettes and turrets;

(2) All machinery for working hydraulic or electric mountings;

(3) All fire-control instruments and range finders;

(4) All ammunition, explosives, and mines;

(5) All torpedoes, warheads, and torpedo tubes;

(6) All wireless telegraphy installations;

(7) The conning tower and all side armor, or alternately all main propelling machinery; and

(8) All landing and flying-off platforms, and all other aviation accessories.

IV. The periods in which scrapping of vessels is to be effected are as follows:

(a) In the case of vessels to be scrapped under the first paragraph of Article II., the work of rendering the vessels incapable of further warlike service, in accordance with paragraph 3 of this part, shall be completed within six months from the coming into force of the present treaty, and the scrapping shall be finally effected within 18 months from such coming into force.

(b) In the case of vessels to be scrapped under the second and third paragraphs of Article II., or under Article III., the work of rendering the vessel incapable of further warlike service in accordance with paragraph 3 of this part shall be commenced not later than the date of completion of its successor, and shall be finished within six months from the date of such completion. The vessel shall be finally scrapped, in accordance with paragraph 2 of this part, within 18 months from the date of completion of its successor. If, however, the completion of the new vessel be delayed, then the work of rendering the old vessel incapable of further warlike service in accordance with paragraph 3 of this part shall be commenced within four years from the laying of the keel of the new vessel, and shall be finished within six months from the date on which such work was commenced, and the old vessel shall be finally scrapped in accordance with paragraph 2 of this part within 18 months from the date when the work of rendering it incapable of further warlike service was commenced.

PART 3—Replacement—The replacement of capital ships and aircraft carriers shall take place according to the rules in section 1 and the tables in section 2 of this part.

SECTION I.—Rules for Replacement—(a) Capital ships and aircraft carriers 20 years after the date of their completion may, except as otherwise provided in Article VIII. and in the table in section II. of this part, be replaced by new construction, but within the limits prescribed in Article IV. and Article VII. The keels of such new construction may, except as otherwise provided in Article VIII. and in the tables in section II. of this part, be laid down not earlier than 17 years from the date of completion of the tonnage to be replaced, provided, however, that no

capital ship tonnage, with the exception of the ships referred to in the third paragraph of Article II., and the replacement tonnage specifically mentioned in section II. of this part, shall be laid down until 10 years from Nov. 12, 1921.

(b) Each of the contracting powers shall communicate promptly to each of the other contracting powers the following information:

(1) The names of the capital ships and aircraft carriers to be replaced by new construction.

(2) The date of governmental authorization of replacement tonnage.

(3) The date of laying the keels of replacement tonnage.

(4) The standard displacement in tons and metric tons of each new ship to be laid down, and the principal dimensions, namely, length at waterline, extreme beam at or below waterline, mean draft at standard displacement.

(5) The date of completion of each new ship and its standard displacement in tons and metric tons, and the principal dimensions, namely, length at waterline, extreme beam at or below waterline, mean draft at standard displacement, at time of completion.

(c) In case of loss or accidental destruction of capital ships or aircraft carriers, they may immediately be replaced by new construction subject to the tonnage limits prescribed in Articles IV. and VII. and in conformity with the other provisions of the present treaty, the regular replacement programme being deemed to be advanced to that extent.

(d) No retained capital ships or aircraft carriers shall be reconstructed except for the purpose of providing means of defense against air and submarine attack, and subject to the following rules: The contracting powers may, for that purpose, equip existing tonnage with bulge or blister or anti-air attack deck protection, providing the increase of displacement thus effected does not exceed 3,000 tons (3,048 metric tons) displacement for each ship. No alterations in side armor, in caliber, number or general type of mounting of main armament shall be permitted except:

(1) In the case of France and Italy, which countries within the limits allowed for bulge may increase their armor protection and the caliber of the guns now carried on their existing capital ships so as not to exceed 16 inches (406 millimeters) and

(2) The British Empire shall be permitted to complete, in the case of the Renown, alterations to armor already commenced but temporarily suspended.

SECTION II.—*Replacement and Scrapping of Capital Ships.*

UNITED STATES.

| YR. | Ships Laid Down | Ships Completed | Ships Scrapped (Age in Parentheses). | Ships Retained. Pre-Jutland. | Ships Retained. Post-Jutland. |
|---|---|---|---|---|---|
| | | | Maine (20), Missouri (20), Virginia (17), Nebraska (17), Georgia (17), New Jersey (17), Rhode Island (17), Connecticut (17), Louisiana (17), Vermont (16), Kansas, (16), Minnesota (16), New Hampshire (15), South Carolina (13), Michigan (13), Washington (0), South Dakota (0), Indiana (0), Montana (0), North Carolina (0), Iowa (0), Massachusetts (0), Lexington (0), Constitution (0), Constellation (0), Saratoga (0), Ranger (0), United States (0).* | 17 | 1 |
| 1922 | ..... | A, B† | Delaware (12), North Dakota (12) | 15 | 3 |
| 1923 | ..... | ..... | ..... | 15 | 3 |
| 1924 | ..... | ..... | ..... | 15 | 3 |
| 1925 | ..... | ..... | ..... | 15 | 3 |
| 1926 | ..... | ..... | ..... | 15 | 3 |
| 1927 | ..... | ..... | ..... | 15 | 3 |
| 1928 | ..... | ..... | ..... | 15 | 3 |
| 1929 | ..... | ..... | ..... | 15 | 3 |
| 1930 | ..... | ..... | ..... | 15 | 3 |
| 1931 | C, D | ..... | ..... | 15 | 3 |
| 1932 | E, F | ..... | ..... | 15 | 3 |
| 1933 | G | ..... | ..... | 15 | 3 |
| 1934 | H, I | C, D | Florida (23), Utah (23), Wyoming (22). | 12 | 5 |
| 1935 | J | E, F | Arkansas (23), Texas (21), New York (21) | 9 | 7 |
| 1936 | K, L | G | Nevada (20), Oklahoma (20) | 7 | 8 |
| 1937 | M | H, I | Arizona (21), Pennsylvania (21) | 5 | 10 |
| 1938 | N, O | J | Mississippi (21) | 4 | 11 |
| 1939 | P, Q | K, L | New Mexico (21), Idaho (20) | 2 | 13 |
| 1940 | ..... | M | Tennessee (20) | 1 | 14 |
| 1941 | ..... | N, O | California (20), Maryland (20) | 0 | 15 |
| 1942 | ..... | P, Q | 2 ships West Virginia class | 0 | 15 |

* The United States may retain the Oregon and Illinois, for noncombatant purposes, after complying with the provisions of part 2, III. (b). †Two West Virginia class.

NOTE—A, B, C, D, etc., represent individual capital ships of 35,000 tons standard displacement, laid down and completed in the years specified.

BRITISH EMPIRE.

| YR. | Ships Laid Down | Ships Completed | Ships Scrapped (Age in Parentheses). | Ships Retained. Pre-Jutland. | Ships Retained. Post-Jutland. |
|---|---|---|---|---|---|
| | | | Commonwealth (16), Agamemnon (13), Dreadnought (15), Bellerophon (12), St. Vincent (11), Inflexible (13), Superb (12), Neptune (10), Hercules (10), Indomitable (13), Temeraire (12), New Zealand (9), Lion (9), Princess Royal (9), Conquerer (9), Monarca (9), Orion (9), Australia (8), Agincourt (7), Erin (7), 4 building or projected.* | 21 | 1 |
| 1922 | A, B† | ..... | ..... | 21 | 1 |
| 1923 | ..... | ..... | ..... | 21 | 1 |
| 1924 | ..... | ..... | ..... | 21 | 1 |
| 1925 | ..... | A, B | King George V. (13), Ajax (12), Centurion (12), Thunderer (13) | 17 | 3 |
| 1926 | ..... | ..... | ..... | 17 | 3 |
| 1927 | ..... | ..... | ..... | 17 | 3 |
| 1928 | ..... | ..... | ..... | 17 | 3 |
| 1929 | ..... | ..... | ..... | 17 | 3 |
| 1930 | ..... | ..... | ..... | 17 | 3 |
| 1931 | C, D | ..... | ..... | 17 | 3 |
| 1932 | E, F | ..... | ..... | 17 | 3 |
| 1933 | G | ..... | ..... | 17 | 3 |
| 1934 | H, I | C, D | Iron Duke (20), Marlborough (20), Emperor of India (20), Benbow (20) | 13 | 5 |
| 1935 | J | E, F | Tiger (21), Queen Elizabeth (20), Warspite (20), Barham (20) | 9 | 7 |
| 1936 | K, L | G | Malaya (20), Royal Sovereign (20) | 7 | 8 |
| 1937 | M | H, I | Revenge (21), Resolution (21) | 5 | 10 |
| 1938 | N, O | J | Royal Oak (22) | 4 | 11 |
| 1939 | P, Q | K, L | Valiant (23), Repulse (23) | 2 | 13 |
| 1940 | ..... | M | Renown (24) | 1 | 14 |
| 1941 | ..... | N, O | Ramillies (24), Hood (21) | 0 | 15 |
| 1942 | ..... | P, Q | A (17), B (17) | 0 | 15 |

* The British Empire may retain the Colossus and Collingwood for noncombatant purposes, after complying with the provisions of part 2, III. (b). † Two 35,000-ton ships, standard displacement.

NOTE—A, B, C, D, etc., represent individual capital ships of 35,000 tons standard displacement, laid down and completed in the years specified.

FRANCE.

| YR. | Ships Laid Down | Ships Completed | Ships Scrapped (Age in Parentheses). | SHIPS RETAINED. SUMMARY. Pre-Jutland. | Post-Jutland. |
|---|---|---|---|---|---|
| | *Tons.* | *Tons.* | | | |
| 1922 | ..... | ..... | ..... | 7 | 0 |
| 1923 | ..... | ..... | ..... | 7 | 0 |
| 1924 | ..... | ..... | ..... | 7 | 0 |
| 1925 | ..... | ..... | ..... | 7 | 0 |
| 1926 | ..... | ..... | ..... | 7 | 0 |
| 1927 | 35,000 | ..... | ..... | 7 | 0 |
| 1928 | ..... | ..... | ..... | 7 | 0 |
| 1929 | 35,000 | ..... | ..... | 7 | 0 |
| 1930 | ..... | 35,000 | Jean Bart (17), Courbet (17) | 5 | (*) |
| 1931 | 35,000 | ..... | ..... | 5 | (*) |
| 1932 | 35,000 | 35,000 | France (18) | 4 | (*) |
| 1933 | 35,000 | ..... | ..... | 4 | (*) |
| 1934 | ..... | 35,000 | Paris (20), Bretagne (20) | 2 | (*) |
| 1935 | ..... | 35,000 | Provence (20) | 1 | (*) |
| 1936 | ..... | 35,000 | Lorraine (20) | 0 | (*) |
| 1937 | ..... | ..... | ..... | 0 | (*) |
| 1938 | ..... | ..... | ..... | 0 | (*) |
| 1939 | ..... | ..... | ..... | 0 | (*) |
| 1940 | ..... | ..... | ..... | 0 | (*) |
| 1941 | ..... | ..... | ..... | 0 | (*) |
| 1942 | ..... | ..... | ..... | 0 | (*) |

* Within tonnage limitations; number not fixed.

NOTE—France expressly reserves the right of employing the capital ship tonnage allotment as she may consider advisable, subject solely to the limitations that the displacement of individual ships should not surpass 35,000 tons, and that the total capital ship tonnage should keep within the limits imposed by the present treaty.

ITALY.

| YR. | Ships Laid Down | Ships Completed | Ships Scrapped (Age in Parentheses). | SHIPS RETAINED. SUMMARY. Pre-Jutland. | Post-Jutland. |
|---|---|---|---|---|---|
| | *Tons.* | *Tons.* | | | |
| 1922 | ..... | ..... | ..... | 6 | 0 |
| 1923 | ..... | ..... | ..... | 6 | 0 |
| 1924 | ..... | ..... | ..... | 6 | 0 |
| 1925 | ..... | ..... | ..... | 6 | 0 |
| 1926 | ..... | ..... | ..... | 6 | 0 |
| 1927 | 35,000 | ..... | ..... | 6 | 0 |
| 1928 | ..... | ..... | ..... | 6 | 0 |
| 1929 | 35,000 | ..... | ..... | 6 | 0 |
| 1930 | ..... | ..... | ..... | 6 | 0 |
| 1931 | 35,000 | 35,000 | Dante Alighieri (19) | 5 | (*) |
| 1932 | 45,000 | ..... | ..... | 5 | (*) |
| 1933 | 25,000 | 35,000 | Leonardo da Vinci (19) | 4 | (*) |
| 1934 | ..... | ..... | ..... | 4 | (*) |
| 1935 | ..... | 35,000 | Guilio Cesare (21) | 3 | (*) |
| 1936 | ..... | 45,000 | Conti di Cavour (21), Duilio (21) | 1 | (*) |
| 1937 | ..... | 25,000 | Andrea Doria (21) | 0 | (*) |

* Within tonnage limitations; number not fixed.

NOTE—Italy expressly reserves the right of employing the capital ship tonnage allotment as she may consider advisable, subject solely to the limitations that the displacement of individual ships should not surpass 35,000 tons, and the total capital ship tonnage should keep within the limits imposed by the present treaty.

*Standard Displacement.*

The standard displacement of a ship is the displacement of the ship complete, fully manned, engined, and equipped ready for sea, including all armament and ammunition, equipment, outfit, provisions and fresh water for crew, miscellaneous stores and implements of every description that are intended to be carried in war, but without fuel or reserve feed water on board.

The word "ton" in the present treaty, except in the expression "metric tons," shall be understood to mean the ton of 2,240 pounds (1,016 kilos).

Vessels now completed shall retain their present ratings of displacement tonnage in accordance with their national system of measurement. However, a power expressing displacement in metric tons shall be considered for the application of the present treaty as owning only the equivalent displacement in tons of 2,240 pounds.

A vessel completed hereafter shall be rated at its displacement tonnage when in the standard condition defined herein.

JAPAN.

| YR. | Ships Laid Down | Ships Completed | Ships Scrapped (Age in Parentheses.) | SHIPS RETAINED. SUMMARY. Pre-Jutland. | Post-Jutland. |
|---|---|---|---|---|---|
| | | | Hizen (20), Mikasa (20), Kashima (16), Katori (16), Satsuma (12), Aki (11), Settsu (10), Ikoma (14), Ibuki (12), Kurama (11), Amagi (0), Akagi (0), Kaga (0), Tosa (0), Takao (0), Atago (0). Projected programme 8 ships not laid down.* | 8 | 2 |
| 1922 | ..... | ..... | ..... | 8 | 2 |
| 1923 | ..... | ..... | ..... | 8 | 2 |
| 1924 | ..... | ..... | ..... | 8 | 2 |
| 1925 | ..... | ..... | ..... | 8 | 2 |
| 1926 | ..... | ..... | ..... | 8 | 2 |
| 1927 | ..... | ..... | ..... | 8 | 2 |
| 1928 | ..... | ..... | ..... | 8 | 2 |
| 1929 | ..... | ..... | ..... | 8 | 2 |
| 1930 | ..... | ..... | ..... | 8 | 2 |
| 1931 | A.... | ..... | ..... | 8 | 2 |
| 1932 | B.... | ..... | ..... | 8 | 2 |
| 1933 | C.... | ..... | ..... | 8 | 2 |
| 1934 | D.... | A.... | Kongo (21) | 7 | 3 |
| 1935 | E.... | B.... | Hiyei (21) Haruna (20) | 5 | 4 |
| 1936 | F.... | C.... | Kirishima (21) | 4 | 5 |
| 1937 | G.... | D.... | Fuso (22) | 3 | 6 |
| 1938 | H.... | E.... | Yamashiro (21) | 2 | 7 |
| 1939 | I..... | F.... | Ise (22) | 1 | 8 |
| 1940 | ..... | G.... | Hiuga (22) | 0 | 9 |
| 1941 | ..... | H.... | Nagato (21) | 0 | 9 |
| 1942 | ..... | I..... | Mutsu (21) | 0 | 9 |

* Japan may retain the Shikishima and Asahi for noncombatant purposes, after complying with the provisions of Part 2, III. (b).

NOTE—A, B, C, D, etc., represent individual capital ships of 35,000 tons standard displacement, laid down and completed in the years specified.

## CHAPTER III.

*Miscellaneous Provisions.*

ARTICLE XXI.—If during the term of the present treaty the requirements of the national security of any contracting power in respect of naval defense are, in the opinion of that power, materially affected by any change of circumstances, the contracting powers will, at the request of such power, meet in conference with a view to the reconsideration of the provisions of the treaty and its amendment by mutual agreement.

In view of possible technical and scientific developments the United States, after consultation with the other contracting powers, shall arrange for a conference of all the contracting powers which shall convene as soon as possible after the expiration of eight years from the coming into force of the present treaty to consider what changes, if any, in the treaty may be necessary to meet such developments.

ARTICLE XXII.—Whenever any contracting power shall become engaged in a war which in its opinion affects the naval defense of its national security, such power may after notice to the other contracting powers suspend for the period of hostilities its obligations under the present treaty other than those under Articles XIII. and XVII., provided that such power shall notify the other contracting powers that the emergency is of such a character as to require such suspension.

The remaining contracting powers shall in such case consult together with a view to agreement as to what temporary notifications, if any, should be made in the treaty as between themselves. Should such consultation not produce agreement, duly made in accordance with the constitutional methods of the respective powers, any one of said contracting powers may, by giving notice to the other contracting powers, suspend for the period of hostilities its obligations under the present treaty, other than those under Articles XIII. and XVII.

On the cessation of hostilities the contracting powers will meet in conference to consider what modifications, if any, should be made in the provisions of the present treaty.

ARTICLE XXIII.—The present treaty shall remain in force until Dec. 31, 1936, and in case none of the contracting powers shall have given notice two years before that date of its intention to terminate the treaty it shall continue in force until

the expiration of two years from the date on which notice of termination shall be given by one of the contracting powers, whereupon the treaty shall terminate as regards all the contracting powers. Such notice shall be communicated in writing to the Government of the United States, which shall immediately transmit a certified copy of the notification to the other powers and inform them of the date on which it was received. The notice shall be deemed to have been given and shall take effect on that date. In the event of notice of termination being given by the Government of the United States, such notice shall be given to the diplomatic representatives at Washington of the other contracting powers, and the notice shall be deemed to have been given and shall take effect on the date of the communication made to the said diplomatic representatives.

Within one year of the date on which a notice of termination by any power has taken effect, all the contracting powers shall meet in conference.

ARTICLE XXIV.—The present treaty shall be ratified by the contracting powers in accordance with their respective constitutional methods and shall take effect on the date of the deposit of all the ratifications, which shall take place at Washington as soon as possible. The Government of the United States will transmit to the other contracting powers a certified copy of the proces verbal of the deposit of ratifications.

The present treaty, of which the French and English texts are both authentic, shall remain deposited in the archives of the Government of the United States, and duly certified copies thereof shall be transmitted by that Government to the other contracting powers.

In faith whereof the above-named plenipotentiaries have signed the present treaty.

The above treaty was agreed to by the delegates from the countries concerned, at the Conference on Limitation of Armament, at Washington, on Feb. 6, 1922.

## CAPITAL SHIP STRENGTH AS DETERMINED BY THE ARMAMENT CONFERENCE.

(Displacement-Efficiency in Last Column Estimated on 20-Year Life Assigned by Conference.)

| CAPITAL SHIPS. | Heavy Guns. | Broadside Energy Foot-Tons. | Date Completed. | Displacement in Tons. | Years Old, Nov. 11, 1921. | Fraction of 20-Yr. Life Remaining. | Displacement-Efficiency as Reduced by Age. |
|---|---|---|---|---|---|---|---|
| *UNITED STATES.* | | | | | | | |
| Maryland | Eight 16″ | 792,000 | 1921 | 32,600 | 0 | 20-20 | 32,600 |
| Colorado | Eight 16″ | 792,000 | 1921 | 32,600 | 0 | 20-20 | 32,600 |
| Washington | Eight 16″ | 792,000 | 1921 | 32,600 | 0 | 20-20 | 32,600 |
| California | Twelve 14″ | 914,160 | 1921 | 32,300 | 0 | 20-20 | 32,300 |
| Tennessee | Twelve 14″ | 914,160 | 1920 | 32,300 | 1 | 19-20 | 30,685 |
| Idaho | Twelve 14″ | 914,160 | 1919 | 32,000 | 2 | 9-10 | 28,800 |
| Mississippi | Twelve 14″ | 914,160 | 1917 | 32,000 | 4 | 4-5 | 25,600 |
| New Mexico | Twelve 14″ | 914,160 | 1918 | 32,000 | 3 | 17-20 | 27,200 |
| Arizona | Twelve 14″ | 787,272 | 1816 | 31,400 | 5 | 3-4 | 23,550 |
| Pennsylvania | Twelve 14″ | 787,272 | 1916 | 31,400 | 5 | 3-4 | 23,550 |
| Oklahoma | Ten 14″ | 656 060 | 1916 | 27,500 | 5 | 3-4 | 20,625 |
| Nevada | Ten 14″ | 656.060 | 1916 | 27,500 | 5 | 3-4 | 20,625 |
| Texas | Ten 14″ | 656,060 | 1914 | 27,000 | 7 | 13-20 | 17,550 |
| New York | Ten 14″ | 656.060 | 1914 | 27,000 | 7 | 13-20 | 17,550 |
| Arkansas | Twelve 12″ | 629,746 | 1912 | 26,000 | 9 | 11-20 | 14,300 |
| Wyoming | Twelve 12″ | 629,746 | 1912 | 26,000 | 9 | 11-20 | 14,300 |
| Utah | Ten 12″ | 490,000 | 1911 | 21,825 | 10 | 1-2 | 10,912 |
| Florida | Ten 12″ | 490,000 | 1911 | 21,825 | 10 | 1-2 | 10,912 |
| Total | 192 | 13,385,176 | | 525,800 | | | 416,259 |
| *GREAT BRITAIN.* | | | | | | | |
| Hood (modified) | Eight 16″ | 817,280 | .... | 37,000 | 0 | 20-20 | 37,000 |
| Hood (modified) | Eight 16″ | 817,280 | .... | 37,000 | 0 | 20-20 | 37,000 |
| Royal Sovereign | Eight 15″ | 658,400 | 1916 | 26,600 | 5 | 3-4 | 19,950 |
| Royal Oak | Eight 15″ | 658,400 | 1916 | 26,600 | 5 | 3-4 | 19,950 |
| Resolution | Eight 15″ | 658,400 | 1916 | 26,600 | 5 | 3-4 | 19,950 |
| Revenge | Eight 15″ | 658,400 | 1916 | 26,600 | 5 | 3-4 | 19,950 |
| Ramilies | Eight 15″ | 658,400 | 1917 | 26,600 | 4 | 4-5 | 21,280 |
| Queen Elizabeth | Eight 15″ | 658,400 | 1915 | 28.925 | 6 | 7-10 | 20,247 |
| Warspite | Eight 15″ | 658,400 | 1915 | 28,925 | 6 | 7-10 | 20.247 |
| Barham | Eight 15″ | 658,400 | 1915 | 28,925 | 6 | 7-10 | 20,247 |
| Valiant | Eight 15″ | 658,400 | 1916 | 28.925 | 5 | 3-4 | 21,694 |
| Malaya | Eight 15″ | 658,400 | 1916 | 28 925 | 5 | 3-4 | 21,694 |
| Benbow | Ten 13.5″ | 606,000 | 1914 | 25.850 | 7 | 13-20 | 16,803 |
| Empress of India | Ten 13.5″ | 606,000 | 1914 | 25.850 | 7 | 13-20 | 16,803 |
| Iron Duke | Ten 13.5″ | 606,000 | 1914 | 25.850 | 7 | 13,20 | 16,803 |
| Marlborough | Ten 13.5″ | 606,000 | 1914 | 25,850 | 7 | 13-20 | 16,803 |
| Hood | Eight 15″ | 658,400 | 1920 | 43,000 | 1 | 19-20 | 40,850 |
| Renown | Six 15″ | 493,800 | 1916 | 27.550 | 5 | 3-4 | 20,663 |
| Repulse | Six 15″ | 493,800 | 1916 | 27,550 | 5 | 3-4 | 20,663 |
| Tiger | Eight 13.5″ | 484,800 | 1914 | 29,600 | 7 | 13-20 | 19,240 |
| Total | 164 | 12,773,360 | | 582,725 | | | 447,837 |
| *JAPAN.* | | | | | | | |
| Nagato | Eight 16″ | 745,840 | 1921 | 35,000 | 0 | 20-20 | 35,000 |
| Mutsu | Eight 16″ | 745,840 | 1921 | 35,000 | 0 | 20-20 | 35,000 |
| Hiuga | Twelve 14″ | 789,600 | 1918 | 32,750 | 3 | 17-20 | 27,837 |
| Ise | Twelve 14″ | 789,600 | 1917 | 32,750 | 4 | 4-5 | 26,200 |
| Yamashiro | Twelve 14″ | 789,600 | 1917 | 32,000 | 4 | 4-5 | 25,600 |
| Fuso | Twelve 14″ | 789,600 | 1915 | 32,000 | 6 | 7-10 | 22,400 |
| Kirishima | Eight 14″ | 526,400 | 1915 | 28,450 | 6 | 7-10 | 19,915 |
| Haruna | Eight 14″ | 526,400 | 1915 | 28,450 | 6 | 7-10 | 19,915 |
| Hi-Yei | Eight 14″ | 526,400 | 1914 | 28,450 | 7 | 13-20 | 18,493 |
| Kongo | Eight 14″ | 526,400 | 1913 | 28,450 | 8 | 3-5 | 17,070 |
| Total | 96 | 6,755,680 | | 313.300 | | | 247,430 |

## TREATY LIMITING SUBMARINES AND NOXIOUS GASES.

(Signed by the Arms Conference delegates from the U S., British Empire, France, Italy, and Japan, on Feb. 6, 1922.) Ratified by the U. S. Senate, March 29, 1922.

ARTICLE I.—The signatory powers declare that among the rules adopted by civilized nations for the protection of the lives of neutrals and noncombatants at sea in time of war, the following are to be deemed an established part of international law:

(1) A merchant vessel must be ordered to submit to visit and search to determine its character before it can be seized.

A merchant vessel must not be attacked unless it refuse to submit to visit and search after warning, or to proceed as directed after seizure.

A merchant vessel must not be destroyed unless the crew and passengers have been first placed in safety

(2) Belligerent submarines are not under any circumstances exempt from the universal rules above

stated; and if a submarine can not capture a merchant vessel in conformity with these rules the existing law of nations requires it to desist from attack and from seizure and to permit the merchant vessel to proceed unmolested.

ARTICLE II.—The signatory powers invite all other civilized powers to express their assent to the foregoing statement of established law so that there may be a clear public understanding throughout the world of the standards of conduct by which the public opinion of the world is to pass judgment upon future belligerents.

ARTICLE III.—The signatory powers, desiring to insure the enforcement of the humane rules of existing law declared by them with respect to attacks upon and the seizure and destruction of merchant ships, further declare that any person in the service of any power who shall violate any of those rules, whether or not such person is under orders of a governmental superior, shall be deemed to have violated the laws of war and shall be liable to trial and punishment as if for an act of piracy and may be brought to trial before the civil or military authorities of any power within the jurisdiction of which he may be found.

ARTICLE IV.—The signatory powers recognize the practical impossibility of using submarines as commerce destroyers without violating, as they were violated in the recent war of 1914-1918, the requirements universally accepted by civilized nations for the protection of the lives of neutrals and noncombatants, and to the end that the prohibition of the use of submarines as commerce destroyers shall be universally accepted as a part of the law of nations they now accept that prohibition as henceforth binding as between themselves and they invite all other nations to adhere thereto.

ARTICLE V.—The use in war of asphyxiating, poisonous, or other gases, and all analogous liquids, materials, or devices, having been justly condemned by the general opinion of the civilized world and a prohibition of such use having been declared in treaties to which a majority of the civilized powers are parties.

The signatory powers, to the end that this prohibition shall be universally accepted as a part of international law binding alike the conscience and practice of nations, declare their assent to such prohibition, agree to be bound thereby as between themselves and invite all other civilized nations to adhere thereto.

ARTICLE VI.—The present treaty shall be ratified as soon as possible in accordance with the constitutional methods of the signatory powers and shall take effect on the deposit of all the ratifications, which shall take place at Washington.

The Government of the United States will transmit to all the signatory powers a certified copy of the procès-verbal of the deposit of ratifications.

The present treaty, of which the French and English texts are both authentic, shall remain deposited in the archives of the Government of the United States, and duly certified copies thereof will be transmitted by that Government to each of the signatory powers.

ARTICLE VII.—The Government of the United States will further transmit to each of the nonsignatory powers a duly certified copy of the present treaty and invite its adherence thereto.

Any nonsignatory power may adhere to the present treaty by communicating an instrument of adherence to the Government of the United States, which will thereupon transmit to each of the signatory and adhering powers a certified copy of each instrument of adherence.

## FOUR-POWER PACIFIC TREATY.

The United States Senate, on March 24-27, 1922, ratified, by a vote of 67 to 27, the Four-Power Pacific Treaty between the United States, the British Empire, France, Italy, and Japan. The Senate also adopted reservations to the treaty. Following are the full text of the treaty and the reservations, the former being in practically the identical language of the agreement signed Dec. 13, 1921, at Washington, by the Four-Power delegates to the Conference on Limitation of Armament.

*Four-Power Treaty.*

The United States of America, the British Empire, France and Japan, with a view to the preservation of the general peace and the maintenance of their rights in relation to their insular possessions and insular dominions in the regions of the Pacific Ocean, have determined to conclude a treaty to this effect and have appointed as their plenipotentiaries:

The President of the United States; His Majesty the King of the United Kingdom of Great Britain and Ireland, etc., and for the Dominion of Canada, for the Commonwealth of Australia, for the Dominion of New Zealand, for India; The President of the French Republic; His Majesty the Emperor of Japan;

Who having communicated their full powers, found in good and due form, have agreed as follows:

ARTICLE I.—The high contracting parties agree as between themselves to respect their rights in relation to their insular possessions and insular dominions in the region of the Pacific Ocean.

If there should develop between any of the high contracting parties a controversy arising out of any Pacific question and involving their said rights which is not satisfactorily settled by diplomacy and is likely to affect the harmonious accord now happily subsisting between them, they shall invite the other high contracting parties to a joint conference to which the whole subject will be referred for consideration and adjustment.

ARTICLE II.—If the said rights are threatened by the aggressive action of any other power the high contracting parties shall communicate with one another fully and frankly in order to arrive at an understanding as to the most efficient measures to be taken, jointly or separately, to meet the exigencies of the particular situation.

ARTICLE III.—This treaty shall remain in force for ten years from the time it shall take effect, and after the expiration of said period it shall continue to be in force subject to the right of any of the high contracting parties to terminate it upon twelve months' notice.

ARTICLE IV.—This treaty shall be ratified as soon as possible in accordance with the constitutional methods of the high contracting parties and shall take effect on the deposit of ratifications, which shall take place at Washington, and thereupon the agreement between Great Britain and Japan, which was concluded at London on July 13, 1911, shall terminate.

(For the full text of the Anglo-Japanese treaty, see the 1922 ALMANAC.)

*Reservations to Four-Power Pacific Treaty.*

(Included in the Senate's ratification, March 24-27, 1922.)

*No. 1*—(Signed Feb. 6, 1922, by the four-power delegates to the Arms Conference.)

The term "insular possessions and insular dominions" used in the aforesaid treaty shall, in its application to Japan, include only Karafuto (or the Southern portion of the island of Sakhalin), Formosa and the Pescadores, and the islands under the mandate of Japan. The present agreement shall have the same force and effect as the said treaty to which it is supplementary.

*No. 2*—(Originated and passed by the U. S. Senate, March 27, 1922.)

The United States understands that under the statement in the preamble or under the terms of this treaty there is no commitment to armed force, no alliance, no obligation to join in any defense.

## CHINESE POLICIES AND CUSTOMS TARIFF TREATIES.

The United States Senate, on March 30, 1922, ratified (66 to 0) a Treaty Concerning Chinese Principles and Policies, and also ratified (58 to 1—King of Utah) the Chinese Customs Tariff Treaty.

The first named treaty, between the United States, Belgium, the British Empire, China, France, Italy, Japan, the Netherlands, and Portugal, agreed on by the delegates, at Washington, on Feb. 6, 1922, is as follows:

TREATY ON CHINESE POLICIES.

ARTICLE I.—The contracting powers, other than China, agree:

(1) To respect the sovereignty, the independence, and the territorial and administrative integrity of China;

(2) To provide the fullest and most unembarrassed opportunity to China to develop and maintain for herself an effective and stable Government;

(3) To use their influence for the purpose of effectually establishing and maintaining the principle of equal opportunity for the commerce and industry of all nations throughout the territory of China;

(4) To refrain from taking advantage of conditions in China in order to seek special rights or privileges which would abridge the rights of subjects or citizens of friendly States, and from countenancing action inimical to the security of such States.

ARTICLE II.—The contracting powers agree not to enter into any treaty, agreement, arrangement or understanding, either with one another, or, individually or collectively, with any power or powers,

which would infringe or impair the principles stated in Article I.

ARTICLE III.—With a view to applying more effectually the principles of the open door or equality of opportunity in China for the trade and industry of all nations, the contracting powers, other than China, agree that they will not seek, nor support their respective nationals in seeking—

(a) Any arrangement which might purport to establish in favor of their interests any general superiority of rights with respect to commercial or economic development in any designated region of China.

(b) Any such monopoly or preference as would deprive the nationals of any other power of the right of undertaking any legitimate trade or industry in China, or of participating with the Chinese Government, or with any local authority, in any category of public enterprise, or which by reason of its scope, duration, or geographical extent is calculated to frustrate the practical application of the principle of equal opportunity.

It is understood that the foregoing stipulations of this article are not to be so construed as to prohibit the acquisition of such properties or rights as may be necessary to the conduct of a particular commercial, industrial, or financial undertaking or to the encouragement of invention and research.

China undertakes to be guided by the principles stated in the foregoing stipulations of this article in dealing with applications for economic rights and privileges from Governments and nationals of all foreign countries, whether parties to the present treaty or not.

ARTICLE IV.—The contracting powers agree not to support any agreements by their respective nationals with each other designed to create spheres of influence or to provide for the enjoyment of mutually exclusive opportunities in designated parts of Chinese territory.

ARTICLE V.—China agrees that, throughout the whole of the railways in China she will not exercise or permit unfair discrimination of any kind. In particular there shall be no discrimination whatever, direct or indirect, in respect of charges or of facilities on the ground of the nationality of passengers or the countries from which or to which they are proceeding, or the origin or ownership of goods or the country from which or to which they are consigned, or the nationality or ownership of the ship or other means of conveying such passengers or goods before or after their transport on the Chinese railways.

The contracting powers, other than China, assume a corresponding obligation in respect of any of the aforesaid railways over which they or their nationals are in a position to exercise any control in virtue of any concession, special agreement or otherwise.

ARTICLE VI.—The contracting powers, other than China, agree fully to respect China's rights as a neutral in time of war to which China is not a party; and China declares that when she is a neutral she will observe the obligations of neutrality.

ARTICLE VII.—The contracting powers agree that whenever a situation arises which in the opinion of any one of them involves the application of the stipulations of the present treaty, and renders desirable discussion of such application, there shall be full and frank communication between the contracting powers concerned.

ARTICLE VIII.—Powers not signatory to the present treaty, which have governments recognized by the signatory powers and which have treaty relations with China, shall be invited to adhere to the present treaty. To this end the Government of the United States will make the necessary communications to non-signatory powers and will inform the contracting powers of the replies received. Adherence by any power shall become effective on receipt of notice thereof by the Government of the United States.

ARTICLE IX.—The present treaty shall be ratified by the contracting powers in accordance with their respective constitutional methods, and shall take effect on the date of the deposit of all the ratifications, which shall take place at Washington as soon as possible. The Government of the United States will transmit to the other contracting powers a certified copy of the procès-verbal of the deposit of ratifications.

The present treaty, of which the French and English texts are both authentic, shall remain deposited in the archives of the Government of the United States, and duly certified copies thereof shall be transmitted by that Government to the other contracting powers.

In faith whereof the above-named plenipotentiaries have signed the present treaty.

## CHINESE CUSTOMS TARIFF TREATY.

The text of the Chinese Customs Tariff Treaty is as follows:

ARTICLE I.—The representatives of the contracting powers having adopted on the 4th day of February, 1922, in the city of Washington, a resolution, which is appended as an annex to this article, with respect to the revision of Chinese customs duties, for the purpose of making such duties equivalent to an effective 5 per cent. ad valorem, in accordance with existing treaties concluded by China with other nations, the contracting powers hereby confirm the said resolution and undertake to accept the tariff rates fixed as a result of such revision. The said tariff rates shall become effective as soon as possible, but not earlier than two months after publication thereof.

*Annex.*

With a view to providing additional revenue to meet the needs of the Chinese Government, the powers represented at this conference, namely, the United States of America, Belgium, the British Empire, China, France, Italy, Japan, the Netherlands, and Portugal, agree:

That the customs schedule of duties on imports into China adopted by the Tariff Revision Commission at Shanghai on Dec. 19, 1918, shall forthwith be revised so that the rates of duty shall be equivalent to 5 per cent. effective, as provided for in the several commercial treaties to which China is a party.

A revision commission shall meet at Shanghai, at the earliest practicable date, to effect this revision forthwith and on the general lines of the last revision.

This commission shall be composed of representatives of the powers above named and of representatives of any additional powers having Governments at present recognized by the powers represented at this conference, and who have treaties with China providing for a tariff on imports and exports not to exceed 5 per cent. ad valorem and who desire to participate therein.

The revision shall proceed as rapidly as possible with a view to its completion within four months from the date of the adoption of this resolution by the Conference on the Limitation of Armament and Pacific and Far Eastern Questions.

The revised tariff shall become effective as soon as possible but not earlier than two months after its publication by the revision commission.

The Government of the United States, as convener of the present conference, is requested forthwith to communicate the terms of this resolution to the Governments of powers not represented at this conference but who participated in the revision of 1918, aforesaid.

ARTICLE II.—Immediate steps shall be taken, through a special conference, to prepare the way for the speedy abolition of likin and for the fulfilment of the other conditions laid down in Article VIII. of the treaty of Sept. 5, 1902, between Great Britain and China; in Articles IV. and V. of the treaty of Oct. 8, 1903, between the United States and China; and in Article I. of the supplementary treaty of Oct. 8, 1903, between Japan and China, with a view to levying the surtaxes provided for in those articles.

The special conference shall be composed of representatives of the signatory powers, and of such other powers as may desire to participate and may adhere to the present treaty, in accordance with the provisons of Article VIII., in sufficient time to allow their representatives to take part. It shall meet in China within three months after the coming into force of the present treaty, on a day and at a place to be designated by the Chinese Government.

ARTICLE III.—The special conference provided for in Article II. shall consider the interim provisions to be applied prior to the abolition of likin and the fulfilment of the other conditions laid down in the articles of the treaties mentioned in Article II.; and it shall authorize the levying of a surtax on dutiable imports as from such date, for such purposes, and subject to such conditions as it may determine.

The surtax shall be at a uniform rate of 2½ per cent. ad valorem, provided, that in case of certain articles of luxury which, in the opinion of the special conference, can bear a greater increase without unduly impeding trade, the total surtax may be increased but may not exceed 5 per cent. ad valorem.

ARTICLE IV.—Following the immediate revision of the customs schedule of duties on imports into China, mentioned in Article I., there shall be a further revision thereof to take effect at the expiration of four years following the completion of the aforesaid immediate revision, in order to insure that the customs duties shall correspond to the ad valorem rates fixed by the special conference provided for in Article II.

Following this further revision there shall be for the same purpose, periodical revision of the customs schedule of duties on imports into China every seven years, in lieu of the decennial revision authorized by existing treaties with China.

In order to prevent delay, any revision made in

pursuance of this article shall be effected in accordance with rules to be prescribed by the special conference provided for in Article II.

ARTICLE V.—In all matters relating to customs duties there shall be effective equality of treatment and of opportunity for all the contracting powers.

ARTICLE VI.—The principle of uniformity in the rates of customs duties levied at all the land and maritime frontiers of China is hereby recognized. The special conference provided for in Article II. shall make arrangements to give practical effect to this principle; and it is authorized to make equitable adjustments in those cases in which a customs privilege to be abolished was granted in return for some local economic advantage.

In the mean time, any increase in the rates of customs duties resulting from tariff revision, or any surtax hereafter imposed in pursuance of the present treaty, shall be levied at a uniform rate ad valorem at all land and maritime frontiers of China.

ARTICLE VII.—The charge for transit passes shall be at the rate of 2½ per cent. ad valorem until the arrangements provided for by Article II. come into force.

ARTICLE VIII.—Powers not signatory to the present treaty whose Governments are at present recognized by the signatory powers, and whose present treaties with China provide for a tariff on imports and exports not to exceed 5 per cent. ad valorem, shall be invited to adhere to the present treaty.

The Government of the United States undertakes to make the necessary communications for this purpose and to inform the Governments of the contracting powers of the replies received. Adherence by any power shall become effective on receipt of notice thereof by the Government of the United States.

ARTICLE IX.—The provisions of the present treaty shall override all stipulations of treaties between China and the respective contracting powers which are inconsistent therewith, other than stipulations according most favored nation treatment.

ARTICLE X.—The present treaty shall be ratified by the contracting powers in accordance with their respective constitutional methods and shall take effect on the date of the deposit of all the ratifications, which shall take place at Washington as soon as possible. The Government of the United States will transmit to the other contracting powers a certified copy of the procès-verbal of the deposit of ratifications.

The present treaty, of which the French and English texts are both authentic, shall remain deposited in the archives of the Government of the United States, and duly certified copies thereof shall be transmitted by that Government to the other contracting powers.

The above treaties relating to China were agreed to by the delegates from the nations concerned, at the Conference on Limitation of Armaments, at Washington, on Feb. 6, 1922.

## THE RESULTS OF THE ARMS CONFERENCE.

The delay in securing the assent of France and Italy to the naval disarmament treaty has occasioned postponement by the three other nations of their project of reducing their navies. The United States, Great Britain and Japan have, however, provided in their naval budgets for the scrapping of the capital ships and the reduction of forces as called for by the treaty. An official of the Japanese Foreign Office in a statement in Tokio on November 18 said that before the framing of Japan's naval budget, which shows a decrease of yen 117,000,000 (about $58,500,000), as compared with that of the current year, the Foreign Office had received assurances from the American Government that the United States naval budget would be drawn up in the spirit of the Washington Conference. Japan gave similar assurances.

It will cost the United States a minimum of $70,000,000 to scrap its navy, and probably much more, it was indicated by Secretary of the Navy Denby when he on May 2 made public the report of the board appointed to formulate instructions to carry out the rules of the conference.

The completed capital ships to be scrapped by the United States as recommended by the board consist of the following: The Virginia, New Jersey, Rhode Island, Georgia, Nebraska, Connecticut, Louisiana, Vermont, Minnesota, Kansas, New Hampshire, Michigan, South Carolina and the Delaware or the North Dakota.

The Kentucky, Ohio, and the former Iowa, now CB-4, are not listed under the terms of the treaty, but are understood to be among the completed capital ships to be scrapped. The Maine and the Missouri already have been disposed of by sale.

The board recommended that the two most advanced battle cruisers, the Lexington and the Saratoga, be selected for conversion into airplane carriers. The board recommended that the battleship Washington, building by contract and launched, be sold for scrapping.

In Great Britain the Admiralty on August 31 announced that the battle cruisers, Lion and Princess Royal, and the battleships, Orion, Monarch, Conqueror and Erin, all famous in the British Navy, had been ordered scrapped; and on September 27 it further announced that all the thirteen ships which are to be disposed of under the treaty are in home waters and have been taken out of commission and dismantled. Great Britain has also placed a score or more of cruisers and other auxiliary vessels out of commission, as well as many destroyers and submarines.

Of an officers' strength of about 9,400, a total of 1,835 will be retired from active service.

The loss of the French battleship France brought down its naval strength more nearly to the strength of Italy, as it reduced the country's first naval line by one-seventh of its fighting strength. It would cost about 200,000,000 francs to replace the battleship at this time. It was announced on October 12 that France was preparing a naval program to be spread over a period of twenty years and to be arranged in accordance with the terms of the naval treaty.

The Naval Intelligence Bureau in Washington on June 27 announced, according to a despatch in the New York Times, that Japan has, building and projected, more ships than any other power in those particular types upon which no restrictions were imposed by the conference. The despatch says:

"These types are light cruisers, destroyer leaders, destroyers, submarines and fleet submarines. Japan has, building and projected, 140 units with an aggregate tonnage of more than 160,794 among such types, as against 8 units of 11,275 tons being built by Great Britain, 52 units of 116,581 tons being built by the United States, 33 units of 68,400 tons by France, and 24 units of 42,550 tons by Italy.

"Japan is building 52 submarines, whose exact tonnage is unknown. Their aggregate tonnage will be around 50,000, so that Japan's present building program of light cruisers, destroyers and submarines is nearer 210,000 tons than 164,796.

"American naval officers feel that Japan will profit by the failure to adopt a submarine and destroyer ratio, unless the United States Government shall exercise care and maintain its submarine and destroyer, as well as light cruiser strength, in the proportion of 5-3 as between this country and Japan.

"The United States is well off at present in the matter of destroyers on account of the large number built during the war, but the Japanese building program respecting light cruisers and submarines in a few years will place the Japanese Navy in a better relative position.

UNRESTRICTED SHIPS NOW BUILDING.

"Official naval intelligence data covering the whole naval situation up to June 26, 1922, show that in ships building and projected among types on which no restrictions were placed by the naval treaty the position of the powers is as follows:

GREAT BRITAIN.

First-line cruisers, none.
Destroyer leaders, 1 of 1,750 tons.
First-line destroyers, 3 of 3,725 tons.
First-line submarines, 4 of 5,800 tons.
Fleet submarines, none.

UNITED STATES.

First-line light cruisers, 10 of 75,000 tons.
First-line cruisers, 10 of 75,000 tons.
Destroyer leaders, none.
First-line destroyers, 3 of 3,645 tons.
First-line submarines, 36 of 31,561 tons.
Fleet submarines, 3 of 6,375 tons.

JAPAN.

First-line light cruisers, 15 of 81,900 tons.
Destroyer leaders, none.
First-line destroyers, 50 of 58,500 tons.
First-line submarines, 23 of 30,394 tons and 52 of tonnage unknown to American Naval Intelligence officers.
Fleet submarines, none.

FRANCE.

First-line light cruisers, 3 of 24,000 tons.
Destroyer leaders, 6 of 14,400 tons.
First-line destroyers, 12 of 16,800 tons.
First-line submarines, 12 of 13,200 tons.
Fleet submarines, none.

ITALY.

First-line light cruisers, 2 of 16,000 tons.
Destroyer leaders, 6 of 12,270 tons.
First-line destroyers, 12 of 11,680 tons.
First-line submarines, 4 of 2,600 tons.
Fleet submarines, none.

"Study of these figures in comparison with other figures showing the ships retained on June 1, 1922, by each of the five powers, and excluding those to be scrapped under the naval treaty, has convinced naval officers studying the matter that Japan is gaining an advantage over the United States with respect to light cruisers and submarines.

"The United States is building ten light cruisers, and on June 12 was retaining twelve light cruisers which are not to be scrapped. Japan is building fifteen light cruisers, in addition to the eighteen which she is retaining as of June 1. On this showing, Japan will have 33 to 22 for the United States—a ratio of three to two in favor of Japan. If light cruisers were built on the basis of the 5-3 ratio, the United States would be entitled to 55 light cruisers for the 33 which Japan will have when her building and projected light cruisers are commissioned.

OUTLOOK FOR SUBMARINE STRENGTH.

"Japan has, building and projected, for immediate laying down a total of 75 submarines, as against 36 building and about to be laid down for the United States. In commission and built, Japan already has 23 first-line and 10 second-line submarines, which will give Japan a total of 108 submarines. The United States, on the other hand, on June 1, possessed 57 first-line and 28 second-line submarines and 3 fleet submarines. When the 36 classified as building are completed and added to the present strength of 88, the American submarine strength will be 124 submarines. On the basis of a 5-3 ratio, the United States would be entitled to 180 submarines when Japan has her 108 in commission.

"On the basis of present submarine strength of the American and Japanese Navies, the United States will have to build a great many more submarines than it has so far proposed. The existing strength ratio is 8 to 3, and on that basis the United States would be entitled to 288 submarines when the best the American Navy can now see is 124. In other words, the United States would have to build 164 additional submarines."

SHANTUNG TRANSFERRED TO CHINA.

The matter of Shantung being left by the Washington Conference on Disarmament to direct negotiations between Japan and China was arranged in Washington on Feb. 4, 1921, when Japan and China signed the Kiaochow Treaty, transferring the Kiaochow leased territory and the Shantung Railway to China.

On Oct. 10, 1922, the Japanese members of the Shantung Commission who were arranging the details of the restoration announced in Tsingtao Shantung that the leasehold would be restored, on Dec. 2, when the Japanese troops would withdraw and civil and military authority be handed over to China, and the Chinese flag hoisted for the first time since Germany acquired the territory in 1898.

The amounts which China must pay for Japanese investments in the district have been virtually decided upon. Katsuji Debuchi, member of the Shantung commission and formerly Counsellor of the Japanese delegation at Washington, said Japan will exact only what Japan paid to Germany for private German investments and what Japan actually invested since 1914. It is expected that Japan will accept Chinese treasury notes, as China is without cash.

China will receive free all public properties which Japan acquired from the German Government.

The commission decided China must pay 20,000,000 yen for Japanese investments in public improvements, 8,000,000 yen for improvements made in the salt industry of Kiaochow and 55,000,000 yen for the Shantung Railroad, a grand total of $3,600,000 yen.

The coal mines which are valued at 10,000,000 yen, are to be operated jointly by the Japanese and Chinese by a corporation to be organized.

The United States on Oct. 30, 1922, delivered through Minister J. G. Schurman to the Chinese Government, a note advising them that in concert with Great Britain, France, Italy and Japan, the United States was surrendering to China control of the Chinese Eastern Railway in accordance with the terms of the resolutions adopted at the Conference for the Limitation of Armament held in Washington. The taking over of the railroad was incident to the despatch of Allied and American troops to Siberia in the summer and autumn of 1918. An agreement concluded in February, 1919, between Japan and the United States, and later concurred in by the other nations, resulted in the operation of the Chinese Eastern and Chinese Siberian Railways in the zone of operation of the Allied military forces being placed under the supervision of a special Allied committee, this agreement to end with the withdrawal of the foreign military forces from Siberia.

ARMAMENT CONFERENCE COST $252,000.

The Armament Limitation Conference cost the American Government $252,002, minus an estimated unexpended balance of $350.92, according to a statement of expenses transmitted by President Harding to the Senate on May 25.

Salaries of $68,689 were the largest item of expense, while the expenses for buildings were $44,219; for reporting proceedings, $29,358; printing, $20,844; translations, $20,726.

For the War Department automobiles used by delegates and attaches, the report showed $18,752 was spent and $3,227 for other transportation.

The item for "entertainment" was $9,356, while supplies cost about $12,000, and telephone and other wire facilities $4,453.

ELIHU ROOT ON THE VALUE OF THE CONFERENCE.

**Elihu Root**, former Secretary of State, one of the United States delegates, in his Presidential address before the sixteenth annual meeting of the American Society of International Law, in Washington, April 27, 1922, summed up the work of the conference in part as follows:

"The conference was called to deal with the limitation of armament. The special occasion for it was the apparent race of competition in the building of battle ships and battle cruisers on the part of Japan and the United States, a race in which Great Britain was about to enter under the imperative necessity of maintaining her ocean-borne food supply and protecting her Far Eastern colonies and dominions. . . . At the outset of the conference the United States made a very drastic proposal not only to stop competition, but to destroy about 40 per cent. of the existing strength of capital ships of the principal naval powers, in such a way as to leave the relative proportions of naval strength unchanged, and that proposal was ultimately accepted and emoodied in the principal treaty resulting from the conference.

"Such proposals, however, do not carry themselves. Competition in armament results from national states of mind, distrust, apprehension of attack, a widespread belief that war is imminent, so that the peoples of the respective countries think in terms of war, prepare for war, and reach a condition of thought and feeling in which it is natural for war to come. That state of mind must be disposed of if competition is to be really stopped. The nations concerned must cease to think in terms of war and must come to think in terms of peace. The object of having a conference is to effect such a change by friendly negotiation, explanation, doing away with misunderstanding, creating conviction of friendly intention and good faith, with the aid on appropriate occasions of friendly advice of third parties. The success of such a process in the Washington Conference was registered in what is called the Four-Power Treaty between Great Britain, France, Japan, and the United States.

"I doubt if any formal treaty ever accomplished so much by doing so little. It provided that we should all respect rights, which we were bound to do already, and that if controversy arose about the Pacific islands (it was quite immaterial what islands) the parties should get together and talk it over, which was the very thing they were then doing in Washington. The consent of the Senate was not necessary to such an agreement. It merely arranged for following an ordinary form of diplomatic intercourse. The President had done the same thing at Algeciras and at The Hague and at the Conference of London without asking the consent of the Senate, and the Senate had ratified the conclusions reached at those conferences. It was important, however, that the Senate should give its approval in this case because the instrument was a formal certificate to all the people of Japan and all the people of the United States and all the civilized powers that the parties to the treaty had abandoned their mutual distrust and had ceased to think about war with each other and had resumed relations of genuine friendship. That certificate and the truth that it represents incidentally made possible the abandonment of the Anglo-Japanese Alliance and made possible the treaty for the limitation of naval armament and dispelled one war cloud upon the horizon of a troubled world.

PROBLEM OF CHINA.

"The Four-Power Treaty was not enough, however, standing by itself, to make the new condition stable without some treatment of the causes of irritation which had arisen and which might be apprehended upon the continent of Asia. For the discussion of this subject four other powers having interests in the Far East—Belgium, China, the Netherlands and Portugal—also took part. . . .

"Under the conventional arrangements with

China there had developed a vast extent of beneficial trade and industry upon which multitudes of people in and out of China were dependent. It was evident that to attempt then to wipe out all the arrangements which I have described and put China immediately upon the footing of a full member of the society of nations, unhampered in her trade, her administration, and her maintenance of order, except by the rules of international law, would be futile and disastrous, for there was no government in China competent to maintain trade, to administer justice to foreigners, or to protect foreign life and property. It was evident too that China must work out her own salvation, that no exercise of foreign power could accomplish the result. Four hundred and thirty million people are too great a mass to be reformed from the outside. If China is to possess her own territory, with independence and control of her own destinies, she must learn to govern herself and to assert and maintain her own rights as a nation.

"Accordingly, the members of the conference addressed themselves to the task of helping China so far as it was possible in her struggle to achieve self-government. . . .

"Any one examining the treaties and resolutions will find that they uniformly sought a double object, first, to relieve the limitations and inconveniences flowing from the old conventional relations as far as was then practicable under the existing governmental conditions in China, and, second, to afford to all sections and parties of the Chinese people a helpful incentive to unite in the establishment of an effective and stable government by making specific provisions under which such a government, competent to perform its national duties, will be the means of bringing China into the full possession of the rights and liberties assured by international law to the members of the family of nations, just as Japan has been brought into that family.

"Personally I am a believer in the coming of that event. It will be a long, difficult process, for it requires the new education of more than four hundred million people, but I look to the future of that industrious, kindly, peaceful people, with their inveterate respect for individual and family rights, not as a yellow peril but as a great reinforcement to the power of ordered liberty upon the domination of which the future of our civilization depends.

### APPEAL TO PUBLIC OPINION.

"The conference treaty relating to submarines, which is in the way of being described as the Declaration of Washington, was also an incident to the naval armament negotiation. . . .

"It will be perceived that up to this point the treaty does not undertake to make or provide for making new universal or general international law. It does four things: It furnishes the high authority of the five great naval powers of the world as to what the existing law is, at the same time inviting all other powers to add to that authority by their assent.

"It binds all of these five great powers themselves to obey this law.

"It establishes jurisdiction for the trial and punishment of all future violations of this law.

"It classifies violations of this law with piracy. . .

"Perhaps this provision, agreed upon by so great authority in the world, may be the beginning of a system under which in general those rules of international law which express the moral sense of mankind may receive a new sanction through responsibility to law and liability to punishment of the agents through whom the rules may be violated. . . .

"The treaty is not merely a declaration of existing law. It is not merely an agreement between governments resulting from diplomatic negotiations. It is all these, but above all it is an appeal to the public opinion of mankind to establish and maintain a fundamental rule of morals applied to international conduct in the form of a rule of international law.

"The real sanction of international law comes from the punishing power of public opinion, a power which has been growing with great rapidity in recent years and bids fair to grow still more rapidly with the increased public participation in the conduct of foreign affairs and the constantly increasing interdependence of nations. The ordinary mode of its exercise is in control of the operations of government. The most absolutely simple exercise of it is illustrated by the effectiveness of the Chinese boycott, which avails itself of no governmental action whatever. This tremendous and increasing power is not very effective as yet in support of mere governmental agreements as such, and it is not very effective in matters which are complicated and confused, which rest upon conflicting evidence and agreement; but where a rule of international law is simple, easily understood, and applies the moral sense of decent people the world over to human conduct, public opinion is competent to enforce that rule with tremendous effect.

"This treaty takes one further step and that is to simplify still further the whole subject by proposing a new rule of absolute prohibition against the use of submarines as commerce destroyers, and all five of the great powers uniting in the treaty voluntarily subject themselves to the operation of that rule, and at the same time ask other powers to join them in that new rule by adhering to the treaty. This, of course, is the first step in making a new rule of international law. . . . Similar considerations apply to the provision of the treaty under consideration prohibiting the use of poisonous gases."

### SECRETARY HUGHES ON THE AUTHORSHIP OF THE TREATY.

**Charles E. Hughes,** Secretary of State, and head of the United States delegation in a letter to Senator Underwood, also a delegate, on March 11, 1922, wrote in part:

"The treaty itself is very short and simple, and is perfectly clear. It requires no commentary. Its engagements are easily understood and no ingenuity in argument or hostile criticism can add to them or make them other or greater than its unequivocal language sets forth. There are no secret notes or understandings.

"In view of this, the question of authorship is unimportant. It was signed by four powers, whose delegates respectively adopted it, all having made various suggestions.

"I may say however, with respect to the general course of negotiations that after assent had been given by Great Britain and Japan that France should be a party to the agreement, I prepared a draft of the treaty based upon the various suggestions which had been exchanged between the delegates.

"After the approval of the American delegates who were here, the draft was submitted to the representatives of other powers and became the subject of discussion between the heads of the delegations concerned, and with a few changes, which were approved by the American delegates and which did not affect the spirit or substance of the proposed treaty, an agreement was reached.

"The treaty as thus drawn and notified was deemed to embrace the main islands of Japan. Later, in view of the sentiment both in this country and Japan, it was deemed to be preferable to exclude these main islands, and a supplementary treaty was prepared to this effect which designated the islands of Japan which it was to include.

"There is not the slightest mystery about the treaty or basis for suspicion regarding it. It is a straightforward document which attains one of the most important objects the American Government has had in view and is of the highest importance to the maintenance of friendly relations in the Far East upon a sound basis."

### DECLARATIONS OF WAR 1914-18.

| ALLIES AND ASSOCIATES. | War Declared by Central Powers. | War Declared Against Central Powers. | Duration of War. | | |
|---|---|---|---|---|---|
| | | | Y. | M. | D. |
| Serbia | July 28, 1914 | Aug. 9, 1914 | 4 | 3 | 4 |
| Russia | Aug. 1, 1914 | Nov. 3, 1914 | 3 | 7 | 3 |
| France | Aug. 3, 1914 | Aug. 3, 1914 | 4 | 3 | 8 |
| Belgium | Aug. 4, 1914 | April 7, 1917 | 4 | 3 | 7 |
| Britain | Nov. 23, 1914 | Aug. 4, 1914 | 4 | 3 | 7 |
| Montenegro | Aug. 9, 1914 | Aug. 6, 1914 | 4 | 3 | 5 |
| Japan | Aug. 27, 1914 | Aug. 23, 1914 | 4 | 2 | 19 |
| Portugal | Mar. 9, 1916 | Nov. 23, 1916 | 3 | 11 | 19 |
| Italy | | May 23, 1915 | 3 | 5 | 19 |
| San Marino | | June 6, 1915 | 3 | 5 | 4 |
| Roumania | Aug. 29, 1916 | Aug. 27, 1916 | 1 | 6 | 10 |
| Greece | | Nov. 23, 1916 | 1 | 11 | 18 |
| United States | | April 6, 1917 | 1 | 7 | 5 |
| Panama | | April 7, 1917 | 1 | 7 | 4 |
| Cuba | | April 7, 1917 | 1 | 7 | 4 |
| Siam | | July 22, 1917 | 1 | 3 | 20 |
| Liberia | | Aug. 4, 1917 | 1 | 3 | 8 |
| China | | Aug. 14, 1917 | 1 | 2 | 28 |
| Brazil | | Oct. 26, 1917 | 1 | 0 | 16 |
| Guatemala | | April 21, 1918 | 0 | 6 | 21 |
| Nicaragua | | May 6, 1918 | 0 | 6 | 5 |
| Hayti | | July 12, 1918 | 0 | 3 | 30 |
| Honduras | | July 19, 1918 | 0 | 3 | 23 |

## THE UNITED STATES NAVY, AS OF JULY 1, 1921.

(Ships not built and in commission by July 1921, are in italics.)

*BATTLESHIPS.*

| SHIPS AND YEAR COMPLETED. | Displacement. | Length. | | Breadth. | | Draft. | | Speed. | Main Battery. | | | Secondary Battery. | | | Weight of One Main Broadside. | Weight of One Secondary Broadside. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Tons.* | *Ft.* | *In.* | *Ft.* | *In.* | *Ft.* | *In.* | *Knots.* | *No.* | *In.* | *Cal.* | *No.* | *In.* | *Cal.* | *Pounds.* | *Pounds.* |
| Arizona, 1915 | 31,400 | 608 | 0 | 97 | 0½ | 29 | 10 | 21.0 | 12 | 14 | 45 | 14 | 5 | 51 | 16,800 | 882 |
| Arkansas, 1911 | 26,000 | 562 | 0 | 93 | 2½ | 29 | 7 | 21.0 | 12 | 12 | 50 | 16 | 5 | 51 | 10,440 | 1,008 |
| California, 1919 | 32,300 | 624 | 0 | 97 | 3½ | 31 | 0 | 21.0 | 12 | 14 | 50 | 14 | 5 | 51 | 16,800 | 882 |
| *Colorado*, 1921 | 33,600 | 624 | 0 | 97 | 3½ | 31 | 3½ | 21.0 | 8 | 16 | 45 | 14 | 5 | 51 | 16,800 | 882 |
| Connecticut, 1906 | 16,000 | 450 | 0 | 76 | 10 | 26 | 8 | 18.0 | 4 | 12 | 45 | 12 | 3 | 50 | 4,480 | 78 |
| Delaware, 1909 | 20,000 | 518 | 9 | 85 | 2½ | 28 | 10 | 21.5 | 10 | 12 | 45 | 16 | 5 | 51 | 8,700 | 1,080 |
| Florida, 1910 | 21,825 | 521 | 6 | 88 | 2½ | 30 | 1 | 22.1 | 10 | 12 | 45 | 16 | 5 | 51 | 8,700 | 1,008 |
| Idaho, 1917 | 32,000 | 624 | 0 | 97 | 4½ | 31 | 0½ | 21.0 | 12 | 14 | 50 | 14 | 5 | 51 | 16,800 | 882 |
| *Indiana* | 43,200 | 684 | 0 | 106 | 0 | 33 | 0 | 23.0 | 12 | 16 | 50 | 16 | 6 | 53 | 25,200 | 1,728 |
| *Iowa* | 33,200 | 684 | 0 | 106 | 0 | 33 | 0 | 23.0 | 12 | 16 | 50 | 16 | 6 | 53 | 25,200 | 1,728 |
| Kansas, 1907 | 16,000 | 450 | 0 | 76 | 10 | 26 | 8 | 18.1 | 4 | 12 | 45 | 12 | 3 | 50 | 4,480 | 78 |
| Maryland, 1920 | 32,600 | 624 | 0 | 97 | 3½ | 31 | 3½ | 21.0 | 8 | 16 | 45 | 14 | 5 | 51 | 16,800 | 882 |
| *Massachusetts* | 43,200 | 684 | 0 | 106 | 0 | 33 | 0 | 23.0 | 12 | 16 | 50 | 16 | 6 | 53 | 25,200 | 1,728 |
| Michigan, 1910 | 16,000 | 452 | 9 | 80 | 2½ | 27 | 1 | 18.8 | 8 | 12 | 45 | 14 | 3 | 50 | 3,480 | 78 |
| Minnesota, 1907 | 16,000 | 450 | 0 | 76 | 10 | 26 | 8 | 18.8 | 4 | 12 | 45 | 12 | 3 | 50 | 4,480 | 78 |
| Mississippi, 1917 | 32,000 | 624 | 0 | 97 | 4½ | 31 | 0½ | 21.0 | 12 | 14 | 50 | 14 | 5 | 51 | 16,800 | 882 |
| *Montana* | 43,200 | 684 | 0 | 106 | 0 | 33 | 0 | 23.0 | 12 | 16 | 50 | 16 | 6 | 53 | 25,200 | 1,728 |
| Nevada, 1914 | 27,500 | 583 | 0 | 95 | 2½ | 29 | 7 | 20.5 | 10 | 14 | 45 | 12 | 5 | 51 | 14,000 | 756 |
| New Mexico, 1917 | 32,000 | 624 | 0 | 97 | 4½ | 31 | 0½ | 21.0 | 12 | 14 | 50 | 14 | 5 | 51 | 16,800 | 882 |
| New York, 1912 | 27,000 | 573 | 0 | 95 | 2½ | 29 | 7 | 21.5 | 10 | 12 | 45 | 16 | 6 | 51 | 14,000 | 1,008 |
| *North Carolina* | 43,200 | 684 | 0 | 106 | 0 | 33 | 0 | 23.0 | 12 | 16 | 50 | 16 | 6 | 53 | 25,200 | 1,728 |
| N. Dakota, 1908 | 20,000 | 518 | 9 | 85 | 2½ | 28 | 10 | 21.0 | 10 | 12 | 45 | 14 | 5 | 51 | 8,700 | 1,080 |
| Ohio, 1904 | 12,500 | 388 | 0 | 72 | 3 | 25 | 4 | 18.0 | 4 | 12 | 40 | 4 | 6 | 50 | 3,480 | 420 |
| Oklahoma, 1914 | 27,500 | 583 | 0 | 95 | 2½ | 29 | 7½ | 20.6 | 10 | 14 | 45 | 12 | 5 | 51 | 14,000 | 756 |
| Pennsylvania, 1915 | 31,400 | 608 | 0 | 97 | 0½ | 29 | 10 | 21.0 | 12 | 14 | 45 | 14 | 5 | 51 | 16,800 | 882 |
| S. Carolina, 1910 | 16,000 | 452 | 9 | 80 | 2½ | 27 | 1 | 18.8 | 8 | 12 | 45 | 14 | 3 | 50 | 3,480 | 78 |
| *South Dakota* | 43,200 | 684 | 0 | 106 | 0 | 33 | 0 | 23.0 | 12 | 16 | 50 | 16 | 6 | 53 | 25,200 | 840 |
| Tennessee, 1919 | 32,300 | 624 | 0 | 97 | 3½ | 31 | 0 | 21.0 | 12 | 14 | 50 | 14 | 5 | 51 | 16,800 | 882 |
| Texas, 1912 | 27,000 | 573 | 0 | 95 | 2½ | 29 | 7 | 21.0 | 10 | 14 | 45 | 16 | 6 | 51 | 14,000 | 1,008 |
| Utah, 1909 | 21,825 | 521 | 6 | 88 | 2½ | 30 | 1 | 21.0 | 10 | 12 | 45 | 16 | 5 | 51 | 8,700 | 1,008 |
| *Washington* | 32,600 | 600 | 0 | 97 | 3½ | 31 | 3½ | 21.0 | 8 | 16 | 45 | 14 | 5 | 51 | 16,800 | 882 |
| *West Virginia* | 32,600 | 600 | 0 | 97 | 3½ | 31 | 3½ | 21.0 | 8 | 16 | 45 | 14 | 5 | 51 | 16,800 | 882 |
| Wyoming, 1911 | 26,000 | 562 | 0 | 93 | 2½ | 29 | 7 | 21.2 | 10 | 12 | 50 | 16 | 5 | 51 | 10,440 | 1,008 |

The Colorado was launched at Camden, N. J., March 22, 1921.

All of the battleships have submerged torpedo tubes, mostly two each. They have a crew of 60 to 65 officers, and 800 to 1,600 enlisted men.

Battleships are divided into three classes—predreadnoughts, dreadnoughts, and super-dreadnoughts—according to their displacement and guns. The first named class usually are not over 16,000 tons; the second, 18,000 tons or so; the third, 25,000 tons or more. The dreadnoughts have a main battery of all big guns (11 inches or more). The super-dreadnoughts have more than 10 big guns in the main battery, or a very large displacement, and a speed of 21 to 25 knots an hour.

Of the battleships in the above list the following are officially classed as second line ("obsolete"): Connecticut, Kansas, Michigan, Minnesota, Ohio, South Carolina.

Other second-line battleships on the navy list in July, 1921, but not in commission, were the Georgia (14,948), Louisiana (16,000), Nebraska (14,948), New Hampshire (16,000), New Jersey (14,948), Rhode Island (14,948), Vermont (16,000), and Virginia (14,948). All but the Illinois and Kentucky carry four 12-in. guns, the two named having four 13-in. guns. Their contract speed ranged from 16.9 knots to 19.26 knots an hour.

## APPROPRIATIONS FOR THE "NEW" U. S. NAVY SINCE 1883.

| FISC. YEAR. | Dollars. | FISC. YEAR. | Dollars. | FISC. YEAR. | Dollars. | FISC. YEAR. | Dollars. |
|---|---|---|---|---|---|---|---|
| 1884 | 17,189,340 | 1894 | 22,928,257 | 1904 | 87,926,217 | 1914 | 143,019,023 |
| 1885 | 16,796,714 | 1895 | 25,759,216 | 1905 | 113,523,439 | 1915 | 147,795,024 |
| 1886 | 18,256,336 | 1896 | 30,686,652 | 1906 | 105,105,890 | 1916 | 157,172,318 |
| 1887 | 17,412,520 | 1897 | 31,268,275 | 1907 | 104,629,684 | 1917 | 318,397,828 |
| 1888 | 26,091,338 | 1898 | 62,993,513 | 1908 | 108,124,421 | 1918 | 1,774,690,675 |
| 1889 | 20,935,211 | 1899 | 119,921,780 | 1909 | 124,318,308 | 1919 | 2,222,128,215 |
| 1890 | 22,246,567 | 1900 | 59,088,547 | 1910 | 137,779,343 | 1920 | 624,899,575 |
| 1891 | 24,742,253 | 1901 | 66,220,984 | 1911 | 133,376,688 | 1921 | 764,547,585 |
| 1892 | 32,723,493 | 1902 | 84,442,711 | 1912 | 128,207,383 | 1922 | 425,848,079 |
| 1893 | 24,025,689 | 1903 | 82,592,228 | 1913 | 130,644,875 | | |

## NAVAL EXPENDITURES BY PRINCIPAL POWERS.

| FISCAL YEAR. | Great Britain. (Apr. to Mar.) | United States. (July to June.) | France. (Jan. to Dec.) | Italy. (July to June.) | Japan. (Apr. to Mar.) |
|---|---|---|---|---|---|
| 1906-1907 | $152,954,342 | $98,392,144 | $59,514,296 | $25,865,668 | $30,072,061 |
| 1907-1908 | 151,880,617 | 117,353,475 | 60,685,813 | 27,516,454 | 35,124,346 |
| 1908-1909 | 156,401,161 | 120,421,578 | 62,194,916 | 30,453,697 | 39,347,332 |
| 1909-1910 | 181,936,341 | 122,247,365 | 64,899,589 | 31,812,885 | 35,005,719 |
| 1910-1911 | 202,056,258 | 111,791,979 | 74,102,439 | 40,595,204 | 36,889,158 |
| 1911-1912 | 211,596,296 | 133,559,072 | 80,371,109 | 40,780,987 | 42,944,329 |
| 1912-1913 | 224,443,296 | 129,787,233 | 81,692,832 | 41,893,420 | 46,510,216 |
| 1913-1914 | 237,530,459 | 136,858,301 | 90,164,625 | 49,550,147 | 48,105,152 |
| 1914-1915 | 260,714,275 | 142,959,092 | 123,828,872 | 56,920,440 | 69,111,653 |
| 1915-1916 | 1,001,202,544 | 152,821,540 | ..... | 135,736,207 | 63,000,000 |
| 1916-1917 | 1,020,003,279 | 261,403,176 | ..... | 161,482,062 | 73,000,000 |
| 1917-1918 | 1,119,944,455 | 1,214,995,767 | 301,910,093 | 226,061,278 | 85,000,000 |
| 1918-1919 | 1,670,456,135 | 1,915,155,835 | 445,802,202 | 229,779,176 | 125,000,000 |
| 1919-1920 | 787,644,050 | 1,078,099,485 | 174,829,243 | 45,711,604 | 150,000,000 |
| 1920-1921 | 441,861,500 | 757,486,849 | 199,638,237 | 78,389,226 | 187,207,522 |
| 1921-1922 | 406,033,504 | 425,848,079 | 181,509,980 | 81,068,748 | 248,519,224 |

## COST OF U. S. WARSHIPS—DATE OF COMMISSION.

| Ships. | Cost of Hull and Mach., Including Armor. | Cost of Equipage, Including Armament. | Total Cost. | Date of First Commission. | Time from Laying Keel to 1st Commis. | |
|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | | *Yrs.* | *Mos.* |
| Battleships, first line—Delaware | 6,830,796 | 1,628,182 | 8,458,978 | April 4, 1910 | 2 | 5 |
| North Dakota | 7,246,687 | 1,439,241 | 8,685,928 | April 11, 1910 | 2 | 4 |
| Florida | 8,983,866 | 1,373,762 | 10,357,628 | Sept. 15, 1911 | 2 | 6 |
| Utah | 7,002,295 | 1,951,781 | 8,954,076 | Aug. 31, 1911 | 2 | 6 |
| Wyoming | 8,252,338 | 1,990,024 | 10,242,362 | Sept. 25, 1912 | 2 | 7 |
| Arkansas | 8,376,927 | 1,830,163 | 10,207,090 | Sept. 17, 1912 | 2 | 8 |
| New York | 9,692,582 | 1,673,226 | 11,365,808 | April 15, 1914 | 2 | 7 |
| Texas | 9,373,440 | 1,805,755 | 11,179,195 | Mar. 12, 1914 | 2 | 11 |
| Nevada | 9,924,556 | 1,630,854 | 11,555,410 | Mar. 11, 1916 | 3 | 4 |
| Oklahoma | 10,131,607 | 1,639,339 | 11,770,946 | May 2, 1916 | 3 | 6 |
| Pennsylvania | 11,736,236 | 2,056,773 | 13,793,009 | June 12, 1916 | 2 | 7½ |
| Arizona | 11,079,917 | 1,913,662 | 12,993,579 | Oct. 17, 1916 | 2 | 7 |
| New Mexico | 13,284,240 | 2,703,976 | 15,988,216 | May 20, 1918 | 2 | 7 |
| Mississippi | 11,758,598 | 2,867,381 | 14,625,979 | Dec. 18, 1917 | 2 | 8½ |
| Idaho | 11,798,355 | 2,645,602 | 14,443,957 | Mar. 24, 1919 | 4 | 2 |
| Tennessee | 17,990,473 | 446,681 | 18,437,154 | June 3, 1920 | 3 | 0½ |
| Total | 163,462,913 | 29,596,402 | 193,059,315 | | | |
| Battleships, second line—Kentucky | 4,418,095 | ..... | 4,418,095 | May 15, 1900 | 3 | 10½ |
| Illinois | 4,073,429 | ..... | 4,073,429 | Sept. 16, 1901 | 4 | 7 |
| Ohio | 4,475,375 | 630,398 | 5,105,773 | Oct. 4, 1904 | 5 | 5½ |
| Virginia | 5,491,036 | ..... | 5,491,036 | May 7, 1906 | 4 | 0 |
| Nebraska | 5,679,516 | ..... | 5,679,516 | July 1, 1907 | 5 | 0 |
| Georgia | 5,541,279 | ..... | 5,541,279 | Sept. 24, 1906 | 5 | 1 |
| New Jersey | 5,385,806 | ..... | 5,385,806 | May 12, 1906 | 4 | 1 |
| Rhode Island | 5,360,125 | ..... | 5,360,125 | Feb. 19, 1906 | 3 | 9 |
| Connecticut | 6,394,758 | 1,065,477 | 7,460,235 | Sept. 29, 1906 | 3 | 6 |
| Louisiana | 6,065,531 | ..... | 6,065,531 | June 2, 1906 | 3 | 4 |
| Vermont | 6,166,267 | ..... | 6,166,267 | Mar. 4, 1907 | 2 | 9½ |
| Kansas | 6,208,541 | 1,134,693 | 7,343,234 | April 18, 1907 | 3 | 2 |
| Minnesota | 6,149,874 | 1,328,399 | 7,478,273 | Mar. 9, 1907 | 3 | 5 |
| New Hampshire | 5,976,237 | ..... | 5,976,237 | Mar. 19, 1908 | 2 | 10 |
| South Carolina | 5,669,186 | 1,221,618 | 6,890,804 | Mar. 1, 1910 | 3 | 3 |
| Michigan | 5,693,620 | 1,123,407 | 6,817,027 | Jan. 4, 1910 | 3 | 1 |
| Total | 88,748,675 | 6,503,992 | 95,252,667 | | | |
| Cruisers, second line—Charleston | 3,167,234 | 562,421 | 3,729,655 | Oct. 17, 1905 | 3 | 9 |
| Charlotte | 4,779,380 | ..... | 4,779,380 | May 7, 1908 | 3 | 1½ |
| Frederick | 4,874,874 | 612,439 | 5,487,313 | April 18, 1905 | 3 | 6 |
| Huntington | 4,885,216 | ..... | 4,885,216 | Feb. 23, 1905 | 3 | 5 |
| Huron | 4,735,160 | 773,933 | 5,509,093 | Jan. 27, 1908 | 5 | 4 |
| Missoula | 4,781,089 | ..... | 4,781,089 | July 21, 1908 | 3 | 3 |
| Olympia | 2,484,027 | 290,212 | 2,774,239 | Feb. 5, 1895 | 3 | 8 |
| Pittsburgh | 4,857,086 | 841,155 | 5,698,241 | Mar. 9, 1905 | 3 | 7 |
| Pueblo | 4,831,941 | 163,557 | 4,995,498 | Jan. 19, 1905 | 3 | 9 |
| Rochester | 3,897,840 | 481,148 | 4,378,988 | Aug. 1, 1893 | 2 | 10 |
| Seattle | 5,201,905 | ..... | 5,201,905 | Aug. 7, 1906 | 2 | 11 |
| St. Louis | 3,173,782 | 488,906 | 3,662,688 | Aug. 18, 1906 | 4 | 0½ |
| Total | 51,669,534 | 4,213,771 | 55,883,305 | | | |
| Light cruisers, 2d line—Birmingham | 1,629,956 | 323,993 | 1,953,949 | April 11, 1908 | 2 | 8 |
| Chester | 1,766,293 | ..... | 1,766,293 | April 25, 1908 | 2 | 7 |
| Salem | 1,619,325 | 323,855 | 1,943,180 | Aug. 1, 1908 | 2 | 11 |
| Total | 5,015,574 | 647,848 | 5,663,422 | | | |

### CORRESPONDING GRADES IN ARMY, NAVY, AND MARINE CORPS.

| Navy. | Army and Marine Corps. | Navy. | Army and Marine Corps. |
|---|---|---|---|
| Admiral | General. | Commander | Lieutenant Colonel. |
| Vice-Admiral | Lieutenant General. | Lieutenant Commander | Major. |
| Rear Admiral | Major General. | Lieutenant | Captain. |
| Commodore | Brigadier General. | Lieutenant, junior grade | First Lieutenant. |
| Captain | Colonel. | Ensign | Second Lieutenant. |

## NAVAL EDUCATION SYSTEM OF THE UNITED STATES.

The Bureau of Navigation of the Department is charged with the training and education of the line officers of the navy, and each staff bureau with the training of the staff officers. Midshipmen, when appointed, are given four years instruction on general and technical subjects at the Naval Academy. Upon graduation these midshipmen are commissioned as line officers and are ordered to sea duty. None is sent to any special schools until he has had at least one year at sea. Officers who have shown special qualifications and interest in the subjects mentioned below are selected for special instruction. In recent years 40 per cent. to 80 per cent. of each Naval Academy class have received special instruction in some one of these subjects. The following courses are maintained by the Bureau of Navigation:

*War College*—Newport, R. I., one year; for officers of command or flag rank. This course includes theoretical instruction in the art of naval warfare, and war games played on game boards.

*Post-Graduate Work*—Naval Academy, Annapolis, Md., and various educational institutions; two years. The first year of this course is at the Naval Academy and consists of the preparation and technical groundwork. This work merges into the specialization course continued at the institution, offering the best available facilites in the given work, viz.: ordnance, marine, gas, electrical and radio engineering. Columbia University, Massachusetts Institute of Technology, George Washington and Harvard are among the institutions at which special instruction is given. As a part of this course practical work during the summer is given to student officers at such places as navy yards, naval gun factory, Bureau of Mines, Bureau of Standards and large industrial plants.

*Naval Construction*—Naval Academy and Massachusetts Institute of Technology; two to three years. First year at post-graduate work at Naval Academy and the remainder at Massachusetts Institute of Technology, studying design and construction of ships. These officers are transferred from the line to the construction corps.

*Submarines*—New London, Conn.; three months. This course is practical training in handling submarines and firing torpedoes from them.

*Torpedoes*—Naval Torpedo Station, Newport, R. I.; five months. Theoretical and practical instruc-

tion in the assembly, firing, care and maintenance of various types of torpedoes.

*Aviation*—Pensacola, Fla.; nine months. Training in both heavier than air and lighter than air craft.

*Law*—Judge-Advocate-General's office and George Washington University; three years. Certain officers while on duty in the Judge-Advocate's office take the law course at George Washington University, giving special attention to military law and procedure.

*Optical Instruments and Gyroscopic Instruments*—Naval gun factory, Ford instrument works and other industrial plants. From time to time officers are sent to places where such instruments are manufactured, to learn the details and principles of manufacturing, while others are given shorter courses in the care, operation and maintenance of these instruments.

## EDUCATION AND TRAINING OF ENLISTED MEN IN THE NAVY.

There are shore training stations at Newport, R. I.; Hampton Roads, Va.; Great Lakes, Ill., and San Francisco. At the Hampton Roads and San Francisco training stations there are special schools for enlisted men who desire later the Naval Academy. Trade schools are maintained at the stations and at several of the navy yards and naval air stations. The course of training for apprentice seamen and firemen, third class, at training stations, is eight weeks. Upon the completion of the course of training at training stations, apprentice seamen will be rated seamen, second class, or firemen, third class. Every endeavor is made to qualify those who are unable to swim 50 yards. This is particularly desirable in the case of line petty officers, and no man shall be made a coxswain or a member of a power boat who has not so qualified.

Men need not be continuous service men to be eligible for entrance to a trade school, but, except in the case of recruits who will enter immediately after enlistment, no men will be detailed who will not have at least two years to serve on their current enlistment after they have completed their course. A recruit must have enlisted for at least three years to be eligible for entrance to any trade school having a course of six months or more. Men who complete a course of instruction in any service trade school are not qualified for furlough without pay or discharge by purchase or by special order during the remainder of the enlistment in which the course was completed. A man who applies for instruction in any service trade school shall be so informed and required to sign a statement that he has no intention of requesting furlough without pay or discharge by purchase or special order during his current enlistment, and that no reason exists or can be anticipated to necessitate such discharge. Men who have completed one course of instruction in any trade school whose course is six months or longer will not be considered eligible for entrance to another trade school, except that men entering the apprentice courses in the aviation mechanics' school may be advanced through the higher trade schools of his specialty if his aptitude and progress warrant. Men qualifying for a rating prior to the completion of a course are to be rated and transferred to receiving ships for general detail.

The training given men at regular training stations is supplemented and continued through navy education study courses, supplied through the Bureau of Navigation for men on active duty in naval vessels and at naval shore stations. These courses are designed primarily for increasing the technical knowledge and efficiency of enlisted personnel in regular naval trades. They cover a wide range of technical courses closely related to naval duties, as well as the fundamental subjects needed by men whose general education is not adequate for a proper study of the technical courses related to these duties.

The naval education study courses are largely developed within the navy. They combine the self-instruction type of material used in other educational extension work with the instruction of regular ship officers and the practical knowledge gained through regu ar duties. Diplomas are granted for completed courses and a permanent record of all completed educational work is entered in the service record which carries the complete official statement of each man's qualifications and service.

## UNITED STATES NAVAL ACADEMY AT ANNAPOLIS.

The students of the Naval Academy are styled midshipmen. Five midshipmen are allowed for each Senator, Representative and Delegate in Congress, five for the Resident Commissioner from Porto Rico, five for the District of Columbia, and fifteen appointed each year from the United States at large. The appointments from the District of Columbia and fifteen each year at large are made by the President. It is the custom of Presidents to give the appointments of midshipmen at large to the sons of officers of the army and navy, for the reason that officers, owing to the nature of their duties, are usually not in a position to establish permanent residences.

The selection of candidates, by competitive examination or otherwise, for nomination for vacancies in the quota of Senators, Representatives and Delegates in Congress is entirely in the hands of each Senator, Representative and Delegate in Congress having a vacancy; and all applications for appointment or inquiries relative to competitive examinations should be addressed accordingly. Two examinations for admission are held each year, the first on the third Wednesday in February, the second on the third Wednesday in April.

The law authorizes the appointment of one hundred enlisted men each year to be selected as a result of a competitive examination of enlisted men of the Regular Navy and Marine Corps, and members of the Naval Reserve Force on active duty, who must not be more than twenty years of age on April 1 of the year they enter, and who will have been in the service at least one year by August 15 of that year. The mental and physical requirements, as well as the amount of money to be deposited upon admission, are the same for these candidates as for other candidates for midshipmen.

The competitive examination of these enlisted men is held on the third Wednesday in April of each year. Candidates may also be accepted on certificate. For details write Bureau of Navigation, Navy Department, Washington, D. C.

All candidates, except 4 Filipinos, are required to be citizens of the U. S. and must not be less than 16 or more than 20 years of age on April 1 of the calendar year in which they enter the Naval Academy.

The course for midshipmen is four years. Examinations on the ground covered are held at the end of each academic term. During the summer, midshipmen of the first, second and third classes go to sea for about three months. Midshipmen after graduation are commissioned as Ensigns in the navy, and occasionally to fill vacancies in the Marine Corps and in certain of the staff corps of the navy. The act of June 29, 1906, prescribes that the Secretary of the Navy shall notify in writing each Senator, Representative and Delegate in Congress of any vacancy that will exist at the Naval Academy and which he shall be entitled to fill by nomination of a candidate and one or more alternates therefor. The nomination of a candidate and alternate or alternates to fill said vacancy shall be made upon the recommendation of the Senator, Representative or Delegate, if said recommendation is made by the fourth day of March of the year following that in which said notice in writing is given, but if it is not made by that time the Secretary of the Navy shall fill the vacancy by appointment of an actual resident of the State, Congressional district or Territory, as the case may be, in which the vacancy will exist, who shall have been for at least two years immediately preceding the date of his appointment an actual and bona fide resident of the State, Congressional district or Territory.

The height of candidates for admission shall not be less than five feet two inches, between the ages of sixteen and eighteen years and not less than five feet four inches, between the ages of eighteen and twenty years; and the minimum weight at sixteen years shall be one hundred and eleven pounds, with an increase of not less than three pounds for each additional year, or fraction of a year, over one-half. Any marked deviation in the date will add materially to the consideration for rejection. Candidates must be unmarried, and any midshipman who shall marry, or who shall be found to be married before his final graduation, shall be dismissed from the service. Each candidate who has passed the required examinations must, before being admitted as a midshipman, deposit the sum of $350 to cover the cost of his initial outfit—clothing, uniforms, text books and equipment.

Each candidate before admission will be required to sign articles by which he binds himself to serve in the United States Navy during the pleasure of the President of the United States (including his time of probation at the Naval Academy) unless sooner discharged. The pay of a midshipman is $780 a year.

## ORIGIN OF THE UNITED STATES NAVAL ACADEMY.

The United States Naval Academy was founded at Annapolis, Md., in 1845, by George Bancroft, who then was Secretary of the Navy. Owing to the Civil War it was removed to Newport, R. I., in May, 1861, but was re-established at Annapolis in September, 1865.

## THE ARMY OF THE UNITED STATES.

The army of the United States consists of the Regular Army, the National Guard while in the service of the United States, and the Organized Reserves, including the Officers' Reserve Corps and the Enlisted Reserve Corps.

The Regular Army consists of the Infantry, the Cavalry, the Field Artillery, the Coast Artillery Corps, the Air Service, the Corps of Engineers, the Signal Corps, which are designated the combatant arms or the line of the army: the General Staff Corps, the Adjutant General's Department, the Inspector General's Department, the Judge Advocate General's Department, the Quartermaster Corps, the Finance Department, the Medical Department, the Ordnance Department, the Chemical Warfare Service, the officers of the Bureau of Insular Affairs, the officers and enlisted men under the jurisdiction of the Militia Bureau, the chaplains, the professors and cadets of the United States Military Academy, the present military storekeeper, detached officers, detached enlisted men, unassigned recruits, the Indian Scouts, the officers and enlisted men of the retired list, and such other officers and enlisted men as are now or may hereafter be provided for. Except in time of war or similar emergency when the public safety demands it, the number of enlisted men of the Regular Army shall not exceed 280,000, including the Philippine Scouts: however, the Army Appropriation Act, approved June 30, 1922, for the fiscal year of 1923 provides for 125,000 enlisted men and 7,148 Philippine Scouts.

The National Guard consists of the regularly enlisted militia between the ages of 18 and 45 years and of commissioned officers between the ages of 21 and 64 years, of the several States, Territories and the District of Columbia. The organization thereof in general is the same as that prescribed for the Regular Army. The National Guard may be called as such into the service of the United States, and when so called is subject to the laws and regulations governing the Regular Army as far as applicable. When Congress has authorized the use of troops in excess of those of the Regular Army, the members of the National Guard may be drafted into the military service to serve therein for the period of the war or emergency, unless sooner discharged.

The Organized Reserves constitute a war force in order to meet any major emergency requiring the use of troops in excess of those of the Regular Army and the National Guard. They are liable to military service only in the event of a serious national emergency especially proclaimed by Congress.

MILITARY DEPARTMENTS AND CORPS AREAS, U. S. ARMY.

| Department or Corps Areas. | Headquarters. | Jurisdiction. |
|---|---|---|
| First Corps Area | Boston | Me., N. H., Vt., Mass., R. I., Conn. |
| Second Corps Area | N. Y. (Gov. Isl.) | N. Y., N. J., Del. |
| Third Corps Area | Baltimore, Md | Pa., Md., Va., D. C. |
| Fourth Corps Area | Ft. McPherson, Ga | N. C., S. C., Ga., Fla., Ala., Tenn., Miss., La. |
| Fifth Corps Area | Columbus Barracks, Ohio | Ohio, W. Va., Ind., Ky. |
| Sixth Corps Area | Chicago, Ill | Ill., Mich., Wis. |
| Seventh Corps Area | Omaha, Neb | Ark., Mo., Kan., Iowa, Neb., Minn., N. Dak., S. Dak. |
| Eighth Corps Area | Ft. Sam Houston, Tex | Tex., Okla., Colo., N. Mex., Ariz. |
| Ninth Corps Area | Presidio of San Francisco, Cal | Wash., Ore., Idaho, Mont., Wyo., Utah, Nev., Cal. |
| Hawaiian Dept | Honolulu | Hawaiian Islands and dependencies. |
| Philippine Dept | Manila | Philippine Islands and U. S. troops in China. |
| Pan. Canal Dept | Quarry Heights, Balboa Heights | Canal Zone. |

COAST ARTILLERY DISTRICTS.

| | | |
|---|---|---|
| First | Boston | Coast defenses of Boston, L. I. Sound, Narragansett Bay New Bedford, Portland and Portsmouth. |
| Second | N. Y. (Gov. Isl.) | Coast defenses of the Delaware, Eastern N. Y., Sandy Hook, and Southern N. Y. |
| Third | Baltimore, Md | Coast defenses of Baltimore, Chesapeake Bay, and the Potomac. |
| Fourth | Ft. McPherson, Ga | Coast defenses of the Cape Fear, Charleston, Key West, Mobile, Pensacola and Savannah. |
| Ninth | Presidio of San Francisco, Cal | Coast defenses of the Columbia, Los Angeles, Puget Sound, San Diego, and San Francisco. |
| Panama | Ft. Amador, Canal Zone | Coast defenses of Balboa and Cristobal. |
| Hawaiian | Honolulu | Coast defenses of Honolulu and Pearl Harbor. |

Effective Sept. 1, 1920, the six military departments within the continental limits of the United States were discontinued and the continental area divided into nine corps areas. The military departments and corps areas include the coast artillery districts, coast defenses, forts and camps within their limits. In October, 1920, there was attached to the First Corps Area such part of the State of New York as lies east of west longitude 72° 30'; Sept. 1, 1920, the island of Porto Rico, with the islands and keys adjacent, was attached to the Second Corps Area, and the Territory of Alaska to the Ninth Corps Area. Sept. 1, 1920, there was attached to the Ninth Corps Area that part of the State of Arizona west of the 114th meridian and south of the 33d parallel. Aug. 1, 1922, Jefferson Barracks, Mo., was attached to the Sixth Corps Area. The territorial limits of the coast artillery districts within the continental limits of the United States are those of the corps areas bearing the same numerical designations.

TACTICAL DIVISIONS.

The active tactical divisions, with their headquarters, are as follows: *First*, Ft. Hamilton, N. Y.; *Second*, Camp Travis, Tex.; *Hawaiian Division*, Schofield Barracks, H. T.; *Panama Division*, Fort Amador, C. Z.; *Philippine Division*, Fort Wm. McKinley, P. I.; *First Cavalry Division*, Fort Bliss, Tex.

GENERAL ARMY HOSPITALS.

The General Hospitals of the army are located at Hot Springs, Ark. (also navy); Denver, Colo., Presidio, San Francisco; Manila, Philippines; Honolulu, Hawaii; Takoma Park at Washington, D. C. and El Paso, Tex.

## UNITED STATES MILITARY ACADEMY AT WEST POINT.

EACH Senator, Congressional district and Territory, including Porto Rico, Alaska and Hawaii, is entitled to have two cadets at the academy; the District of Columbia, four cadets. There are also eighty-two appointments at large, two of whom are appointed upon the recommendation of the Vice-President, specially conferred by the President of the United States. The law (act of May 4, 1916) authorizes the President to appoint cadets to the United States Military Academy from among enlisted men in the Regular Army and National Guard, the total number not to exceed one hundred and eighty at any one time.

Appointments are usually made one year in advance of date of admission, by the Secretary of War, upon the nomination of the Senator or Representative. These nominations may either be made after competitive examination or given direct, at the option of the Representative. The Representative may nominate two legally qualified second candidates to be designated first and second alternates. The alternates will receive from the War Department a letter of appointment, and will be

examined with the regular appointee, and the better qualified will be admitted to the academy in the event of the failure of the principal to pass the prescribed preliminary examinations. Appointees to the Military Academy must be between seventeen and twenty-two years of age; enlisted men of the Regular Army and of the National Guard must be between the ages of nineteen and twenty-two years, and have served as enlisted men not less than one year. *Provided*, that whenever any member of the graduating class shall fail to complete the course with his class by reason of sickness, or deficiency in his studies, or other cause, such failure shall not operate to delay the admission of his successor.

Appointees must be free from any infirmity which may render them unfit for military service, and able to pass, unless a satisfactory certificate is submitted, a careful examination in English grammar, English composition, English literature, algebra through quadratic equations, plane geometry, United States history, and the outlines of general history. The Secretary of War is authorized to permit not exceeding four Filipinos to be designated, one for each class, by the Governor-General of the Philippine Islands, to receive instruction at the United States Military Academy at West Point: *Provided*, that the Filipinos undergoing instruction shall receive the same pay, allowances and emoluments as are authorized by law for cadets at the Military Academy appointed from the United States, to be paid out of the same appropriations; *And provided further*, that said Filipinos undergoing instruction, on graduation, shall be eligible only to commissions in the Philippine Scouts; serve for eight years, unless sooner discharged.

The course of instruction, which is quite thorough, requires four years; *Provided*, that any person heretofore nominated in accordance with regulations, for appointment to fill a vacancy which would have resulted from the graduation of a cadet during the present year, may be so appointed notwithstanding the retention of such cadet at the academy; *Provided further*, that any cadet now at the academy may at his option, exercised prior to June 11, 1920, continue at the academy one additional year and postpone thereby his prospective graduation, and cadets not electing so to prolong their course shall be graduated in the years assigned to their respective classes prior to the passage of this act.

The course is largely mathematical and professional. The principal subjects taught are mathematics, English, French, drawing, drill regulations of all arms of the service, natural and experimental philosophy, chemistry, chemical physics, mineralogy, geology, electricity, history, international, constitutional and military law, Spanish, civil and military engineering, art and science of war, economic and government, and ordnance and gunnery.

From about the middle of June to the end of August cadets live in camp, engaged only in military duties and receiving practical military instruction. Cadets are allowed but one leave of absence during the four years' course, and this is granted at the expiration of the first two years. The pay of a cadet is $1,174.20 per year and with proper economy is sufficient for his support.

Upon graduating, cadets are commissioned as Second Lieutenants in the United States Army. The whole number of cadets graduated from 1802 to 1922, inclusive, has been 6,959. It is virtually absolutely necessary for a person seeking an appointment to apply to his Senator or Member of Congress. The Superintendent is Brig.-Gen. Fred W. Sladen, U. S. A., and the military and academic staff consists of fifteen persons. Number of cadets June 1, 1922, was 1,154.

## NATIONAL GUARD STRENGTH, SEPTEMBER 30, 1922.

| State. | Army. | | | | G.H.Q. Reserve Troops. | Spec. Allot. ment. | *Coast Arty. Corps. | State Staff. | Aggregate. | Auth'ized for 1923. | Pct. of Authorized. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Divisional Troops. | Corps Troops. | Cav. Div. | Army Troops. | | | | | | | |
| Porto Rico | | | | | | 1,817 | | 20 | 1,837 | 1,993 | 92 |
| New Hampshire | | 1,151 | | | | | | 3 | 1,154 | 1,367 | 84 |
| Oklahoma | 3,527 | 579 | | | | | | 36 | 4,142 | 5,074 | 82 |
| Arkansas | | | | 354 | | 1,274 | | 28 | 1,656 | 2,041 | 81 |
| Minnesota | 2,534 | | | | | 2,528 | | 45 | 5,107 | 6,313 | 81 |
| South Carolina | 1,438 | 307 | | | | | 225 | 7 | 1,977 | 2,444 | 81 |
| Rhode Island | 463 | | 215 | | | | 760 | 4 | 1,442 | 1,811 | 80 |
| Vermont | 1,215 | 41 | | | | | | 28 | 1,284 | 1,621 | 79 |
| Washington | 2,196 | 112 | 102 | | | | 206 | 27 | 2,643 | 3,371 | 78 |
| Oregon | 1,969 | | | | | | 333 | 41 | 2,343 | 3,023 | 78 |
| Pennsylvania | 8,648 | 1,551 | 1,715 | 810 | | | | 49 | 12,773 | 16,505 | 77 |
| Wisconsin | 3,937 | 301 | 1,226 | 77 | | 1,260 | | 16 | 6,817 | 8,870 | 77 |
| Indiana | 3,814 | 1,175 | | | | | | 60 | 5,049 | 6,632 | 76 |
| New York | 11,069 | 2,355 | 1,352 | 837 | | 3,611 | 2,142 | 89 | 21,455 | 28,615 | 75 |
| Connecticut | 1,560 | 1,210 | 164 | | | | 178 | 22 | 3,134 | 4,212 | 74 |
| West Virginia | 1,163 | 77 | | | | | | 8 | 1,248 | 1,684 | 74 |
| Florida | 1,702 | 47 | | | | | 101 | 10 | 1,860 | 2,520 | 74 |
| Ohio | 7,931 | | 746 | | | | | 15 | 8,692 | 11,898 | 73 |
| Arizona | 528 | | | | | | | 4 | 532 | 729 | 73 |
| Georgia | 2,259 | | 244 | 61 | | | | 12 | 2,576 | 3,546 | 73 |
| New Jersey | 3,588 | | 659 | | | | | 11 | 4,258 | 5,944 | 72 |
| Delaware | | 722 | | | | | | 15 | 737 | 1,058 | 70 |
| Iowa | 2,634 | 404 | 675 | | | | | 39 | 3,752 | 5,394 | 70 |
| Alabama | 2,061 | 188 | 425 | | | | | 22 | 2,696 | 3,906 | 69 |
| Missouri | 2,825 | 851 | | | 447 | | | 18 | 4,141 | 6,014 | 69 |
| North Dakota | 1,123 | | | | | | | 23 | 1,146 | 1,667 | 69 |
| Michigan | 3,718 | 214 | 250 | | | | | 23 | 4,205 | 6,149 | 68 |
| Mississippi | 1,386 | | | | | | | 33 | 1,419 | 2,091 | 68 |
| Louisiana | 1,565 | | 266 | | | | | 11 | 1,842 | 2,723 | 68 |
| North Carolina | 1,549 | 382 | 335 | | | | 86 | 12 | 2,364 | 3,550 | 67 |
| Kentucky | 2,195 | | 541 | | | | | 8 | 2,744 | 4,152 | 66 |
| Maryland | 2,511 | 84 | | | | | | 40 | 2,635 | 4,038 | 65 |
| Maine | 1,738 | | | | | | 581 | 31 | 2,350 | 3,629 | 65 |
| South Dakota | | 154 | | | 866 | | | 5 | 1,025 | 1,586 | 65 |
| Virginia | 3,064 | | | | | | 621 | 33 | 3,718 | 5,780 | 64 |
| Massachusetts | 6,711 | | 368 | 250 | | 312 | 937 | 27 | 8,605 | 13,520 | 64 |
| Illinois | 4,941 | 846 | 215 | | | 1,368 | | | 7,370 | 11,971 | 62 |
| Idaho | 450 | | 437 | | | | | 27 | 914 | 1,501 | 61 |
| Kansas | 2,413 | | 345 | | | | | 32 | 2,790 | 4,600 | 61 |
| Nebraska | 1,278 | | | | | | | 21 | 1,299 | 2,146 | 61 |
| Colorado | 1,144 | | 187 | | | | | 33 | 1,364 | 2,341 | 58 |
| Texas | 5,526 | | 1,007 | | | | | 40 | 6,573 | 12,005 | 55 |
| Wyoming | | | 470 | | | | | 8 | 478 | 895 | 53 |
| Utah | 492 | | 205 | | | 1,229 | | 27 | 724 | 1,495 | 48 |
| Hawaii | | | | | | | | 33 | 1,262 | 2,817 | 45 |
| New Mexico | 84 | 125 | 412 | | | | | 8 | 629 | 1,479 | 43 |
| California | 2,644 | | | | | | 828 | 4 | 3,476 | 8,582 | 41 |
| Dist of Columbia | 378 | 88 | | | | | | 12 | 478 | 1,381 | 35 |
| Tennessee | 579 | 113 | 146 | | | | | 15 | 853 | 2,854 | 30 |
| Montana | 423 | | | | | | | 16 | 439 | 1,581 | 28 |
| Nevada | | | | | | | | | | 179 | .. |
| Total | 112,973 | 13,077 | 12,707 | 2,389 | 1,313 | 13,399 | 6,998 | 1,151 | 164,007 | 241,297 | 68 |

*Coast artillery figures are for fixed defenses.

## AMERICAN CASUALTIES IN WAR WITH GERMANY.

TOTAL DEATHS, OFFICERS AND ENLISTED MEN.

(Official data, as of March 3, 1922.)

| CAUSE OF DEATH. | FOREIGN. | | | DOMESTIC. | | | GRAND TOTAL. | | Aggregate. |
|---|---|---|---|---|---|---|---|---|---|
| | Officers. | Enlisted Men. | Total. | Officers. | Enlisted Men. | Total. | Officers. | Enlisted Men. | |
| Killed in action | 1,618 | 35,193 | 36,811 | ..... | 5 | 5 | 1,618 | 35,198 | 36,816 |
| Died of wounds received in action | 603 | 13,108 | 13,711 | 1 | 44 | 45 | 604 | 13,152 | 13,756 |
| Died of disease | 609 | 23,091 | 23,700 | 1,037 | 37,369 | 38,406 | 1,646 | 60,460 | 62,106 |
| Died of accident | 355 | 2,203 | 2,558 | 357 | 1,535 | 1,892 | 712 | 3,738 | 4,450 |
| Drowned | 17 | 308 | 325 | 13 | 372 | 385 | 30 | 680 | 710 |
| Suicide | 60 | 237 | 297 | 75 | 598 | 673 | 135 | 835 | 970 |
| Murder or homicide | 6 | 152 | 158 | 13 | 146 | 159 | 19 | 298 | 317 |
| Executed | ..... | 11 | 11 | ..... | 24 | 24 | ..... | 35 | 35 |
| Other causes | 1 | 120 | 121 | 2 | 154 | 156 | 3 | 274 | 277 |
| Total | 3,269 | 74,423 | 77,692 | 1,498 | 40,247 | 41,745 | 4,767 | 114,670 | 119,437 |
| Total wounded | 7,292 | 190,657 | 197,949 | ..... | ..... | ..... | 7,293 | 190,657 | 197,950 |
| Grand tot., died, wounded | 10,561 | 265,080 | 275,641 | 1,498 | 40,247 | 41,745 | 12,060 | 305,327 | 317,387 |

CASUALTIES BY STATES.

(Official data, as of March 3, 1922.)

| STATE. | DIED. | | | WOUNDED. | | | Aggregate Casualties. |
|---|---|---|---|---|---|---|---|
| | Officers. | Enlisted Men. | Total. | Officers. | Enlisted Men. | Total. | |
| Alabama | 63 | 2,264 | 2,327 | 139 | 3,093 | 3,232 | 5,559 |
| Arizona | 13 | 276 | 289 | 14 | 437 | 451 | 740 |
| Arkansas | 33 | 1,647 | 1,680 | 34 | 1,520 | 1,554 | 3,234 |
| California | 197 | 2,767 | 2,964 | 209 | 4,458 | 4,667 | 7,631 |
| Colorado | 49 | 940 | 989 | 76 | 1,030 | 1,106 | 2,095 |
| Connecticut | 74 | 1,728 | 1,802 | 118 | 4,001 | 4,119 | 5,921 |
| Delaware | 11 | 149 | 160 | 10 | 178 | 188 | 348 |
| District of Columbia | 97 | 311 | 408 | 103 | 400 | 503 | 911 |
| Florida | 27 | 1,112 | 1,139 | 50 | 552 | 602 | 1,741 |
| Georgia | 130 | 2,724 | 2,854 | 206 | 2,194 | 2,400 | 5,254 |
| Idaho | 22 | 597 | 619 | 14 | 875 | 889 | 1,508 |
| Illinois | 296 | 6,238 | 6,534 | 470 | 11,839 | 12,309 | 18,843 |
| Indiana | 98 | 2,503 | 2,601 | 130 | 3,455 | 3,585 | 6,186 |
| Iowa | 76 | 3,235 | 3,311 | 99 | 4,309 | 4,408 | 7,719 |
| Kansas | 101 | 2,157 | 2,258 | 176 | 3,294 | 3,470 | 5,728 |
| Kentucky | 63 | 2,352 | 2,415 | 75 | 3,107 | 3,182 | 5,597 |
| Louisiana | 42 | 2,132 | 2,174 | 40 | 1,156 | 1,196 | 3,370 |
| Maine | 33 | 830 | 863 | 58 | 1,271 | 1,329 | 2,192 |
| Maryland | 83 | 1,455 | 1,538 | 119 | 2,414 | 2,533 | 4,071 |
| Massachusetts | 295 | 3,838 | 4,133 | 375 | 8,508 | 8,883 | 13,016 |
| Michigan | 161 | 3,902 | 4,063 | 210 | 6,757 | 6,967 | 11,030 |
| Minnesota | 82 | 3,229 | 3,311 | 95 | 4,494 | 4,589 | 7,900 |
| Mississippi | 36 | 1,577 | 1,613 | 45 | 1,035 | 1,080 | 2,693 |
| Missouri | 150 | 3,852 | 4,002 | 291 | 6,729 | 7,020 | 11,022 |
| Montana | 17 | 1,400 | 1,417 | 38 | 2,427 | 2,465 | 3,882 |
| Nebraska | 40 | 1,472 | 1,512 | 35 | 1,906 | 1,941 | 3,453 |
| Nevada | 7 | 155 | 162 | 5 | 180 | 185 | 347 |
| New Hampshire | 30 | 529 | 559 | 26 | 994 | 1,020 | 1,579 |
| New Jersey | 156 | 3,232 | 3,388 | 197 | 6,733 | 6,930 | 10,318 |
| New Mexico | 16 | 383 | 399 | 17 | 554 | 571 | 970 |
| New York | 682 | 11,562 | 12,244 | 1,070 | 26,248 | 27,318 | 39,562 |
| North Carolina | 76 | 2,429 | 2,505 | 156 | 3,667 | 3,823 | 6,328 |
| North Dakota | 20 | 1,181 | 1,201 | 34 | 1,749 | 1,783 | 2,984 |
| Ohio | 188 | 5,985 | 6,173 | 340 | 10,657 | 10,997 | 17,170 |
| Oklahoma | 43 | 2,497 | 2,540 | 53 | 4,324 | 4,377 | 6,917 |
| Oregon | 46 | 804 | 850 | 60 | 887 | 947 | 1,797 |
| Pennsylvania | 402 | 9,921 | 10,323 | 717 | 22,898 | 23,615 | 33,938 |
| Rhode Island | 20 | 479 | 499 | 37 | 1,041 | 1,078 | 1,577 |
| South Carolina | 69 | 1,958 | 2,027 | 146 | 2,356 | 2,502 | 4,529 |
| South Dakota | 14 | 1,029 | 1,043 | 31 | 1,189 | 1,220 | 2,263 |
| Tennessee | 92 | 2,655 | 2,747 | 221 | 3,563 | 3,784 | 6,531 |
| Texas | 210 | 4,557 | 4,767 | 297 | 6,383 | 6,680 | 11,447 |
| Utah | 16 | 488 | 504 | 14 | 626 | 640 | 1,144 |
| Vermont | 15 | 482 | 497 | 33 | 693 | 726 | 1,223 |
| Virginia | 104 | 2,356 | 2,460 | 187 | 3,802 | 3,989 | 6,449 |
| Washington | 63 | 1,302 | 1,365 | 81 | 1,907 | 1,988 | 3,353 |
| West Virginia | 47 | 1,650 | 1,697 | 51 | 2,515 | 2,566 | 4,263 |
| Wisconsin | 143 | 3,554 | 3,697 | 252 | 5,775 | 6,027 | 9,724 |
| Wyoming | 7 | 399 | 406 | 13 | 460 | 473 | 879 |
| Alaska | 1 | 81 | 82 | ..... | 7 | 7 | 89 |
| Canal Zone | 1 | 10 | 11 | ..... | ..... | ..... | 11 |
| Hawaii | 6 | 44 | 50 | 2 | 3 | 5 | 55 |
| Philippine Islands | 2 | 104 | 106 | ..... | 4 | 4 | 110 |
| Porto Rico | 2 | 157 | 159 | 1 | 3 | 4 | 163 |
| Total | 4,767 | 114,670 | 119,437 | 7,270 | 190,657 | 197,927 | 317,364 |

There were, in addition, 23 officers whom it has thus far been impracticable to classify by States, because of lack of home address.

## ARMED STRENGTH OF THE WORLD.

(As of August 1, 1922.)

| Country. | Army. | Res. Inc. Militia. | Country. | Army. | Res. Inc. Militia. | Country. | Army. | Res. Inc. Militia. |
|---|---|---|---|---|---|---|---|---|
| Abyssinia | 51,000 | 400,000 | Esthonia | 25,000 | 50,000 | New Zealand | 1,000 | 23,000 |
| Algeria | 75,000 | ..... | Finland | 30,600 | 140,000 | Nicaragua | 2,000 | Cons'p'n |
| Argentina | 26,300 | 759,000 | France | 777,000 | 4,400,000 | Norway | 40,000 | 315,000 |
| Australia | 3,200 | 108,000 | Germany | 100,000 | ..... | Paraguay | 1,900 | 100,000 |
| Austria | 30,000 | ..... | Gt. Britain | 182,000 | 205,000 | Persia | 86,000 | ..... |
| Belg. Congo | 12,400 | ..... | Greece | 250,000 | 250,000 | Peru | 7,500 | 99,000 |
| Belgium | 113,000 | 237,000 | Guatemala | 6,200 | 126,000 | Poland | 290,000 | 810,000 |
| Bolivia | 7,100 | 230,000 | Hayti | 2,644 | 20,000 | Portugal | 33,000 | 620,000 |
| Brazil | 35,000 | 560,000 | Honduras | 2,900 | 43,577 | Roumania | 165,000 | 1,100,000 |
| Canada | 3,800 | 52,000 | Hungary | 35,000 | ..... | Russia | 1,300,000 | 3,500,000 |
| Chili | 23,782 | 609,734 | India. British | 212,000 | 70,000 | Salvador | 7,500 | 25,000 |
| China | 1,100,000 | ..... | Indo-China | 20,000 | ..... | Santo Dom | 1,900 | 25,000 |
| Colombia | 6,000 | 362,700 | Italy | 250,000 | 2,350,000 | Spain | 217,000 | 700,000 |
| Costa-Rica | Nat. Police | | Japan | 300,000 | 1,700,000 | Sweden | 19,500 | 550,000 |
| Cuba | 12,500 | 300,000 | Jugo-Slavia | 140,000 | 1,100,000 | Switzerland | 170,000 | 135,000 |
| Czecho-Slov | 147,000 | 1,524,000 | Liberia | 650 | 2,500 | Turkey | 120,000 | 800,000 |
| Denmark | 26,000 | 159,000 | Lithuania | ..... | 45,000 | Un. of S. Afr. | 2,200 | 12,000 |
| Dut Ea. Ind. | 40,000 | 20,000 | Mexico | 68,316 | 833,000 | United States | 125,000 | 160,000 |
| Ecuador | 6,000 | 90,000 | Morocco | 218,000 | ..... | Uruguay | 8,500 | 157,439 |
| Egypt | 30,000 | ..... | Netherlands | 30,000 | 450,000 | Venezuela | 8,000 | 87,000 |
| Eritrea | 2,500 | ..... | | | | | | |

## DECORATIONS WON BY AMERICANS IN THE WORLD WAR.

AWARDS MADE TO OFFICERS AND MEN BY THE NAVY DEPARTMENT.

*CONGRESSIONAL MEDALS OF HONOR.*

**Officers—**

Lieut. Commander Joel T. Boone, (MC), U. S. N.
Ensign Charles H. Hammann, U. S. N. R. F.
Lieut. Edouard V. M. Isaacs, U. S. N.
Lieut. Commander Alexander G. Lyle, (MCDS), U. S. N.
Lieut. Commander James J. Madison, U. S. N. R. F.
Lieut. (jg) Weedon E. Osborne, (MCDS), U. S. N. (Dec).
Lieut. Orlando H. Petty, (MC), U. S. N. R. F.

**Enlisted Men—**

John Henry Balch, Ph. M. 1st cl., U. S. N.
David E. Hayden, H. A. 1st cl., U. S. N.
Osmond K. Ingram, G. M. 1st cl., U. S. N. (Dec).
Cann, Tedford H., Seaman, U. S. N. R. F.
Covington, Jesse W., Ship's Cook 3d cl., U. S. N.
Graves, Ora, Seaman, U. S. N.
McGunigal, Patrick, Shipfitter 1st cl., U. S. N.
Mackenzie, John, C. B. M., U. S. N.
Ormsbee, Francis Edward, C. M. M., U. S. N.
Schmidt, Oscar, C. G. M., U. S. N.
Siegel, John Otto, Boatswain's Mate 2d cl., U. S. N.
Upton, Frank Monroe, Q. M. 3rd cl., U. S. N.

*WAR AWARDS TO THE UNITED STATES NAVY.*

**Medal of Honor—**

Officers....7
Men....3
Total....10

**Distinguished Service Medal—**

Officers....140
Men....10
Total....150

**Navy Cross—**

Officers....963
Men....399
Total....1,362

**Letter of Commendation—**

Officers....510
Men....127
Total....637

Total officers' awards....1,621
Total men's awards....539
Grand total....2,160

*WAR AWARDS TO THE UNITED STATES ARMY.*

**Distinguished Service Medal—**

Officers....5

**Navy Cross—**

Officers....15

**Letter of Commendation—**

Officers....13
Total....33

*FOREIGN DECORATIONS AWARDED TO UNITED STATES NAVY.*

**Belgian—**

Officers....82
Men....33

**British—**

Officers....67
Men....5

**Chinese—**

Officers....9

**Czechoslovak—**

Officers....14

**Greece—**

Officers....3

**French—**

Officers....198
Men....97

**Italian—**

Officers....123
Men....261

**Japanese—**

Officers....19

**Portugal—**

Officers....54
Men....7

**Russia** (Provisional Gov't).—

Officers....13

**Tunis—**

Officers....6

AWARDS MADE TO OFFICERS AND MEN BY THE WAR DEPARTMENT.

Congressional Medals of Honor are awarded by the President in the name of the Congress to such person who "while an officer or enlisted man of the army shall in action involving actual contact with an enemy distinguish himself conspicuously by gallantry and intrepidity at the risk of his life above and beyond the call of duty." Five were bestowed on the Unknown Soldier of the British, the French, the Italian, the Belgian and the American Armies, and were laid upon their graves.

Eighty-two Congressional Medals of Honor were awarded to American soldiers. Their names follow, an asterisk indicating posthumous award:

*First Division*—Sergt. Wilbur E. Colyer*; Sergt. Michael B. Ellis; Private Sterling Morelock.

*Second Division*—Private Frank J. Bart; Lieut. Louis Cukela; Sergt. Charles F. Hoffman; Private John Joseph Kelly; Sergt. Matej Kocak*; Corpl. John H. Pruitt*; Sergt. Ladiovous Van Iersal.

*Third Division*—Private John L. Barkley; Lieut. George Price Hays.

*Fifth Division*—Capt. Edward C. Allworth; Lieut. Samuel Woodfil.

*Twenty-sixth Division*—Private George Dilboy*; Private Michael J. Perkins*.

*Twenty-seventh Division*—Sergt. Alan Louis

Eggers; Private Frank Gaffney; Sergt. John Cridland Latham; Corpl. Thomas E. O'Shea*; Lieut. William Bradford Turner*; Sergt. Reidar Waaler.

*Twenty-eighth Division*—Sergt. James I. Mestrovitch*.

*Twenty-ninth Division*—Private Henry G. Costin*; Sergt. Earl D. Gregory; Lieut. Patrick Regan.

*Thirtieth Division*—Sergt. Joseph B. Adkinson; Private Robert L. Blackwell*; Lieut. James C. Dozier; Sergt. Garey Evans Foster; Sergt. Thomas Lee Hall*; Corpl. James D. Heriot*; Sergt. Richmond H. Hilton; Sergt. James E. Karnes; Sergt. Milo Lemert*; Sergt. Edward R. Talley; Corpl. John C. Villepigue; Private Calvin John Ward.

*Thirty-third Division*—Corpl. Jake Allex; Sergt. Johannes S. Anderson; Sergt. Sydney G. Gumpertz; Corpl. Ralyn Hill; Private Berger Loman; Capt. George H. Mallon; Corpl. Thomas A. Pope; Sergt. Willie Sandlin; Private Clayton K. Stack.

*Thirty-fifth Division*—Capt. Alexander R. Skinker*; Private Nels Wold*.

*Thirty-sixth Division*—Sergt. Samuel M. Tampler; Corpl. Harold L. Turner.

*Thirty-seventh Division*—Lieut. Albert E. Baesel*.

*Forty-second Division*—Corpl. Sidney E. Manning; Private Thomas C. Neibauer; Sergt. Richard W. O'Neill.

*Seventy-seventh Division*—Capt. Nelson M. Holderman; Sergt. Benjamin Kaufman; Capt. George G. McMurtry; Capt. L. Wardlaw Miles; Private Archie A. Peck; Lieut. Col. Fred E. Smith*; Lieut. Col. Charles W. Whittlesey.

*Seventy-eighth Division*—Sergt. William Sawelson*.

*Eighty-second Division*—Lieut. Col. Emory J. Pike*; Corpl. Alvin C. York.

*Eighty-ninth Division*—Private Charles D. Barger; Private David B. Barkeley*; Capt. Marcellus H. Chiles*; Sergt. Arthur J. Forrest; Private Jesse N. Funk; Lieut. Harold A. Furlong; Sergt. M. Waldo Hatler; Sergt. Harold I. Johnston; Lieut. J. Hunter Wickersham*.

*Ninety-first Division*—Sergt. Philip C. Katz; Major Oscar F. Miller*; Sergt. Lloyd M. Seibert; Sergt. Chester H. West.

*Ninety-third Division*—Lieut. George S. Robb.

*Tank Corps*—Lieut. Donald M. Call; Corpl. Harold W. Roberts*.

*Air Service*—Lieut. Frank Luke, Jr.*.

Prior to the World War 1,722 Congressional Medals of Honor had been awarded to American soldiers; this number does not include 911 awards made and later cancelled (as per circular of War Department, 1904).

The War Department also awarded 5,907 Distinguished Service Crosses.

## DISTINGUISHED SERVICE MEDAL.

Awards as made by organization up to Nov. 1, 1922, are reported by the Adjutant General of the army as follows:

| | | |
|---|---|---|
| Regular Army officers | | 662 |
| Emergency officers | | 272 |
| Officer (special)—Master of the Sword at U. S. M. A. | | 1 |
| U. S. Enlisted men | | 2 |
| U. S. Enlisted women (Signal Corps) | | 1 |
| Army Nurse Corps (female) | | 3 |
| U. S. Navy officers | | 29 |
| U. S. Marine Corps officers | | 10 |
| Civilians (American): | | |
| American Red Cross | 5 | |
| Jewish Welfare Board | 1 | |
| Knights of Columbus | 1 | |
| Salvation Army | 1 | |
| Y. M. C. A. | 1 | |
| Y. W. C. A. | 1 | |
| Government officials "a" | 49 | |
| Total | | 59 |
| Civilians (Foreign): | | |
| Argentina | 1 | |
| French | 16 | |
| British | 5 | |
| Italian | 1 | |
| Total | | 23 |
| Foreign officers: | | |
| Belgian Army | 31 | |
| French Army | 288 | |
| French Navy | 7 | |
| Australian Army | 4 | |
| British Army | 120 | |
| British Navy | 1 | |
| Canadian Army | 1 | |
| Italian Army | 57 | |
| Japanese Army | 6 | |
| Roumanian Army | 3 | |
| Russian Army | 1 | |
| Serbian Army | 1 | |
| Total | | 520 |
| Grand total | | 1,582 |

"a" To officials on duty in or connected with offices or bureaus of the War Department and various other Government departments and commissions.

## FOREIGN DECORATIONS.
(Total Awards to Nov. 1, 1922.)

The awards of decorations by foreign countries to Americans in recognition of services during the World War, as made up to Nov. 1, 1922, are reported by the Adjutant General of the army as follows:

| | | |
|---|---|---|
| **Belgium—** | | |
| Croix de Guerre | | 444 |
| Order of the Crown | | 140 |
| Order of Leopold | | 86 |
| Order of Leopold II | | 47 |
| Decoration Militaire | | 20 |
| Military Cross | | 9 |
| Medal of Queen Elizabeth | | 5 |
| Decoration Civique | | 1 |
| Commemorative Medal | | 1 |
| Total | | 753 |
| **China—** | | |
| Chinese Order of Golden Grain | | 12 |
| Chincse Order of the Striped Tiger | | 4 |
| Total | | 16 |
| **Cuba—** | | |
| Cuban Order of Military Merit | | 1 |
| Total | | 1 |
| **Czechoslovakia—** | | |
| Czechoslovak Croix de Guerre | | 26 |
| Revolutionary Medal | | 1 |
| Total | | 27 |
| **France—** | | |
| Croix de Guerre | | 11,571 |
| Legion of Honor | | 1,058 |
| University Palm | | 430 |
| Military Medal | | 303 |
| Order of Black Star | | 285 |
| Medal of Honor Epidemics | | 269 |
| Order of Agricultural Merit | | 100 |
| Medal of Honor Foreign Affairs | | 56 |
| Medal of Honor Life Saving, etc | | 17 |
| Medal of National Recognition | | 4 |
| Mutuality Medal | | 2 |
| Order of Nichan el Anouar | | 1 |
| Total | | 14,096 |
| **Great Britain—** | | |
| Military Medal | | 411 |
| Military Cross | | 323 |
| Distinguished Conduct Medal | | 114 |
| Order of St. Michael and St. George | | 81 |
| Distinguished Service Order | | 79 |
| Royal Red Cross | | 75 |
| Order of the Bath | | 50 |
| Order of the British Empire | | 33 |
| Meritorious Service Medal | | 30 |
| Distinguished Flying Cross | | 18 |
| Royal Victorian Order | | 2 |
| Order of St. John of Jerusalem in England | | 1 |
| Total | | 1,217 |
| **Greece—** | | |
| Greek Order of The Redeemer | | 16 |
| Greek Order of George I | | 10 |
| Greek Medal of Military Merit | | 5 |
| Greek War Cross | | 4 |
| Total | | 35 |
| **Italy—** | | |
| Croce Di Guerra | | 389 |
| War Service Ribbon | | 378 |
| Order of the Crown | | 159 |
| Order of St. Maurice and St. Lazarus | | 62 |
| Medal for Military Valor | | 22 |
| Military Order of Savoy | | 1 |
| Total | | 1,011 |
| **Japan—** | | |
| Japanese Order of the Rising Sun | | 34 |
| Order of the Sacred Treasure | | 18 |
| Total | | 52 |
| **Lithuania—** | | |
| Lithuanian Service Cross | | 1 |
| Total | | 1 |
| **Monaco—** | | |
| Order of Charles of Monaco | | 2 |
| Total | | 2 |
| **Montenegro—** | | |
| Prince Danilo de Montenegro | | 125 |
| Medaille de Bravoure | | 94 |
| Medaille pour la Zele | | 10 |
| Obilitch Medal of Montenegro | | 1 |
| Montenegrin War Cross | | 1 |
| Total | | 231 |
| **Panama—** | | |
| Medal La Solidaridad | | 112 |
| Total | | 112 |

| | |
|---|---|
| **Poland—** | |
| Polish Commemorative Cross | 74 |
| Decoration Krzyz Walecznych | 32 |
| Decoration Polonia Restituta | 9 |
| Polish White and Red Ribbon | 4 |
| Polish Cross Virtuti Militari | 1 |
| Total | 120 |
| **Portugal—** | |
| War Cross | 18 |
| Order of Avis | 8 |
| Order of Christ | 4 |
| Total | 30 |
| **Roumania—** | |
| Order of the Crown | 29 |
| Order of the Star | 21 |
| Order of Queen Mary | 2 |
| Order of Michel le Brave | 1 |
| Total | 53 |
| **Russia—** | |
| St. George's Cross | 22 |
| Order of St. Stanislaus | 21 |
| Order of St. Anne | 16 |
| St. Stanislaus Silver Medal | 6 |
| St. Anne's Medal | 2 |
| Order of St. Vladimir | 1 |
| Total | 68 |
| **Serbia—** | |
| Order of White Eagle | 31 |
| Order of St. Sava | 12 |
| Medal of Bravery | 1 |
| Order of the Star of the Karageorge | 1 |
| Total | 45 |
| Grand total | 17,870 |

## 161 AMERICAN GIRLS CAVE THEIR LIVES IN THE WAR.

The Women's Overseas Service League on Armistice Day, Nov. 11, 1922, published a list of the 161 "gold star" American girls who gave their lives in the World War. Most of them rest in French soil though some are buried in Siberia, China, Manila and Armenia and some in England. Plans are being forwarded for a permanent memorial for them. Miss Irene Givenwilson, Curator of the Red Cross Museum, Washington, has the matter in charge. Of those on the list Marion Crondell, Y. M. C. A. canteener was killed by a German shell at Chalons-sur-Marne, March 26, 1917; Winona C. Martin was killed in a Paris hospital by a bomb from a German air raider; and Ruth Landon was killed when the German shell from Big Bertha struck and demolished the roof of the Church of St. Gervais in Paris at Good Friday service, 1918.

**California**—San Francisco—Thelma Eisfeldt. Nellie G. Galliher.
Hollywood—Pauline H. Field, Mary Agnes Moore.
Petaluma—Viola E. Lundholm, Ruth W. Lundholm.
Fort Jones—Maud Evans.
Altaville—Elizabeth F. Lee.
Dos Palos—Ida Henrietta Vietmeier.
**Colorado**—Denver—Hattie M. Raithel.
Leadville—Clara M. Orgren.
**Connecticut**—Waterbury—Alice J. Knight.
Plattsville—Irene Mercedes Flynn.
**Idaho**—Nampa—Genevra Robinson.
Winchester—Norene Mary Royer.
**Florida**—Jacksonville—Bessie Gale.
**Georgia**—Decatur—Camille O'Brien.
**Delaware**—Wilmington—Ruth MacGregor.
**Illinois**—Chicago—Lucille Pepoon, Carmelita O'Connor, Antoinette W. Lippold.
Evanston—Helen Burnet Wood.
Virginia—Nellie Robertson.
Beecher City—Geneva Gastevens.
Decatur—Florence A. Hinton.
**Indiana**—Frankton—May Berry.
Roanoke—Grace G. Buell.
Lebanon—Grace Copeland.
Washington—Crystal E. McCord.
Jeffersonville—H. Mary Rapp.
**Iowa**—Carroll—Kathleen C. Kennebeck.
Council Bluffs—Ruby Smith.
Edgewood—Ruth Cutler, Elsie May Hatch.
Fort Madison—Dorothy E. Koellner.
**Kansas**—Abilene—Grace W. Hershey.
**Kentucky**—Eddyville—Katherine P. Irwin.
**Maine**—Andover—Frances E. Bartlett.
**Maryland**—Baltimore—Daisy Adams, Charlotte A. Cox, and Grace Belle Micheau.
**Michigan**—Detroit—Mabel A. Ragan, Charlotte Schonheit.
Blanchard—Hazel E. Babcock.
Battle Creek—Alice V. Murphy.
Buchanan—Gladys N. Lyon.
**Massachusetts**—Boston—Anna Walker.
Roxbury—Anna K. Welsh, Evelyn Jane De Mers.
Cambridge—Helen M. Burrage.
Springfield—Margaret Bailey.
Chelsa—Mary C. Burke.
Somerville—Katherine V. Golden, Gertrude O'Connor.
Sheffield—Maud Victoria Kells.
Dorchester—Grace L. Malloch.
Needham—Mrs. Charles McDonald.
Amherst—Elizabeth Stearns Tyler.
**Minnesota**—Duluth—Lydia V. Whiteside.
St. Hilaire—Norah E. Anderson.
Montevideo—Esther Amundsen.
**Mississippi**—Biloxi—Katherine Dent.
Carrollton—Margaret Eleanor Kerin.
**Missouri**—Queen City—Katherine Hoffman.
**Nebraska**—Omaha—Maude Mae Butler, Marion G. Crandell.
**New Hampshire**—Concord—Lucy N. Fletcher.
**New Jersey**—Newark—Esther Slocum, Florence L. Athay.
Jersey City—Catherine McGurty.
Cresskill—Margaret Worth.
Haddon Heights—Elizabeth H. Weimann.
Madison—Annabel S. Roberts.
Somerville—Emma E. Venn, Eliz. McWilliams.
**New York**—Fredonia—Asnia Williams.
Oneonta—Fannie Scatchard.
Holland—Florence H. Trank.
Buffalo—Magdalena M. Volland.
Albany—Gertrude Valentine.
Clyde—Marjorie R. Vrooman.
New Rochelle—Lorraine Ransome.
Brooklyn—Alice C. Rogers, Winifred L. Heath.
New York City—Edith White, Frances Moeschen, Edna McCauley, Sophia Haarman, Dorothy Hamlin. Dorothea Gay, Ruth Landon, Dorothea Cromwell, Gladys Cromwell, Anna McBreen, Edith Barnett.
Norwich—Mary K. Cairns.
Suffern—Florence W. Campbell.
Rockville Centre—Winona Caroline Martin.
Rochester—Blanche A. Rowley.
Elmira—Mabel R. Morey.
Canandaigua—Martha D. McKechnie.
Palmer Falls—Alice Hagadorn.
Philmont—Katheryne E. Greene.
**North Carolina**—Charlotte—Felicita W. Hecht.
**North Dakota**—Golden Valley—Sabra Regina Hardy.
Lisbon—Florence Kimball.
**Ohio**—Attica—Edith Ayres.
Dayton—Jeannette Bellman.
Springfield—Helena J. Courtney.
Cincinnati—Ella Maescher.
East Liverpool—Elizabeth L. Russell.
**Oregon**—Hillsboro—Ima L. Ledford.
**Pennsylvania**—Allentown—Mary Ellen Appel, Anna Marie McMullen.
Philadelphia—Marion H. White, Nellie J. Ward.
Pittsburgh—Kathrine M. Joyce.
Summerville—Jessie P. Baldwin.
Sewickley—Virginia Branum.
Watsontown—Helen Fairchild.
Scranton—Eugenia C. Hosie.
Yardley—Miriam Knowles.
Pottstown—Harriet L. Kulp.
Ridgway—Claire Ledden.
Shreveport—Julia Lide.
Lansdowne—Mary C. Stevens.
Bellevue—Alice L. Thompson.
Shickshinny—Gladys Watkins.
McKeesport—Esther Yochelson.
York—Jeanette Zinn.
**Rhode Island**—Providence—Caroline H. Christman.
Pawtucket—Henrietta I. Drummond.
Manville—Teresa M. Murphy.
**Vermont**—Burlington—Luella M. Wheeler.
**Virginia**—Achilles—Cornelia E. Thornton.
Charlottesville—Anna D. Reveley.
**West Virginia**—Clarksburg—Lucinda L. Rose.
**Washington** — Seattle — Tilda A. Thorkelson, Mrs. Jessie Chisholm, Alice Stevens Drisko.
**Washington, D. C.**—Erma L. Shaw, Jane Minor Hendricks, Jane A. Delano.
**Wisconsin**—Ashland—Nellie M. Dingley.
Gilmanton—Eileen L. Forrest.
Lodi—Elma Groves.
Lake Geneva—Elizabeth L. McDonald.
Richland Center—Dorothy Beth Millman.
Alma—Orma A. Schreiber.
**Canada**—Toronto—Ella Dalton.
Quebec—Kathleen E. Symmes.
Petersboro, Ont.—Marian L. Overend.
Goderich, Ont.—Florence Beatrice Graham.
**Foreign Lands**—Paris—Elizabeth May Durant.
Edinburgh, Scotland—Jean L. Lueders.
London, England—Harriett Hannaford Ellis.

## UNITED STATES MARINE CORPS.

John A. Lejeune, Major General Commandant. Headquarters, Navy Building, 18th and B Streets, N. W., Washington, D. C. The authorized strength of the corps is (Nov. 20, 1922): 1,093 officers, 116 warrant officers, 42 pay clerks, and 27,400 enlisted men, as follows: 1 major general commandant, 1 major general (permanent), 1 major general (temporary), 3 brigadier generals; staff: 6 brigadier generals, line, 33 colonels, 44 lieutenant colonels, 124 majors, 329 captains, 276 first lieutenants, 275 second lieutenants, 58 marine gunners, 58 quartermaster clerks, 42 pay clerks, 73 sergeants major, 368 quartermaster sergeants, 2 drum majors, 413 first sergeants, 399 gunnery sergeants, 1,853 sergeants, 3,303 corporals, 320 drummers, 320 trumpeters, 5,071 privates, first class, 15,211 privates, 1 leader of band, 1 second leader, 10 principal musicians, 25 first-class musicians, 20 second-class musicians, 10 third-class musicians.

GENERAL OFFICERS OF THE MARINE CORPS, IN ADDITION TO THE COMMANDANT.

*Brigadier Generals, Staff*—Henry C. Haines, Adjutant and Inspector; Charles L. McCawley, Quartermaster; George Richards, Paymaster. *Major Generals, Line*—George Barnett, Wendell C. Neville. *Brigadier Generals, Line*—Joseph H. Pendleton, Eli K. Cole, Smedley D. Butler, Logan Feland, Harry Lee, John H. Russell.

The losses due to the World War were: Killed in action, 1,450; died of wounds, 1,007; died of disease, 304; accidentally killed, 28; died of other causes, 18; total, 2,807. Wounded, 7,714. Total casualties, 10,521.

Commissioned officers are appointed from graduates of the Naval Academy, from worthy non-commissioned officers of the Marine Corps, and from civil life.

Information regarding pay, allowances, etc., may be obtained from the U. S. Marine Corps, Washington, D. C. Re-enlistments are made at all marine barracks, posts and stations. There are recruiting stations at 28 E. 23d St., New York City; 402 Atlantic Ave., Boston; Post Office Building, Philadelphia; 544 S. State St., Chicago; 3d Floor, Post Office, Kansas City; 535 St. Charles St., New Orleans; Old Federal Building, Houston; Custom House, Denver; 170 Fourth St., Portland, Ore.; 660 Market St., San Francisco, and in other large cities.

## WAR FINANCE CORPORATION.

(Treasury Building. The active life of the Corporation, except for the liquidation of its business, ceases July 1, 1923.)

*Chairman*—Andrew W. Mellon (Secretary of the Treasury), Henry C. Wallace (Secretary of Agriculture).

*Managing Director*—Eugene Meyer, Jr. (term expires May 17, 1924); *Assistant to the Managing Director*—Floyd R. Harrison.

*Directors*—George R. Cooksey (term expires May 17, 1924); Dwight F. Davis (term expires May 17, 1926); Fred Starek (term expires May 17, 1926).

*Assistants to the Directors*—William Ontjes, Snelson Chesney, Ralph P. Merritt.

*General Counsel*—G. A. Marr.

*Consulting Counsel*—Gerard C. Henderson.

*Secretary*—George P. Lynde.

*Treasurer*—R. Reyburn Burklin.

## INTERNATIONAL SANITARY BUREAU.

*Honorary Director*—Dr. Pablo Garcia Medina, Bogota, Colombia; *Director*—Surgeon Gen. Hugh S. Cumming, United States Public Health Service, Washington, D. C.; *Assistant to the Director*—Assistant Surgeon General J. D. Long, United States Public Health Service, Washington, D. C.; *Vice Director*—Assistant Surgeon General J. H. White, United States Public Health Service, Washington, D. C.; *Secretary*—Dr. Julio Bianchi, Minister of Guatemala, Washington, D. C.; *Executive Clerk*—W. P. Montgomery, Pan-American Building, Washington, D. C.; *Board of Directors*—Dr. J. Llambias, Director General Public Health, Buenos Ayres, Argentina; Dr. Carlos Chagas, Director General Public Health, Rio de Janeiro, Brazil; Dr. Juan Guiteras, Director General Public Health, Habana, Cuba; Dr. Luis Razetti, Secretary Academy of Medicine, Caracas, Venezuela.

## IMPEACHMENTS IN UNITED STATES HISTORY.

THE Constitution of the United States, Article II., Section IV., provides that civil officers of the United States may be removed from office on impeachment and conviction of treason, bribery or other high crimes and misdemeanors; that the House of Representatives has the sole power of impeachment, and the Senate the sole power to try impeachments; that the Vice President shall preside at impeachments except when the President is tried, when the Chief Justice of the Supreme Court shall preside; and that two-thirds of the members present must vote for conviction before a person impeached shall be deemed guilty. Only eight persons have been impeached and tried before the Senate, and only two of them have been convicted. The record is as follows:

William Blount, Senator from Tennessee, impeached July 7, 1797, for conspiring to wage war with Spain in favor of Great Britain, to excite the Cherokee Indians against Spain, and to create disaffection among the Indians toward the United States; trial Dec. 17, 1798, to Jan. 14, 1799; vote, 11 guilty, 14 not guilty; verdict, acquittal.

John Pickering, Judge of the District Court of the United States for the District of New Hampshire; impeached 1803 for drunkenness and disregard of the terms of the statutes; trial March 3 to March 12, 1803; vote, 19 guilty, 7 not guilty; verdict, guilty; punishment, removal from office.

Samuel Chase, Associate Justice of the Supreme Court of the United States; impeached 1804 for misconduct at trials of persons charged with breach of the Sedition Law; trial Nov. 30, 1804, to March 1, 1805; vote, 9 guilty, 30 not guilty, and 15 guilty, 19 not guilty, on different counts; verdict acquittal.

James Peck, Judge of the District Court of the United States for the District of Missouri; impeached for tyrannous treatment of counsel, 1830; trial May 11 to May 30, 1830, and from Dec. 13, 1830, to Jan. 31, 1831; vote, 22 guilty, 21 not guilty verdict acquittal.

West H. Humphreys, Judge of the District Court of the United States for the District of Tennessee, impeached 1862 for supporting the secession movement and unlawfully acting as Judge of the Confederate District Court; trial May 22 to June 26, 1862; vote, 32 guilty, 4 not guilty; verdict, guilty; punishment, removal from office.

Andrew Johnson, President of the United States, impeached for usurpation of the law, corrupt use of the veto power, interference at elections and high crimes and misdemeanors; trial, March 30 to May 26, 1868; vote, guilty, 35, not guilty, 19; verdict, acquittal.

William W. Belknap, Secretary of War of the United States, impeached for accepting bribes; trial April 5 to Aug. 1, 1876; vote, guilty, 5, not guilty, 25; verdict, acquittal.

Charles Swayne, Judge of the District Court of the United States for the District of Florida; impeached 1905 for misconduct in office; trial Feb. 6 to Feb. 27, 1905; vote, 55 guilty, 37 not guilty; verdict, acquittal.

Robert W. Archibald, Associate Judge of United States Commerce Court, was impeached July 11, 1912, on thirteen articles charging him with corrupt collusion with coal mine owners and railroad officials while in office. The Senate began his trial Dec. 3, 1912, and ended Jan. 13, 1913. Verdict, guilty, removal from office.

On June 12, 1914, District Judge Alston G. Dayton was impeached. Proceedings dropped March 3, 1915.

In the House, near the close of the 66th Congress, a member asked for the impeachment of Federal District Judge Kenesaw Mountain Landis for having accepted, at a salary, the post of Commissioner of Baseball. The demand was not acted upon by the House.

## STORY OF THE RAILROAD DOLLAR.

(From a Nov., 1922, bulletin of the National City Bank of N. Y.)

FOR the last six years the percentage of the annual income of the railroad companies directly disbursed to their own employes has been as follows:

| | | |
|---|---|---|
| In 1916 | $1,365,776,046 or 38 | per cent. |
| In 1917 | 1,617,718,932 or 40.3 | per cent. |
| In 1918 | 2,430,846,416 or 49.8 | per cent. |
| In 1919 | 2,644,109,442 or 51.4 | per cent. |
| In 1920 | 3,424,075,109 or 55.4 | per cent. |
| In 1921 | 2,585,329,497 or 46.9 | per cent. |

For the year 1921 the average dollar of railroad incomes for all the railroads of the country was disbursed as follows:

| | Cents. |
|---|---|
| For labor (salaries and wages) | 46.9 |
| For materials, supplies and miscellaneous | 20.6 |
| For fuel | 9.5 |
| For taxes | 5.0 |
| For loss and damage, injuries to persons and insurance | 2.9 |
| For depreciation and retirements | 2.8 |
| For hire of equipment and joint facility rents | 1.4 |
| Total expenses | 89.1 |
| Net operating income (available for interest on bonds or notes or dividends on stock) | 10.9 |
| | 100.0 |

The Illinois Central Railroad Company has given out an analysis of its receipts and expenditures for the year 1921, showing the share of each dollar of revenue contributed by each source of income, and how each dollar of revenue was expended. The table is as follows:

WHERE THE 1921 DOLLAR CAME FROM.

| | Cents. |
|---|---|
| Transportation of freight (44,637,466 tons; average distance per ton, 270.46 miles; average revenue per ton per mile, 1.015 cents) | 71.71 |
| Transportation of passengers (37,027,889 passengers; average distance per passenger, 25.25 miles; average revenue per passenger per mile, 3.104 cents) | 16.98 |
| Transportation of mail | 1.69 |
| Transportation of express | 1.53 |
| Sources related to freight service, such as demurrage and storage, and special service | 0.49 |
| Switching service | 0.85 |
| Sources related to passenger service, such as operation of parlor cars, excess baggage, etc. | 0.56 |
| Hotel, restaurant, dining room and buffet service | 0.58 |
| Station and train privileges, and miscellaneous | 0.32 |
| Rents of equipment, road, buildings and other property, joint facilities, and miscellaneous income | 2.79 |
| Income from corporate investments | 2.50 |
| | 100.00 |

WHERE THE 1921 DOLLAR WENT.

| | Wages. | Material. | Total. |
|---|---|---|---|
| | *Cts.* | *Cts.* | *Cts.* |
| Maintenance of tracks, roadbed, buildings, bridges and other structures (wages, 54.7%; material, 45.3%) | 8.56 | 7.09 | 15.65 |
| Maintenance of locomotives, freight and passenger cars and other equipment (wages, 62.7%; material, 37.33%) | 11.87 | 7.07 | 18.94 |
| Train, station and switching operations, and other transportation service (wages, 92.96%; material, 7.04%) | 24.81 | 1.88 | 26.69 |
| Traffic agencies, compilation and issuance of tariffs, miscellaneous traffic expenses (wages, 73.44%; material, 26.56%) | 0.94 | 0.34 | 1.28 |
| Hotel, restaurant, dining and buffet service (wages, 48.39%; material, 51.61%) | 0.30 | 0.32 | 0.62 |
| Fuel | ..... | ..... | 7.50 |
| Salaries of clerks and other general office employes | ..... | ..... | 1.48 |
| Legal expenses | ..... | ..... | 0.18 |
| Pension department expenses | ..... | ..... | .016 |
| Salaries of general officers | ..... | ..... | 0.19 |
| Valuation expenses | ..... | ..... | 0.15 |
| Miscellaneous general expenses | ..... | ..... | 0.37 |
| Depreciation and retirement of equipment | ..... | ..... | 3.90 |
| Loss, damage and casualties | ..... | ..... | 1.97 |
| Rent of equipment, leased lines, joint facilities and miscellaneous rents | ..... | ..... | 2.45 |
| Interest on bonds and other interest charges | ..... | ..... | 6.85 |
| Dividends on capital stock | ..... | ..... | 4.48 |
| Taxes | ..... | ..... | 5.54 |
| Balance available for enlarging and improving the property | ..... | ..... | 1.60 |
| | | | 100.00 |

## OFFICIALS FROM WHOM GAMING AND FISHING LAWS MAY BE OBTAINED.

**Alabama**—The Commissioner of Conservation, Montgomery.
**Alaska**—The Governor, Juneau; Secretary of Commerce, Washington, D. C.
**Arizona**—State Game Warden, Phoenix.
**Arkansas**—Secretary, Game and Fish Commission, Little Rock.
**California**—Executive Officer, Fish and Game Commission, New Call Building, San Francisco.
**Colorado**—State Game and Fish Commissioner, Denver.
**Connecticut**—Secretary, Commission of Fisheries and Game, Hartford.
Secretary, Shell Fish Commission, New Haven.
**Delaware**—Secretary, Game and Fish Commission, Laurel.
**District of Columbia**—Superintendent Metropolitan Police, Washington.
**Florida**—Shell Fish Commissioner, Tallahassee.
**Georgia**—Game and Fish Commissioner, Atlanta.
**Idaho**—Fish Commissioner, Pocatello.
**Illinois**—Chief Game and Fish Warden, Springfield.
**Indiana**—Director, Department of Conservation, Indianapolis.
**Iowa**—State Fish and Game Warden, Des Moines.
**Kansas**—State Fish and Game Warden, Pratt.
**Kentucky**—Executive Agent, Game and Fish Commission, Frankfort.
**Louisiana**—Commissioner of Conservation, New Court Building, New Orleans.
**Maine**—Commissioner of Inland Fisheries and Game, Augusta.
**Maryland**—Conservation Commission, 512 Munsey Building, Baltimore.
**Massachusetts**—Chairman, Commissioners of Fisheries and Game, State House, Boston.
**Michigan**—Director, Conservation Commission, Lansing.
**Minnesota**—Game and Fish Commissioner, St. Paul.
**Mississippi**—Department of Game and Fish, Jackson.
**Missouri**—Game and Fish Commissioner, St. Louis.
**Montana**—Game and Fish Commission, Helena.
**Nebraska**—Chief Deputy, Game and Fish Commission, Lincoln.
**Nevada**—State Fish Commissioner, Reno.
**New Hampshire**—Fish and Game Commissioner, Concord.
**New Jersey**—Fish and Game Commissioner, East Orange.
**New Mexico**—Game and Fish Warden, Sante Fe.
**New York**—Secretary of Conservation Commission, Albany.
**North Carolina**—Chairman, Fisheries Commission Board, Morehead City.
**North Dakota**—Pres., Game and Fish Board Beach.
**Ohio**—Chief Game Warden, Board of Agriculture, Columbus.
**Oklahoma**—Secretary, Game and Fish Commission, Oklahoma City.
**Oregon**—Fish and Game Commissions, Portland.
**Pennsylvania**—Fish and Game Depts., Harrisburg.
**Rhode Island**—Inland Fisheries Commission, Providence.
**South Carolina**—Chief Game and Fish Warden, Columbia.
**South Dakota**—State Game and Fish Warden, Pierre.
**Tennessee**—State Game and Fish Warden, Nashville.
**Texas**—Game, Fish and Oyster Commissioner, Austin.
**Utah**—Fish and Game Commissioner, Salt Lake City.
**Vermont**—Fish and Game Commissioner, Montpelier.
**Virginia**—Commissioner of Game and Inland Fisheries, Richmond.
**Washington**—Chief Game Warden and State Fish Commissioner, Olympia; Chief Deputy Game Warden, Spokane.
**West Virginia**—Game and Fish Commission, Charleston.
**Wisconsin**—Conservation Commission, Madison.
**Wyoming**—Game and Fish Dept., Cheyenne.

## WORLD AGRICULTURE SOCIETY.

(Headquarters, Amherst, Mass.)

The purpose of the World Agriculture Society is to promote increased food production.

*President*—Dr. Kenyon L. Butterfield, (President Massachusetts Agricultural College, Amherst; *Executive Secretary*—Laurence H. Parker, Amherst; *Treasurer*—Harry W. Kidder, (Treasurer Amherst College); *Clerk of the Corporation*—Arthur H. Dakin, Amherst; *Field Secretary*—Lincoln W. Barnes, Amherst; *Auditor*—Winthrop S. Welles, Amherst; *Executive Committee*—Ray Stannard Baker, Lincoln W. Barnes, Charles R. Green, Robert J. McFall, Laurence H. Parker, Winthrop S. Welles.

*Advisory Council*—Belgium, M. Pail DeVuyst, Director General, Belgium Department of Agriculture; British Isles, J. Nugent Harris, 42 Dalebury Road, Wandworth Common, London, S. W. 17; Mrs. May Elliot Hobbs, Kelmscott, Lechlade, Gloucestershire; Canada, Col. H. M. Tory, President, University of Alberta; Licut.-Col. F. C. St. B. Harrison, Principal, Macdonald College, St. Anne de Bellevue, Quebec; China, Dr. Wen Pin Wei, Chinese Legation, London, England; France, M. Henri Girard, membre du Conseil Superieur de l'Agriculture, Plailly, Oise; United States, Dr. H. P. Douglas, Upper Montclair, N. J.; Dr. Butterfield.

*Branches* of World Agriculture Society—Amherst, Mass., Guy A. Thelin, Secretary; Berea, Ky., Secretary-Treasurer, Harlan Franklin; Connecticut Agricultural College, Storrs, Conn., Samuel Kostolefsky, Secretary; Hampton Institute, Hampton, Va., Prof. W. K. Blodgett, Secretary; North Carolina State College Agricultural Club, A. H. Veasey, President, Raleigh, N. C.; Tuskegee, Ala., S. B. Simmons, Secretary; Wellesley College, Margaret W. Conant, Secretary; Ontario Agricultural College, M. Leslie Hancock, Secretary.

Institut National d'Agronomie, members, MM. Angot Gerard, Samsoen, Tran Van Trin, 16 rue Claude Bernard, Paris, France; Hokkaido Imperial University, Prof. K. Morimoto, organizer, Nanking, China; Philippines University, Prof. Jose J. Mirasol, Los Banos, P. I.; A. E. F. Farmers' Club, Lieut. Adolph C. Stangel, 2001 Washington St., Manitowoc, Wis.; International Institute of Agriculture, Signor Dragoni, Rome, Italy.

International Association of Agricultural Missions, Dr. Warren H. Wilson, New York City, President; Vice Presidents, Prof. Sam Higginbotham, India; Prof. B. C. Case, Burma; Prof. B. H. Hunnicut, Brazil; Prof. H. A. Longworth, Africa; Prof. F. L. Crouse, Chile; Dean J. H. Reisner, East China; Prof. G. W. Groff, South China; Prof. L. H. Parker, Amherst, Mass., for the United States; American Country Life Association, Dr. K. L. Butterfield, Amherst, Mass., President; A. R. Mann, Ithaca, N. Y., Mrs. Chas. F. Shuttler, Farmington, Mo., Vice Presidents; E. C. Lindeman, Greenboro, N. C., Executive Secretary; C. F. Jenkins, Philadelphia, Pa., Treasurer; Field Secretary, N. T. Frame, Morgantown, W. Va.

World Alliance for International Friendship through Churches, Dr. H. A. Atkinson, 70 Fifth Ave., New York City, director; Rural Life Bureau of National Catholic Welfare Council, the Rev. E. V. O'Hara, Eugene, Ore., director; Societe des Ingenieurs Agricoles de Louvain, M. le Vicomte Vilain XIII, President, Louvain, Belgium; Commission Nationale pour l'Embellissement de la Vie Rural, M. Max Pastur, Jodoigne, President.

Association des Ingenieurs Agricoles de Gembloux, H. Kufferath, Gembloux, Belgium, President; Federazione pro Montibus, Dr. Guido A. R. Borghesani, Rome, Italy, director; Hungarian Agrarian League, Address, Ullivet, Hungary; Bureau of Applied Botany of Russian Scientific Agricultural Committee, Prof. N. I. Vabilov, Morskaja, 44 Petrograd, Russia, Chairman; director of New York office, D. N. Borodin, 110 W. 40th St., N. Y. City; Union of Siberian Creamery and Other Co-operative Associations, Joseph K. Okulitch, 113 Lincoln St., Boston, Mass.

La Societe des Agriculteurs de France, M. le Marquis de Vogue, Paris, President; American Committee for Devastated France, President, Miss Anne Morgan, Chairman Executive Committee, 16 E. 39th St., N. Y. City; M. Andre Tardieu, Paris, Honorary President; Myron T. Herrick, President; Village Clubs Association of England and Wales, Sir Henry Rew, K. C. B., 80 Pall Mall, London, S. W. I., Chairman.

Junta Agro-Pecuaria Internacional (Livestock Breeders), Robert Scoville, New York City, Chairman; Woman's National Farm and Garden Association, 1828 Stevens Bldg, Chicago, Mrs. Francis King, Alma, Mich., President.

## THE INTERNATIONAL JOINT COMMISSION.

(Washington, D. C.)

*United States — Chairman* — Obadiah Gardner; Clarence D. Clark, Marcus A. Smith; *Secretary*—William H. Smith.

*Canada—Chairman*—Charles A. Magrath; Henry A. Powell, K. C., Sir William Hearst, K. C. M. G.; *Secretary*—Lawrence J. Burpee.

## INTERNATIONAL BOUNDARY COMMISSION.

(U. S. Coast and Geodetic Survey, Washington.)

For defining and marking boundary between United States and Canada, except on Great Lakes and St. Lawrence River; for marking and surveying boundary between Alaska and Canada.

*U. S. Section—Commissioner*—E. Lester Jones; *Engineer to the Comm.*—J. H. Van Wagenen; *Chief Clerk and Disbursing Officer*—Robert B. Martin.

*Canadian Section—Commissioner*—J. J. McArthur.

## ROSENWALD RURAL SCHOOLS.

Julius Rosenwald of Chicago, during the last eight years, has given $1,107,000 toward the construction of 1,633 rural schoolhouses for Negroes in 14 Southern States. This aid has been furnished on condition that the Negroes themselves, through their own contributions, from white friends or from public funds, raise an amount equal to or larger than that furnished by the Julius Rosenwald Fund.

On this co-operative plan, up to Nov. 20, 1922, 1,633 schoolhouses, utilizing the services of 3,807 teachers and providing for 171,000 pupils, were built at a total cost of approximately $5,700,000. Of this amount the Negroes gave about $1,510,000, the whites $345,000, the public funds $2,738,000, and Mr. Rosenwald $1,107,000. Classified by types the buildings include 443 one-teacher schools, 618 two-teacher schools, 262 three-teacher schools, 153 four-teacher schools, 51 five-teacher schools, 47 six-teacher schools, 22 schools above six teacher, and 37 teachers' homes.

By States the number of school buildings erected and the amounts contributed from the Julius Rosenwald Fund follow:

Alabama, 260, $121,400; Arkansas, 77, $55,100; Florida, 7, $7,900; Georgia, 77, $52,750; Kentucky, 66, $42,300; Louisiana, 167, $113,000; Maryland, 27, $19,500; Mississippi, 193, $165,400; North Carolina, 267, $179,165; Oklahoma, 25, $21,930; South Carolina, 104, $92,000; Tennessee, 136, $91,000; Texas, 96, $72,133; Virginia, 131, $73,900; total, 1,633, $1,107,478.

### ROSENWALD AID TO NEGRO Y. M. C. A. AND Y. W. C. A.

Julius Rosenwald in 1910 offered through the Chicago Y. M. C. A. to give $25,000 toward the cost of a Negro Y. M. C. A. building for men and boys in any city of the United States which by popular subscription would raise $75,000 additional, thus assuring a building to cost complete a minimum of $100,000. Under this offer buildings were erected at a cost of $2,150,000 in thirteen cities, having a total Negro population of 1,000,000.

In 1920 Mr. Rosenwald made a second offer to contribute $25,000 to any city raising not less than $125,000, being influenced by interest awakened in Akron, O.; Dayton, O.; Detroit; Jersey City; Augusta, Ga.; Montclair, N. J.; Atlantic City; Orange, N. J.; Los Angeles; Nashville and Chicago for a second building. Owing to excessive cost and adverse conditions no city had qualified up to Nov. 15, 1922, but the Chicago Y. M. C. A. reported that Atlantic City, which had bought a site for $50,000, intended inaugurating a campaign for building funds in the spring of 1923; also that Detroit, Jersey City and Dayton might soon qualify.

Mr. Rosenwald gave $25,000 toward the cost of a Y. W. C. A. building erected in New York and he promised $25,000 to a Y. W. C. A. building now under construction in Philadelphia. There is no general offer to aid Y. W. C. A.'s, New York and Philadelphia presenting exceptional situations.

## THE GULF STREAM.

Discussions about the effects of the Gulf Stream upon climate and mariners' reports of its excessive heat recall that the first detailed study of what he called "the grandest and most mighty terrestrial phenomenon," was made by the late Rear Admiral John Elliott Pillsbury, U. S. N., a former President of the National Geographic Society, and summarized by him in a communication to the National Geographic Magazine.

"In all oceans there are movements of the water (other than that caused by the tides) which may be said to be due primarily to the prevalent wind," Admiral Pillsbury wrote.

"In the two great oceans, the Atlantic and the Pacific, there is to be found both north and south of the Equator, and also in the Indian Ocean, a similar circulation, that is, a general westerly movement in the tropics, a flow toward the poles along the eastern shores of the continents, an easterly set in the temperate zones, and a current toward the Equator along the western shores. It thus becomes a grand circular movement, some parts being quite slow, and other parts very swift; sometimes there may be a temporary interruption in the slower portions, or perhaps even a reversal, but taken as a whole the movement is continuous.

"In the North Atlantic Ocean the currents are probably more pronounced than in either the Pacific or the Indian Oceans.

"The equatorial current is usually described as being a broad band of water moving across the Atlantic in the tropics. The portion of this current situated south of the Equator is divided into two parts upon meeting the eastern salient of South America, Cape St. Roque. One branch turns south toward the Antarctic, while the other is forced to the westward along the shores of Northern Brazil and the Guianas, and is called the Guiana coast current. The equatorial current north of the Equator has an almost uninterrupted progress until it reaches the Windward Islands, but a portion of it also impinges against the Guiana coast and thus augments the volume of that current.

### HOW GULF STREAM IS FORMED.

"At the Windward Islands both are united, and a portion of the flow enters the Caribbean through the various passages, crosses it to the Yucatan and Honduras coasts, and thence into the Gulf of Mexico, from which it issues through the Straits of Florida as the Gulf Stream. Passing onward toward Europe it is augmented in volume by a part of the north equatorial current that sweeps along outside the West Indian Islands and the Bahamas, and while this current is slow in movement in comparison to the Gulf Stream itself, it doubtless carries a much greater number of heat units to help warm up Northern Europe.

"The Gulf Stream, or rather the combined flow mentioned above, divides as it meets the resistance of the Eastern Continent, one branch flowing south along the African coast, while the other proceeds northward into the Arctic toward Spitzbergen and Franz Josef Land.

"It is difficult for the mind to grasp the immensity of this great ocean river. The straits of Florida at its narrowest point is about 40 miles wide and observations here numbered between three and four thousand, surface and subsurface. A calculation of the average volume of water passing in one hour gives the enormous sum of 90 billion tons. If this one single hour's flow of water could be evaporated, the remaining salts would require many times more than all the ships in the world to carry it.

### MAGNITUDE OF OCEAN RIVER.

"When one is on board a vessel, floating upon its waters, one is not as much impressed at the power and grandeur of this wonder of nature as he is when he stands before a towering mountain, an immense iceberg, or a fall of water such as Niagara, but when one remembers that the mighty torrent, speeding on hour by hour and day by day in a volume equal to all the largest rivers in the world combined, carrying its beneficent heat to temper the climate of continents, one begins to realize that of all the forces of the physical world none can equal this one river of the ocean.

"It is interesting to note in the history of the Gulf Stream how great its influence has been on the fortunes of the New World. Before the discovery of America, strange woods and fruits were frequently found on the shores of Europe and offlying islands. Some of these were seen and examined by Columbus, and to his thoughtful mind they were convincing evidence of the fact that strange lands were somewhere to the westward. These woods were carried by the Gulf Stream and by the prevailing winds from the American continent, so that in part, the stream is responsible for the discovery of the New World.

### INFLUENCE IN COLONIZING AMERICA.

"The influence of the Gulf Stream in the colonization of America was very great. The division of the English colonies into New England and Virginia was probably in part due to the routes by which they were reached. Vessels bound from England to New England crossed the North Atlantic outside the limit of the Gulf Stream, or in a feeble adverse current. They had the advantage, too, of crossing the Newfoundland Banks and of being able to surely replenish their provisions by fishing.

"This voyage, however, much as the advantages might be either by the shorter distance or the gaining of food, was not thought to be practicable with a vessel bound to the Southern Colonies. They sailed south to the trade-wind region, through the Carribbean and around Cuba, thence following the Gulf Stream to their port.

"The Dutch adopted this passage to the Hudson, so that really Nantucket Island became the dividing line between the two voyages; a difference of 100 or 200 miles in destination caused a difference in the length of the passage of about 3,000 miles.

"The name of 'Gulf Stream' was first suggested by Benjamin Franklin because it issues from the Gulf of Mexico. While it is only a part of the grand scheme of ocean circulation, and the Gulf of Mexico is in reality only a stopping place, as it were, for its waters, this name is generally applied to the current now as it was given by Franklin—that is, the current coming from the Gulf of Mexico and spreading abroad over the North Atlantic."

## DISTANCES BETWEEN CITIES OF THE UNITED STATES BY LAND.

| City. | New York. | New Orleans. | San Francisco. | Seattle |
|---|---|---|---|---|
| Atlanta, Ga. | 876 | 496 | 2,810 | 2,953 |
| Baltimore, Md. | 188 | 1,124 | 3,081 | 3,051 |
| Bismarck, N. D. | 1,767 | 1,720 | 1,866 | 1,478 |
| Boston, Mass. | 235 | 1,607 | 3,313 | 3,283 |
| Buffalo, N. Y. | 442 | 1,275 | 2,804 | 2,774 |
| Charleston, S. C. | 739 | 776 | 3,119 | 3,242 |
| Chattanooga, Tenn. | 847 | 491 | 2,672 | 2,815 |
| Chicago, Ill. | 912 | 912 | 2,279 | 2,249 |
| Cincinnati, Ohio. | 757 | 829 | 2,377 | 2,547 |
| Cleveland Ohio. | 584 | 1,092 | 2,636 | 2,606 |
| Columbus, Ohio. | 637 | 945 | 2,593 | 2,563 |
| Dallas, Tex. | 1,769 | 515 | 1,932 | 2,426 |
| Denver, Col. | 1,930 | 1,357 | 1,376 | 1,584 |
| Detroit, Mich. | 693 | 1,100 | 2,551 | 2,521 |
| Duluth, Minn. | 1,391 | 1,391 | 2,243 | 1,816 |
| El Paso, Tex. | 2,310 | 1,195 | 1,287 | 2,134 |
| Galveston, Tex. | 1,782 | 410 | 2,157 | 2,728 |
| Helena, Mont. | 2,452 | 2,152 | 1,255 | 793 |
| Indianapolis, Ind. | 825 | 888 | 2,462 | 2,432 |
| Jacksonville, Fla. | 985 | 616 | 3,098 | 3,317 |
| Kansas City, Mo. | 1,342 | 880 | 1,986 | 2,065 |
| Key West, Fla. | 1,454 | 1,087 | 3,569 | 3,788 |
| Little Rock, Ark. | 1,290 | 487 | 2,291 | 2,548 |
| Los Angeles, Cal. | 3,149 | 2,007 | 475 | 1,322 |
| Louisville, Ky. | 871 | 778 | 2,473 | 2,553 |
| Memphis, Tenn. | 1,157 | 396 | 2,439 | 2,549 |
| Milwaukee, Wis. | 997 | 997 | 2,364 | 2,164 |
| Minneapolis, Minn. | 1,332 | 1,285 | 2,101 | 1,828 |
| Mobile, Ala. | 1,231 | 141 | 2,623 | 2,989 |
| New Orleans, La. | 1,372 | | 2,482 | 2,941 |
| New York, N. Y. | | 1,372 | 3,191 | 3,161 |
| Norfo k, Va. | 347 | 1,093 | 3,247 | 3,215 |
| Ogden, Utah. | 2,405 | 1,891 | 786 | 1,060 |
| Oklahoma, Okla. | 1,608 | 752 | 1,994 | 2,334 |
| Omaha, Neb. | 1,405 | 1,080 | 1,786 | 1,923 |
| Philadelphia, Pa. | 91 | 1,281 | 3 100 | 3,070 |
| Pittsburgh, Pa. | 444 | 1,142 | 2,747 | 2,717 |
| Port Townsend, Wash. | 3,199 | 2,979 | 1,005 | 38 |
| Portland, Me. | 350 | 1,722 | 3,428 | 3,898 |
| Portland, Ore. | 3,20 | 2 746 | 722 | 195 |
| Salt Lake City, Utah. | 2,442 | 1,928 | 823 | 1,097 |
| San Antonio, Tex. | 1,943 | 571 | 1,911 | 2,708 |
| San Diego, Cal. | 3,231 | 2,088 | 602 | 1,449 |
| San Francisco, Cal. | 3,191 | 2,482 | | 967 |
| Sante Fe, N. Mex. | 2,211 | 1,351 | 1,286 | 1,851 |
| Sault Ste. Marie, Mich. | 1,036 | 1,399 | 2,581 | 2,329 |
| Savannah, Ga. | 845 | 661 | 3,104 | 3,247 |
| Seattle, Wash. | 3,151 | 2,931 | 957 | |
| Sioux City, Iowa. | 1,422 | 1,173 | 1,821 | 1,879 |
| St. Paul, Minn. | 1,322 | 1,275 | 2,091 | 1,839 |
| St. Louis, Mo. | 1,065 | 699 | 2,199 | 2,342 |
| Tacoma, Wash. | 3,199 | 2,890 | 916 | 32 |
| Toledo, Ohio. | 705 | 1,040 | 2,523 | 2,493 |
| Washington, D. C. | 228 | 1,144 | 3,069 | 3,039 |

## SOME FAMOUS OLD PEOPLE OF 1922.

At what age is one to be classed as "old"?

Five centuries ago a man was called old at fifty. In the nineteenth century few under sixty would admit that they were old. With so many hale and hearty men well on in years to-day, it seems well to keep the limit set by the Psalmist of three-score years and ten in offering this list, by no means exhaustive, of famous old people of 1922. The age at the last birthday is given and the list is made up as of October 1, 1922:

**100**—John A. Stewart, banker, New York; Cornelius Cole, former U. S. Senator, California.

**99**—The Earl of Halsbury, former Lord Chancellor of Great Britain.

**96**—Major Gen. Sir Archibald E. H. Anson, served in Crimean War, British administrator.

**93**—John R. Voorhis, President of the Board of Elections, New York.

**91**—Frederic Harrison, English publicist, author.

**90**—George Shiras, Jr., U. S. Supreme Court Justice (retired); F. F. Mackay, New York, actor.

**89**—Prof. William F. Warren, former President of Boston University.

**88**—Chauncey M. Depew, former U. S. Senator, New York; James Brown Herreshoff, yacht builder, inventor; Charles William Eliot, President Emeritus of Harvard University; S. Baring-Gould, English author.

**87**—Rev. Dr. Lyman Abbott, editor; Sir Archibald Geikie, O. M., geologist; Mrs. William H. Felton, of Georgia, first woman to be appointed United States Senator.

**86**—Joseph G. Cannon, Congressman from Illinois; Cardinal Vincenzo Vannutelli; Lyman J. Gage, former Secretary of the Treasury; Mme. Juliette Adam, French author.

**85**—Rt. Rev. Daniel S. Tuttle, P. E. Bishop; Viscount Knollys, private secretary to King Edward VII.

**84**—John Wanamaker, merchant and former Postmaster General; Sir George Otto Trevelyan, biographer of Macaulay and English publicist; Emile Loubet, President of the French Republic, 1899-1906; Henry A. du Pont, former U. S. Senator; Edward P. Weston, long distance walker.

**83**—John D. Rockefeller, founder of the Standard Oil Co.; William P. Clyde, steamship owner; Lieut. Gen. Nelson A. Miles, U. S. Army (retired).

**82**—Simeon E. Baldwin, jurist, former Governor of Connecticut; Cardinal Logue; George F. Baker, banker, New York; Thomas Hardy, O. M., English novelist and poet; Sir John Scott Keltie, editor the Statesman's Year Book; George Gray, statesman, former U. S. Judge; Henry Holt, New York publisher; Admiral of the Fleet Sir Edward H. Seymour, O. M.; Palmer Cox, creator of the Brownies; Viscount Mersey, English jurist; Henry Clews, banker, New York.

**81**—Oliver Wendell Holmes, U. S. Supreme Court Justice; Georges Clemenceau, former Premier of France; the Earl of Dunraven, yachtsman; Viscount Chaplin, British statesman; Field Marshal Lord Grenfell; Sir Edward George Clarke, British lawyer; the Rev. Dr. R. S. MacArthur, Baptist clergyman.

**80**—Rev. Dr. Charles H. Parkhurst, Congregational minister; Giovanni Giolitti, former Premier of Italy; Charles S. Fairchild, former Secretary of the Treasury; Camille Flammarion, French astronomer; Dr. David Webster, N. Y. surgeon; Richard Vincent, Jr., famous dahlia grower.

**79**—Joseph McKenna, U. S. Supreme Court Justice; Paul Cambon, French diplomatist; Knute Nelson, U. S. Senator, Minnesota; Carroll S. Page, U. S. Senator, Vermont; W. P. Dillingham, U. S. Senator, Vermont; Lord Trevathin, former Lord Chief Justice of England; Rev. Dr. Russell H. Conwell, President Temple University, Philadelphia, lecturer; Rear Admiral Charles E. Clarke, U. S. N. (retired), commander U. S. S. Oregon in Spanish War; Rear Admiral Yates Stirling, U. S. N. (retired); Robert T. Lincoln, former Ambassador to Great Britain; Rev. Dr. J. B. Remensnyder, Lutheran clergyman.

**78**—Queen Mother Alexandra of Great Britain, George W. Cable, novelist; George Haven Putnam, New York publisher; Major Gen. A. W. Greely, U. S. A. Signal Service (retired), Arctic explorer; Anatole France, French author; Frank E. Warren, U. S. Senator, Wyoming; N. Pashitch, Premier of Jugo-Slavia; Robert Bridges, poet-laureate of England; T. P. O'Connor, M. P., Irish journalist.

**77**—Elihu Root, former Secretary of State; Sarah Bernhardt, French actress; Rear Admiral Charles D. Sigsbee, U. S. N. (retired), commander of U. S. S. Maine, destroyed in Havana Harbor, 1898; Rear Admiral William H. Brownson, U. S. N. (retired); Rev. Dr. J. F. Goucher, educator; the Duke of Richmond and Gordon; the Marquis of Lansdowne, British statesman; Field Marshal Lord Methuen; J. Ranken Towse, dramatic critic; Sir Henry Lucy, English journalist.

**76**—Judge Elbert H. Gary, head of the U. S. Steel Corporation; Judson Harmon, Governor of Ohio, 1909-13, former U. S. Attorney-General; the Duke of Somerset; Le Baron B. Colt, U. S. Senator, Rhode Island; the Earl of Harewood, father-in-law of Princess Mary of Great Britain; Charles P. Scott, editor of the Manchester (England) Guardian; Ira Remsen, educator, chemist; Clara Morris, actress; Joseph I. C. Clarke, New York, journalist, playwright.

**75**—Thomas A. Edison, inventor; the Earl of Rosebery, former Premier of Great Britain; Prof. Henry A. Beers, author, critic; Arthur Shelbourne Hardy, author, diplomatist; the Marquis of Aberdeen, English statesman; the Duke of Beaufort; the Earl of Iveagh, brewer, philanthropist; Eli Whitney, financier; Annie Besant, theosophist; Charlotte Crabtree (Lotta), actress; Viscount Pirrie, shipbuilder; Rev. Bernard Vaughan, S. J., famous English preacher; Field Marshal Paul von Hindenburg, former German General.

**74**—Louis C. Tiffany, artist; Nat G. Herreshoff, yacht builder, inventor; Melville E. Stone, journalist; Vladimir de Pachmann, pianist; James Ford Rhodes, historian; Nathan Straus, merchant, philanthropist; Leslie M. Shaw, former Secretary of the Treasury; the Earl of Balfour (Arthur J.) British statesman, former Premier; Rt. Rev. Dr. R. T. Davidson, Archbishop of Canterbury; Brooks Adams, lawyer, author; Rear Admiral W. W. Kimball, U. S. N., (retired).

**73**—Luther Burbank, plant wizard; Mrs. Frances Hodgson Burnett, author; Rear Admiral Seaton Schroeder, U. S. N. (retired); Rear Admiral Richard Wainwright, U. S. N. (retired); Dr. Talcott Williams, journalist, educator; William R. Day, U. S. Supreme Court Justice, former Secretary of State; the Duke of Wellington; Prof. Edward S. Dana, scientist, educator; Charles B. Alexander, lawyer; Austin G. Fox, lawyer; Lord Stamfordham, private secretary to King George V; Max Nordau, author and physician; Field Marshal August von Mackensen, German General; Grand Admiral Alfred von Tirpitz, former head of the German navy.

**72**—Cyrus H. K. Curtis, journalist; Henry Cabot Lodge, U. S. Senator, Massachusetts; Dr. Thomas G. Masaryk, President of Czecho-Slovakia; Oscar S. Straus, former Ambassador; Samuel Gompers, President American Federation of Labor; David R. Francis, former Ambassador; Henry White, former Ambassador; the Duke of Grafton; Augustine Birrell, British statesman, author; Kate Claxton, actress; Lord Shaw, English jurist; Pierre Loti (Louis Marie Julien Viaud) French author; Dr. David Jayne Hill, former Ambassador, educator; Prof. William M. Sloane, President American Academy of Arts and Letters; Henry W. Cannon, banker; Rose Coghlan, actress; Sir Thomas Lipton, merchant yachtsman; Ellen Key, Swedish Feminist, author; Field Marshal Liman von Sanders, German General, commanded the Turkish army.

**71**—Marshal Ferdinand Foch, Generalissimo of the Allied armies in the World War; Felix Adler, lecturer, educator; Cardinal Mercier; Thomas F. Ryan, financier; Henry Arthur Jones, dramatist; Dr. Robert Abbe, surgeon; Lord Leverhulme, manufacturer; Count George Noble Plunkett, Irish publicist; Sir William Robertson Nicoll, author, editor; Richard Henry Dana, lawyer; Leon Bourgeois, former Premier of France; Dr. David Starr Jordan, President Emeritus of Leland Stanford, Jr., University; Fred Warde, actor; Sir George Younger, Chairman of the English Conservative Party; Stuyvesant Fish, New York banker.

**70**—Marshal J. J. C. Joffre, hero of the Marne; Brander Matthews, author, critic, educator; Edwin Markham, poet; H. H. Asquith, former Premier of Great Britain; Field Marshal the Earl of Ypres (Sir John French), commander B. E. F.; the Duke of Rutland; Alton B. Parker, jurist; Paul Bourget, French author; Lieut. Gen. the Earl of Dundonald, fought in Boer War; Rev. Dr. Henry van Dyke, author, diplomatist; the Duke of Montrose, M. Marcel, made famous by his wave; George Foster Peabody, New York banker, publicist.

## BUILDING CONSTRUCTION IN CHIEF UNITED STATES CITIES.

(From *Bradstreet's*. For New York City figures see pages 555, 556.)

| CITY. | Values 1921. | Values 1920. | Values 1919. |
|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* |
| NEW ENGLAND. | | | |
| Boston | 23,610,841 | 23,152,818 | 16,034,206 |
| Bridgeport | 3,095,170 | 5,295,311 | 3,835,339 |
| Brockton | 1,705,514 | 1,565,359 | 1,146,088 |
| Burlington, Vt. | 206,900 | 237,000 | 403,025 |
| Cambridge | 1,815,561 | 4,604,712 | 2,996,669 |
| Chelsea | 566,990 | 572,257 | 560,172 |
| Everett | 534,736 | 629,465 | 879,295 |
| Fitchburg | 898,435 | 1,689,620 | 1,095,365 |
| Hartford | 6,961,990 | 17,384,346 | 8,351,521 |
| Haverhill | 779,780 | 1,120,850 | 1,242,480 |
| Holyoke | 1,026,382 | 2,876,245 | 1,879,150 |
| Lawrence | 2,937,495 | 2,504,151 | 1,738,062 |
| Lowell | 1,579,784 | 4,980,378 | 3,352,710 |
| Lynn | 1,122,188 | 849,697 | 1,212,578 |
| Manchester | 1,164,866 | 2,612,595 | 1,781,725 |
| Medford | 1,291,796 | 1,186,489 | 963,793 |
| New Bedford | 5 816,631 | 6,143,414 | 7,005,570 |
| New Haven | 6,487,808 | 4,934,333 | 8,910,917 |
| Newton | 3,476,739 | 2,610,568 | 3,168,451 |
| Portland, Me | 1,638,243 | 1,392,101 | 2,062,300 |
| Quincy, Mass | 1,902,597 | 2,022,748 | 2,159,697 |
| Salem | 686,834 | 539,701 | 654,579 |
| Somerville | 1,704,058 | 1,223,188 | 793,520 |
| Springf'd, Mass. | 5,669,534 | 6,670,274 | 5,879,845 |
| Worcester | 6,709,721 | 5,971,446 | 6,680,919 |
| MIDDLE. | | | |
| Albany, N. Y | 4,943,537 | 3,744,110 | 3,030,388 |
| Allentown | 1,814,268 | 2,930,930 | 2,717,709 |
| Altoona | 1,771,516 | 1,638,138 | 1,046,334 |
| Atlantic City | 8,862,943 | 16,537,777 | 4,253,844 |
| Auburn | 355,562 | 486,649 | 330,281 |
| Bayonne | 2,733,576 | 2,394,699 | 2,899,505 |
| Binghamton | 2,215,851 | 1,461,799 | 1,575,094 |
| Buffalo | 18,640,000 | 13,141,000 | 13,033,000 |
| Camden | 1,908,127 | 2,781,430 | 3,421,949 |
| East Orange | 3,955,879 | 3,251,926 | 4,347,790 |
| Elizabeth | 3,547,449 | 2,835,058 | 5,962,601 |
| Erie | 3,348,510 | 3,737,279 | 3,304,573 |
| Harrisburg | 2,719,428 | 1,190,690 | 2,739,685 |
| Jersey City | 12,702,912 | 7,393,049 | 4,557,951 |
| Lancaster | 1,384,106 | 1,285,663 | 987,158 |
| Mount Vernon | 3,869,579 | 2,351,522 | 2,849,327 |
| Newark, N. J | 20,515,258 | 20,566,845 | 20,165,795 |
| New Brunswick | 701,219 | 706,521 | 1,072,262 |
| Niagara Falls | 3,279,550 | 3,665,350 | 2,940,452 |
| Philadelphia | 42,793,750 | 55,130,938 | 65,158,700 |
| Pittsburgh | 23,339,334 | 16,019,249 | 14,835,712 |
| Reading | 2,223,650 | 2,450,575 | 1,377,013 |
| Rochester | 15,930,845 | 9,960,813 | 9,499,334 |
| Schenectady | 2,608,411 | 2,748,665 | 2,166,623 |
| Scranton | 2,396,490 | 3,021,855 | 2,112,372 |
| Syracuse | 5,838,598 | 6,883,100 | 6,073,158 |
| Troy | 1,402,799 | 535,507 | 651,659 |
| Utica | 3,102,860 | 2,205,609 | 3,287,750 |
| Wilkes-Barre | 1,779,120 | 1,350,345 | 834,180 |
| Williamsport | 1,452,617 | 833,380 | 682,382 |
| Wilmington | 2,235,710 | 3,838,531 | 5,911,859 |
| Yonkers | 4,601,500 | 4,720,700 | 2,671,100 |
| York | 524,712 | 689,543 | 507,372 |
| WESTERN. | | | |
| Akron | 3,782,449 | 20,346,605 | 27,261,361 |
| Bay City | 1,168,781 | 1,832,383 | 1,365,055 |
| Canton | 3,510,114 | 4,487,753 | 5,987,035 |
| Cincinnati | 17,692,510 | 13,191,442 | 19,323,750 |
| Cleveland | 46,531,703 | 65,624,550 | 47,707,625 |
| Columbus | 9,265,110 | 10,257,170 | 6,346,430 |
| Dayton | 6,105,061 | 6,054,344 | 8,052,758 |
| Detroit | 58,086,083 | 71,765,425 | 82,325,295 |
| Evansville | 1,081,326 | 1,621,912 | 1,457,664 |
| Fort Wayne | 4,803,476 | 2,963,777 | 2,205,145 |
| Grand Rapids | 5,617,331 | 4,445,212 | 3,758,595 |
| Indianapolis | 18,329,356 | 15,284,304 | 12,794,556 |
| Lima | 742,060 | 660,580 | 1,535,615 |
| Louisville | 7,430,300 | 6,986,260 | 4,146,269 |
| Newark, Ohio | 449,143 | 539,650 | 260,635 |
| Saginaw | 3,035,432 | 2,144,490 | 3,748,794 |
| South Bend | 4,098,997 | 4,609,071 | 4,029,461 |
| Springf'd, Ohio | 1,116,457 | 783,676 | 2,269,041 |
| Terre Haute | 2,214,705 | 756,499 | 868,705 |
| Toledo | 7,654,420 | 6,798,931 | 7,889,132 |
| Youngstown | 5,752,585 | 3,425,931 | 6,193,229 |
| Zanesville | 515,837 | 499,065 | 374,208 |
| NORTHWESTERN. | | | |
| Cedar Rapids | 3,023,225 | 2,391,373 | 2,142,000 |
| Chicago | 111,915,110 | 74,082,350 | 101,198,250 |
| Davenport | 1,697,020 | 1,736,626 | 2,648,589 |
| Des Moines | 3,720,425 | 4,091,229 | 5,221,885 |
| Dubuque | 1,326,057 | 741,690 | 1,005,302 |
| Duluth | 3,738,492 | 7,385,064 | 5,491,875 |
| East St. Louis | 1,403,924 | 1,930,353 | 1,434,658 |

| CITY. | Values 1921. | Values 1920. | Values 1919. |
|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* |
| Fargo | 1,812,830 | 2,269,115 | 1,310,410 |
| Lincoln | 1,715,942 | 1,693,015 | 2,056,052 |
| Milwaukee | 24,976,025 | 19,680,825 | 21,457,820 |
| Minneapolis | 23,383,135 | 15,992,215 | 17,307,410 |
| Omaha | 11,385,710 | 14,086,965 | 8,636,245 |
| Peoria | 2,419,649 | 1,683,751 | 4,053,644 |
| Quincy | 317,450 | 284,200 | 536,600 |
| St. Paul | 15,141,633 | 12,276,466 | 18,453,295 |
| Sioux City | 3,003,515 | 4,297,220 | 7,038,388 |
| Sioux Falls | 1,233,915 | 2,133,926 | 2,006,747 |
| Springfield, Ill. | 2,237,810 | 2,194,685 | 2,924,809 |
| Superior | 860,441 | 1,600,135 | 1,906,799 |
| SOUTHWESTERN. | | | |
| Dallas | 14,987,396 | 14,536,764 | 13,916,618 |
| Fort Smith | 885,719 | 1,071,178 | 858,603 |
| Fort Worth | 4,649,272 | 10,355,119 | 19,468,467 |
| Galveston | 1,936,937 | 672,762 | 632,178 |
| Houston | 10,330,771 | 8,543,268 | 6,852,910 |
| Kan. City, Kan. | 1,932,490 | 1,180,285 | 1,665,232 |
| Kan. City, Mo. | 16,424,075 | 13,720,275 | 13,164,060 |
| Muskogee | 1,146,515 | 1,190,664 | 792,916 |
| Oklahoma | 7,774,494 | 6,007,798 | 9,030,640 |
| St. Joseph | 1,054,301 | 1,942,615 | 1,086,720 |
| St. Louis | 15,612,396 | 18,545,798 | 20,538,460 |
| San Antonio | 7,515,045 | 4,711,212 | 3,987,305 |
| Topeka | 1,356,129 | 1,657,794 | 1,432,295 |
| Tulsa | 7,327,790 | 9,548,987 | |
| Waco | 1,316,568 | 1,135,040 | 434,511 |
| Wichita | 7,233,688 | 3,807,281 | 4,794,947 |
| SOUTHERN. | | | |
| Asheville | 1,974,120 | 1,403,951 | 850,755 |
| Atlanta | 10,901,021 | 13,121,186 | 10,435,250 |
| Augusta | 1,685,800 | 2,875,602 | 1,307,759 |
| Baltimore | 28,372,620 | 30,797,940 | 13,705,797 |
| Birmingham | 6,556,101 | 4,384,229 | 3,929,822 |
| Charlotte | 2,213,946 | 1,816,048 | 1,165,753 |
| Chattanooga | 2,464,661 | 2,944,075 | 1,562,576 |
| Greensboro | 1,681,833 | 1,090,397 | 973,935 |
| Huntington | 3,466,057 | 2,301,383 | 2,343,753 |
| Jackson | 633,600 | 455,395 | 316,963 |
| Jacksonville | 5,047,310 | 3,467,405 | 3,492,905 |
| Knoxville | 2,543,315 | 2,479,041 | 2,133,822 |
| Little Rock | 3,675,406 | 3,727,732 | 2,601,768 |
| Macon | 933,800 | 1,430,798 | 1,102,163 |
| Memphis | 9,359,335 | 6,715,183 | 7,502,397 |
| Miami | 5,363,100 | 4,476,760 | 3,264,215 |
| Mobile | 733,130 | 604,815 | 660,454 |
| Nashville | 3,092,447 | 2,177,921 | 2,528,821 |
| New Orleans | 8,037,959 | 12,598,476 | 4,248,992 |
| Norfolk | 4,940,733 | 4,634,323 | 7,852,944 |
| Richmond | 9,292,439 | 6,919,278 | 8,770,438 |
| Roanoke | 2,285,726 | 1,221,285 | 1,115,485 |
| Shreveport | 3,915,857 | 5,569,368 | 3,557,846 |
| Tampa | 4,043,845 | 2,663,442 | 1,202,534 |
| Washington | 24,327,434 | 19,521,928 | 20,402,292 |
| Wheeling | 1,266,757 | 1,153,174 | 485,971 |
| FAR-WESTERN. | | | |
| Berkeley | 3,206,112 | 3,113,364 | 1,737,634 |
| Boise | 930,510 | 1,088,299 | 1,482,651 |
| Butte | 102,342 | 233,690 | 716,727 |
| Colorado Sp'gs. | 595,472 | 820,568 | 325,145 |
| Denver | 10,135,925 | 7,539,940 | 6,799,960 |
| Fresno | 4,166,001 | 7,649,097 | 3,996,875 |
| Long Beach | 13,211,943 | 10,668,529 | 6,847,731 |
| Los Angeles | 82,123,269 | 60,023,600 | 29,045,619 |
| Oakland | 16,091,836 | 9,494,833 | 7,134,563 |
| Pasadena | 6,590,935 | 4,157,678 | 1,831,600 |
| Phoenix | 1,815,341 | 4,514,501 | 2,334,174 |
| Portland, Ore | 17,237,106 | 12,088,705 | 10,000,165 |
| Pueblo | 1,124,195 | 1,145,388 | 671,290 |
| Sacramento | 4,587,069 | 3,449,483 | 1,965,481 |
| Salt Lake City | 3,436,885 | 2,530,703 | 4,059,828 |
| San Diego | 10,647,853 | 5,671,798 | 2,858,651 |
| San Francisco | 22,307,672 | 26,709,527 | 14,813,242 |
| San Jose | 1,230,222 | 1,743,411 | 1,066,551 |
| Seattle | 12,862,425 | 13,760,090 | 15,614,960 |
| Spokane | 2,124,177 | 3,035,934 | 1,729,848 |
| Stockton | 1,938,181 | 2,617,527 | 1,477,990 |
| Tacoma | 3,669,077 | 4,746,678 | 2,780,462 |
| CANADA. | | | |
| Edmonton | 1,380,399 | 3,231,955 | 960,296 |
| Halifax | 2,204,398 | 3,421,379 | 5,194,805 |
| Hamilton | 4,639,450 | 4,321,420 | 5,086,277 |
| London | 2,527,510 | 2,146,305 | 2,454,990 |
| Montreal | 17,182,736 | 14,711,144 | 12,743,480 |
| Ottawa | 2,672,310 | 3,532,392 | 3,179,437 |
| St. John | 573,500 | 1,107,300 | 586,740 |
| Toronto | 23,892,878 | 25,749,102 | 19,797,026 |
| Vancouver | 3,046,532 | 3,708,873 | 2,271,412 |
| Victoria | 917,417 | 1,144,072 | 478,416 |
| Winnipeg | 5,530,600 | 8,371,050 | 2,948,150 |

Totals for cities above (1919) $1,054,735,453; (1920) $1,156,681,031; (1921) $1,187,766,539.

## COMMERCIAL FAILURES IN THE UNITED STATES, 1921.

(Tabulated by R. G. Dun & Co.)

| STATES. | TOTAL, 1921. | | | 1920. | | MANUFACTURING. | | TRADING. | |
|---|---|---|---|---|---|---|---|---|---|
| | No. | Assets. | Liabilities. | No. | Liabilities. | No. | Liabilities. | No. | Liabilities. |
| | | *Dollars.* | *Dollars.* | | *Dollars.* | | *Dollars.* | | *Dollars.* |
| NEW ENGLAND. | | | | | | | | | |
| Maine | 136 | 1,566,091 | 2,873,293 | 74 | 1,373,049 | 29 | 1,431,393 | 98 | 1,343,152 |
| New Hampshire | 41 | 234,573 | 486,465 | 36 | 252,096 | 13 | 156,249 | 27 | 276,857 |
| Vermont | 31 | 159,072 | 361,724 | 19 | 429,044 | 7 | 182,512 | 22 | 172,276 |
| Massachusetts | 828 | 8,164,467 | 24,208,619 | 443 | 10,970,133 | 289 | 7,622,643 | 463 | 14,485,644 |
| Connecticut | 516 | 25,271,597 | 15,443,368 | 230 | 6,970,124 | 131 | 12,146,287 | 365 | 3,019,617 |
| Rhode Island | 150 | 410,749 | 1,255,632 | 81 | 339,346 | 32 | 301,914 | 112 | 753,966 |
| Total | 1,702 | 35,806,549 | 44,629,101 | 883 | 20,334,092 | 501 | 21,840,998 | 1,087 | 20,051,512 |
| 1920 | 883 | 10,527,406 | 20,334,092 | ..... | ..... | 300 | 9,661,237 | 505 | 6,942,767 |
| 1919 | 812 | 5,840,287 | 12,812,487 | ..... | ..... | 289 | 4,847,206 | 447 | 4,956,067 |
| MIDDLE ATLANTIC. | | | | | | | | | |
| New York | 3,045 | 91,496,916 | 177,441,484 | 1,764 | 105,200,020 | 1,090 | 66,730,993 | 1,707 | 42,596,143 |
| New Jersey | 531 | 11,571,381 | 14,279,030 | 345 | 13,057,181 | 179 | 9,379,329 | 320 | 4,282,031 |
| Pennsylvania | 1,234 | 21,725,638 | 38,879,299 | 535 | 18,032,674 | 312 | 16,121,443 | 849 | 13,739,989 |
| Total | 4,810 | 124,793,935 | 230,599,813 | 2,644 | 136,289,875 | 1,581 | 92,231,765 | 2,876 | 60,618,163 |
| 1920 | 2,644 | 81,252,085 | 136,289,875 | ..... | ..... | 996 | 56,339,859 | 1,412 | 31,920,418 |
| 1919 | 1,627 | 18,618,247 | 40,365,599 | ..... | ..... | 577 | 17,660,819 | 873 | 9,684,710 |
| SOUTH ATLANTIC. | | | | | | | | | |
| Maryland | 285 | 5,105,575 | 7,851,388 | 123 | 4,207,297 | 76 | 3,428,248 | 183 | 3,589,660 |
| Delaware | 64 | 302,758 | 720,431 | 24 | 279,716 | 10 | 179,835 | 50 | 406,846 |
| Dist. of Columbia | 48 | 360,409 | 964,848 | 37 | 1,280,294 | 7 | 139,504 | 35 | 779,095 |
| Virginia | 407 | 4,241,275 | 5,672,739 | 219 | 5,076,567 | 63 | 1,450,948 | 326 | 3,802,070 |
| West Virginia | 141 | 2,233,859 | 2,907,021 | 77 | 899,947 | 21 | 1,284,624 | 109 | 676,145 |
| North Carolina | 311 | 5,915,683 | 7,643,759 | 72 | 1,044,597 | 32 | 1,779,927 | 263 | 5,122,481 |
| South Carolina | 372 | 7,485,847 | 7,616,939 | 44 | 948,499 | 21 | 1,659,879 | 342 | 7,520,606 |
| Georgia | 801 | 18,307,379 | 18,741,895 | 224 | 6,191,507 | 82 | 5,850,606 | 697 | 12,318,673 |
| Florida | 265 | 3,247,282 | 6,820,858 | 121 | 2,275,269 | 42 | 4,127,803 | 209 | 1,912,352 |
| Total | 2,694 | 47,200,067 | 60,939,878 | 941 | 22,203,693 | 354 | 19,901,374 | 2,214 | 36,127,928 |
| 1920 | 941 | 17,883,102 | 22,203,693 | ..... | ..... | 188 | 7,385,918 | 680 | 10,396,951 |
| 1919 | 647 | 5,978,458 | 7,957,599 | ..... | ..... | 106 | 2,840,410 | 495 | 4,279,712 |
| SOUTH CENTRAL. | | | | | | | | | |
| Kentucky | 193 | 2,304,134 | 2,990,764 | 87 | 2,620,377 | 32 | 791,396 | 148 | 1,682,209 |
| Tennessee | 318 | 8,147,453 | 8,542,964 | 142 | 1,879,415 | 39 | 2,617,738 | 269 | 3,917,200 |
| Alabama | 407 | 5,471,046 | 8,539,231 | 93 | 1,486,060 | 49 | 2,730,331 | 351 | 5,528,025 |
| Mississippi | 298 | 3,542,373 | 6,687,370 | 76 | 1,768,144 | 11 | 560,855 | 285 | 6,109,615 |
| Arkansas | 302 | 6,084,515 | 8,164,253 | 134 | 1,383,484 | 23 | 876,624 | 274 | 6,874,101 |
| Oklahoma | 554 | 9,321,578 | 12,572,218 | 197 | 2,061,911 | 59 | 2,629,208 | 474 | 8,957,227 |
| Louisiana | 199 | 2,144,291 | 4,639,596 | 36 | 583,037 | 18 | 899,548 | 177 | 3,205,985 |
| Texas | 796 | 8,771,752 | 19,438,286 | 273 | 8,982,687 | 73 | 4,033,642 | 690 | 13,907,223 |
| Total | 3,067 | 45,787,642 | 71,574,682 | 1,038 | 20,765,115 | 304 | 15,139,342 | 2,668 | 50,180,985 |
| 1920 | 1,038 | 16,980,875 | 20,765,115 | ..... | ..... | 128 | 8,428,619 | 852 | 10,765,449 |
| 1919 | 717 | 7,204,058 | 9,800,585 | ..... | ..... | 93 | 3,217,156 | 566 | 4,948,533 |
| CENTRAL EAST. | | | | | | | | | |
| Ohio | 1,061 | 38,709,251 | 42,436,828 | 446 | 11,140,646 | 279 | 24,292,086 | 720 | 14,890,417 |
| Indiana | 373 | 9,023,871 | 14,134,731 | 170 | 6,427,645 | 91 | 7,351,402 | 251 | 4,524,318 |
| Illinois | 981 | 16,522,640 | 28,412,344 | 435 | 20,641,742 | 329 | 14,910,527 | 603 | 11,610,919 |
| Michigan | 675 | 6,315,489 | 12,802,725 | 207 | 8,364,538 | 145 | 5,161,439 | 504 | 7,315,433 |
| Wisconsin | 247 | 7,656,119 | 8,812,313 | 112 | 2,196,740 | 67 | 5,607,706 | 161 | 2,969,794 |
| Total | 3,337 | 78,227,370 | 106,598,941 | 1,370 | 48,771,311 | 911 | 57,323,160 | 2,239 | 41,310,881 |
| 1920 | 1,370 | 38,797,975 | 48,771,311 | ..... | ..... | 463 | 27,643,397 | 812 | 12,093,743 |
| 1919 | 1,161 | 17,664,082 | 23,253,597 | ..... | ..... | 380 | 14,121,020 | 686 | 6,109,364 |
| CENTRAL WEST. | | | | | | | | | |
| Minnesota | 344 | 6,346,730 | 9,456,733 | 122 | 3,189,526 | 59 | 2,46 495 | 260 | 5,263,461 |
| Iowa | 312 | 6,684,612 | 7,733,719 | 123 | 4,193,409 | 66 | 2,235,021 | 234 | 5,404,248 |
| Missouri | 594 | 22,808,851 | 31,870,433 | 224 | 4,580,849 | 146 | 5,383,602 | 404 | 6,518,832 |
| North Dakota | 60 | 731,237 | 1,240,210 | 27 | 370,220 | 5 | 148,469 | 54 | 1,086,393 |
| South Dakota | 86 | 1,034,154 | 1,543,482 | 11 | 379,352 | 5 | 26,300 | 77 | 1,497,028 |
| Nebraska | 229 | 6,383,09 | 10,752,031 | 87 | 4,521,510 | 33 | 3,171,532 | 181 | 3,804,729 |
| Kansas | 233 | 4,149,159 | 4,931,990 | 119 | 1,347,434 | 31 | 1,665,281 | 183 | 2,123,285 |
| Total | 1,855 | 48,137,852 | 67,529,098 | 713 | 18,582,300 | 345 | 15,095,700 | 1,393 | 25,697,976 |
| 1920 | 713 | 13,456,920 | 18,582,300 | ..... | ..... | 185 | 10,482,004 | 476 | 5,889,199 |
| 1919 | 447 | 3,619,297 | 5,615,022 | ..... | ..... | 95 | 2,508,618 | 309 | 2,492,564 |
| WESTERN. | | | | | | | | | |
| Montana | 196 | 1,765,008 | 2,759,476 | 81 | 594,329 | 26 | 311,685 | 148 | 2,220,864 |
| Idaho | 127 | 2,627,222 | 2,679,865 | 70 | 2,197,772 | 13 | 122,603 | 111 | 2,524,373 |
| Wyoming | 33 | 517,450 | 741,950 | 7 | 283,345 | 2 | 93,500 | 29 | 634,450 |
| Colorado | 135 | 2,678,067 | 4,722,381 | 36 | 624,981 | 21 | 370,042 | 108 | 1,287,533 |
| New Mexico | 38 | 446,534 | 613,380 | 6 | 99,854 | 3 | 81,200 | 35 | 532,180 |
| Arizona | 91 | 922,666 | 1,542,444 | 18 | 146,071 | 11 | 461,700 | 76 | 964,800 |
| Utah | 85 | 1,587,357 | 1,333,323 | 81 | 1,631,577 | 15 | 77,103 | 68 | 1,253,920 |
| Nevada | 9 | 9,473 | 34,350 | 16 | 206,672 | 3 | 3,000 | 5 | 26,350 |
| Total | 714 | 10,553,777 | 14,427,169 | 315 | 5,784,601 | 94 | 1,520,833 | 580 | 9,444,470 |
| 1920 | 315 | 4,073,969 | 5,784,601 | ..... | ..... | 44 | 491,872 | 249 | 4,939,978 |
| 1919 | 271 | 1,583,328 | 2,416,341 | ..... | ..... | 55 | 256,262 | 198 | 2,022,421 |
| PACIFIC. | | | | | | | | | |
| Washington | 388 | 5,000,440 | 8,494,735 | 250 | 12,261,487 | 101 | 2,860,527 | 248 | 3,784,978 |
| Oregon | 305 | 7,476,493 | 11,040,136 | 168 | 2,113,499 | 101 | 2,699,650 | 174 | 1,997,487 |
| California | 780 | 6,054,191 | 11,568,330 | 559 | 8,015,832 | 202 | 4,293,836 | 520 | 5,579,905 |
| Total | 1,473 | 18,531,124 | 31,103,201 | 977 | 22,390,818 | 405 | 9,854,013 | 942 | 11,362,370 |
| 1920 | 977 | 15,531,782 | 22,390,818 | ..... | ..... | 331 | 7,559,565 | 546 | 5,609,842 |
| 1919 | 769 | 6,530,086 | 11,070,007 | ..... | ..... | 270 | 6,162,725 | 439 | 3,177,072 |
| UNITED STATES. | | | | | | | | | |
| Total | 19,652 | 409,038,316 | 627,461,883 | 8,881 | 295,121,805 | 4,495 | 232,907,185 | 13,999 | 254,794,285 |
| 1920 | 8,881 | 195,504,114 | 295,121,805 | ..... | ..... | 2,635 | 127,992,471 | 5,532 | 88,558,347 |
| 1919 | 6,451 | 67,037,843 | 113,291,237 | ..... | ..... | 1,865 | 51,614,216 | 4,013 | 37,670,443 |

ASSETS AND LIABILITIES OF FAILED CONCERNS.

| YEAR. | No. | Assets. | Liabilities. | YEAR. | No. | Assets. | Liabilities. |
|---|---|---|---|---|---|---|---|
| 1900 | 10,774 | $78,079,555 | $138,495,673 | 1911 | 13,441 | $124,516,544 | $191,061,665 |
| 1901 | 11,002 | 55,455,940 | 113,092,376 | 1912 | 15,452 | 136,538,168 | 203,117,391 |
| 1902 | 11,615 | 58,729,557 | 117,476,769 | 1913 | 16,037 | 174,688,151 | 272,672,388 |
| 1903 | 12,069 | 90,013,081 | 155,444,185 | 1914 | 18,280 | 265,293,046 | 357,908,859 |
| 1904 | 12,199 | 84,438,076 | 144,202,311 | 1915 | 22,156 | 183,453,383 | 302,286,148 |
| 1905 | 11,520 | 57,826,090 | 102,676,172 | 1916 | 16,993 | 113,599,026 | 196,212,256 |
| 1906 | 10,682 | 66,610,322 | 119,201,515 | 1917 | 13,855 | 103,464,805 | 182,441,371 |
| 1907 | 11,725 | 138,535,645 | 197,385,225 | 1918 | 9,982 | 101,637,798 | 163,019,979 |
| 1908 | 15,690 | 146,199,325 | 222,315,684 | 1919 | 6,451 | 67,037,843 | 113,291,237 |
| 1909 | 12,924 | 102,773,007 | 154,603,465 | 1920 | 8,881 | 195,504,114 | 295,121,805 |
| 1910 | 12,652 | 136,538,168 | 201,757,097 | 1921 | 19,651 | 409,038,316 | 627,401,883 |

FAILURES IN THE UNITED STATES BY CLASSES, CALENDAR YEARS.

| MANUFACTURERS. | NUMBER. | | | LIABILITIES. | | |
|---|---|---|---|---|---|---|
| | 1921. | 1920. | 1919. | 1921. | 1920. | 1919. |
| | | | | *Dollars.* | *Dollars.* | *Dollars.* |
| Iron, foundries and nails | 80 | 35 | 23 | 8,638,413 | 4,083,973 | 1,520,780 |
| Machinery and tools | 461 | 248 | 177 | 52,558,701 | 27,066,318 | 12,868,454 |
| Woolens, carpets and knit goods | 38 | 18 | 6 | 2,890,278 | 1,836,218 | 94,001 |
| Cottons, lace and hosiery | 58 | 30 | 21 | 4,429,966 | 1,446,678 | 1,456,138 |
| Lumber, carpenters and coopers | 354 | 207 | 240 | 17,693,448 | 13,345,872 | 4,442,536 |
| Clothing and millinery | 848 | 435 | 174 | 19,959,548 | 10,551,074 | 1,721,845 |
| Hats, gloves and furs | 186 | 93 | 26 | 5,480,916 | 3,091,431 | 305,150 |
| Chemicals and drugs | 89 | 45 | 38 | 3,769,466 | 3,222,836 | 1,128,966 |
| Paints and oils | 20 | 14 | 8 | 943,241 | 310,416 | 169,073 |
| Printing and engraving | 143 | 50 | 59 | 4,858,479 | 2,509,071 | 824,870 |
| Milling and bakers | 385 | 282 | 172 | 8,485,800 | 3,606,130 | 2,477,628 |
| Leather, shoes and harness | 185 | 91 | 53 | 4,742,907 | 3,485,696 | 895,417 |
| Liquors and tobacco | 97 | 61 | 49 | 7,625,039 | 1,371,535 | 934,089 |
| Glass, earthenware and brick | 46 | 26 | 45 | 3,347,179 | 1,344,809 | 1,809,936 |
| All other | 1,505 | 1,003 | 774 | 87,478,806 | 50,720,414 | 20,965,439 |
| Total manufacturing | 4,495 | 2,635 | 1,865 | 232,907,185 | 127,992,471 | 51,614,216 |
| TRADERS. | | | | | | |
| General stores | 2,277 | 618 | 425 | 43,059,785 | 10,143,829 | 4,412,395 |
| Groceries, meat and fish | 3,007 | 1,713 | 1,359 | 38,186,071 | 13,058,862 | 8,256,917 |
| Hotels and restaurants | 554 | 369 | 324 | 6,281,038 | 4,175,359 | 3,158,861 |
| Liquors and tobacco | 260 | 160 | 214 | 1,661,091 | 1,858,623 | 1,522,640 |
| Clothing and furnishing | 1,871 | 566 | 325 | 29,146,874 | 7,679,954 | 2,760,100 |
| Drygoods and carpets | 1,298 | 377 | 206 | 24,646,808 | 8,096,949 | 3,073,446 |
| Shoes, rubbers and trunks | 589 | 162 | 120 | 8,913,982 | 1,954,013 | 1,090,104 |
| Furniture and crockery | 402 | 74 | 78 | 5,402,195 | 743,455 | 805,037 |
| Hardware, stoves and tools | 320 | 83 | 81 | 7,867,114 | 1,434,922 | 1,211,738 |
| Chemicals and drugs | 409 | 112 | 130 | 4,835,851 | 914,705 | 789,261 |
| Paints and oils | 72 | 16 | 21 | 1,764,062 | 324,963 | 758,623 |
| Jewelry and clocks | 313 | 103 | 73 | 5,785,059 | 1,669,599 | 699,733 |
| Books and papers | 52 | 21 | 21 | 458,762 | 229,287 | 176,337 |
| Hats, furs and gloves | 125 | 135 | 21 | 6,420,668 | 7,365,158 | 288,887 |
| All other | 2,450 | 1,023 | 615 | 70,371,425 | 28,915,669 | 8,666,364 |
| Total trading | 13,999 | 5,532 | 4,013 | 254,794,285 | 88,558,347 | 37,670,443 |
| Agents, brokers, etc | 1,158 | 714 | 573 | 139,700,413 | 78,570,987 | 24,006,578 |
| Total commercial | 19,652 | 8,881 | 6,451 | 627,401,883 | 295,121,805 | 113,291,237 |
| Banking | 383 | 119 | 50 | 167,849,555 | 50,708,300 | 16,520,862 |

FAILURES IN UNITED STATES SINCE 1857.

| YEAR. | No. | Liab., Dols. | YEAR. | No. | Liab., Dols. | YEAR. | No. | Liab., Dols. | YEAR. | No. | Liab., Dols. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1857 | 4,932 | 291,750,000 | 1874 | 5,830 | 155,239,000 | 1890 | 10,907 | 189,856,964 | 1906 | 10,682 | 119,201,515 |
| 1858 | 4,225 | 95,749,000 | 1875 | 7,740 | 201,000,000 | 1891 | 12,273 | 189,868,638 | 1907 | 11,725 | 197,385,225 |
| 1859 | 3,913 | 64,394,000 | 1876 | 9,092 | 191,117,000 | 1892 | 10,344 | 114,044,167 | 1908 | 15,690 | 222,315,684 |
| 1860 | 3,676 | 79,807,000 | 1877 | 8,872 | 190,669,936 | 1893 | 15,242 | 346,779,889 | 1909 | 12,924 | 154,603,465 |
| 1861 | 6,993 | 207,210,000 | 1878 | 10,478 | 234,383,132 | 1894 | 13,885 | 172,992,886 | 1910 | 12,652 | 201,757,097 |
| 1862 | 1,652 | 23,049,000 | 1879 | 6,658 | 98,149,053 | 1895 | 13,197 | 173,196,060 | 1911 | 13,241 | 186,498,823 |
| 1863 | 495 | 7,899,000 | 1880 | 4,735 | 65,752,000 | 1896 | 15,088 | 226,096,834 | 1912 | 15,452 | 203,117,391 |
| 1864 | 520 | 8,579,000 | 1881 | 5,582 | 81,155,932 | 1897 | 13,351 | 154,332,071 | 1913 | 15,632 | 250,802,536 |
| 1865 | 530 | 17,625,000 | 1882 | 6,738 | 101,547,564 | 1898 | 12,186 | 130,662,899 | 1914 | 18,280 | 357,908,859 |
| 1866 | 1,505 | 53,783,000 | 1883 | 9,184 | 172,874,172 | 1899 | 9,337 | 90,879,889 | 1915 | 22,156 | 302,286,148 |
| 1867 | 2,780 | 96,666,000 | 1884 | 10,968 | 226,343,427 | 1900 | 10,774 | 138,495,673 | 1916 | 16,993 | 196,212,256 |
| 1868 | 2,608 | 63,694,000 | 1885 | 10,637 | 124,220,321 | 1901 | 11,002 | 113,092,379 | 1917 | 13,855 | 182,441,371 |
| 1869 | 2,799 | 75,054,000 | 1886 | 9,834 | 114,644,119 | 1902 | 11,615 | 117,476,769 | 1918 | 9,982 | 163,019,979 |
| 1870 | 3,546 | 88,242,000 | 1887 | 9,634 | 167,560,944 | 1903 | 12,069 | 145,444,185 | 1919 | 6,451 | 113,291,237 |
| 1871 | 2,915 | 85,252,000 | 1888 | 10,679 | 128,829,973 | 1904 | 12,199 | 144,202,311 | 1920 | 8,881 | 295,121,805 |
| 1872 | 4,069 | 121,056,000 | 1889 | 10,882 | 148,784,337 | 1905 | 11,520 | 102,676,172 | 1921 | 19,652 | 627,401,883 |
| 1873 | 5,183 | 228,499,000 | | | | | | | | | |

BANK FAILURES IN THE UNITED STATES, 1893-1921.

| YEAR. | TOTAL. | | NATIONAL. | | YEAR. | TOTAL. | | NATIONAL. | |
|---|---|---|---|---|---|---|---|---|---|
| | No. | Liabilities. | No. | Liabilities. | | No. | Liabilities. | No. | Liabilities. |
| 1893 | 642 | $210,998,808 | 161 | $67,673,894 | 1908 | 180 | $123,126,956 | 31 | $48,388,000 |
| 1894 | 125 | 125,666,035 | 18 | 4,803,616 | 1909 | 80 | 24,677,128 | 11 | 4,109,224 |
| 1895 | 132 | 20,710,210 | 34 | 5,863,842 | 1910 | 119 | 41,097,255 | 10 | 4,284,482 |
| 1896 | 198 | 50,718,915 | 34 | 22,674,512 | 1911 | 107 | 25,511,606 | 3 | 1,250,000 |
| 1897 | 171 | 28,249,700 | 28 | 5,977,421 | 1912 | 79 | 24,219,522 | 4 | 8,313,000 |
| 1898 | 80 | 18,395,094 | 11 | 4,102,290 | 1913 | 120 | 31,546,314 | 7 | 5,197,336 |
| 1899 | 55 | 27,116,790 | 10 | 7,106,567 | 1914 | 212 | 56,005,107 | 19 | 9,606,098 |
| 1900 | 58 | 14,456,563 | 5 | 1,312,721 | 1915 | 133 | 37,223,234 | 18 | 13,649,000 |
| 1901 | 74 | 18,018,774 | 9 | 5,666,231 | 1916 | 50 | 10,396,779 | 8 | 1,755,000 |
| 1902 | 63 | 10,969,072 | 2 | 420,617 | 1917 | 42 | 18,451,964 | 4 | 3,700,000 |
| 1903 | 121 | 29,685,766 | 12 | 5,735,477 | 1918 | 20 | 5,131,887 | 0 | ..... |
| 1904 | 99 | 28,158,811 | 24 | 10,257,223 | 1919 | 50 | 16,520,862 | 4 | 1,850,000 |
| 1905 | 78 | 20,227,155 | 16 | 4,198,348 | 1920 | 119 | 50,708,300 | 10 | 3,350,000 |
| 1906 | 58 | 18,805,380 | 8 | 1,490,966 | 1921 | 383 | 167,849,555 | ..... | ..... |
| 1907 | 132 | 233,325,972 | 12 | 12,533,000 | | | | | |

## INTERNATIONAL TRADE COURT OF ARBITRATION.

A. C. Bedford, of New York, Chairman of the American Section of the International Chamber of Commerce, in which 28 countries are associated with the United States, announced on Nov. 6, 1922, that the chamber has perfected plans for the establishment of a court of arbitration for the settlement and adjustment of international commercial disputes. The court is the result of two years of careful study and is to be independent of all agencies established by Governments.

Owen D. Young, Chairman of the board of the General Electric Company, has been selected as Chairman of the American group on the court. His associates will be:

Newton D. Baker, President of Chamber of Commerce of Cleveland and formerly Secretary of War.

Irving T. Bush, President of Bush Terminal Company, New York.

R. Goodwin Rhett, President of People's National Bank, Charleston, S. C.

Henry M. Robinson, President of First National Bank, Los Angeles.

M. J. Sanders, Manager of International Mercantile Marine, New Orleans.

Frederick S. Snyder, President of Chamber of Commerce of Boston.

Thomas E. Wilson, President of Wilson & Co., Chicago.

Edgar Carolan of International General Electric Company, Paris, France.

Administration of the court will be directed from the headquarters of the International Chamber, 32 Rue Jean Goujon, Paris.

M. Philip von Hemert, President of the Dutch Chamber of Commerce in Paris and Chairman of the special committee that drafted the rules of procedure for the court, will serve as President of its Executive Committee.

Mr. Carolan of the American group will serve as one of the Vice Presidents of its Executive Committee.

### THESE COUNTRIES INTERESTED.

Similar groups of representative business men have been named by the following 28 countries represented in the International Chamber of Commerce: Argentina, Austria, Belgium, Bulgaria, Costa Rica, Czechoslovakia, Denmark, Esthonia, France, Great Britain, Greece, Guatemala, Haiti, Indo-China, Italy, Japan, Luxemburg, Netherlands, Norway, Poland, Portugal, Spain, Soudan, Sweden, Switzerland, Union of South Africa, and Jugo-Slavia.

The purpose of the court is economical adjustment of commercial disputes without the necessity of long delays and expenses involved in great distress, limitation of means of communication, differences in language and the usual legal agencies.

The proposed procedure has three phases—conciliation, arbitration where legal sanction for the enforcement of awards exists, and arbitration where there is no enforcing law.

Conciliation will be invoked where, for instance, there is disagreement over a contract which looks as if it could be handled without the more formal procedure of arbitration. It is expected that such cases can be handled satisfactorily by the administrative commission, consisting of one resident commissioner from each country represented.

Two forms of arbitration are provided, as already indicated, to cover, on the one hand, the case where the laws of both countries involved provide for the enforcement of arbitral awards, and on the other hand, the case where there is no such provision. In the latter case enforcement will have to depend on moral suasion, and such influence as, for instance, the United States Chamber of Commerce might have in this country.

Some of the provisions in the code now formulated for use in the case of countries where there is no legal sanction for the execution of arbitration awards follow:

### AN INTERNATIONAL COURT.

"The Council of the International Chamber of Commerce shall name a committee on arbitration, for the purpose of facilitating arbitration of disputes arising between business men of different countries. This committee shall be known as the 'Court of Arbitration of the International Chamber of Commerce.'

"Any party who desires to have recourse to arbitration under the new plan shall address a request to his national committee or, if no national committee exists, through an organization member of the international chamber, giving a statement of the transaction in question and the claims to be arbitrated. If the question is found suitable for arbitration the court shall forward a copy of the request to the other party and invite him to furnish a statement of his case.

"The court will appoint one arbitrator to try each case submitted to it, unless the parties desire the appointment of two arbitrators and one umpire or of three arbitrators.

"The Court of Arbitration will request the various national committees to furnish the names of technically qualified arbitrators for appointment to hear the cases submitted to it. The arbitration shall take place in the country and town as may be determined by the court.

"Normally the arbitrators shall render their award within sixty days. The arbitrators will have the right, where the law permits, to take evidence in countries other than that in which the arbitration takes place.

"The award of the arbitrators, in addition to the decision on the merits, shall determine which of the two parties is responsible for the costs, or in what proportion such costs shall be divided between them. The arbitrators shall be entitled to reimbursement of expenses, but shall serve gratuitously except, within the discretion of the court, in such countries and industries where fees are customarily allowed for arbitrators.

### IN HONOR BOUND.

"Whenever the parties have agreed to arbitration by the International Chamber of Commerce, the jurisdiction of the Court of Arbitration is obligatory upon the contracting parties, and upon the refusal or failure of one of the parties to present his case before the arbitrators an award by default may be made.

"The parties are in honor bound to carry out the award of the arbitrators."

In the event of the failure of the party against whom the award has been rendered, it is provided that the successful party may notify the national committee or the organization member of the International Chamber of Commerce, whereupon the court shall report the default to the Chamber of Commerce of the country concerned, with the request that the proper disciplinary measures be applied.

Settlement of a dispute by conciliation may be effected by business men bringing the controversy to the attention of the International Chamber through the national committees. Such requests for the good offices of the chamber will be referred to the administrative commission, which is composed of the representatives of the member countries resident in Paris to co-operate with international headquarters.

After examining all documents submitted by both parties to the controversy and collecting all possible information, the administrative committee, through its Chairman, will communicate with the parties, through the national committees, proposing a basis of mutual agreement.

## EXPECTATION OF LIFE IN THE UNITED STATES, 1910-1920.

(Original registration States.)

| YEAR. | At Age 0. | At Age 32. | At Age 62. |
|---|---|---|---|
| White males: | | | |
| 1920 | 53.98 | 34.93 | 13.38 |
| 1910 | 50.23 | 33.33 | 12.85 |
| Difference | 3.75 | 1.60 | .53 |
| White females: | | | |
| 1920 | 56.33 | 36.12 | 14.01 |
| 1910 | 53.52 | 35.40 | 13.70 |
| Difference | 2.71 | .72 | .31 |

| YEAR. | At Age 0. | At Age 32. | At Age 62. |
|---|---|---|---|
| Negro males: | | | |
| 1920 | 40.14 | 28.50 | 11.42 |
| 1910 | 34.05 | 26.16 | 10.88 |
| Difference | 6.09 | 2.34 | .54 |
| Negro females: | | | |
| 1920 | 42.16 | 28.82 | 12.12 |
| 1910 | 37.67 | 28.33 | 11.96 |
| Difference | 4.49 | .49 | .16 |

The above table shows that the average span of life has lengthened 3.75 years for white males since 1910, with gains also, for white females and for Negroes of both sexes.

## WHO IS THE RICHEST MAN?

(From the Wall Street Journal, Sept. 20, 1922.)

Henry Ford has in the Ford Motor Co. the largest income and, if capitalized, the largest fortune in the world.

Profits, before taxes for 1922, will exceed $125,000,000. After taxes they will be $110,000,000, about $100 a car. With these earnings the Ford Motor Co. could be capitalized at $2,000,000,000 and pay 5 per cent. on that capital.

Ford condemns bankers, but with $180,000,000 cash he himself is the largest individual banker in this country, if not in the world. Michigan sugar beet growers and automobile manufacturers have little need for such a stupendous sum and only a few millions are banked in Detroit. Wall Street—the financial centre of the country—absorbs the other millions, and Ford accumulated profits expand and multiply with Wall Street assistance.

In his newspaper interviews Ford says that Wall Street and the gold standard have outlived their usefulness, but his millions flow through to Wall Street at 4 per cent. to bring his company a possible $7,200,000 gold standard money annually in interest. This is more than $6 profit for every car he produces.

Even a Republican Congress unites to add to the Ford wealth. The company paid more than $50,000,000 in Federal taxes in 1921. Because of the abolition of the excess profits levy, it will pay only $16,000,000 in 1922. The Fords are $34,000,000 richer, though if they were to draw the riches out they would pay more than 50 per cent. additional in personal income taxes.

So Ford continues to pile up in his business the millions which find their way into Wall Street. His replacement parts business is so profitable that he could chop off his manufacturing profit of probably $80 a car and make more than $15,000,000 annually, or $14 on each car produced from the sale of parts necessary to keep the millions of Fords now on the roads in running condition.

He could distribute this $14 as a bonus to his workmen and still make the $6 a car profit from interest.

But he is not selling at cost. He is holding on to profits from interest, parts and cars: $58,000,000 in the record ten months ended last February, despite the heavy taxes; $110,000,000 in all probability after taxes in 1922.

## CHIEF POLITICAL ASSASSINATIONS SINCE 1865.

Abraham Lincoln, President of the United States, April 14, 1865; died April 15, 1865.
Michael, Prince of Serbia, June 10, 1868.
Prim, Marshal of Spain, December 28, 1870.
Richard, Earl of Mayo, Governor-General of India, February 8, 1872.
Abdul Aziz, Sultan of Turkey, June 4, 1876.
Alexander II. of Russia, March 13, 1881.
James A. Garfield, President of the United States, July 2, 1881; died September 19, 1881; Guiteau, hanged, June 30, 1882.
Carter H. Harrison, Sr., Mayor of Chicago, October 28, 1893.
Marie Francois Sadi-Carnot, President of France, June 24, 1894.
Stanislaus Stambouloff, Premier of Bulgaria, July 25, 1895.
Nasr-ed-Din, Shah of Persia, May 1, 1896.
Canovas Del Castillo, Prime Minister of Spain, August 8, 1897.
Juan Idiarte Borda, President of Uruguay, August 25, 1897.
José Maria Reyna Barrios, President of Guatemala, February 18, 1898.
Empress Elizabeth of Austria, September 10, 1898.
General Ulisses Heureuax, President of the Dominican Republic, July 26, 1899.
William Goebel, Governor of Kentucky, January 30, 1900.
Humbert, King of Italy, July 29, 1900.
William McKinley, President of the United States, September 6, 1901; died September 14, 1901; Leon Czolgosz executed, October 29, 1901.
Alexander, King of Serbia, and his wife, Queen Draga, June 11, 1903.
Bobrikoff, Gov.-General of Finland, June 16, 1904.
Von Plehve, Russian Minister of the Interior, July 28, 1904.
Soisalon Soininen, Procurator-General of Finland, February 6, 1905.
Delyannis, Grecian Premier, June 13, 1905.
Major-Gen. Count Shuvaloff, Russia, July 11, 1905.
Ex-Governor Frank Steunenberg, Idaho, December 30,1905.
Sergius, Grand Duke of Russia, February 17, 1905.
Gen. Count Alexis Ignatieff, Russia, August 26, 1906.
Gen. Pavlov, St. Petersburg, January 9, 1907.
Premier Mirza Ali Hzam, Persia, August 31, 1907.
Carlos, King of Portugal, February 1, 1908.
Louis Philippe, Crown Prince of Portugal, February 1, 1908.
Prince Ito, of Japan, October 26, 1909.
Premier Pasha Ghali, Egypt, February 21, 1910.
Peter Arcadowitch Stolypin, Premier of Russia, September 14, 1911.
Ramon Caceres, President of the Dominican Republic, November 19, 1911.
José Canalejas, Prime Minister of Spain, November 12, 1912.
Nazim Pasha, Turkish Minister of War, January 23, 1913.
Manuel E. Arujo, Premier of Salvador, February 4, 1913.
Francisco I. Madero, President of Mexico, February 23, 1913.
José Pino Suarez, Vice-President of Mexico, February 23, 1913.
George, King of Greece, March 18, 1913.
Archduke Francis Ferdinand of Austria-Hungary and his wife, Countess Sophie Chotck, Duchess of Hohenberg, June 28, 1914.
Jean L. Jaures, French Socialist leader, July 31, 1914.
Guillaume Sam, President of Hayti, July 28, 1915.
General Chen Chi-Nei, of Chinese revolutionary party, May 19, 1916.
General Count von Mirbach, German Ambassador to Russia, at Moscow, July 5, 1918.
Czar of Russia and family, July, 1918.
German Field Marshal von Eichhorn, in the Ukraine, July 31, 1918.
Count Karl Sturgkh, Austrian Premier, at Vienna, October 21, 1918.
Count Stephen Tisza, ex-Pres. Hung. Privy Council, at Budapest, November, 1918.
Sidonio Paes, President of Portugal, December 14, 1918.
Habibullah Khan, Ameer of Afghanistan, at Laghman, February 20, 1919.
"Red Czar," Yankel Sverdlov, at Moscow, early in 1919.
Kurt Eisner, Bavarian Premier, at Munich, February 21, 1919.
War Minister Neuring, at Dresden, Saxony, April 12, 1919.
Hugo Haase, Pres. Ger. Soc. Party, at Berlin, October, 8, 1919.
Gen. Venustiano Carranza, President of Mexico, at Tlaxaltenango, May 20, 1920.
Essad Pasha, Albanian leader, at Paris, June 13, 1920.
Droubi Pasha, Syrian Premier, near Haifa, August 20, 1920.
Inspector O'Sullivan, of British Army, at Dublin Castle, December 17, 1920.
Dr. Z. Jones, Governor of San Juan Province, Argentina; Buenos Aires, November 20, 1921.
Senor Dato, Premier of Spain; at Madrid, March 8, 1921.
Talaat Pasha, Ex Grand Vizier of Turkey; at Berlin, March 15, 1921.
M. Dras Kovics, Jugo-Slav Minister of Interior, at Delnice, Croatia, July 21, 1921.
Mathias Erzberger, Ex-German Vice Chancellor, by two youths, near Offenburg, Baden, August 26, 1921.
Portuguese Premier, Antonio Granjo, Ex-Pres. Machado dos Santos, and two other high officials, Lisbon, October 19, 1921.
Ta Kashi Hara, Japanese Premier, at Tokio, by Korean youth, November 4, 1921.
Bulgarian Minister of War, M. Demitroff, at Kostendil, October 22, 1921.
Heikki Ritavowi, Finnish Minister of the Interior, at Helsingfors, by a merchant, Feb. 14, 1922.
Jemal Azmyk Bey, Ex-Gov. of Trebizond, and B. E. Chakir, of the Turkish Committee of Union and Progress, by an Armenian, at Berlin, April 7, 1922.
Field Marshal Sir Henry H. Wilson, Military Adviser of the Ulster Government, by two Irishmen, at London, June 22, 1922.
Dr. Walter Rathenau, German Foreign Minister, by two German youths, (who, when at bay in a Saxony Castle, killed selves), at Berlin, June 24, 1922.
Djemal Pasha, Ex-Turkish (Unionist), Minister of Marine, Afghan Army Chief of Staff, by two Armenians, at Tiflis, Repub. of Georgia, July 25, 1922.
Gen. Michael Collins, Irish Free State Premier, by rebels, near Bandon, County Cork, Aug. 22, 1922.

# Memorable Dates.

NOTE.—Consult also the various other collections of dates, such as Battles of the Revolution, Great Battles of the Civil War, Marine Disasters, etc., Chief Political Assassinations, etc.

*B.C.*
4700 The Great Pyramid built in Egypt. This is the date estimated by the Encyclopaedia Britannica.
2084 Shepherd Kings conquer Egypt.
1825 Shepherd Kings abandon Egypt.
1722 Sesostris or Rameses King of Egypt.
1546 Scamander founds Kingdom of Troy.
1520 Corintn built.
1606 Pan-Athenian games instituted.
1493 Thebes built by Cadmus.
1453 First Olympic games.
1252 Tyre built by Phoenicians.
1193 Trojan War begins.
1183 Fall of Troy.
1048 David takes Jerusalem.
1028 Solomon's Temple dedicated.
878 Carthage founded.
776 Olympic Era began.
753 Rome founded.
721 Ten Tribes put in captivity.
658 Byzantium founded.
588 Jerusalem taken by Nebuchadnezzar.
536 Restoration of the Jews under Cyrus.
509 Expulsion of Tarquin from Rome.
490 Greeks defeat Persians at Marathon.
480 Xerxes defeated Greeks at Thermopylae.
431 Peloponnesian War begins.
401 Cyrus killed by Artaxerxes at Cunaxa.
385 Rome taken by the Gauls.
356 Temple of Diana at Ephesus burned.
331 Darius defeated by Alexander.
283 Alexandrian Library founded.
264 First Punic War begins.
216 Hannibal defeats Romans.
146 Carthage destroyed by Romans.
55 Caesar conquered Britain.
4 Birth of Jesus Christ.

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*A.D.*
29 The Crucifixion.
70 Jerusalem destroyed by Titus.
313 Constantine converted to Christianity.
410 Romans abandon Britain.
593 Block printing invented by Chinese.
640 Alexandrian Library burned.
756 Moorish Kingdom in Spain founded.
787 Danes land in England.
827 Egbert, first King of England, Oct. 14.
1066 Battle of Hastings, Norman Conquest.
1096 The Crusades began; last was in 1270.
1172 Ireland conquered by Henry II.
1215 King John granted Magna Charta, June 15.
1233 The Inquisition established in Spain by Pope Gregory IX.; revived there in 1480; suppressed by Napoleon, in Spain, in 1808; restored in 1814; finally abolished in 1820.
1258 Assembly of Knights and Burgesses of England (the "Mad Parliament").
1265 First Representative Parliament in England.
1294 First regular English Parliament.
1308 Parliament becomes a Legislative power, with assent essential to the constitution of laws.
1320 Gunpowder invented by Michael Schwartz, a monk at Goslar, Germany.
1381 Wat Tyler's rebellion, England.
1415 Battle of Agincourt, Oct. 25.
1431 Joan of Arc was burned, May 30.
1438 Printing with single types done by Coster, at Haarlem, Holland.
1450-5 Cut metal types invented by Gutenberg, at Mentz, Germany.
1453 Constantinople taken by the Turks.
1455 The Wars of the Roses began.
1462 The Bible was first printed at Mentz.
1470 Caxton set up his printing press.
1492 Columbus discovered America, Oct. 12.
1497 Cabot discovered east coast of Canada, June 24.
1517 The Reformation began in Germany.
1519 Cortez began conquest of Mexico.
1534 Cartier ascended St. Lawrence River.
1535 The first English Bible printed.
1539 Monasteries were closed in England.
1558 Accession of Queen Elizabeth, Nov. 17.
1565 Revolt of the Netherlands began.
—— St. Augustine, Fla., settled.
1572 St. Bartholomew massacre, Aug. 24.
1588 Spanish Armada defeated, July.
1603 Union of England and Scotland.
1607 Jamestown, Va., settled, May 13.
1609 Hudson River first explored.
1615 Champlain entered Lake Ontario.
1616 Shakespeare died, April 23.
1618 Thirty Years' War in Germany began.
1619 First Representative American Legislative Assembly, Jamestown, Va., July 30.
—— First negro slaves brought to America.
1620 Pilgrims of the Mayflower landed; "Mayflower Compact" was signed aboard the ship, Nov. 11; they went ashore at Plymouth, Mass., Dec. 20.
1623 Manhattan Island settled.
1632 Canada and Acadia ceded to France.
1634 Maryland settled by Roman Catholics.
1636 Rhode Island settled by Roger Williams; Harvard College founded.
1639 First printing in America. Freeman's Oath, and an almanac, New England.
1640 Cromwell's Long Parliament assembled; Lake Erie discovered by Brebeuf and Chaumont.
1642 Colonies of Conn., New Haven, New Plymouth and Mass. (incl. New Hampshire), form the New England Confederation.
1649 Charles I. beheaded, Jan. 30.
1653 Cromwell became Lord Protector.
1660 Restoration of the Stuarts; St. Petersburg founded.
1664 New York conquered from the Dutch.
—— The great plague of London.
1666 The great fire of London began, Sept. 2.
1670 Hudson Bay Co., chartered, May 13.
1678 Roman Catholics excluded from English Parliament.
1679 Habeas Corpus Act passed in England.
1682 Pennsylvania settled by Wm. Penn.
1685 Revocation of the Edict of Nantes.
1688 James II. abdicated, Dec. 11.
1689 Irish Parliament of James II. at Dublin; attaints 3,000 Protestants.
—— Lachine (Canada) Massacre, Aug. 5.
1690 Battle of the Boyne, July 1 (July 12, new style).
—— First newspaper in America; at Boston.
1704 Gibraltar taken by the English July 24; Battle of Blenheim, Aug. 13.
1707 First Parliament of Great Britain.
1713 Peace of Utrecht, April 11.
1714 Accession of House of Hanover, Aug. 1.
1715 First Jacobite Rebellion in Great Britain; the second in 1745.
1717 Snow fell 10 to 20 ft. deep in New England, Feb. 20-24.
1720 South Sea Bubble.
1745 Battle of Fontenoy, April 30.
1754 New Hampshire, Mass., R. I., Conn., N. Y., Penn., and Md., hold a convention at Albany to consider a Colonial Confederacy, June 19.
1756 Black Hole suffocation in Calcutta.
1759 Canada taken from the French.
1763 Pontiac's conspiracy; Treaty of Paris.
1765 Stamp Act enacted by Parliament, March.
—— N. Y., R. I., Del., Mass., Conn., N. J., Penn., Md. and S. C., hold Stamp Act Congress at N. Y. City and issue a Declaration of Rights, Oct. 7.
1770 Boston Massacre, March 5.
1773 Steam Engine perfected by Watt.
—— Tea destroyed in Boston Harbor, Dec. 16.
1774 First Continental Congress, Sept. 5-Oct. 26, Philadelphia.
1775 First American Anti-Slavery Soc. founded by Quakers, April 14, Phila.
—— Battle of Lexington, April 19.
—— Second Continental Congress, May 10, Phila.
—— Congress agrees on Articles of Confederation, May 20.
—— Mecklenburg, North Carolina, Declaration of Independence, May 20.
—— Washington chosen head of American Army, June 15.
—— Battle of Bunker Hill, June 17.
1776 Tom Paine publishes "Common Sense."
—— Rhode Island declares her independence, May 4.
—— Battle of Fort Moultrie, Charleston, S. C., June 28.
—— Declaration of Independence, July 4.
—— Battle of Long Island, Aug. 27.
—— Battle of Harlem Heights, Sept. 16.
—— Nathan Hale executed, Sept. 22.
—— Washington crossed the Delaware River, Dec. 8.
—— Third Continental Congress, Balto., Dec. 20.
—— Battle of Trenton, N. J., Dec. 25-26.
1777 Vermont declares independence, January.
—— Fourth Continental Congress, Phila., March 4.
—— Henry Clay born, April 12.
—— Stars and Stripes flag adopted by Congress, June 14.

1777 Battle of Bennington, Vt., Aug. 16.
—— Fifth Continental Congress meets (for 1 day), Lancaster, Pa., Sept. 27.
—— Sixth Continental Congress meets, York, Pa., Sept. 30.
—— Burgoyne's surrender, Oct. 17.
—— Articles of Confederation adopted by Congress, Nov. 15.
1778 Seventh Continental Congress meets, Phila., July 2.
—— Wyoming Valley, Pa., massacre, by Indians and Tories, July 4.
—— N. J., Mass., R. I., Conn., Pa., N. Y. and Va., and S. C. sign the Articles of Confederation, July 9; N. C., July 21; Ga., July 24.
—— French fleet arrives in Narragansett Bay, July 29.
—— Cherry Valley, N. Y., massacre by Indians and Tories, Nov. 10.
—— N. J. signs Articles of Confederation, Nov. 26.
1779 Delaware signs Articles of Confederation, Feb. 12-May 5.
—— Capt. Cook killed, Feb. 14.
1779-'80 Long Island Sound frozen over.
1780 Bank of Penna. chartered (first in U. S.), March 1.
—— Massacre of Americans in Waxhaw, N. C., by British, May 29.
—— Major Andre captured, Sept. 23; hung Oct. 2.
1781 Congress announces complete ratification of Articles of Confederation, March 1.
—— Cornwallis surrenders at Yorktown, Oct. 19.
1782 Congress adopts great seal of U. S., June 20.
—— Preliminary peace articles between U. S. and Great Britain signed, at Paris, Nov. 30; by this treaty the Newfoundland fisheries were regulated with the U. S.
1783 Eighth Continental Congress meets, Princeton, N. J., June 30.
—— Fiery meteor passed over England, Aug. 18.
—— Definitive treaty of peace between U. S. and Great Britain, Sept. 3.
—— Congress demobilizes American Army, Oct. 18-Nov. 3.
—— British evacuated New York, Nov. 25.
—— Ninth Continental Congress meets, Annapolis, Md., Nov. 26.
—— Washington delivers his farewell address, at Fraunces's Tavern, N. Y., Dec. 4; resigns his army commission Dec. 23, and retires to Mt. Vernon, Va.
1784 Congress ratifies peace treaty with Great Britain, Jan. 14.
—— First daily paper in America, Advertiser, issued at Phila.
—— John Fitch operated his steamboat on Delaware River.
—— Tenth Continental Congress meets, Trenton, N. J., Nov. 1.
1785 Eleventh Continental Congress meets at N. Y., Jan. 11.
1786 Shay's rebellion, in Mass.
1787 U. S. Constitution ratified at a convention of delegates from the States, at Phila., May 14-Sept. 17.
—— Fourteenth (last) Continental Congress meets at N. Y., Nov. 5; adjourns 1788, Oct. 21.
1788 First settlement in Australia, Jan. 26.
1789 First Presidential election, Feb.
—— U. S. Constitution in effect in ratifying States, March 4.
—— First U. S. Congress meets, N. Y., April 6.
—— Washington first inaugurated President, April 30.
—— The French Revolution began, July 14, with destruction of Bastille prison.
—— U. S. Supreme Court created, Sept.
—— North Carolina ratifies Constitution, Nov. 21.
1790 Rhode Island ratifies Constitution, May 29.
1792 King of Sweden shot by Ankerstrom.
—— France proclaimed a Republic.
—— First U. S. Mint established, April 2.
—— First Canadian Legislature.
1793 Canada forbids slave importation.
—— Cotton-gin invented by Whitney.
—— Louis XVI. of France executed, Jan. 21.
1796 Vaccination discovered by Jenner.
1798 The Irish rebellion.
—— Lord Nelson defeats French fleet near Egypt, Aug. 1.
1799 Bonaparte declared First Consul.
1800 Sixth Congress (2d session) meets (for first time) at Washington, Nov. 17.
—— Battle of Marengo, June 14; Battle of Hohenlinden, Dec. 3.
1801 Union of Great Britain and Ireland, Jan. 1; first Parliament of United Kingdom.
1803 England and France renew war.
—— Louisiana purchased from the French.
1804 Bonaparte became Emperor of France.
1805 Battle of Trafalgar; death of Nelson, Oct. 21.
1805 Battle of Austerlitz, Dec. 2.
1807 British take Copenhagen.
—— Robert E. Lee born, Jan. 19.
—— Fulton's first steamboat voyage.
1812 Second United States War with Great Britain, declared June 19.
—— The French expedition to Moscow; city burned by the Russians, Sept. 16.
1813 Perry's victory on Lake Erie, Sept. 10.
1814 The printing machine invented.
—— Scott's "Waverly" published.
—— Bonaparte abdicated; Allies entered Paris, March 31.
—— British burned White House at Washington, Aug. 24.
—— Battle of Lake Champlain, Macdonough's Victory, Sept. 11.
—— Treaty of Ghent, Dec. 24.
1815 Battle of New Orleans, Jan. 8.
—— Battle of Waterloo, June 17-18; Bonaparte surrendered to British, July 16.
—— "Holy Alliance" formed at Paris, Sept. 26.
1817 Work begun on Erie Canal, July 4.
1818 Imprisonment for debt abolished at New York Dec. 6.
1819 First steamship crossed the Atlantic. This was the Savannah, which went from N. Y. to Savannah (March 28-April 12), and went from Savannah to Liverpool (May 22-June 20).
1821 Napoleon died at St. Helena, May 5.
1822 Famine in Ireland.
1823 Monroe Doctrine declared, Dec. 2.
1828 First passenger railroad in United States (the Baltimore and Ohio), was begun, July 4.
—— War between Russia and Turkey.
—— Catholics readmitted to Parliament.
1829 Welland Canal opened.
1830 Revolution in France, Orleanist succession.
1831 London Bridge opened.
1833 Steamship Royal William crossed from Nova Scotia to England.
—— Fire at N. Y.; 70 houses burned.
—— First opera house opened at N. Y., Nov. 18.
1834 Last lottery in England, Aug. 28.
1835 Morse invented the telegraph.
—— Seminole War in Florida began.
—— Great fire in New York City, Dec. 16-17; 674 buildings burned.
1837 Accession of Queen Victoria, June 30.
—— Rebellion in Canada.
1838 Fire destroyed 1,158 buildings at Charleston, S. C., April 27.
1839 Seven hundred die by earthquake at Martinique.
1841 Upper and Lower Canada united, Feb. 10.
1842 Fire at Hamburg, Germany, destroyed 1,992 buildings, May 4.
1843 San Domingo earthquake.
—— First telegraph line in U. S., Washington to Baltimore.
1845 Texas annexed.
—— Fire destroyed 1,000 buildings at Pittsburgh, Pa., April 10.
—— Fire destroyed 1,300 buildings at N. Y., June 28; and 600 buildings at Albany, N. Y., July 24.
1846 Sewing machine completed by Howe.
—— The Irish potato famine.
—— British Corn Laws repealed, June 26.
—— War with Mexico began; treaty signed July 4, 1848.
1847 Battle of Chapultepec, Sept. 13.
1848 French Revolution. Republic succeeded reign of Louis Philippe.
—— Washington Monument, at Wash., D. C., begun July 4.
—— U. S. signed peace with Mexico, July 4.
—— Fire destroyed 3,000 buildings at Constantinople, Aug. 16.
—— Gold discovered in California, September.
1850 Clayton-Bulwer treaty between U. S. and Britain.
1851 Gold discovered in Australia, Feb. 12.
—— Fire destroyed 2,500 buildings at San Francisco, May 3-5; also 500 buildings there, June 22.
—— First International Exhibition, London.
1852 Louis Napoleon became Emperor of France.
1853 Crimean War began.
1854 Japan opened by Commodore Perry.
1855 Sebastopol falls; Crimean War ends, Sept. 8.
1857 The great mutiny in India.
—— The Dred Scott decision.
—— First Atlantic Cable begun to be laid, Valentia, Ireland, Aug. 5; first messages, Aug. 5, 1858.
1859 John Brown's raid on Harper's Ferry, Va., Oct. 16.
—— First petroleum oil well opened, Titusville, Pa., Aug. 26.
1860 Prince of Wales visited the U. S.
—— South Carolina seceded, Dec. 20.
1861 Emancipation of the Russian serfs.

1861 Southern Confederacy formed, Feb. 4; elected Jefferson Davis President, Feb. 9; Fort Sumter fired on April 12.
—— Battle of Bull Run, July 21.
1862 Battle of Antietam, Sept. 17.
1863 Lincoln's Emancipation Proclamation (issued Sept. 22, 1862) in effect Jan. 1.
—— Battle of Gettysburg, July 1-3.
1863 Draft riots at N. Y. City, July 13-16.
—— Battle of Chickamauga, Sept. 19-20.
1864 War between Germany and Denmark.
1865 Lee surrendered at Appomattox, April 9.
—— President Lincoln shot by J. Wilkes Booth at Washington, April 14; died April 15.
1866 Fire destroyed centre of Portland, Me., and made 2,000 homeless, July 4.
—— Fenians invaded Canada.
—— Second Atlantic cable laid. First (1857-8) had lasted only a little while.
—— Fire destroyed 2,500 buildings at Quebec, Canada, Oct. 13.
1867 Maximilian of Mexico executed.
—— The Dominion of Canada established.
1868 President Andrew Johnson impeached, tried and acquitted.
—— U. S.-China (Burlingame) treaty, July 4.
—— Queen Isabella flees from Spain, Sept. 30.
1869 Financial "Black Friday" in New York, Sept. 24.
—— Red River rebellion in Canada.
—— Suez Canal opened, Nov. 17.
1870 Franco-German War begun, July 19; France proclaimed Republic, Sept. 4.
1871 The German Empire re-established.
—— The great fire in Chicago, Oct. 8-11; 18,000 buildings destroyed.
1872 Col. Jas. Fisk, Jr., "King of Wall Street," shot at N. Y., by Edw. S. Stokes, Jan. 6; he died two days later; Stokes got 4 years in prison.
—— Eruption of Mt. Vesuvius, April 20.
—— The great fire in Boston, Nov. 9; 748 buildings destroyed.
1873 Fifth Ave. Theatre burned, N. Y., Jan. 1.
—— "Boss" W. M. Tweed at N. Y. convicted of fraud.
—— Panic at N. Y. began with bank failures on Sept. 20.
1874 Over 60 acres at Chicago burned.
1876 Centennial Exposition at Philadelphia.
—— Jarrett and Palmer train, New York to San Francisco, left Jersey City, May 31; arrived San Francisco, June 4; time of journey, 83 hours 34 minutes.
—— Tidal wave, Bengal, India; 200,000 drowned.
—— Hallett's Reef (Hell Gate) blown up, Sept. 2.
—— Brooklyn Theatre fire, Dec. 5; 289 lives lost.
1877 Russia declares war on Turkey, April 24.
—— Fire swept over 600 acres of City of St. John, N. B., June 20; 100 lives lost.
—— Eleven Molly Maguires hanged at Pottsville, Pa., for murders, June 21.
1878 Paris Exposition.
—— "L" opened in New York, April 30.
—— Masked burglars got $2,757,700 at Manhattan Savings Institution, N. Y., Oct. 27.
1879 English massacred at Cabul, Sept. 4.
1881 East River frozen over, people crossed on foot.
—— President Garfield shot, July 2.
—— Fire kills 850 at Ring Theatre, Vienna, Dec. 8.
1882 Fire destroyed most of Kingston, Jamaica, Dec. 11.
—— Tuberculosis germ discovered by Dr. Koch.
1883 Brooklyn Bridge opened May 24.
1884 Panic at N. Y., failure of Marine Bank and Jas. R. Keene, May 5.
—— Bartholdi's Statue of Liberty presented to U. S. at Paris, July 4.
1885 First electric street railway in U. S., at Baltimore, opened Sept. 1.
—— Hell Gate rocks blown up, Oct. 10.
—— Louis Riel, Canadian rebel leader, executed Nov. 11.
1886 Haymarket Anarchist riots, Chicago; 7 police killed, 60 wounded, May 4.
—— Steve Brodie jumped from Brooklyn Bridge. July 23.
—— Charleston, S. C., earthquake, Aug. 31.
—— Statue of Liberty on Bedloe's Island unveiled in presence of 1,000,000 people. The World raised $ 00,000 to erect the statue, Oct. 28.
1887 Fire kills 200 at Opera Comique, Paris, May 25; and 200 at theatre, Exeter, England, Sept. 4.
—— Flood in Hoang-Ho River, China; 900,000 perish.
1888 Great blizzard in Eastern part of U. S., March 11-14.
1889 Brazil became a republic.
—— Johnstown, Pa., flood, May 31; 2,209 lives lost.
1891 Park Place disaster, N. Y., 64 killed, Aug. 22.
1892 Fire destroyed 28 lives at Hotel Royal, N. Y., Feb. 6; and 600 in building, St. John's, N. F., July 8.
—— U. S.-Canada boundary treaty.
—— Pinkerton guards killed several steel strikers, Homestead, Pa., July 16.
1893 World's Fair at Chicago, opened May 1.
—— Queen Lilluokalani of Hawaii deposed, Jan. 16.
1894 Chinese-Japanese War began.
—— Hawaii made a republic, July 4.
—— First gasoline vehicle in operation, July 4.
—— Battle of Yalu, Sept. 17.
—— Capt. Dreyfus degraded, Dec. 23; restored to rank, July 12, 1906.
1895 Roentgen Ray discovered by W. K. Roentgen, a German physicist.
—— Cuban Revolution began, Feb. 20.
1896 President Cleveland appointed Venezuela Boundary Commission, Jan. 1; treaty signed Feb. 2, 1897.
—— "Greater New York" bill signed, May 11.
—— Toronado killed several hundred at St. Louis, May 17.
1897 The Turkish-Greek War.
—— Fire killed 150 at charity bazaar, Paris, May 4.
1898 U. S. Battleship Maine blown up in harbor of Havana, Cuba, Feb. 15.
—— War began between Spain and the United States, April 21.
—— Dewey destroyed the Spanish fleet in Manila Bay, May 1.
—— Battles of San Juan and El Caney, July 1-3.
—— Battle of Santiago de Cuba, July 3.
—— Peace protocol signed between the United States and Spain, Aug. 12.
—— Peace treaty signed by American and Spanish delegates at Paris, Dec. 10.
—— Battle of Omdurman, Sept. 2.
1899 Spanish Peace Treaty ratified by U. S. Senate, Feb. 6.
—— Universal Peace Conference at Hague, called by Czar, May 18.
—— The South African War began, Oct. 11.
—— Philippine-American War began, Feb. 4.
—— Windsor Hotel fire (N. Y.) March 17; 45 lives lost.
1900 Chicago drainage canal opened, Jan. 2.
—— N. Y. subway contract let to John B. McDonald, Jan. 2.
—— Paris Exposition.
—— Boxer insurrection in China.
—— Great fire at Ottawa and Hull, Canada, April 26.
—— Hoboken docks and ships fire, June 30; 145 lives lost.
—— The Galveston tornado, Sept. 8; 6,000 lives lost.
1901 Death of Queen Victoria, Jan. 22.
—— J. P. Morgan organized U. S. Steel Corp.
—— Aguinaldo captured by Gen. Funston, Mar. 23.
—— Northern Pacific Railway stock "corner" and panic, May 9.
—— Pan-American Exposition, May 1-Nov. 2.
—— Jacksonville, Fla., swept by $11,000,000 fire, May 3.
—— Assassination of President McKinley, Sept. 6.
—— Marconi signalled letter "S" across Atlantic from England to Newfoundland, Dec. 12. First message sent in Dec. 1902.
1902 Martinique destroyed by volcano.
—— Pennsylvania coal strike of 145,000 anthracite miners, May 12. Settled by President Roosevelt's commission, Oct. 23.
—— Fire destroyed 456 buildings at Paterson, N. J., Feb.; and 115 at a church, Birmingham, Ala., Sept. 20.
—— Cuban Republic inaugurated, May 20.
—— Edward VII. crowned King of Great Britain, Aug. 9.
—— First International Arbitration Court opened, Hague, October.
1903 Kishineff massacre.
—— Republic of Panama established, Nov. 13.
—— Alaska boundary treaty ratified by U. S., Feb. 11.
—— U. S.-Philippine cable completed, message sent around the world in 12 minutes, July 4.
—— Fire kills 602 at Iroquois Theatre, Chicago, Dec. 30.
1904 The great fire in Baltimore, Feb. 7; 2,500 buildings destroyed.
—— The Russo-Japanese War began, Feb. 6.
—— St. Louis Exposition opened, May 1.
—— Steamboat General Slocum burned, June 15; 1,021 lives lost.
—— Subway opened, New York, Oct. 27.
1905 Port Arthur surrendered to Japanese, Jan. 2.
—— Battle of Mukden, Feb. 20–Mar. 15.
—— Battle of Sea of Japan, May 27–28.
—— Peace terms between Japan and Russia agreed on at Portsmouth, N. H., Aug. 25.
—— Norway dissolved union with Sweden.
1906 Eruption of Vesuvius, April 5–12.

1906 San Francisco earthquake and conflagration, April 18-19; over 500 lives were lost.
1907 Earthquake killed 1,400, Kingston, Jamaica.
—— Wall Street's "silent panic," March 14.
—— Coal mine fire killed 400, Fairmount, Va.
—— Jamestown Exposition opened, April 26.
—— Bridge over St. Lawrence at Quebec collapsed, Aug. 29.
—— U. S. Judge, K. M. Landis, Chicago, fined Standard Oil $29,240,000 as rebate fines.
1908 Great earthquake in Southern Italy.
—— American battlesnip fleet nearly circumnavigated the globe.
—— Fire killed 169 at theatre, Boyertown, Pa., Jan. 4, and 174 at school at Collinwood, Ohio, March 4.
—— Chelsea (Mass.) fire, April 12.
—— Dr. F. A. Cook discovered North Pole, he claimed, April 21.
—— Gov. Hughes signed bill abolisning race track gambling in N. Y. State, June 11.
—— District of Columbia Supreme Court sentenced Samuel Gompers and others to prison for contempt of court in Bucks Stove case, Dec.
1909 R. E. Peary, U. S. N., discovered North Pole, April 6.
—— Hudson-Fulton celebration, New York, Sept.–Oct.–Nov.
1910 Republic of Portugal established.
—— Union of South Africa formed, May 31.
1911 U. S. Supreme Court ordered Standard Oil combine dissolved, May 15; same decree as to American Tobacco Co., May 29.
—— The Italian-Turkish War began Sept. 29.
—— Postal Banks established in United States, at N. Y., Chicago, St. Louis and Boston, Aug. 1.
—— Triangle Waist factory fire, N. Y., 148 killed, March 25.
—— Flood in Yangtse Kiang River, China; 100,000 drowned.
—— President Diaz of Mexico resigned May 25
—— The South Pole discovered, Dec. 14, by Capt Roald Amundsen.
—— China proclaimed a Republic.
1912 Balkan War began.
—— Equitable Building burned, Jan. 9; 6 lives lost.
—— Steamship Titanic wrecked by iceberg, off Canadian coast, April 14-15.
1913 Foulke Engle Brandt pardoned by Gov. Sulzer, New York, Jan. 17.
—— Ohio and Indiana floods, March 25-27; 732 lives lost. In Brazos (Tex.), floods, 500 died.
—— Peace Palace at Hague dedicated.
—— Steamer Volturno disaster, Oct. 9.
—— Mine explosion, Cardiff, Wales; 400 killed, Oct. 14.
1914 World War began in Europe. Archduke Francis of Austria assassinated at Sarajevo, June 28; Austria declared war on Serbia, July 28; Germany invaded France at Cirey; Russian troops invaded Germany, Aug. 2; Germans entered Liege, Aug. 7; British Expeditionary Force landed in France, Aug 16; Germans occupied Brussels, Aug. 20; Japan declared war on Germany, Aug. 23; Austria declared war on Japan, Aug. 25; Louvain bombarded and damaged, Aug. 25; Battle of the Marne, Sept. 6–10; Germans occupied Antwerp, Oct. 9; De Wet's rebellion in South Africa, Oct. 28; Japanese capture Tsingtau, Nov. 7; German cruiser Emden destroyed at Cocos Island, Nov. 10.
—— S. S. Empress of Ireland sunk, May 29.
—— Great fire in Salem, Mass., June 25; 1,000 buildings destroyed.
—— Panama Canal opened, Aug. 15.
—— Cape Cod Canal opened.
1915 British naval victory, North Sea, off Dogger Bank, Jan. 24; German official submarine "blockade" of Great Britain began, Feb. 18; British "Orders in Council" to prevent commodities reaching or leaving Germany, March 1; Battle of Ypres, April 22–28; Germans invade Baltic provinces of Russia, April 30; Italy denounces treaty of Triple Alliance, May 4; steamship Lusitania sunk, May 7, 1,179 lives lost; steamship Arabic sunk, Aug. 19; Allied forces land at Salonica, Oct. 5; Nurse Cavell shot at Brussels, Oct. 12; Italian liner Ancona sunk, Nov. 9.
—— Panama-Pacific International Exposition opened, Feb. 20.
—— Excursion steamer Eastland turned over at Chicago, July 24; over 850 lost.
—— Wireless communication between Japan and United States established, July 27.
—— China restored as a monarchy.
1916 Germans attack Verdun, Feb. 21–28; Rebel rising in Dublin, April 24; naval battle off Jutland, May 31; third battle of Ypres, June 2; battle of Somme, July 1–10; second battle of Somme, July 14–Aug. 5; Capt. Fryatt executed, July 27; President Wilson's Peace Note publishcd, Dec. 20.
1916 Black Tom dock explosion and fire, Jersey City, July 30; $33,000,000 loss.
1917 Germany begins unrestricted submarine warfare, Feb. 1; United States broke off diplomatic relations with Germany, Feb. 3; United States declared a state of war existed with Germany, April 6; Russian Czar abdicates, March 15; first American troops landed in France, June 26; Russia proclaimed a Republic, Sept. 15; first shot by American troops in France, Oct. 27; first American casualties in France, Nov. 3; Bolsheviks under Lenin seize supreme power in Russia, Nov. 7; Battle of Cambria, Nov. 20–Dec. 4; United States declared a state of war existed with Austria, Dec. 7; Jerusalem captured, Dec. 9.
—— King Constantine of Greece abdicated, June 12.
—— Halifax disaster, Dec. 6; explosion of a munition ship in harbor in collision caused fire that laid in ruins one-third of the city; killed 1,226, with 400 others missing; destroyed 3,000 houses, with $20,000,000 damage.
1918 Peace signed at Brest-Litovsk between the Bolsheviks on the one side, and Germany, Austria-Hungary, Bulgaria and Turkey on the other, March 3; peace signed between Germany and Finland, March 7; battle of the Somme, March 21 to April 6; Paris bombarded by long range guns at distance of 75 miles, March 23; British naval forces raid Zeebrugge and Ostend, April 22; pro-German plot discovered in Ireland, Sinn Fein leaders arrested, May 17; battle of the Aisne, May 27–June 5; Czar Nicholas of Russia, the Empress, their four daughters and one son, Prince Dolgoroukoff, Dr. Bodkin, a lady-in-waiting and a nurse were shot by Bolshevik orders at Ekaterinburg, July 16; at Perm, also in July, the Bolshevists assassinated the Czar's brother, Grand Duke Michael, and at Alapaievsky, north of Ekaterinburg, they killed the Grand Dukes Sergius Mikhailovitch, Igo Constanthovitch and Ivan Constantinovitch; German retreat across the Marne begins, July 19; battle of St. Mihiel, Sept. 12–16; United States troops take St. Mihiel, Sept. 13; battle of the Meuse-Argonne, Sept. 20 to Nov. 11; Franco-American attack in Argonne, Sept. 26; British attack breaks Hindenburg line, Sept. 27; Bulgaria signs armistice and surrenders, Sept. 29; Ferdinand of Bulgaria abdicates, Oct. 5, United States troops capture St. Etienne, Oct. 6.
—— Allies capture Cambrai, Le Cateau and Roncroy, Oct. 9; Allies occupy Ostend, Bruges and Lille, Oct. 17; Germans in third peace note accept Persident Wilson's terms and recall submarines to their bases, Oct. 20; British and Italians cross the Piave, Oct. 27; armistice granted to Turkey, Oct. 30; Hungarian Republic proclaimed in Budapest, and Republic of German-Austria in Vienna, Nov. 1; Austria accepts truce terms, Nov. 4; United States troops capture Sedan, Nov. 7; revolution in Kiel and Hamburg, Nov. 7; Bavaria proclaimed a republic, Nov. 8; the Kaiser abdicates, Nov. 9; he flees to Holland, Nov. 10; armistice in World War signed, Nov. 11; German fleet surrenders to British, Nov. 21; United States troops enter Mainz, Dec. 6; American troops crossed the Rhine, Dec. 13.
—— Malbone St. Tunnel rail (B. R. T.) wreck, 97 killed, 100 hurt, Nov. 2.
1919 Peace Conference opens informally at Paris, Jan. 12; formally inaugurated at Versailles, Jan. 18; treaty signed at Versailles, June 28, by the Treaty Plenipotentiaries of Germany and the Allied Powers; President Wilson gave the treaty to the Senate, July 10; ratified by the German National Assembly, July 10; by the British Parliament, July 25; and by King George, July 31; by the King of Italy, Oct. 7; by France, Oct. 13, and by Japan, Oct. 27; rejected by the United States Senate, Nov. 19.
—— Three U. S. Navy seaplanes left Trepassy, Newfoundland, May 16; one, the N-C 4, reached the Azores, May 17; Lisbon, May 27; Plymouth, England, May 31; Harry G. Hawker and MacKenzie Grieve fell in

midocean, on an attempted flight, May 18, from Newfoundland to Ireland, but were rescued. John Alcock and A. W. Brown made, June 14-15, a non-stop air flight from Newfoundland to Ireland. A British dirigible balloon, R-34, left Scotland, July 2, and descended at Mineola, L. I., July 6. It left for England July 10, and arrived there July 13. The U. S. transcontinental air flight, New York to San Francisco and return, Oct. 8-18, was won by Lieut. W. B. Maynard and Lieut. Alex. Pearson.

1919 Nation-wide bomb plot, at the home of Attorney General Palmer; the Red was killed by his own bomb, June 2.

—— Airplane service between New York and Chicago begun July 1.

—— Big port strike at N. Y., Boston, etc., begun July 16.

—— Dirigible balloon exploded at Chicago; 10 killed.

—— Thirty-one killed, 500 injured, in race riot, at Chicago, July 27.

—— Boston police strike, begun Sept. 9.

—— Steel workers strike all over U. S., beginning Sept. 22; railway strike in England, begun Sept. 27; soft coal miners in U. S. began strike Oct. 31.

1920 The United States Senate for the second time defeated the German treaty, March 19.

—— The U. S. Transport Buford (Soviet Ark) took to Finland Emma Goldman, Alexander Berkman and 200 other Reds (Dec., 1919–Jan., 1920).

1920 The Eighteenth Amendment to the U. S. Constitution providing for Nation-wide prohibition, was proclaimed in effect Jan. 16.

—— The Nineteenth Amendment giving suffrage to women, was proclaimed in effect Aug. 26.

—— Wall St., N. Y., bomb explosion, killed over 30, injured over 100; did over $2,000,000 property damage, Sept. 16.

1921 President Harding signed joint resolution (passed by House June 30, by Senate July 1) of Congress declaring peace with Germany and Austria, July 2. The Treaty was signed Aug. 25, at Berlin, by United States and German representatives; was ratified Sept. 17 by the German National Council; ratified by the United States Senate (66 to 20) on Oct. 18.

—— Sinn Feiners burned Custom House, Dublin, May 25.

—— Arkansas River floods and rain swept away 665 houses at Pueblo, Col., making 3,500 persons homeless; property loss over $20,000,000; 1,500 dead or missing, June 3-4.

—— Explosion of a new gas plant at Oppan, on the Rhine, Germany; killed hundreds and destroyed property worth millions, Sept. 21.

—— Collapse and explosion of dirigible balloon, ZR-2, over Hull, England, over 40 were killed; Aug. 25.

—— Limitation of Armaments Conference met at Washington in November; it adjourned Feb. 6, 1922.

1922 Roof of Knickerbocker (movie) Theatre collapsed at Washington, D. C.; 98 died from injuries; Jan. 28.

—— Dirigible balloon, Roma, exploded descending at Hampton, Va.; 34 died of injuries; Feb 21.

## HIGHEST LATITUDES REACHED IN POLAR EXPLORATIONS.

(Prepared by the National Geographic Society, Washington, D. C., Gilbert Grosvenor, President.)

The following is a record of the highest latitudes attained in Arctic and Antarctic exploration during the past three hundred years in the Eastern and Western Hemispheres, both by land and by sea: * Represents new records.

ARCTIC EXPLORATION—WESTERN HEMISPHERE.

| COMMANDER. | Date. | No. Lat. | Locality. |
|---|---|---|---|
| *John Davis | 1588 | 72° 12′ | Sanderson's Hope, in West Greenland Waterways. |
| William Baffin | 1616 | 77° 45′ | Ellesmere Land. |
| William Morton, Elisha Kent Kane Expedition | 1854 | 82° 27′ | Cape Constitution. |
| Sir Edward Augustus Inglefield | 1859 | 78° 28′ | Smith Sound. |
| Dr. Isaac I. Hayes | 1861 | 81° 35′ | Cape Lieber, Grinnell Land. |
| Capt. Charles Frederick Hall | 1871 | 82° 2′ | Near Thank God Harbor. |
| *A. H. Markham, Nares Expedition | 1875 | 83° 20′ | Northeast Grinnell Land. |
| *James B. Lockwood and Gen. David L. Brainard, Gen. A. W Greely Expedition | 1882 | 83° 24′ 5″ | Greenland Coast. |
| *Robert E. Peary | 1892 | 83° 27′ | Greenland Coast. |
| Robert E. Peary | 1902 | 84° 17′ | Grinnell Land. |
| *Robert E. Peary (Apr. 21) | 1906 | 87° 6′ | North of Greenland. |
| *Robert E. Peary (Apr. 6) | 1909 | 90° | The North Pole. |

ARCTIC EXPLORATION—EASTERN HEMISPHERE.

| COMMANDER. | Date. | No. Lat. | Locality. |
|---|---|---|---|
| *William Barents | 1596 | 79° 49′ | Spitzbergen & Gr'nland Sea. |
| *Henry Hudson | 1607 | 80° 23′ | Spitzbergen & Gr'nland Sea. |
| *Phipps | 1773 | 80° 48′ | Spitzbergen & Gr'nland Sea. |
| *Scoresby the Elder | 1806 | 81° 30′ | Spitzbergen & E. Greenland. |
| *Sir William Edward Parry | 1827 | 82° 45′ | North of Spitzbergen. |
| Baron Nordenskjold and Otter | 1868 | 81° 42′ | Spitzbergen. |
| J. Payer | 1873 | 81° 50′ | Franz Josef Land. |
| *Fridtjof Nansen | 1893-5 | 86° 4′ | North of Franz Josef Land. |
| Frederick George Jackson | 1894-7 | 81° 20′ | Franz Josef Land. |
| Prince Luigi Amadeo | 1899 | 82° 4′ | Franz Josef Land. |
| *Capt. Cagni, Duke of Abruzzi's Expedition | 1899 | 86° 34′ | North of Franz Josef Land. |
| Ziegler Polar Expedition | 1904 | 82° | Franz Josef Land. |

ANTARCTIC EXPLORATION.

| COMMANDER. | Date. | Latitude. | Longitude. | Means. |
|---|---|---|---|---|
| * Capt. James Cook | 1773 | 71° 10′ S. | 106° 54′ W. | Sailing vessel. |
| †Admiral Charles Wilkes (Jan. 16) | 1840 | ..... | 158° E. | Sailing vessel. |
| *Capt. Ross | 1842 | 77° 32′ S. | ..... | Sailing vessel. |
| *Borchgrevinck | 1899 | 78° 50′ S. | ..... | Steamship. |
| *Capt. Robert F. Scott | 1902 | 82° 17′ | 163° E. | Steamship and sledge journeys. |
| *Sir Ernest Shackleton | 1908 | 88° 20′ | 162° E. | Steamship and sledge journeys. |
| *Roald Amundsen (Dec. 14) | 1911 | 90° | ..... | Steamship and sledge journeys. |
| Capt. Robert F. Scott (Jan. 18) | 1912 | 90° | ..... | Steamship and sledge journeys. |

Captain Cagni, on his journey in 1899, reached 86° 34′ N., 64° E.—at that time the most northerly point attained by man—within 206 miles of the North Pole. Sir Ernest Shackleton in 1908 personally led the party which pushed to latitude 88° 20′ S., 162° E. longitude, surpassing his predecessors by 366 geographical miles and reaching within 97 miles of the South Pole.

†The time and place from which Admiral Wilkes first saw the Antarctic Continent.

NOTE BY THE EDITOR.—Dr. Frederick A. Cook claims to have discovered the North Pole on April 21, 1908.

## TROOPS ENGAGED IN U. S. WARS.

| WARS. | DATES. From— | DATES. To— | TROOPS ENGAGED. Regulars. | Militia & Volunteers. | Navy. | Total. | Individuals (Estimated.) |
|---|---|---|---|---|---|---|---|
| Revolution, War of the | April 19, 1775 | April 11, 1783 | 130,711 | 58,750 | 15,000 | ..... | ..... |
| Estimated additional | ..... | ..... | ..... | 105,330 | ..... | 309,791 | 184,038 |
| NW. Ind., Miamis, Wyandots, Delawares, Potawatomies, Shawnees, { Gen. Harmer | Sept. 19, 1790 | ..... | 320 | 1,133 | ..... | { 1,453 | |
| Chippewas, { Gen. St. Clair | ..... | ..... | ..... | ..... | ..... | { 2,300 | 5,627 |
| and Ottawas.. { Gen. Wayne. | ..... | Aug. 3, 1795 | 2,843 | 2,387 | ..... | { 5,230 | |
| France, War with | July 9, 1798 | Sept. 30, 1800 | ..... | ..... | 4,593 | 4,593 | 3,216 |
| Tripoli, Africa, War with | June 10, 1801 | June 4, 1805 | ..... | ..... | 3,330 | 3,330 | 2,331 |
| NW. Ind., Gen. Harrison | Sept. 11, 1811 | Oct. —, 1813 | 250 | 660 | ..... | 910 | 676 |
| Great Britain, War with, 1812 | June 18, 1812 | Feb. 17, 1815 | 85,000 | 471,622 | 20,000 | 576,622 | 286,730 |
| Creek Indian War, Alabama | July 27, 1813 | Aug. 9, 1814 | 600 | 13,181 | ..... | 13,781 | 9,048 |
| Seminole or Fla. and Ga. Ind. | Nov. 20, 1817 | Oct. 31, 1818 | 1,000 | 5,911 | ..... | 6,911 | 4,643 |
| Winnebago Exp'd'n, Wis., also called La Fever Ind. (no fght'g) | June —, 1827 | Sept. —, 1827 | 900 | 516 | ..... | 1,416 | 1,330 |
| Sac and Fox Indian War in Ill. | 1831 | 1831 | ..... | ..... | ..... | ..... | ..... |
| Black Hawk Indian | April 26, 1832 | Sept. 21, 1832 | 1,339 | 5,126 | ..... | 6,465 | 5,900 |
| Cherokee removal | 1833 | 1839 | ..... | 9,494 | ..... | 9,494 | 5,547 |
| Seminole or Florida | Dec. 23, 1835 | Aug. 14, 1842 | 11,169 | 29,953 | ..... | 41,122 | 22,795 |
| Sabine Ind. disturb., SW. front'r, La., Ark., Tex. (no fighting) | April —, 1836 | June —, 1837 | 1,323 | 3,106 | ..... | 4,429 | 3,365 |
| Creek Ind. disturbance in Ala | May 5, 1836 | Sept. 30, 1837 | 935 | 12,483 | ..... | 13,418 | 10,204 |
| N. Y., Aroost'k, Canada (Patriot War) frontier disturbances | 1838 | 1839 | ..... | 1,500 | ..... | 1,500 | 1,050 |
| Fla. War with Seminole Indians | 1842 | Dec. 31, 1858 | ..... | ..... | ..... | ..... | ..... |
| Mexico, War with | April 24, 1846 | May 30, 1848 | 30,954 | 73,776 | 7,500 | 112,230 | 78,718 |
| Cayuse Ind., Ore., Ore. vols | 1848 | 1848 | ..... | 1,116 | ..... | 1,116 | 1,005 |
| Tex. and N. Mex. Ind | 1849 | 1856 | 5,050 | 1,415 | ..... | 6,465 | 4,243 |
| Apache, Navajo, Utah | 1849 | 1855 | 1,500 | 1,061 | ..... | 2,561 | 1,785 |
| Cal. Ind. disturb., Yuma exped. | Dec. —, 1851 | April —, 1852 | 265 | ..... | ..... | 265 | ..... |
| Utah Indian disturbances | 1851 | 1853 | 10 | 530 | ..... | 540 | 540 |
| Ore., Wash. Ind. War, Rogue R., Yakima, Klikitat, Klamath and Salmon River | 1851 | Dec. 31, 1856 | 850 | 6,379 | ..... | 7,229 | 5,145 |
| Comanche Indian | 1854 | 1854 | ..... | 503 | ..... | 503 | 425 |
| Seminole or Fla. Indian | Dec. 20, 1855 | May 8, 1858 | ..... | 2,687 | ..... | 2,687 | 1,715 |
| Civil War | April 15, 1861 | Aug. 20, 1866 | 126,587 | 2,545,754 | 105,963 | 2,778,304 | 2,213,365 |
| Spanish-American (actual hostilities ceased Aug. 13, 1898) | April 21, 1898 | April 11, 1899 | 57,239 | 223,235 | 31,959 | 312,523 | 312,000 |
| Philippine Is., insurrection in | April 11, 1899 | July 4, 1902 | 76,416 | 50,052 | 13,570 | 140,038 | 139,438 |
| Expedition for relief of U. S. Legation at Peking, China | June 20, 1900 | May 12, 1901 | 5,000 | ..... | 1,913 | 6,913 | 6,713 |
| War with Germany | April 6, 1917 | Nov. 11, 1918 (Armistice.) | 544,848 | 461,043 (Nat. Guard.) | 575,455 (Males) | 5,019,874 (Incl. Nat. Army.) | 5,019,874 |

The Continental Army was organized by the Continental Congress, June 15, 1775, under George Washington as Maj.-Gen. and Commander-in-Chief. The so-called Continentals in the Revolution totalled 231,462. The War Department was established, August 7, 1789. The standing army was organized September, 1790.

### UNION ARMY LOSSES IN THE CIVIL WAR.

(From "Regimental Losses in the American Civil War," by William F. Fox, Lieutenant-Colonel, U. S. V.)

| DATE. | Battle. | Killed. | Wounded. | Missing. | Aggregate. |
|---|---|---|---|---|---|
| July 1-3, 1863 | Gettysburg | 3,070 | 14,497 | 5,434 | 23,001 |
| May 8-18, 1864 | Spottsylvania | 2,725 | 13,413 | 2,258 | 18,396 |
| May 5-7, 1864 | Wilderness | 2,246 | 12,037 | 3,383 | 17,666 |
| September 17, 1862 | Antietam | 2,108 | 9,549 | 753 | 12,410 |
| May 1-3, 1863 | Chancellorsville | 1,606 | 9,762 | 5,919 | 17,287 |
| September 19-20, 1863 | Chickamauga | 1,656 | 9,749 | 4,774 | 16,179 |
| June 1-4, 1864 | Cold Harbor | 1,844 | 9,077 | 1,816 | 12,737 |
| December 11-14, 1862 | Fredericksburg | 1,284 | 9,600 | 1,769 | 12,653 |
| August 28-30, 1862 | Manassas | 1,747 | 8,452 | 4,263 | 14,462 |
| April 6-7, 1862 | Shiloh | 1,754 | 8,408 | 2,855 | 13,047 |
| December 31, 1862 | Stone River | 1,730 | 7,802 | 3,717 | 13,249 |
| June 15-19, 1864 | Petersburg (assault) | 1,688 | 8,513 | 1,185 | 11,386 |

The Union losses at Bull Run (first Manassas), July 21, 1861, were: Killed, 470; wounded, 1,071; captured and missing, 1,793; aggregate, 3,334.

The Confederate losses in particular engagements were as follows: Bull Run (first Manassas), July 21, 1861, killed, 387; wounded, 1,582; captured and missing, 13; aggregate, 1,982. Fort Donelson, Tenn., February 14-16, 1862, killed, 466; wounded, 1,534; captured and missing, 13,329; aggregate, 15,829. Shiloh, Tenn., April 6-7, 1862, killed, 1,723; wounded, 8,012; captured and missing, 959; aggregate, 10,694. Seven Days' Battle, Virginia, June 25-July 1, 1862, killed, 3,478; wounded, 16,261; captured and missing, 875; aggregate, 20,614. Second Manassas, August 21-September 2, 1862, killed, 1,481; wounded and missing, 7,627; captured and missing, 89; aggregate, 9,197. Antietam campaign, September 12-20, 1862, killed, 1,886; wounded, 9,348; captured and missing, 1,367; aggregate, 12,601. Fredericksburg, December 13, 1862, killed, 596; wounded, 4,068; captured and missing, 651; aggregate, 5,315. Stone River, Tenn., December 31, 1862, killed, 1,294; wounded, 7,945; captured and missing, 1,027; aggregate, 10,266. Chancellorsville, May 1-4, 1863, killed, 1,665; wounded, 9,081; captured and missing, 2,018; aggregate, 12,764. Gettysburg, July 1-3, 1863, killed 2,592; wounded, 12,706; captured and missing, 5,150; aggregate, 20,448. Chickamauga, September 19-20, 1863, killed, 2,268; wounded, 13,613; captured and missing, 1,090; aggregate, 16,971.

The number of casualties in the volunteer and regular armies of the United States during the war of 1861-65, according to a statement prepared by the Adjutant-General's office, was as follows: Killed in battle, 67,058; died of wounds, 43,012; died of disease, 199,720; other causes, such as accidents, murder, Confederate prisons, etc., 40,154; total died, 349,944; total deserted, 199,105. Number of soldiers in the Confederate service who died of wounds or disease (partial statement), 133,821; deserted (partial statement), 104,428. Number of United States troops captured during the war, 212,608; Confederate troops captured, 476,169. Number of United States troops paroled on the field, 16,431; Confederate troops paroled on the field, 248,599. Number of United States troops who died while prisoners, 30,156; Confederate troops who died while prisoners, 30,152.

# A List of Marine Disasters.

(Figures indicate number of lives lost.)

1805—Oct. 23. British troop ship Aeneas, lost off Newfoundland; 340.
1816—Nov. 10. British troop ship Harpooner, floundered off Newfoundland; 200.
1831—April 9. Brig Billow wrecked on Ragged Island, Nova Scotia; 137.
—Aug. 19. Immigrant ship Lady Sherbrooke, Ireland to Quebec, wrecked off Cape Ray; 273.
1832—April 9. Steamship Brandywine burned on Mississippi River near Memphis; 110.
1833—May 11. Ship Lady of the Lake, England to Quebec, n:t by iceberg; 215.
1836—Nov. 21. American ship Bristol, England to New York, wrecked on Far Rockaway Beach, N. Y.; 77.
1837—Jan. 2. American bark Mexico, England to New York, wrecked on Hempstead Beach, near Point Lookout, N. Y.; 62.
—Feb. 16. British ship Jane and Margaret, England to New York, lost near Isle of Man; 200.
—May 9. Steamer Sherrod burned on Mississippi River; 175.
—Oct. 9. Steamboat Home, New York to Charleston, wrecked off Ocracoke; 100.
—Oct. 29. Steamboat Monmouth sunk in collision on Mississippi River; 234.
1838—April 25. Steamboat Moselle blown up on Ohio River, near Cincinnati, Ohio; 100.
—June 14. Steamboat Pulaski, Savannah to Baltimore, blew up off North Carolina; 140.
—June 16. Steamboat Washington burned on Lake Erie; 50.
—Nov. 25. Steamboat Gen. Brown, blew up on Mississippi River, at Helena, Ark.; 60.
1840—Jan. 13. Steamboat Lexington, New York to Stonington, burned off Edens Neck, L. I.; 140.
—Aug. 9. Brig. Florence, Rotterdam to New York, foundered off Newfoundland; 60.
1841—Feb. 19. Ship Governor Fenner, England to New York, sunk in collision off Holyhead, England; 122.
—April 19. American ship, William Browne, England to Philadelphia, sunk by iceberg; 70.
1841—March 11. Steamer President New York to Liverpool, with 136 persons on board; never heard from.
—Aug. 9. Steamer Erie burned on Lake Erie; 175
—Aug. 28. Transports Abercrombie, Robinson and Waterloo wrecked off Cape of Good Hope; 189.
1847—April 28. Emigrant ship Exmouth, Londonderry to Quebec; 200.
—Nov. 19. Steamers Talisman and Tempest in collision on Ohio River; 100.
—Nov. 21. Steamer Phoenix burned on Lake Michigan; 240.
1848—Aug. 24. American emigrant ship Ocean Monarch, from Liverpool, burned off Carnarvonshire, North Wales; 200.
1850—March 30. Steamer Royal Adelaide wrecked off Margate; 400.
—June 17. Steamer Griffith burned on Lake Erie; 300.
—Nov. 12. Emigrant ship Edmund, Limerick to New York, wrecked off coast of Ireland; 100.
1852—Jan. 24. Steamer Amazon burned off Scilly Islands; 100.
—Feb. 26. Troopship Birkenhead, Queenstown to Cape of Good Hope, wrecked; 454.
—Aug. 20. Steamer Atlantic sunk by collision on Lake Erie; 250.
1853—Feb. 16. The Independence burned off coast Lower California; 140.
—Sept. 29. Emigrant ship Annie Jane wrecked off coast of Scotland; 348.
—Dec. 23–31. Steamer San Francisco, bound for California with 700 United States troops, foundered at sea; 240.
1854—Jan. 20. Emigrant ship Tayleur wrecked off Lambay; 380.
—March. Steamer City of Glasgow, Liverpool to Philadelphia, with 450 passengers, never heard from.
—May 10. Troopship Lady Nugent, from Madras, foundered in a storm; 400.
—Sept. 27. Steamer Arctic, from Liverpool, sunk in collision in fog, 40 miles off Cape Race, N. F.; 350.
—Nov. 13–16. Eleven transports with supplies for the army in the Crimea wrecked in storm on Black Sea; 500.
1855—May 1. Emigrant ship John wrecked off Falmouth; 200.
1856—Jan. 30. Chilian warship Cazador wrecked; 314.
—Sept. 23. Steamer Pacific, Collins Line, 240 on board, never heard from.
—Nov. 2. Steamer Lyonnais sunk off Nantucket in collision; 260.
1857—Feb. 26. Steamer Tempest, Anchor Line; 150 on board; never heard from.
—June 26. Steamer Montreal, Quebec to Montreal, burned; 250.
—Aug. 20. Ship Dunbar wrecked near Sydney, Australia; 120.
—Sept. 12. Steamer Central America, Havana to New York, sunk; 400.
1858—June 13. Steamboat Pennsylvania exploded on Mississippi River, near Memphis; 160.
—Sept. 13. Steamer Austria, Hamburg to New York, burned in midocean; 471.
1859—April 27. American ship Pomona, Liverpool to New York, wrecked; 400.
—Oct. 25. Steamer Royal Charter wrecked on the Anglesea coast; 446.
1860—Feb. 19. American ship Luna wrecked off Barfleur; 100.
—Feb. 19. Steamer Hungaria wrecked near Cape Sable, N. S.; 205.
—Sept. 8. Steamer Lady Elgin sunk by collision on Lake Michigan; 287.
1863—Feb. 7. British steamer Orpheus wrecked off coast of New Zealand; 190.
—April 27. Steamer Anglo-Saxon wrecked in fog off Cape Race, N. F.; 237.
1865—April 27. Steamboat Sultana with exchanged Union prisoners of war aboard, destroyed on Mississippi River, 7 miles above Memphis, by boiler explosion; 1400.
—Aug. 24. Emigrant ship Eagle Speed foundered near Calcutta; 265.
1866—Jan. 11. Steamer London foundered in Bay of Biscay; 220.
—Jan. 30. Steamer Missouri, boilers exploded on Ohio River; 100.
—Jan. 30. Steamer Miami, boilers exploded on Mississippi River; 150.
—Oct. 3. Steamer Evening Star, New York to New Orleans, foundered; 250.
1867—Oct. 29. Royal mail steamers Rhone and Wye and about fifty vessels driven ashore and wrecked at St. Thomas, West Indies, by a hurricane; 1,000.
1868—April 9. Steamer Sea Bird burned on Lake Michigan; 100.
1869—Oct. 27. Steamer Stonewall burned below Cairo, Ill.; 200.
1870—Jan. 24. American Oneida sunk in collision off Yokohama; 115.
—Jan. 28. Inman Line steamer City of Boston, New York to Liverpool, with 177 on board; never heard from.
—Sept. 7. British warship Captain foundered off Finisterre; 472.
—Oct. 19. Steamer Cambria lost off Inishtrahul; 170.
1871—July 30. Staten Island ferryboat Westfield's boilers exploded in New York harbor; 100; 200 injured.
1873—Jan. 22. British steamer Northfleet sunk in collision off Dungeness; 300.
—April 1. White Star steamer Atlantic wrecked off Nova Scotia; 547.
—Nov. 23. French Line steamer Ville du Havre, New York to Havre, in collision with ship Loch Earn and sunk in sixteen minutes; 230.
1874—Dec. 6. Emigrant ship Cospatrick burned at sea; 470.
1875—May 7. Hamburg mail steamer Schiller, wrecked in fog on Scilly Islands; 200.
—Nov. 4. American steamer Pacific sunk by collision off Cape Flattery; 236.
—Dec. 6. Steamer Deutschland, Bremen to New York, wrecked at mouth of the Thames; 157.
1877—July 15. British steamer Eten wrecked off Valparaiso; 100.
—Nov. 24. United States sloop-of-war Huron wrecked off North Carolina coast; 100.
—November. Steamer Atacama wrecked off Caldera, Chili; 104.
1878—Jan. 31. Steamer Metropolis wrecked off North Carolina; 100.
—March 24. British training ship Eurydice foundered near the Isle of Wight; 300.
—Sept. 3. British steamer Princess Alice sunk in collision in the Thames; 700.
—Dec. 18. French steamer Byzantin sunk in collision in the Dardanelles; 210.
1879—Dec. 2. Steamer Borusia sank off the coast of Spain; 174.
1880—Jan. 31. British training ship Atlanta left Bermuda with 290 men; never heard from.
—Nov. 24. French steamer Oncle Joseph sank by collision of Spezzia; 250.
1881—May 24 Steamer Victoria, capsized in Thames River, Canada; 200.

—Aug. 30. Steamer Teuton wrecked off the Cape of Good Hope; 200.
1883—July 3. Steamer Daphne capsized in the Clyde; 124.
1884—Jan. 18. American steamer City of Columbus wrecked off Gay Head Light, Mass.; 99.
—April 3. Steamer Daniel Steinman wrecked off Sambro Head, N. S.; 131.
—April 18. Bark Pomena in collision with steamer State of Florida off coast of Ireland, both vessels sunk; 150.
—July 22. Spanish steamer Gigon and British steamer Lexham in collision off Cape Finisterre; both sunk; 150.
1886—March 14. Steamer Oregon, Cunard Line, Liverpool to New York, in collision with unknown schooner 18 miles east of Long Island; passengers and crew saved.
1887—Jan. 20. Steamer Kapunda in collision with bark Ada Melmore off coast of Brazil; 300.
—Nov. 15. British steamer Wah Yeung burned; 400.
—Nov. 19. Steamer W. A. Scholten sunk by collision in the English Channel; 134.
1888—Aug. 14. Steamship Geiser sunk by collision with the Thingvalla; 105.
—Sept. 12. Italian steamship and steamship La France collide near Canary Islands; 89.
1889—March 16. United States warships Trenton, Vandalia and Nipsic and German ships Adler and Eber wrecked on Samoan Islands; 147.
1890—Jan. 2. Steamer Persia wrecked on Island of Corsica; 130.
—Feb. 17. British steamer Duburg wrecked in China Sea; 400.
—March 1. British steamship Quetta wrecked off Cape York; 124.
—Sept. 19. Turkish frigate Ertogrul foundered off coast of Japan; 540.
—Nov. 10. British cruiser Serpent wrecked in storm off coast of Spain; 167.
—Dec. 27. British steamer Shanghai burned in China Sea; 100.
1891—March 17. Steamer Utopia, Anchor Line, sunk by collision off Gibraltar; 574.
—April 16. British ship St. Catharis wrecked off Carolina Island; 90.
—April 22. Chilian warship Blauco Encalada blown up in Caldera Bay; 200.
—Dec. 18. Steamer Abyssinia, Guion Line; burned at sea.
1892—Jan. 13. Steamer Namchow wrecked in China Sea; 414.
—Oct. 28. Steamer Roumania, Anchor Line, wrecked off Portuguese coast; 113.
1893—Feb. 8. Steamer Trinacria, Anchor Line, wrecked off coast of Spain; 115.
—Feb. 11. White Star steamer Naronic, Liverpool to New York on her maiden voyage; never heard from.
—June 22. British battleship Victoria sunk by collision with her sister ship Camperdown off Tripoli; 350.
1894—Feb. 2. United States corvette Kearsarge wrecked on Roncador Reef.
—June 25. Steamship Norge, wrecked on Rockall Reef, North Atlantic; 600.
—Nov. 1. Steamer Wairaro wrecked off coast of New Zealand; 134.
1895—Jan. 30. German steamer Elbe sunk in collision with British steamer Crathie in North Sea; 335.
—March 11. Spanish cruiser Reina Regenta foundered in the Atlantic at entrance to the Mediterranean; 400.
—May 28. French steamer Dom Pedro wrecked on coast of Galicia; 100.
1896—June 17. Steamer Drummond Castle wrecked off Brest, France; 250.
1898—Feb. 15. United States battleship Maine blown up in Havana harbor; 260.
—July 4. French Line steamer La Bourgogne, in collision with British sailing ship Cromartyshire; 560.
—Oct. 14. Steamer Mohegan, Atlantic Transport Line, wrecked off the Lizard; 170.
1901—Feb. 22. Pacific mail steamer Rio de Janeiro wrecked in San Francisco harbor; 128.
—April 1. Turkish transport Aslan wrecked in Red Sea; 180.
1902—July 21. Steamer Primus sunk in collision with steamer Hansa, on the Elbe; 112.
1903—June 7. French steamer Libau sunk in collision near Marseilles; 150.
1904—June 15. Steamship General Slocum took fire going through Hell Gate, East River; 1,000.
—June 28. Steamer Norge wrecked off Scottish coast; 646.
1905—Sept. 13. Japanese warship Mikasa sunk by explosion; 599.
1906—Jan. 21. Brazilian battleship Aquidaban sunk near Rio Janeiro by explosion of powder magazine; 212.
—Jan. 22. American steamer Valencia lost off Vancouver Island; 129.
—Aug. 4. Italian emigrant ship Sirio wrecked off Cape Palos; 350.
—Oct. 21. Russian steamer Variag on leaving Vladivostok accidentally struck by a torpedo and sunk; 140.
1907—January. British steamship, Bengwerm foundered in North Sea; 24.
—Feb. 12. Steamer Larchmont sunk in Long Island Sound; 131.
—Feb. 21. British steamer Berlin stranded off the Hook of Holland; 100.
—Feb. 24. Austrian steamer Imperatrix wrecked; 137.
—March 12. Explosion on French battleship Jena killed 117.
—July 20. American steamers Columbia and San Petro collided on the California coast; 100.
—Nov. 26. Turkish steamer Kaptan, foundered in North Sea; 110.
1908—Feb. 3. Steamship St. Cuthbert burned off Nova Scotia; 15.
—March 23. Japanese steamer Matsu Maru sunk in collision near Hakodate; 300.
—April 25. British cruiser Gladiator sunk in collision with American Liner St. Paul off Isle of Wight; 30.
—April 30. Japanese training cruiser Matsu Shima sunk by explosion off the Pescadores; 200.
—July 28. Steamer Ying King foundered off Hongkong; 300.
—Aug. 24. Steamship Folgenender wrecked; 70.
—Nov. 6. Steamer Taish sunk in storm; 150.
—Nov. 27. Steamer San Pablo sunk off the Philippines; 100.
1909—Jan. 23. Collision between steamer Florida and White Star steamer Republic, latter sunk off Nantucket Lightship during a fog; 6.
—Aug. 1. British steamer Waratah, from Sydney via Port Natal for London, left Port Natal July 26; never heard from; 300.
—Nov. 14. Steamer Scyne sunk in collision with steamer Onda off Singapore; 100.
1910—Feb. 9. French Line steamer General Chanzy wrecked off Minorca; 200.
1911—Feb. 2. Steamship Abenton wrecked; 70.
—April 2. Steamship Koombuna wrecked; 150.
—April 23. Steamship Asia ran aground; 40.
—Sept. 5. Steamship Tuscapel wrecked; 80.
—Sept. 25. French battleship Liberte sunk by explosion at Toulon; 285.
—Nov. 23. Destroyer Harusame sunk off coast of Japan; 45.
—Nov. 23. Steamship Roumania sunk in Adriatic; 60.
1912—Jan. 11. Russ, Russian steamer, foundered in Black Sea; 172.
—Jan. 18. Hall Line steamship Wistow Hall wrecked off North Haven, Aberdeenshire, Scotland; 53 Lascars.
—Feb. 13. Ryoha Maru and Mori Maru, Japanese steamers, sunk in collision off Nagasaki; 46.
—March 5. Spanish steamship Principe de Asturias struck rock off Sebastian Point and sunk; 500.
—March 16. British steamer Oceana sunk in collision in British Channel; 15.
—March 21. Passenger steamship Cachepol sunk off coast of Peru; British officers, 25 passengers; crew of 45 Chilian sailors; 80.
—March 28. British steamship Koombana lost in typhoon off Australian coast; 130.
—April 8. Nile, excursion steamer, sunk in collision near Cairo, Egypt; 200.
—April 14–15. White Star steamship Titanic sunk after collision with iceberg in North Atlantic; 1,517.
—April 30. Steamer Texas blown up by mine at entrance to Gulf of Smyrna; 64.
—June 20. Steamer Hungarian burned on lower Danube; 23
—Sept. 23. Russian steamer Obnevka sunk in Dvina River; 115.
—Sept. 28. Japanese steamer Kickermaru sunk off coast of Japan; 1,000.
—Oct. 7. Steamer Fagundes Varella burned off Brazilian coast; 18.
—Nov. 1. Steamer Cecilia sunk in Lake St. Louis, Quebec; 16.
1913. Jan. 2. Steamer El Dorado lost in storm on Atlantic coast; 39.
—Jan. 4. Steamer Julia Luckenbach sunk in collision with British freighter Indrakuala in Chesapeake Bay; 15.
—Jan. 7. Oil steamer Rosecrans wrecked on Oregon coast; 33.
—Jan. 9. Steamer James T. Staples sunk in Tombigbee River, Alabama; 18; 10 injured.
—Jan. 16. British steamer Veronese wrecked near Oporto, Portugal; 16.

—March 1. British steamer Calvadas lost in blizzard in Sea of Marmora: 200.
—March 5. German torpedo-boat destroyer S-178 sunk in collision with cruiser Yorck, near Heligoland: 66
—March 7. British steamer Alum Chive destroyed by dynamite explosion, Baltimore: 50.
—May 24. Steamer Nevada sunk by mine in Gulf of Smyrna; 40
—Aug 18 Steamer State of California wrecked near Juneau, Alaska; 40.
—Oct. 9. Steamship Volturno wrecked by fire and explosion in mid-ocean; 135.
—Nov. 9. Steamer collier Bridgeport wrecked in St. Lawrence River; 44.
—Dec. 5. Swedish steamer Malmverget foundered on Norway coast; 45.
—December. German steamer Acilia wrecked near Terra del Fuego: 98.
1914—Jan. 5. Tank steamer Oklahoma sunk off Sandy Hook; 21.
—Jan. 30. Old Dominion steamship Monroe sunk in collision off coast of Virginia; 41.
—March 25. Steamer Mani blown up off Pearl Harbor, Hawaii; 30.
—March 31. Sealing steamer Southern Cross wrecked in Belle Isle Strait; 173.
—April 28. Steamer Benj. Noble, off Duluth; 20.
—May 3. Leyland Liner Columbian burned on Grand Banks; 15.
—May 15–21. Steamship Luckenbach wrecked off coast of South Carolina; 29.
—May 29. Canadian Pacific steamship Empress of Ireland sunk in collision with Danish collier Storstad in St. Lawrence; 1,024.
—Sept. 18. Steam schooner Francis H. Leggett wrecked near mouth of Columbia River, Oregon: 80.
—Oct. 30. British hospital ship Robrilla wrecked on coast near Whitby, England; 54.
1915—Jan. 18. British steamer Penarth wrecked off English coast; 21.
—March 24. United States submarine F-4 sunk off Honolulu, H. I.; 26.
—April 3. Dutch steamer Prins Maurits lost off Cape Hatteras; 44.
—July 24. Steamer Eastland overturned in Chicago River; 812.
—Aug. 16. Dredge San Jacinto wrecked off Galveston, Tex.; 50.
—Aug. 16. Dredge Sam Houston wrecked off Galveston, Tex.; 56.
—Sept. 28. Steamship Isabel foundered in Long Island Sound; 14.
—Nov. 2. Steamer Santa Clara wrecked on Oregon coast; 15.
—Nov. 11. Steamer Charles A. Luck lost on Lake Superior; 18.
1916—Jan. 22. Steamship Pollentia foundered in mid-Atlantic
—Feb. 3. Steamer Daijin Baru sunk in Pacific; 160.
—Feb. 26. French auxiliary cruiser Provence sunk in Mediterranean. Of nearly 4,000 on board but 870 were saved.
—May 9. Steamship Roanoke wrecked off coast of California; 41.
—June 5. River packet Eleanore capsized in Mississippi, north of Memphis, Tenn.; 30.
—Aug. 1. British steamer Ecuador sunk by explosion off coast of Chile; 20.
—Aug. 11. Greek steamer Eletheria burned in Aegean Sea; 40.
—Aug. 16. American steamer Admiral Clark wrecked in South Atlantic; 20.
—Aug. 29. United States cruiser Memphis wrecked at Santa Domingo; 33.
—Aug. 29. Chinese steamer Hsin Yu sunk off coast of China; 1,000.
—Aug. 29. Japanese steamer Wakatsu Maru wrecked on coast of Japan; 105.
—Oct. 20. Steamer James B. Colgate wrecked on Lake Erie; 21.
—Oct. 20. Steamer Merida lost on Lake Erie; 20.
—Nov. 3. London and N. W. Railway steamship Connemara and British steamship Retriever collided and sank in Irish Sea; 92.
1917—May 15. Ship Standard wrecked in Bering Sea; 25.
—July 1. French steamer Himalaya sunk by explosion in the Mediterranean; 28.
—July 9. The British warship Vanguard blown up at her dock in a British port; 800.
—July 27. Japanese freighter Koto Hira Maru wrecked on island near Alaska; loss, $1,000,000.
—Nov. 10. Steamer Castalia wrecked on Lake Superior; 22.
1918—Feb. 24. Red Cross liner Florizel wrecked near Cape Race, N. F.; 92.
—Feb. 26. United States naval tug Cherokee lost in storm off Delaware Capes; 29.
—March 18. British steamer Batiscan lost off Nova Scotia; 41.
—March 24. British steamer War Knight destroyed in collision off British coast; 37.
—April 25. Chinese steamship Kiang-Kwan sunk in collision off Hankow; 500.
—May 1. American steamship City of Athens sunk in collision off Delaware coast; 66.
—June 14. The U. S. S. Cyclops, 19,360 tons displacement, left the Barbados, West Indies, on March 4, 1918, and has not been heard of since. She had on board a crew of 15 officers and 221 men; also as passengers 6 officers and 51 enlisted men, as well as the American Consular General at Rio Janeiro, Brazil. The disappearance of this ship has remained a mystery.
—July 6. River steamer Columbia sunk in Illinois River at Wesley City; 87.
—July 12. Japanese battleship Kawachi blown up in Tokayama Bay; 500.
—Oct 3. American steamer Lake City sunk off Key West, Fla.: 30.
—Oct. 4. American steamer Herman Frasch sunk in collision off Nova Scotia; 50.
—Oct. 24. Canadian steamship Princess Sophia sunk on coast of Alaska; 350.
1919—Jan. 1 British steam yacht lost off Stornoway, Scotland; only 30 of 300 saved.
—Jan. 9. British steamer Northumbria lost off Middlesbrough.
—Jan. 11. Steamer Yuma sunk en route Pedro d'Macoris to New York; 79.
—Jan. 17. French steamer Chaonia lost in Straits of Messina; 460.
—April 4. Italian transport Umbria struck a mine and sank; 100 injured.
—Aug. 6. Schooner Gallia sunk in collision off St. Pierre, West Indies; 20.
—Sept. 3. British destroyer S-19 sunk by Russian mine: 24.
—Sept. 9. American steamship Corydon foundered in Bahama Channel; 27.
—Oct. 28. Steamship Muskegon sunk in Lake Michigan; 16.
—Nov. 9. American steamship Polar Land vanished off Nova Scotia; 51.
—Nov. 15. Steamship John Owen sunk in Lake Superior; 23.
—Nov. 23. Steamship Myron sunk in Lake Superior; 18.
—Dec. 18. Oil tanker J. A. Chanslor sunk off Cape Blanco, Ore.; 37.
—Dec. 18. British Steamship Manxman lost off Nova Scotia; 40.
—Dec 29. Belgian steamship Anton von Driel sunk at St. Mary's Bay, Newfoundland; 26.
1920—Jan. 10. British steamship Troveal sunk in Channel; 35.
—Jan. 12. French steamship sunk in Bay of Biscay; 500.
—Jan. 22. U. S. tanker Meliero broke in two off Florida; 22.
—Jan. 29. American steamship Fortune sunk off Jekyl Island, Ga.; 13.
—Feb. 7. American steamship Polias wrecked off Rockland, Me.; 10.
—April 18. American steamship Wm. O'Brien sunk in Atlantic Ocean in storm; 40.
—Aug. 20. American ore carrier Superior City, by collision, Lake Superior; 29.
1921—Spanish steamer Santa Isabel, storm-wrecked near Villagarcia; 214.
—Feb. 26. U. S. Destroyer Woolsey, by collision off Panama; 16.
—March 18. Steamer Hongkong hit rock near Swatow, China; 1,000.
—March 23. U. S. naval tug Conestoga, vanished in Pacific; 43.
—April 11. Steamer Col. Bowie, Gulf of Mexico; 19
—Oct. 8. Steamer Rowan, off Brit. Isles; 27.
1922—Jan. 4. Greek torpedo boat blew up at Piraeus; 55.
—March 23. British submarine sunk by destroyer, in practice, off Gibraltar; 23.
—April 25. French coal steamer sunk by storm off Brittany; 32.
—May 20. British steamer Egypt, in collision off France; 98.
—June 4. Excursion steamer, Villa Franca sunk off Hohenau, Paraguay; 80.
—June 16. Brazilian liner Avare upset at Hamburg dock; 24.
—Aug. 26. French battleship, France, 23,000 tons, hit rock and sank off Quiberon Bay; 3.
—Aug. 26. Japanese cruiser, Niitaka, sank in storm off Kamchatka; 300.
—Aug. 29. Chilean steamer, Itata, sank in storm off Coquimbo; 301.
—Sept. 9. German steamer Hammonia, sank in storm off Vigo, Spain; 30.

For later marine disasters see Chronology.

## GREAT OCEAN STEAMSHIPS.

(Former names of some of the vessels are in parentheses.)

The data are from Lloyd's 1922-1923 Register.

| NAME. | Regist'd Tonnage. | L'gth, Feet. | Br th. Feet. |
|---|---|---|---|
| Majestic (Br.) (Bismarck) | 56,551 | 915.5 | 100.1 |
| Leviathan (U. S.) (Vaterland) | 54,282 | 907.6 | 100.3 |
| Berengaria (Br.) (Imperator) | 52,022 | 882.9 | 98.3 |
| Olympic (Br.) | 46,439 | 852.5 | 92.5 |
| Aquitania (Br.) | 45,647 | 868.7 | 97.0 |
| Homeric (Br.) (Columbus) | 34,693 | 751.0 | 83.3 |
| Paris (Fr.) | 34,569 | 735.4 | 85.3 |
| Mauretania (Br.) | 30,696 | 762.2 | 88.0 |
| Empress of Scotland (Br.) (Kaiserin Auguste Victoria) | 25,037 | 677.5 | 77.3 |
| Caracciolo (It.) | 25,000 | | |
| Belgic (Br.) (Bergenland) | 24,547 | 670.4 | 78.4 |
| Adriatic (Br.) | 24,541 | 709.2 | 75.5 |
| Rotterdam (Hol.) | 24,149 | 605.5 | 77.4 |
| Baltic (Br.) | 23,884 | 709.2 | 75.6 |
| George Washington (U. S.) | 23,788 | 699.1 | 78.2 |
| France (Fr.) | 23,666 | 689.2 | 75.6 |
| Duilio (It.) | 22,000 | 601.4 | 75.9 |
| Giulio Cesare (It.) | 21,848 | 602.4 | 76.5 |
| Empress of Canada (Br.) | 21,517 | 627.0 | 77.7 |
| Empress of China (Br.) (Tirpitz) | 21,498 | 589.8 | 75.2 |
| America (U. S.) (American) | 21,144 | 668.8 | 74.3 |
| Cedric (Br.) | 21,073 | 680.9 | 75.3 |
| Celtic (Br.) | 21,026 | 680.9 | 75.3 |
| Minnesota (U. S.) | 20,602 | 622.0 | 73.5 |
| Cap Polonio (Ger.) | 20,597 | 637.7 | 72.3 |
| Resolute (U. S.) (Brabantia) | 20,200 | 596.0 | 72.3 |
| Reliance (U. S.) (Johann Heinrich Burchard) | 19,980 | 592.0 | 72.3 |
| Scythia (Br.) | 19,730 | 600.7 | 73.8 |
| Caronia (Br.) | 19,687 | 650.0 | 72.2 |
| Laconia (Br.) | 19,679 | 601.3 | 73.7 |
| Samaria (Br.) | 19,602 | 601.5 | 73.7 |
| Carmania (Br.) | 19,524 | 650.4 | 72.2 |
| Agamemnon (U. S.) (Kaiser Wilhelm II.) (Pres. Harding) | 19,361 | 684.3 | 72.3 |
| Arundel Castle (Br.) | 19,023 | 630.5 | 72.5 |
| Windsor Castle (Br.) | 18,967 | 632.4 | 72.5 |
| Lapland (Br.) | 18,565 | 605.8 | 70.4 |
| Ceramic (Br.) | 18,495 | 655.1 | 69.4 |
| Empress of France (Br.) | 18,388 | 571.4 | 72.4 |
| Mount Vernon (U. S.) (Kronprinzessin Cecile) | 18,372 | 685.4 | 72.2 |
| President Grant (U. S.) | 18,072 | 599.0 | 68.2 |
| Conte Rosso (It.) | 18,017 | 570.2 | 74.2 |
| Ohio (Br.) | 18,000 | 587.0 | 71.5 |
| Arabic (Brit.) (Berlin) | 17,324 | 591.3 | 69.8 |
| Minnekahda (U. S.) | 17,281 | 620.5 | 66.4 |
| Transylvania (Br.) | 17,250 | 530.0 | 70.0 |
| Tuscania (Br.) | 17,250 | 550.0 | 70.0 |
| Nieuw Amsterdam (Hol.) | 17,149 | 600.0 | 70.0 |
| Empress of India (Br.) (Prinz Friedrich Wilhelm) | 16,992 | 590.1 | 68.3 |
| Empress of Asia (Br.) | 16,909 | 570.1 | 68.2 |
| Empress of Russia (Br.) | 16,810 | 570.2 | 68.2 |
| Doric (Br.) | 16,600 | 575.4 | 67.8 |
| Pittsburgh (Br.) | 16,600 | 575.3 | 67.8 |
| Regina (Br.) | 16,500 | 575.3 | 67.8 |
| Montcalm (Br.) | 16,418 | 549.5 | 70.2 |
| Montrose (Br.) | 16,402 | 548.7 | 70.2 |
| Montclare (Br.) | 16,400 | 549.5 | 70.2 |
| Hansa (Ger.) (Deutschland) (Victoria Luise) | 16,376 | 660.9 | 67.3 |
| Camerania (Br.) | 16,280 | 552.4 | 70.4 |
| Narkunda (Br.) | 16,227 | 581.4 | 69.4 |
| Tyrrhenia (Br.) | 16,000 | 550.0 | 70.3 |
| Empress of Britain (Br.) | 15,857 | 548.8 | 65.7 |
| Naldera (Br.) | 15,825 | 580.9 | 67.2 |
| King Alexander (Br.) (Cleveland) (Mobile) | 15,746 | 588.9 | 65.3 |
| Andes (Br.) | 15,620 | 570.3 | 67.3 |
| Almanzora (Br.) | 15,551 | 570.0 | 67.3 |
| Mongolia (Br.) | 15,550 | 550.0 | 71.7 |
| Moldavia (Br.) | 15,500 | 550.0 | 71.5 |
| Orduna (Br.) | 15,499 | 550.3 | 67.3 |
| Orbita (Br.) | 15,486 | 550.3 | 67.3 |
| G. Harrison Smith (Br.) | 15,371 | 550.6 | 72.3 |
| Steelore (U. S.) | 15,300 | 551.0 | 72.0 |
| Marore (U. S.) | 15,300 | 551.0 | 72.0 |
| Veendam (Hol.) | 15,150 | 550.2 | 67.3 |
| Volendam (Hol.) | 15,150 | 550.2 | 67.3 |
| Massilia (Fr.) | 15,147 | 574.0 | 64.0 |
| Orca (Br.) | 15,120 | 550.3 | 67.3 |
| President Taft (U. S.) (Lone Star State) | 15,000 | 518.72 | |
| Euripides (Br.) | 14,947 | 550.7 | 67.4 |
| Arlanza (Br.) | 14,930 | 570.3 | 65.3 |
| Von Steuben (U. S.) (Kronprinz Wilhelm) | 14,901 | 637.1 | 66.3 |
| Bethore (U. S.) | 14,899 | 550.3 | 72.2 |
| Megantic (Br.) | 14,878 | 550.4 | 67.3 |
| Ormonde (Br.) | 14,853 | 580.5 | 66.7 |
| Luteliz (Fr.) | 14,654 | 579.0 | 64.1 |
| Ulysses (Br.) | 14,626 | 563.2 | 68.4 |
| Ormuz (Br.) (Zeppelin) | 14,588 | 550.0 | 67.3 |
| Nestor (Br.) | 14,547 | 563.2 | 68.4 |
| Taiyo Maru (Jap.) (Cap Finisterre) | 14,457 | 560.0 | 65.3 |
| Saxonia (Br.) | 14,197 | 580.0 | 64.2 |
| President Madison (U. S.) (Bay State) | 14,187 | 516.5 | 72.2 |
| President Roosevelt (U. S.) (Peninsula State) | 14,187 | 516.5 | 72.2 |
| President Lincoln (U. S.) (Hoosier State) | 14,187 | 516.5 | 72.2 |
| Wenatchee (U. S.) | 14,174 | 516.5 | 72.2 |
| President McKinley (U. S.) (Keystone State) | 14,127 | 516.5 | 72.2 |
| President Wilson (U. S.) (Empire State) | 14,127 | 516.5 | 72.2 |
| President Jackson (U. S.) (Silver State) | 14,124 | 517.0 | 72.2 |
| President Cleveland (U. S.) (Golden State) | 14,123 | 517.0 | 72.2 |
| President Harding (U. S.) (Hawkeye State) | 14,123 | 517.0 | 72.2 |
| President Grant (U. S.) (Pine Tree State) | 14,119 | 517.0 | 72.2 |
| Oropesa (Br.) | 14,072 | 530.0 | 66.3 |
| John D. Archbold (U. S.) | 14,054 | 570.2 | 75.1 |
| William Rockefeller (U. S.) | 14,054 | 554.9 | 75.3 |
| Oroya (Br.) | 14,000 | 525.3 | 62.8 |
| Minnedosa (Br.) | 13,972 | 520.0 | 67.2 |
| Melita (Br.) | 13,967 | 520.0 | 67.2 |
| Gelria (Hol.) | 13,868 | 541.1 | 65.8 |
| Largs Bay (Br.) | 13,851 | 530.9 | 68.3 |
| Esperance Bay (Br.) | 13,851 | 530.0 | 68.3 |
| Moreton Bay (Br.) | 13,850 | 530.6 | 68.3 |
| Hobson's Bay (Br.) | 13,837 | 530.6 | 68.3 |
| Jervis Bay (Br.) | 13,837 | 530.6 | 68.3 |
| Aramis (Fr.) | 13,800 | 541.3 | 63.0 |
| Southern Cross (U. S.) | 13,789 | 516.5 | 72.2 |
| American Legion (U. S.) | 13,737 | 516.5 | 72.2 |
| Pan America (U. S.) | 13,712 | 518.0 | 71.0 |
| Andre Lebon (Fr.) | 13,682 | 508.2 | 61.6 |
| Manchuria (U. S.) | 13,639 | 600.0 | 65.3 |
| Mongolia (U. S.) | 13,639 | 600.0 | 65.3 |
| Cretic (Br.) (Hanoverian) (Mayflower) | 13,518 | 582.0 | 60.3 |
| Antonio Delfino (Ger.) | 13,502 | 499.5 | 64.0 |
| Voltaire (Br.) | 13,500 | 510.3 | 64.4 |
| Niagara (Br.) | 13,415 | 524.7 | 66.3 |
| Western World (U. S.) (Nutmeg State) | 13,400 | 518.0 | 72.0 |
| Tenyo Maru (Jap.) | 13,398 | 558.0 | 61.9 |
| Balmoral Castle (Br.) | 13,361 | 570.0 | 64.5 |
| Nansemond (U. S.) (Pennsylvania) | 13,333 | 559.4 | 62.2 |
| Edinburgh Castle (Br.) | 13,330 | 570.2 | 64.7 |
| Vandyck (Br.) | 13,233 | 510.6 | 64.3 |
| Graf Waldersee (Ger.) | 13,193 | 561.2 | 69.2 |
| Baradine (Br.) | 13,144 | 519.9 | 64.4 |
| San Fernando (Br.) | 13,056 | 530.4 | 69.4 |
| Andania (Br.) | 13,050 | 519.0 | 65.0 |
| Ausonia (Br.) | 13,050 | 519.0 | 65.0 |
| Ascania (Br.) | 13,050 | 519.0 | 65.0 |
| Shinyo Maru (Jap.) | 13,039 | 558.0 | 61.9 |
| San Felix (Br.) | 13,037 | 530.4 | 69.4 |
| San Fabian (Br.) | 13,036 | 530.4 | 69.4 |
| Ballarat (Br.) | 13,033 | 519.8 | 64.2 |
| Diogenes (Br.) | 13,000 | 500.0 | 63.3 |
| Bendigo (Br.) | 13,000 | 520.0 | 64.2 |
| Balranald (Br.) | 13,000 | 520.0 | 64.2 |
| Paul Lecat (Fr.) | 12,989 | 510.7 | 61.6 |
| Stavangerfjord (Nor.) | 12,977 | 532.5 | 64.2 |
| Kenilworth Castle (Br.) | 12,975 | 570.2 | 64.7 |
| Armadale Castle (Br.) | 12,973 | 570.1 | 64.5 |
| San Gerardo (Br.) | 12,915 | 530.2 | 68.5 |
| San Gaspar (Br.) | 12,910 | 530.2 | 68.5 |
| San Florentino (Br.) | 12,842 | 530.4 | 68.6 |
| Albania (Br.) | 12,765 | 523.1 | 61.6 |
| Porthos (Fr.) | 12,692 | 510.3 | 61.6 |
| Sierra (Br.) | 12,686 | 550.2 | 63.3 |
| Rochambeau (Fr.) | 12,678 | 559.4 | 63.7 |
| Runic (Brit.) | 12,663 | 550.2 | 63.3 |
| Aeolus (U. S.) (Grosser Kurfurst) | 12,642 | 560.0 | 62.0 |
| City of Los Angeles (U. S.) | 12,642 | 560.6 | 62.3 |
| Presidente Wilson (It.) (Kaiser Franz Josef I.) | 12,577 | 477.5 | 60.2 |

| NAME. | Regist'd Tonnage. | L'gth, Feet. | Br'th, Feet. |
|---|---|---|---|
| Stockholm (Sw.) (Potsdam) | 12,522 | 547.1 | 62.1 |
| Walmer Castle (Br.) | 12,546 | 570.5 | 64.4 |
| Noordam (Hol.) | 12,531 | 550.3 | 62.3 |
| Rijndam (Hol.) | 12,527 | 550.3 | 62.3 |
| Barrabool (Br.) | 12,500 | 520.0 | 64.4 |
| Metagama (Br.) | 12,420 | 500.4 | 64.2 |
| Saxon (Br.) | 12,385 | 570.5 | 64.4 |
| Corinthic (Br.) | 12,367 | 500.3 | 63.3 |
| Athenic (Br.) | 12,366 | 500.3 | 63.3 |
| Sophocles (Br.) | 12,361 | 500.4 | 63.2 |
| Ionic (Br.) | 12,352 | 500.3 | 63.3 |
| Leopoldina (Brazil) (Blucher) | 12,350 | 525.6 | 62.3 |
| Pesaro (It.) (Moltke) | 12,335 | 525.6 | 62.3 |
| San Melito (Br.) | 12,286 | 530.0 | 66.5 |
| Armagh (Br.) | 12,269 | 530.5 | 63.0 |
| Kroonland (U. S.) | 12,241 | 560.0 | 60.2 |
| Finland (U. S.) | 12,222 | 560.0 | 60.2 |
| Lafayette (Fr.) | 12,220 | 546.7 | 64.0 |
| Shropshire (Br.) | 12,184 | 526.4 | 61.4 |
| Northcumberland (Br.) | 12,160 | 530.5 | 63.0 |
| Wiltshire (Br.) | 12,160 | 526.5 | 61.4 |
| Orvieto (Br.) | 12,133 | 535.3 | 64.0 |
| Osterley (Br.) | 12,129 | 535.0 | 63.2 |
| Scandinavian (Br.) (New England) (Romanic) | 12,116 | 550.3 | 59.3 |
| Argyllshire (Br.) | 12,097 | 526.2 | 61.4 |
| Canopic (Br.) (Commonwealth) | 12,097 | 578.3 | 59.3 |
| San Lorenzo (Br.) | 12,097 | 527.5 | 66.6 |
| San Gregorio (Br.) | 12,093 | 527.2 | 66.6 |
| Cadillac (Br.) | 12,074 | 530.2 | 66.3 |
| Saranac (Brit.) | 12,070 | 530.5 | 66.3 |
| Persic (Br.) | 12,042 | 550.2 | 63.3 |
| Orsova (Br.) | 12,036 | 536.2 | 63.3 |
| Medic (Br.) | 12,032 | 550.2 | 63.3 |
| San Nazario (Br.) | 12,029 | 525.5 | 66.5 |
| San Jeronimo (Br.) | 12,028 | 525.5 | 66.5 |
| Asturias (Br.) | 12,002 | 520.3 | 62.3 |
| Athenia (Br.) | 12,000 | 520.0 | 66.0 |
| Providence (Fr.) | 11,996 | 511.8 | 59.7 |
| San Fraterno (Br.) | 11,929 | 527.3 | 66.6 |
| Patria (Fr.) | 11,885 | 487.2 | 59.2 |
| San Patricio (Br.) | 11,877 | 530.0 | 66.6 |
| Frederik VIII. (Den.) | 11,850 | 523.5 | 62.3 |
| Korea Maru (Jap.) (Korea) | 11,810 | 551.7 | 63.2 |
| Mahana (Br.) | 11,796 | 500.9 | 63.3 |
| Siberia Maru (Jap.) (Siberia) | 11,785 | 551.7 | 63.2 |
| Zeeland (Br.) (Northland) | 11,667 | 561.6 | 60.2 |
| Hanerford, (Br.) | 11,635 | 531.0 | 59.2 |
| Orcoma (Br.) | 11,571 | 511.6 | 62.2 |
| Darro (Br.) | 11,484 | 500.7 | 62.3 |
| Demerara (Br.) | 11,484 | 500.7 | 62.3 |
| Desna (Br.) | 11,483 | 500.7 | 62.3 |
| Deseado (Br.) | 11,477 | 500.7 | 62.3 |
| Batavia (Fr.) (Poloma) | 11,464 | 501.3 | 62.2 |
| Constantinople (Br.) (Bremen) | 11,456 | 550.5 | 60.2 |
| Cumberland (Br.) (Wendland) | 11,446 | 520.0 | 64.2 |
| Philippines (U. S.) (Bulgaria (Hercules) | 11,440 | 501.4 | 62.2 |
| Corsican (Br.) | 11,438 | 500.3 | 61.2 |
| Kaisar-I-Hind (Br.) | 11,430 | 520.0 | 61.2 |
| Achilles (Br.) | 11,426 | 507.4 | 63.2 |
| Philocteles (Br.) | 11,400 | 511.9 | 63.2 |
| Sphinx (Fr.) | 11,375 | 478.0 | 60.7 |
| La Lorraine (Fr.) | 11,372 | 563.1 | 60.0 |
| Tyndareus (Br.) | 11,347 | 507.0 | 63.2 |
| Esperia (It.) | 11,346 | 492.1 | 61.7 |
| Llanstephan Castle (Br.) | 11,293 | 500.5 | 63.3 |
| Remuera (Br.) | 11,276 | 485.0 | 62.3 |
| Hororata (Br.) | 11,243 | 511.1 | 64.2 |
| Themistocles (Br.) | 11,231 | 500.6 | 62.3 |
| Demosthenes (Br.) | 11,223 | 500.6 | 62.3 |
| Berrima (Br.) | 11,202 | 500.1 | 62.2 |
| Borda (Br.) | 11,199 | 500.0 | 62.2 |
| Benalla (Br.) | 11,181 | 500.1 | 62.2 |
| Tamalma (U. S.) | 11,170 | 500.0 | 71.2 |
| La Savoie (Fr.) | 11,168 | 563.1 | 60.0 |
| Espagne (Fr.) | 11,155 | 537.8 | 60.8 |
| Royal George (Br.) (Heliopolis) | 11,146 | 525.8 | 60.2 |
| Drottningholm (Sw.) (Virginian) | 11,143 | 517.0 | 60.0 |
| Beltana (Br.) | 11,120 | 500.1 | 62.2 |
| Omar (Br.) (Koenigen Luise) | 11,103 | 523.1 | 60.1 |
| Macedonia (Br.) | 11,089 | 530.4 | 60.4 |
| Achilles (U. S.) | 11,081 | 514.0 | 65.2 |
| Avon (Br.) | 11,073 | 520.3 | 62.3 |
| Colombie (Fr.) | 11,000 | 476.0 | 62.3 |
| Mercury (U. S.) (Barbarossa) | 10,984 | 526.4 | 60.0 |
| Norfolk (Br.) (Sanerland) | 10,973 | 520.7 | 64.2 |
| Suwa Maru (Jap.) | 10,972 | 516.0 | 62.6 |
| Hertford (Br.) (Freesland) | 10,965 | 520.7 | 64.2 |
| Grampian (Br.) | 10,955 | 485.7 | 60.2 |
| Fushimi Maru (Jap.) | 10,928 | 513.0 | 63.5 |

| NAME. | Regist'd Tonnage. | L'gth, Feet. | Br'th, Feet. |
|---|---|---|---|
| Colombo (It.) (San Germaro) | 10,917 | 518.0 | 64.0 |
| Morea (Br.) | 10,911 | 540.0 | 61.2 |
| Elysses (U. S.) | 10,910 | 514.0 | 65.2 |
| Amsterdam (Hol.) | 10,905 | 474.4 | 65.6 |
| Mantua (Br.) | 10,902 | 540.0 | 61.3 |
| Robert Dollar (Br.) Kurland | 10,893 | 523.5 | 65.7 |
| Vogtland (Br.) | 10,892 | 524.5 | 65.7 |
| City of Paris (Br.) | 10,840 | 484.7 | 59.3 |
| Rushine (Br.) | 10,839 | 480.6 | 60.3 |
| Vancolite (Br.) | 10,831 | 500.3 | 68.0 |
| Victolite (Br.) | 10,825 | 500.4 | 68.2 |
| Tunisian (Br.) | 10,743 | 500.6 | 59.2 |
| Bergensfjord (Nor.) | 10,709 | 512.4 | 61.2 |
| City of Honolulu (U. S.) | 10,688 | 523.0 | 60.1 |
| James McGee (U. S.) | 10,678 | 499.1 | 68.2 |
| W. C. Teagle (U. S.) | 10,678 | 499.1 | 68.2 |
| Victorian (Br.) | 10,677 | 520.0 | 60.4 |
| Cornwall (Br.) | 10,669 | 495.1 | 63.1 |
| Lewis Luckenbach (U. S.) | 10,663 | 496.0 | 68.0 |
| Vauban (Br.) (Alcala) | 10,660 | 495.5 | 60.8 |
| Andrea F. Luckenbach (U.S.) | 10,653 | 496.0 | 68.2 |
| Fred W. Weller (U. S.) | 10,627 | 500.0 | 68.0 |
| A. C. Bedford (U. S.) | 10,614 | 500.0 | 68.0 |
| Melancha (Br.) | 10,572 | 518.0 | 63.7 |
| President Adams (U. S.) (Centennial State) | 10,558 | 502.1 | 62.2 |
| President Garfield (U. S.) (Blue Hen State) | 10,558 | 502.1 | 62.2 |
| President Harrison (U. S.) (Wolverine State) | 10,533 | 502.1 | 62.2 |
| President Hayes (U. S.) (Creole State) | 10,533 | 502.1 | 62.2 |
| President Monroe (U. S.) (Panhandle State) | 10,533 | 502.1 | 62.2 |
| President Polk (U. S.) (Old North State) | 10,533 | 502.1 | 62.2 |
| President Van Buren (U. S.) (Old North State) | 10,533 | 502.1 | 62.2 |
| Araguaya (Brit.) | 10,530 | 515.2 | 61.3 |
| John DeWitt (Hol.) | 10,519 | 482.2 | 59.2 |
| Chicago (Fr.) | 10,502 | 508.4 | 57.8 |
| Groix (Fr.) | 10,500 | 479.0 | 59.0 |
| Vestris (Br.) | 10,494 | 495.5 | 60.8 |
| Ferdinando Palasciano (It.) (King Albert) | 10,484 | 499.3 | 60.2 |
| Macharda (Br.) | 10,464 | 518.0 | 63.7 |
| Doricstar (Br.) | 10,441 | 499.8 | 64.0 |
| Winifredian (Br.) | 10,428 | 552.5 | 59.3 |
| Hakone Maru (Jap.) | 10,423 | 495.0 | 62.0 |
| Haruna Maru (Jap.) | 10,421 | 495.0 | 62.0 |
| Princess Matoika (U. S.) (Kiautschon) (Princess Alice) | 10,421 | 523.5 | 60.1 |
| Hakozaki Maru (Jap.) | 10,420 | 495.0 | 62.0 |
| Scotian (Br.) (Statendam) | 10,417 | 515.3 | 59.8 |
| E. T. Bedford (U. S.) | 10,397 | 499.2 | 68.1 |
| J. A. Moffett Jr. (U. S.) | 10,397 | 499.2 | 68.1 |
| Walter Jennings (U.S.) | 10,396 | 499.2 | 68.1 |
| Waimana (Br.) | 10,389 | 477.6 | 63.1 |
| Pocohontas (U. S.) (Princess Irene) | 10,352 | 523.5 | 60.2 |
| Infanta Isabel de Barbon (Sp.) | 10,348 | 481.9 | 61.3 |
| Calchas (Br.) | 10,304 | 490.8 | 62.4 |
| Agwismith (U. S.) | 10,300 | 500.0 | 68.2 |
| Kamoi Maru (Jap.) | 10,300 | 478.5 | 67.0 |
| F. Q. Barstow (U. S.) | 10,290 | 500.0 | 68.2 |
| Agwistone (U. S.) | 10,289 | 500.0 | 68.2 |
| Wm. G. Warden (U. S.) | 10,289 | 500.0 | 68.2 |
| Mosella (Fr.) | 10,250 | 481.5 | 59.2 |
| Briton (Br.) | 10,248 | 530.3 | 60.3 |
| Philadelphia (U. S.) (City of Philadelphia) | 10,232 | 527.6 | 63.2 |
| Louisville (U. S.) (St. Louis) | 10,230 | 535.5 | 63.0 |
| St. Paul (U. S.) | 10,230 | 535.5 | 63.0 |
| Ixion (Br.) | 10,229 | 506.0 | 60.3 |
| Talttrybius (Br.) | 10,224 | 506.0 | 60.3 |
| J. C. Donnell (U. S.) | 10,215 | 500.0 | 68.2 |
| Main (Fr.) | 10,186 | 500.1 | 58.4 |
| Yorkshire (Br.) | 10,184 | 482.4 | 58.3 |
| Diomed (Br.) | 10,180 | 489.4 | 62.5 |
| United States (Den.) | 10,146 | 500.8 | 58.3 |
| Alfonso XIII. (Sp.) | 10,137 | 480.0 | 61.3 |
| Cristobal Colon (Sp.) | 10,137 | 480.0 | 61.0 |
| Reina Victoria-Eugenia (Sp.) | 10,137 | 480.0 | 61.3 |
| Hellig Olav. (Den.) | 10,136 | 500.8 | 58.3 |
| Vasari (Br.) | 10,117 | 486.0 | 59.3 |
| New York (U. S.) (City of New York) (Plattsburg) | 10,080 | 517.0 | 63.6 |
| Charles Pratt (U. S.) | 10,050 | 500.0 | 68.0 |
| H. H. Rogers (U. S.) | 10,050 | 500.0 | 68.0 |
| Aenca (Br.) | 10,049 | 493.0 | 60.4 |
| Ascanius (Br.) | 10,048 | 493.0 | 60.4 |
| Oscar II. (Den.) | 10,012 | 500.8 | 58.3 |
| Anchises (Br.) | 10,000 | 493.0 | 60.4 |
| Ausonia (It.) | 10,000 | 491.0 | 61.7 |

## WORLD'S MERCHANT SHIPPING 1922.

(Data from 1922-1923 Lloyd's Register Book; covers vessels of 100 tons or more.)

| Country. | Steam and Motor Vessels. | | Sailing Vessels. | | Grand Total. | |
|---|---|---|---|---|---|---|
| | Number. | Gross Tonnage. | Number. | Gross Tonnage. | Number. | Gross Tonnage. |
| British Empire: | | | | | | |
| United Kingdom | 8,430 | 19,088,638 | 419 | 206,999 | 8,849 | 19,295,637 |
| Australia and New Zealand | 595 | 747,214 | 41 | 18,824 | 636 | 766,038 |
| Canada— | | | | | | |
| Coast | 557 | 894,318 | 320 | 126,666 | 877 | 1,020,984 |
| Lakes | 72 | 170,070 | ..... | ..... | 72 | 170,070 |
| Hongkong | 93 | 228,113 | 1 | 3,756 | 94 | 231,869 |
| India and Ceylon | 166 | 223,510 | 48 | 11,590 | 214 | 235,100 |
| Other dominions | 350 | 263,146 | 229 | 59,676 | 579 | 322,822 |
| Total | 10,263 | 21,615,009 | 1,058 | 427,511 | 11,321 | 22,042,520 |
| America (United States): | | | | | | |
| Sea | 3,765 | 13,576,640 | 1,121 | 1,161,866 | 4,886 | 14,738,506 |
| Northern Lakes | 469 | 2,155,904 | 26 | 91,786 | 495 | 2,247,690 |
| Philippine Islands | 97 | 75,918 | 2 | 346 | 99 | 76,264 |
| Total | 4,331 | 15,808,462 | 1,149 | 1,253,998 | 5,480 | 17,062,460 |
| Argentina | 173 | 161,588 | 43 | 19,967 | 216 | 181,555 |
| Belgium | 270 | 571,074 | 5 | 8,403 | 275 | 579,477 |
| Brazil | 349 | 469,444 | 50 | 23,127 | 399 | 492,571 |
| Chili | 107 | 121,122 | 19 | 10,279 | 126 | 131,401 |
| China | 134 | 188,388 | ..... | ..... | 134 | 188,388 |
| Cuba | 49 | 55,179 | 16 | 7,498 | 65 | 62,677 |
| Danzig | 38 | 97,502 | 4 | 9,729 | 42 | 107,231 |
| Denmark | 622 | 963,142 | 200 | 74,996 | 822 | 1,038,138 |
| Esthonia | 38 | 32,149 | 60 | 13,110 | 98 | 45,259 |
| Finland | 190 | 122,954 | 162 | 90,717 | 352 | 213,671 |
| Fiume | 63 | 81,210 | 1 | 152 | 64 | 81,362 |
| France | 1,723 | 3,537,382 | 371 | 308,410 | 2,094 | 3,845,792 |
| Germany | 1,533 | 1,785,767 | 190 | 101,641 | 1,723 | 1,887,408 |
| Greece | 361 | 657,604 | 18 | 10,523 | 379 | 668,127 |
| Holland | 1,100 | 2,617,485 | 64 | 15,228 | 1,164 | 2,632,713 |
| Italy | 1,016 | 2,698,722 | 397 | 167,613 | 1,413 | 2,866,335 |
| Japan | 2,026 | 3,586,918 | ..... | ..... | 2,026 | 3,586,918 |
| Jugo-Slavia | 65 | 81,204 | ..... | ..... | 65 | 81,204 |
| Latvia | 37 | 32,298 | 30 | 7,826 | 67 | 40,124 |
| Norway | 1,716 | 2,417,680 | 136 | 183,181 | 1,852 | 2,600,861 |
| Peru | 30 | 68,363 | 44 | 32,846 | 74 | 101,209 |
| Portugal | 155 | 237,339 | 131 | 48,539 | 286 | 285,878 |
| Roumania | 31 | 72,297 | ..... | ..... | 31 | 72,297 |
| Spain | 780 | 1,215,276 | 193 | 67,481 | 973 | 1,282,757 |
| Sweden | 1,122 | 1,040,032 | 223 | 75,343 | 1,345 | 1,115,375 |
| Uruguay | 41 | 65,265 | 12 | 11,046 | 53 | 76,311 |
| Other countries | 744 | 663,309 | 55 | 28,326 | 799 | 691,635 |
| Country not stated | 148 | 278,788 | 49 | 30,344 | 197 | 309,132 |
| Total | 29,255 | 61,342,952 | 4,680 | 3,027,834 | 33,935 | 64,370,786 |

Of the steamers and motor vessels, 23,250 are steel, 2,625 are iron, and 3,380 are wood or composite. Of the sailing vessels, 966 are steel, 299 are iron, and 3,415 are wood or composite.

## WORLD'S MERCHANT SHIPPING SINCE 1870.

(Includes Sailing and Steam.)

| Year. | United States. | Great Britain. | Germany | France. | Japan. | Norway. | Holland. | Italy. | Belgium. |
|---|---|---|---|---|---|---|---|---|---|
| | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* | *Tons.* |
| 1870 | 4,246,507 | 5,617,693 | 982,355 | 1,072,241 | ..... | 1,022,515 | 389,526 | 1,012,164 | 30,149 |
| 1880 | 4,068,034 | 6,574,513 | 1,181,525 | 919,298 | 89,309 | 1,518,658 | 328,281 | 999,196 | 75,66 |
| 1890 | 4,424,497 | 7,978,538 | 1,433,413 | 944,013 | 145,692 | 1,705,699 | 255,711 | 820,716 | 75,946 |
| 1900 | 5,164,839 | 9,304,108 | 1,941,645 | 1,037,726 | 863,830 | 1,508,118 | 346,923 | 945,008 | 113,259 |
| 1901 | 5,524,218 | 9,608,420 | 2,093,033 | 1,110,988 | 917,971 | 1,467,089 | 382,102 | 999,918 | 110,457 |
| 1902 | 5,797,902 | 10,054,770 | 2,203,804 | 1,217,614 | 944,458 | 1,451,116 | 404,680 | 1,018,807 | 106,182 |
| 1903 | 6,087,345 | 10,268,604 | 2,322,045 | 1,235,341 | 989,612 | 1,443,904 | 395,695 | 1,044,758 | 102,760 |
| 1904 | 6,291,535 | 10,554,520 | 2,352,575 | 1,349,327 | 1,124,695 | 1,451,425 | 399,633 | 1,032,614 | 102,737 |
| 1905 | 6,456,543 | 10,735,582 | 2,469,292 | 1,387,220 | 1,273,467 | 1,482,094 | 411,307 | 1,025,603 | 99,733 |
| 1906 | 6,674,969 | 11,167,332 | 2,629,093 | 1,400,542 | 1,392,798 | 1,547,884 | 436,749 | 1,000,797 | 112,515 |
| 1907 | 6,938,794 | 11,485,099 | 2,790,435 | 1,402,647 | 1,481,206 | 1,569,964 | 447,666 | 995,260 | 120,187 |
| 1908 | 7,365,445 | 11,541,394 | 2,825,449 | 1,452,495 | 1,544,921 | 1,581,146 | 458,345 | 1,020,062 | 152,325 |
| 1909 | 7,388,755 | 11,585,878 | 2,859,307 | 1,444,338 | 1,602,283 | 1,479,684 | 511,246 | 1,071,193 | 187,444 |
| 1910 | 7,508,082 | 11,5 5,663 | 2,903,570 | 1,451,648 | 1,647,629 | 1,526,156 | 534,275 | 1,107,187 | 191,132 |
| 1911 | 7,638,790 | 11,698,508 | 3,023,725 | 1,462,639 | 1,833,354 | 1,646,030 | 565,613 | 1,320,653 | 166,420 |
| 1912 | 7,714,183 | 18,213,620 | 4,628,983 | 2,052,518 | 1,344,991 | 2,292,596 | 1,129,906 | 1,298,582 | 271,684 |
| 1913 | 7,886,551 | 18,696,237 | 5,082,061 | 2,201,164 | 1,500,014 | 2,457,880 | 1,309,849 | 1,521,942 | 304,386 |
| 1914 | 7,928,688 | 19,256,766 | 5,459,296 | 2,319,438 | 1,708,386 | 2,504,722 | 1,496,455 | 1,668,296 | 352,124 |
| 1915 | 8,389,429 | 19,541,368 | 4,706,027 | 2,285,728 | 1,826,068 | 2,529,188 | 1,522,547 | 1,736,545 | 276,427 |
| 1916 | 8,469,649 | 19,134,857 | 4,151,552 | 2,216,443 | 1,847,453 | 2,771,022 | 1,508,916 | 1,896,534 | 272,160 |
| 1917 | 8,871,037 | 19,637,418 | 3,156,008 | 2,152,524 | 2,059,001 | 2,307,164 | 1,552,382 | 1,757,605 | 233,606 |
| 1918 | 9,924,518 | 21,035,149 | 3,225,294 | 2,029,884 | 2,299,405 | 1,806,576 | 1,288,245 | 1,283,790 | 193,538 |
| 1919 | 12,907,300 | 16,555,471 | 3,503,380 | 2,233,631 | 2,325,266 | 1,857,829 | 1,591,911 | 1,370,097 | 313,276 |
| 1920 | 16,324,024 | 18,330,424 | 672,671 | 3,245,194 | 2,995,878 | 2,114,190 | 1,848,348 | 2,406,958 | 464,659 |
| 1921 | 17,026,002 | 19,571,554 | 717,450 | 3,652,249 | 3,354,806 | 2,584,058 | 2,225,787 | 2,650,573 | 551,031 |

Figures for Great Britain 1870-1911 are net tonnage; since then, gross tonnage.

## SHIPBUILDING IN THE WORLD SINCE 1911.

| YEAR. | United Kingdom. | | Dominions. | | Austria-Hungary. | | Denmark. | | France. | | Germany. | | Holland. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Tons. | No. | Tons. | No. | Tons. | No. | Tons. | No. | Tons. | No. | Tons. | No. | Tons. |
| 1911... | 772 | 1,803,844 | 62 | 19,662 | 16 | 37,836 | 18 | 18,689 | 79 | 125,472 | 154 | 255,532 | 113 | 93,050 |
| 1912... | 712 | 1,738,514 | 84 | 34,790 | 12 | 38,821 | 22 | 26,103 | 80 | 110,734 | 165 | 375,317 | 112 | 99,439 |
| 1913... | 688 | 1,932,153 | 91 | 48,339 | 17 | 61,757 | 31 | 40,932 | 89 | 176,095 | 162 | 465,226 | 95 | 104,296 |
| 1914... | 656 | 1,083,553 | 80 | 47,534 | 11 | 34,335 | 25 | 32,815 | 33 | 114,052 | 89 | 387,192 | 130 | 118,153 |
| 1915... | 327 | 650,919 | 31 | 22,014 | .... | ..... | 23 | 45,198 | 6 | 25,402 | .... | ..... | 120 | 113,075 |
| 1916... | 306 | 608,235 | 40 | 31,571 | .... | ..... | 28 | 35,277 | 9 | 42,752 | .... | ..... | 201 | 180,197 |
| 1917... | 286 | 1,162,896 | 105 | 94,471 | .... | ..... | 23 | 20,445 | 6 | 18,828 | .... | ..... | 146 | 148,779 |
| 1918... | 301 | 1,348,120 | 206 | 279,904 | .... | ..... | 13 | 26,150 | 3 | 13,715 | .... | ..... | 74 | 74,026 |
| 1919... | 612 | 1,620,442 | 263 | 358,728 | .... | ..... | 46 | 37,766 | 34 | 32,633 | .... | ..... | 100 | 137,086 |
| 1920... | 618 | 2,055,624 | 103 | 203,644 | .... | ..... | 30 | 60,669 | 50 | 93,449 | .... | ..... | 99 | 183,149 |
| 1921... | 426 | 1,538,052 | 54 | 129,675 | .... | ..... | 37 | 77,238 | 65 | 210,663 | 242 | 509,064 | 98 | 232,402 |

| YEAR. | Italy. | | Japan. | | Norway. | | Sweden. | | United States. | | Other Countries. | | World Total. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Tons. | No. | Tons. | No. | Tons. | No. | Tons. | No. | Tons. | No. | Tons. | No. | Tons. |
| 1911... | 14 | 17,401 | 109 | 44,359 | 71 | 35,435 | 11 | 9,427 | 142 | 171,569 | 38 | 17,864 | 1,599 | 2,650,140 |
| 1912... | 27 | 25,196 | 168 | 57,755 | 89 | 50,255 | 22 | 13,968 | 174 | 284,223 | 52 | 46,654 | 1,719 | 2,901,769 |
| 1913... | 38 | 50,356 | 152 | 64,664 | 74 | 50,637 | 25 | 18,524 | 205 | 276,448 | 83 | 43,455 | 1,750 | 3,332,882 |
| 1914... | 47 | 42,981 | 32 | 85,861 | 61 | 54,204 | 26 | 15,163 | 94 | 200,762 | 35 | 36,148 | 1,319 | 2,852,753 |
| 1915... | 30 | 22,132 | 26 | 49,408 | 59 | 62,070 | 27 | 20,319 | 84 | 177,460 | 10 | 13,641 | 743 | 1,201,638 |
| 1916... | 10 | 56,654 | 55 | 145,624 | 52 | 42,458 | 34 | 26,769 | 211 | 504,247 | 18 | 14,296 | 964 | 1,688,080 |
| 1917... | 11 | 38,906 | 104 | 350,141 | 44 | 46,103 | 34 | 26,760 | 326 | 997,919 | 27 | 32,538 | 1,112 | 2,937,786 |
| 1918... | 7 | 60,791 | 193 | 489,924 | 51 | 47,723 | 36 | 39,583 | 929 | 3,033,030 | 40 | 34,478 | 1,866 | 5,447,444 |
| 1919... | 32 | 82,713 | 133 | 611,883 | 82 | 57,378 | 53 | 50,971 | 1,051 | 4,075,385 | 16 | 26,725 | 2,483 | 7,144,549 |
| 1920... | 82 | 133,190 | 140 | 456,642 | 30 | 38,855 | 46 | 63,823 | 509 | 2,474,253 | 52 | 96,368 | 1,759 | 5,861,666 |
| 1921... | 85 | 164,748 | 43 | 227,425 | 35 | 51,458 | 27 | 65,911 | 173 | 1,006,413 | 78 | 63,465 | 1,377 | 4,341,679 |

Belgium, 3 (17,909 t.); Spain, 11 (47,256 t.). Total excludes Austria-Hungary.

## SEA-GOING STEEL AND IRON STEAMERS AND MOTOR VESSELS.

| COUNTRY. | June, 1914. Tons gross. | June, 1922. Tons gross. | COUNTRY. | June, 1914. Tons gross. | June, 1922. Tons gross. |
|---|---|---|---|---|---|
| United Kingdom | 18,877,000 | 19,053,000 | Japan | 1,642,000 | 3,325,000 |
| British Dominions | 1,407,000 | 2,201,000 | Norway | 1,923,000 | 2,337,000 |
| America (United States) | 1,837,000 | 12,506,000 | Spain | 883,000 | 1,187,000 |
| Austria-Hungary | 1,052,000 | Nil. | Sweden | 992,000 | 996,000 |
| Denmark | 768,000 | 944,000 | Other Countries | 2,398,000 | 3,301,000 |
| France | 1,918,000 | 3,303,000 | | | |
| Germany | 5,098,000 | 1,783,000 | Total abroad | 23,637,000 | 37,749,000 |
| Greece | 820,000 | 653,000 | | | |
| Holland | 1,471,000 | 2,613,000 | World's total | 42,514,000 | 56,802,000 |
| Italy | 1,428,000 | 2,600,000 | | | |

## SEA-GOING STEAMERS AND MOTOR VESSELS OF 4,000 TONS AND ABOVE.

| COUNTRY. | | 4,000 and under 6,000. | 6,000 and under 10,000. | 10,000 and under 15,000. | 15,000 and above. | Total. |
|---|---|---|---|---|---|---|
| Br'ish Em. | 1914 | 1283 | 462 | 111 | 27 | 1883 |
| | 1922 | 1277 | 725 | 137 | 51 | 2190 |
| Un. States | 1914 | 82 | 50 | 10 | 1 | 143 |
| | 1922 | 789 | 615 | 60 | 12 | 1476 |
| France... | 1914 | 103 | 52 | 12 | 2 | 169 |
| | 1922 | 190 | 104 | 19 | 3 | 316 |
| Holland.. | 1914 | 62 | 42 | 5 | 3 | 112 |
| | 1922 | 108 | 129 | 7 | 4 | 248 |
| Italy..... | 1914 | 80 | 27 | .. | .. | 107 |
| | 1922 | 191 | 78 | 6 | 4 | 279 |

| COUNTRY. | | 4,000 and under 6,000. | 6,000 and under 10,000. | 10,000 and under 15,000. | 15,000 and above. | Total. |
|---|---|---|---|---|---|---|
| Japan.... | 1914 | 61 | 43 | 7 | .. | 111 |
| | 1922 | 200 | 97 | 11 | .. | 308 |
| Norway.. | 1914 | 58 | 12 | 2 | .. | 72 |
| | 1922 | 113 | 40 | 2 | .. | 155 |
| Oth. C'tris | 1914 | 703 | 316 | 31 | 21 | 1071 |
| | 1922 | 394 | 138 | 13 | 2 | 547 |
| Gr'nd tot. | 1914 | 2432 | 1004 | 178 | 54 | 3668 |
| | 1922 | 3262 | 1926 | 255 | 76 | 5519 |

## BIG DAMS OF THE WORLD.

| NAME AND LOCATION OF DAM; WHEN OPENED. | Height. | Length of Dam. | Storage Capacity. | Cost. |
|---|---|---|---|---|
| *Built by Engineers' Corps, U. S. Army for Navigation—* | *Feet.* | *Feet.* | *Million Gals.* | *Dollars.* |
| Keokuk (Mississippi River, Keokuk, Iowa)....1913 | 53 | 4,359 | Not known | 24,000,000 |
| Twin City (Mississippi River, below Minneapolis)..1917 | 38 | 574 | Not known | 1,368,000 |
| Hale's Bar (Tennessee River, near Chattanooga)...1913 | 60 | 1,200 | Not known | 6,924,000 |
| No. 17 (Black Warrior River, Ala.).....1915 | 81 | 1,170 | Not known | 3,106,000 |
| *Built by the City of New York for Water Supply—* | | | | |
| Ashokan (Ulster Co., N. Y., Catskill Watershed)...1915 | 252 | 4,650 | 130,400 | 31,067,000 |
| Schoharie (Schoharie Co., N.Y., Catskill Watershed)... | 160 | 2,300 | 20,000 | 14,093,000 |
| Kensico (Westchester Co., N. Y., Bronx and Byram Watershed).....1915 | 307 | 1,825 | 30,573 | 15,171,000 |
| Croton Falls (Westch'r Co., N.Y., Croton W't'rsh'd) 1911 | 167 | 1,900 | 15,753 | 4,319,000 |
| Croton Lake (Westch'r Co., N.Y., Croton W't'rsh'd) 1905 | 297 | 2,168 | 33,815 | 9,337,000 |
| *Built by U. S. Government for Irrigation Purposes—* | | | | |
| Roosevelt (Ariz., Salt River).....1911 | 280 | 1,125 | 425,235 | 4,091,000 |
| Arrowrock (Idaho, Boise River).....1915 | 349 | 1,100 | 91,238 | 4,497,000 |
| Pathfinder (Neb.-Wyo., No. Platte River).....1909 | 218 | 432 | 348,660 | 2,099,000 |
| Elephant Butte (N. Mex.-Tex., Rio Grande River)..1916 | 306 | 1,674 | 759,605 | 5,015,000 |
| Tieton (Wash., Yakima River)..... | 330 | 900 | 65,985 | ..... |
| Shoshone (Wyo., Shoshone River).....1910 | 328 | 200 | 148,783 | 1,671,000 |
| *Foreign, for Irrigation Purposes—* | | | | |
| Assouan (Egypt, River Nile).....1912 | 131 | 6,400 | 281,338 | 18,660,000 |
| Burrinjuck (Australia, New So. Wales)..... | 240 | 784 | 251,317 | ..... |

Cost figures for Croton Lake and Croton Falls cover dam construction only.

## PRINCIPAL RIVERS OF THE U. S.

TOTAL number of navigable streams in United States, 295, tributary as follows, the total navigable length in miles being in parentheses—Atlantic, 148 (5,365); Gulf, not including the Mississippi, 53 (5,212); Mississippi and branches, 54 (13,912); Canada, 2 (315); Pacific, 38 (1,606). Total navigable length, 26,410 miles.

The Hudson was one of the earliest rivers of the country to be improved by the Government. Work began even before 1822 by the State of New York, at which time the Erie Canal was opened, and in 1823 the Erie and Champlain both emptied into the pool created by the State dam at Troy, finished about that year. Work by the United States began in 1834.

| NAMES. | Sources. | Mouths. | Length Miles. |
|---|---|---|---|
| Alabama | Junction of Coosa and Tallapoosa Rivers, Ala | Mobile River | 350 |
| Allegheny | Near Raymond, Pa | Ohio River | 350 |
| Altamaha | Ocmulgee and Oconee Rivers, Ga | Atlantic Ocean | 150 |
| Androscoggin | Umbagog Lake, Me | Kennebec River | 160 |
| Apalachicola | Chattahoochee and Flint Rivers, Ga | Gulf of Mexico | 90 |
| Arkansas | Rocky Mountains, Col | Mississippi River | 2,000 |
| Atchafalaya | Point Coupee Parish, La | Gulf of Mexico | 200 |
| Big Black | So. E. Missouri | White River, Ark | 400 |
| Big Horn | Rocky Mountains, Wyo | Yellowstone River | 500 |
| Black | Adirondack Lakes, N. Y | Lake Ontario | 190 |
| Black Warrior | Locust and Mulberry Rivers, Ala | Tombigbee River | 300 |
| Brazos | In the Staked Plain, Tex | Gulf of Mexico | 850 |
| Canadian | Northeastern New Mexico | Arkansas River | 900 |
| Cape Fear | Haw and Deep Rivers, N. Car | Atlantic Ocean | 250 |
| Chattahoochee | In Habersham County, Ga | Apalachicola River | 500 |
| Cheyenne | Eastern Wyoming | Missouri River | 500 |
| Chickasaha | Kemper County, Miss | Pascagoula River | 200 |
| Chowan | Meheran and Nottaway Rivers, N. Car | Albemarle Sound | 50 |
| Cimarron | Raton Mountains, N. Mex | Arkansas River | 650 |
| Colorado | In the Staked Plain, Tex | Matagorda Bay | 650 |
| Colorado | Junction of Green and Grand Rivers, Utah | Gulf of California | 1,360 |
| Columbia | Upper Columbia Lake, B. C | Pacific Ocean | 1,400 |
| Conecuh | Pike County, Ala | Escambia River, Fla | 175 |
| Connecticut | Connecticut Lake, N. H | Long Island Sound | 410 |
| Coosa | Oostenaula and Etowah Rivers, Ga | Alabama River | 350 |
| Cumberland | Junction of Poor and Straight Forks, Ky | Ohio River | 650 |
| Delaware | Catskill Mountains, N. Y | Delaware Bay | 375 |
| Des Moines | Lake Shetek, Minn | Mississippi River | 450 |
| Dolores | San Juan Mountains, Col | Grand River | 250 |
| Edisto | North and South Edisto Rivers, S. Car | Atlantic Ocean | 150 |
| Escambia | Monroe County, Ala | Pensacola Bay | 50 |
| Flint | Near Atlanta, Ga | Apalachicola River | 350 |
| Fox | Green Lake County, Wis | Green Bay | 250 |
| Genesee | Near Raymond, Pa | Lake Ontario | 145 |
| Gila | Tuscan Mountains, N. Mex | Colorado River | 550 |
| Grand | Southern Iowa | Missouri River | 200 |
| Grand | Hillsdale County, Mich | Lake Michigan | 280 |
| Grand | Grand Lake, Col | Green River | 350 |
| Great Kanawha | Blue Ridge Mountains, N. Car | Ohio River | 450 |
| Green | Lincoln County, Ky | Ohio River | 350 |
| Greenbrier | Pocahontas County, W. Va | Great Kanawha River | 175 |
| Gunnison | Saguache Range, Col | Grand River | 200 |
| Hackensack | Rockland County, N. Y | Newark Bay | 50 |
| Holston | North and South Forks Rivers, Tenn | Tennessee River | 350 |
| Housatonic | Taghanic Mountains, Mass | Long Island Sound | 150 |
| Hudson | Lake Sanford, Adirondack Mountains, N. Y | New York Bay | 350 |
| Humboldt | Elko County, Nev | Humboldt Lake | 375 |
| Illinois | Des Plaines River, Wis | Mississippi River | 435 |
| Indian | Eastern Florida | Atlantic Ocean | 100 |
| James | Formed by Jackson's and Cowpasture Rivers, Va | Chesapeake Bay | 450 |
| Kalamazoo | Hillsdale County, Mich | Lake Michigan | 200 |
| Kansas | Junction of Smoky Hill Fork and Solomon River, Kan | Missouri River | 300 |
| Kaskaskia | Champaign County, Ill | Mississippi River | 320 |
| Kennebec | Moosehead Lake, Me | Atlantic Ocean | 175 |
| Kentucky | Cumberland Mountains, Ky | Ohio River | 250 |
| Menominee | Brule and Michigamie Rivers, Mich | Green Bay | 125 |
| Merrimac | White Mountains, N. H | Atlantic Ocean | 150 |
| Minnesota | Big Stone Lake, S. Dak | Mississippi River | 475 |
| Mississippi | Lake Itasca, Northern Minnesota | Gulf of Mexico | 2,460 |
| Missouri | Rocky Mountains, Southwestern Montana | Mississippi River | 2,551 |
| Mobile | Junction of Tombigbee and Alabama Rivers, Ala | Mobile Bay | 50 |
| Mohawk | Lewis County, N. Y | Hudson River | 160 |
| Monongahela | Formed by West Fork and Tygart's Valley Rivers, W. Va | Alleghany River | 300 |
| Neches | Van Zandt County, Tex | Sabine Lake, Tex | 350 |
| Neosho | Morris County, Kan | Arkansas River | 400 |
| Neuse | Person County, N. C | Pamlico Sound | 300 |
| Ocmulgee | Northern Georgia | Altamaha River | 280 |
| Oconee | Altamaha River, Ga | Ocmulgee River | 270 |
| Ohio | Junction of Alleghany and Monongahela Rivers, Pa | Mississippi River | 950 |
| Osage | Lyon County, Kan | Missouri River | 460 |
| Pamlico | Lower part of Tar River (which see.) | | |
| Passaic | Morris County, N. J | Newark Bay | 100 |
| Pearl | Winston County, Miss | Gulf of Mexico | 350 |
| Pecos | Rocky Mountains, N. Mex | Rio Grande | 800 |
| Pedee (Yadkin) | Blue Ridge Mountains, N. C | Winyaw Bay, S. C | 300 |
| Penobscot | Somerset County, Me | Penobscot Bay | 350 |
| Platte | Sweetwater River, Wyo | Missouri River | 1,260 |
| Powder | Big Horn Mountains, Wyo | Yellowstone River | 400 |
| Potomac | Alleghany Mountains, W. Va | Chesapeake Bay | 450 |
| Rappahannock | Blue Ridge Mountains, Va | Chesapeake Bay | 155 |
| Red | In the Staked Plain, Tex | Mississippi River | 1,200 |
| Red (of North) | Lake Traverse, Minn | Lake Winnipeg | 700 |
| Red Lake River | Red Lake, Minn | Red River of the North | 135 |
| Rio Grande | San Juan Mountains, Col | Gulf of Mexico | 1,800 |
| Roanoke | Formed by Dan and Staunton Rivers, Va | Albemarle Sound | 240 |
| Rock | Koshkonong Lake, Wis | Mississippi River | 330 |
| Sabine | Northern Texas | Gulf of Mexico | 460 |
| Sacramento | Near Sisson, Cal | Suisun Bay | 600 |
| St. Croix | Douglas and Bayfield Counties, Wis | Mississippi River | 200 |

| Names. | Sources. | Mouths. | Length Miles. |
|---|---|---|---|
| St. Francis | St. Francois County, Mo | Mississippi River | 460 |
| St. John's | Brevard and Osceola Counties, Fla | Atlantic Ocean | 400 |
| St. Joseph | Hillsdale County, Mich | Lake Michigan | 260 |
| San Joaquin | Sierra Nevada Mountains, Cal | Sacramento River | 350 |
| Santee | Junction of Wateree and Congaree Rivers, S. C | Atlantic Ocean | 150 |
| Savannah | Formed by Tugaloo and Kiowee Rivers, S. C | Atlantic Ocean | 450 |
| Schuylkill | Near Pottsville, Pa | Delaware River | 130 |
| Scioto | Auglaize County, Ohio | Ohio River | 225 |
| Shenandoah | Northern Virginia | Potomac River | 200 |
| Snake | Yellowstone National Park, Wyo | Columbia River | 950 |
| Sunflower (Big) | Coahoma County, Miss | Yazoo River | 200 |
| Susquehanna | N. or E. Branch, Lake Schuyler and Otsego Lake, N. Y. | Chesapeake Bay | 256 |
| Susquehanna | West Branch, near Raymond, Pa | Susquehanna River | 250 |
| Suwanee | Okefinokee Swamp, Ga | Gulf of Mexico | 200 |
| Tallahatchee | Northern Mississippi | Yazoo River | 240 |
| Tallapoosa | Paulding County, Ga | Coosa River | 250 |
| Tar | Granville County, N. C | Pamlico Sound | 220 |
| Tennessee | Formed by Clinch and Holston Rivers, Tenn | Ohio River | 1,200 |
| Tombigbee | Prentiss County, Miss | Mobile River | 475 |
| Trinity | Northern Texas | Galveston Bay | 530 |
| Wabash | Mercer County, Ohio | Ohio River | 550 |
| Waccamaw | Southern North Carolina | Great Pedee River | 550 |
| Washita | Western Arkansas (also called Ouachita) | Red River | 550 |
| White | Northwestern Arkansas | Mississippi River | 800 |
| Willamette | Cascade Range, Ore | Columbia River | 275 |
| Wisconsin | Northern Wisconsin | Mississippi River | 400 |
| Yazoo | Junction of Tallahatchee and Yalobusha Rivers, Miss | Mississippi River | 300 |
| Yellowstone | Rocky Mountains, Wyo | Missouri River | 1,100 |
| Yukon | Lake Lindeman, Yukon District, Canada | Bering Sea | 2,200 |

The Missouri River connects with the Mississippi 20 miles above St. Louis. Its total length from its source to the Gulf of Mexico is 3,277 miles.

## PRINCIPAL FOREIGN RIVERS.

| River. | Outflow. | Lgth M's. | River. | Outflow. | Lgth M's. | River. | Outflow. | Lgth M's. |
|---|---|---|---|---|---|---|---|---|
| Albany | Hudson Bay | 610 | Irawadi | Bay of Bengal | 1,250 | Po | Adriatic Sea | 420 |
| Amazon | Atlantic Oc | 3,800 | Jordan | Dead Sea | 200 | Red | Lake Winnipeg | 545 |
| Amu Darya | Aral Sea | 1,500 | Kazan | Hudson Bay | 445 | Rhine | North Sea | 700 |
| Amur | Gulf Tartary | 2,600 | Koksoak | Hudson Bay | 535 | Rhone | Gulf of Lyons | 500 |
| Ashwanipi | (See Hamilton) | | Kootenay | Columbia Riv | 400 | Rio Negro | Amazon Riv | 1,400 |
| Assiniboine | Red Riv. of N. | 450 | La Plata | Atlantic Ocean | 2,300 | Riv. of Doubt | Riv. Madeira | 950 |
| Athabaska | Arctic Ocean | 765 | Lena | Arctic Ocean | 2,800 | Saguenay | St. Law. Riv | 405 |
| Backs | Arctic Ocean | 605 | Liard | Arctic Ocean | 550 | St. John | Bay of Fundy | 500 |
| Brahm'putra | Bay of Bengal | 1,680 | Loire | Bay of Biscay | 650 | St. Lawrence | Gulf St. Law | 2,150 |
| Bug | Dnieper Riv | 500 | Mackenzie | Beaufort Sea | 2,525 | St. Maurice | St. Law. Riv | 325 |
| Churchill | Hudson Bay | 1,000 | Madeira | Amazon Riv | 2,000 | Salwin | Gulf of Martaban | 1,750 |
| Columbia | Pacific Ocean | 1,150 | Magdalena | Caribbean Sea | 950 | S. Francisco | Atlantic Oc | 1,200 |
| Congo | Atlantic Ocean | 3,000 | Manikugan | St. Law. Riv | 310 | Sask'tch'wan | Lk. Winnipeg | 1,205 |
| Coppermine | Arctic Ocean | 525 | Maros | Theiss River | 500 | Seine | English Chan | 475 |
| Danube | Black Sea | 1,725 | Marne | Seine River | 310 | Severn | Hudson Bay | 420 |
| Darling | Murray River | 1,160 | Mekong | China Sea | 2,500 | Shannon | Atlantic Oc | 250 |
| Dnieper | Black Sea | 1,400 | Meuse (Ms) | North Sea | 575 | Souris | Hudson Bay | 450 |
| Dniester | Black Sea | 800 | Murray | Indian Ocean | 1,450 | Tagus | Atlantic Oc | 550 |
| Drave | Danube Riv | 450 | Nelson | Hudson Bay | 1,660 | Thames | North Sea | 215 |
| Dubawnt | Hudson Bay | 580 | Niger | Gulf of Guinea | 2,900 | Theiss | Danube Riv | 800 |
| Ebro | Mediterranean | 400 | Nile | Mediterranean | 3,766 | Tigris | Euphrates | 1,150 |
| Elbe | North Sea | 700 | Nottaway | Hudson Bay | 400 | Ural | Caspian Sea | 1,400 |
| English | Hudson Bay | 330 | Ob | Gulf of Ob | 2,300 | Vistula | Gulf of Danzig | 630 |
| Euphrates | Persian Gulf | 1,700 | Oder | Baltic Sea | 550 | Volga | Caspian Sea | 2,300 |
| Fraser | Pacific Ocean | 695 | Orange | Atlantic Oc | 1,100 | Weser | North Sea | 300 |
| Gambia | Atlantic Ocean | 500 | Orinoco | Atlantic Oc | 1,600 | Winnipeg | Hudson Bay | 475 |
| Ganges | Bay of Bengal | 1,500 | Ottawa | St. Law. Riv | 685 | Yangtse | Yellow Sea | 3,400 |
| Garonne | Bay of Biscay | 385 | Paraguay | Parana River | 1,500 | Yenisei | Arctic Ocean | 3,300 |
| Hamilton | Esquimau B'y | 350 | Parana | Atlantic Oc | 2,450 | Zambezi | Indian Ocean | 1,600 |
| Hoangho | Gulf Pechili | 2,600 | Peace | Arctic Oc | 1,065 | | | |
| Indus | Arabian Sea | 1,700 | Pilcomayo | Paraguay Riv | 1,000 | | | |

Canadian drainage basins, area, in square miles—Atlantic, 554,000; Hudson Bay, 1,486,000; Pacific, 387,300; Arctic, 1,290,000.

## FAMOUS WATERFALLS OF THE WORLD.

| Name and Location. | Height in feet. | Name and Location. | Height in feet. | Name and Location. | Height in feet. |
|---|---|---|---|---|---|
| Gavarnie, France | 1,385 | Schaffhausen, Switzerland | 100 | Vettis, Norway | 950 |
| Grand, Labrador | 2,000 | Seven Falls, Colorado | 266 | Victoria, Africa | 400 |
| Kaieteur, British Guiana | 800 | Skjaeggedalsfos, Norway | 530 | Voringfos, Norway | 600 |
| Minnehaha, Minnesota | 50 | Shoshone, Idaho | 210 | Yellowstone (upper), Montana | 110 |
| Missouri, Montana | 90 | Snoqualmie, Washington | 268 | Yellowstone (lower), Montana | 310 |
| Montmorenci, Quebec | 265 | Staubbach, Switzerland | 1,000 | Yguassu, Brazil | 210 |
| Multnomah, Oregon | 850 | Stirling, New Zealand | 500 | Yosemite (upper), California | 1,436 |
| Murchison, Africa | 120 | Sutherland, New Zealand | 1,904 | Yosemite (middle), California | 626 |
| Niagara, New York-Ontario | 164 | Takkakaw, British Columbia | 1,200 | Yosemite (lower), California | 400 |
| Rjukan, Norway | 780 | Twin, Idaho | 180 | | |

### HEIGHT OF YOSEMITE WATERFALLS ABOVE SEA LEVEL.

The height in feet above sea level of the waterfalls in Yosemite Valley is as follows—Upper Yosemite, 6,525; Lower Yosemite, 4,420; Nevada, 5,907; Vernal, 5,044; Illilouette, 5,816; Bridalveil, 4,787; Ribbon, 7,008; Widows Tears, 6,466.

## THE PANAMA CANAL.

(Opened for Navigation August 15, 1914. Gov., Col. Jay J. Morrow, U. S. Army. Balboa Heights.)

THE Panama Canal was built between latitudes 8 and 9 N. across the Isthmus of Panama at its narrowest part but one. The saddle through which it crosses the continental divide was originally about 335 feet above sea level. Gold Hill, the highest point immediately alongside the channel of the Canal, rises 540 feet above sea level. The Canal has a length of 43.8 nautical miles from deep water in the Atlantic to deep water in the Pacific. The Canal extends at sea level from its starting point in Limon Bay to Gatun, 5.77 miles. At Gatun the sea level section ends in a flight of three pairs of locks, forming the steps to Gatun Lake, with its normal elevation 85 feet above the sea.

Gatun Lake was formed by damming the Chagres Valley, and excess water, wasted through the spillway, finds its way to sea through the old course of the Lower Chagres. The Canal proceeds up the valley of the Chagres 20.55 miles to Gamboa, and in this section relatively little excavation was required. At Gamboa begins the real drive through the divide, the famous Culebra Cut. It is 6.97 nautical miles long, 300 feet wide at bottom, and extends to Pedro Miguel lock and dam, on the Pacific slope of the divide. Here one lock lowers the ship to Miraflores Lake, a small body about a mile long, with its surface 55 feet above the sea. At the south end of this lake are Miraflores locks, which, in two steps, lower the ship to the Pacific. A sea level channel 7 miles long carried past Balboa and out into the Pacific.

The minimum depth of the channel is 41 feet, and in parts of Gatun Lake it is about 80 feet deep. The lock chambers have a clear width of 110 feet and length of 1,000 feet, giving ample handling room for the largest ships yet built. Gatun dam, by which Gatun Lake was formed, is a big, gently sloping mound, built by pumping sand and clay into the space between two ridges of rock and earth. It is 1½ miles long and ½ mile wide at its base. Its crest is 105 feet above sea level and the width of the dam at the top is 100 feet.

The Panama Railroad extends between Colon and Panama on the eastern side of the Canal.

The Canal Zone is the strip of land extending five miles on either side of the axis of the Canal, but not including the cities of Panama and Colon, which remain within the Republic of Panama. It has an area of 441½ square miles, including land and water. It was granted to the United States by the treaty made with Panama, February 26, 1904. The United States paid $10,000,000 for the Zone, and makes an annual payment in addition of $250,000.

COMMERCIAL TRAFFIC, PANAMA CANAL.

| | No. of Ships. | Net Tons (P. C.). | Gross Tons (Registered.) | Tolls. | Cargo Tons. |
|---|---|---|---|---|---|
| July, 1921 | 206 | 810,613 | 1,022,802 | $804,503 | 708,982 |
| August, 1921 | 236 | 965,276 | 1,219,817 | 955,380 | 839,273 |
| September, 1921 | 221 | 925,137 | 1,167,220 | 892,001 | 754,894 |
| October 1921 | 255 | 1,069,554 | 1,335,812 | 1,047,935 | 985,775 |
| November, 1921 | 222 | 942,411 | 1,184,157 | 923,048 | 855,440 |
| December, 1921 | 239 | 1,017,244 | 1,284,499 | 1,003,598 | 953,053 |
| January, 1922 | 210 | 846,516 | 1,069,840 | 847,767 | 807,298 |
| February, 1922 | 212 | 886,535 | 1,105,036 | 866,266 | 838,074 |
| March, 1922 | 234 | 975,811 | 1,226,971 | 956,726 | 960,089 |
| April, 1922 | 230 | 974,833 | 1,219,338 | 953,256 | 1,046,047 |
| May, 1922 | 243 | 1,032,816 | 1,297,553 | 1,015,057 | 1,158,507 |
| June, 1922 | 228 | 970,713 | 1,228,038 | 932,290 | 977,478 |
| Fiscal year, 1922 | 2,736 | 11,417,459 | 14,361,083 | 11,197,832 | 10,884,910 |
| Fiscal year, 1921 | 2,892 | 11,415,876 | 14,522,415 | 11,261,919 | 11,599,214 |
| Fiscal year, 1920 | 2,478 | 8,546,044 | 11,059,819 | 8,493,082 | 9,374,499 |
| Fiscal year, 1919 | 2,024 | 6,124,990 | 7,876,603 | 6,156,118 | 6,916,621 |
| Fiscal year, 1918 | 2,069 | 6,574,073 | 9,371,339 | 6,264,765 | 7,532,031 |
| Fiscal year, 1917 | 1,803 | 5,798,557 | 8,530,821 | 5,631,781 | 7,058,563 |
| Fiscal year, 1916 | 758 | 2,396,162 | 3,596,529 | 2,399,830 | 3,094,114 |
| Fiscal year, 1915 | 1,075 | 3,792,572 | 5,416,787 | 4,343,383 | 4,888,454 |

Canal was closed to traffic from September 18, 1915, to April 15, 1916. Canal was opened to commercial traffic August 15, 1914.

COMMERCIAL TRAFFIC, BY VESSELS' NATIONALITY, 1922 (FISCAL YEAR).

| NATIONALITY. | No. of Ships. | Net Tons. (P.C.). | Gross Tons. (Registered) | Tolls. | Cargo Tons. |
|---|---|---|---|---|---|
| British | 935 | 3,795,526 | 4,806,755 | $3,728,007 | 3,329,861 |
| Chilean | 53 | 150,398 | 192,057 | 115,757 | 46,182 |
| Costa Rican | 1 | 18 | 28 | 18 | ..... |
| Danish | 53 | 227,473 | 268,233 | 222,146 | 272,779 |
| Dutch | 66 | 293,428 | 332,952 | 260,138 | 290,573 |
| French | 51 | 190,171 | 251,971 | 216,475 | 139,463 |
| German | 37 | 122,893 | 148,882 | 120,087 | 121,888 |
| Greek | 5 | 18,618 | 21,443 | 19,293 | 11,956 |
| Japanese | 189 | 872,466 | 1,146,103 | 953,949 | 1,044,515 |
| Mexican | 6 | 2,219 | 3,981 | 1,780 | 10 |
| Norweglan | 113 | 385,007 | 488,797 | 374,870 | 408,268 |
| Panaman | 8 | 700 | 1,035 | 611 | 626 |
| Peruvian | 60 | 161,930 | 259,409 | 103,035 | 64,370 |
| Spanish | 9 | 27,264 | 36,184 | 32,712 | 23,701 |
| Swedish | 35 | 124,446 | 135,944 | 105,939 | 141,448 |
| U. S. | 1,095 | 4,971,509 | 6,167,645 | 4,867,495 | 4,950,519 |
| Italian | 20 | 73,393 | 99,664 | 75,511 | 38,851 |
| Totals | 2,736 | 11,417,459 | 14,361,083 | 11,197,832 | 10,884,910 |

### ORIGIN AND DESTINATION OF CARGO.

The tonnage of cargo passing through the Panama Canal during the fiscal year 1922 (10,884,910) was equivalent to 93.8 per cent. of the tonnage of the previous year (11,599,172).

The greatest shrinkage was in the trade with the west coast of South America. Exports from the Atlantic and Gulf ports of the United States to that region fell from 933,261 to 244,514 tons. European exports to South America declined only from 297,166 to 283,804 tons. Exports from South America through the Canal to the United States were 548,609 tons, as compared with 375,597 in 1921, and to Europe 663,127, as compared with 922,499. Combining imports and exports and Europe and the United States, this South American trade was less by 1,388,469 tons, and to this may be added a difference of 398,097 tons in crude oil shipments from Mexico to South America, or a total of 1,786,566.

The trade with Australasia has also fallen off. Exports from the United States to Australasia declined from 620,428 to 288,090, and exports from Europe from 391,848 to 359,895. Imports from Australasia to the United States fell from 147,877 to 45,957, and to Europe from 579,745 to 381,538. The total loss of cargo in the Australasian trade amounted to 664,418.

Exports from the United States to the Far East increased from 1,213,906 to 1,728,172 tons. Imports from the Far East fell from 428,044 to 303,315.

## CANALS IN THE UNITED STATES.

(Canals in italics are ship canals.)

| Class, State and Name. | Points Connected. | Opened. | Total Length. | Canal Length. | Width. | Depth. | Cost of Construction & Improvem't. |
|---|---|---|---|---|---|---|---|
| | | *Year.* | *Miles.* | *Miles.* | *Feet.* | *Feet.* | *Dollars.* |
| Private or State Canals | ..... | ..... | 1,547.17 | 956.83 | ..... | ..... | 316,351,329 |
| MASSACHUSETTS. | | | | | | | |
| *Cape Cod Ship* | Buzzard-Cape Cod Bay. | 1914 | 13.00 | 7.68 | 200 | 25 | 13,500,000 |
| NEW YORK. | | | | | | | |
| Erie and branches | Troy-Tonawanda | 1825 | 340.40 | 122.40 | 150 | 12 | 139,214,929 |
| Champlain | Whitehall-Troy | 1822 | 62.66 | 23.55 | 125 | 12 | 21,691,584 |
| Oswego | Oswego-Three Rivers | 1828 | 23.50 | 23.50 | 200 | 12 | 12,994,329 |
| Cayuga and Seneca | Mays Pt.-Ith's-M't'r F'll | 1839 | 92.23 | ..... | 200 | 12 | 8,153,326 |
| Black River | Rome-Lyons Falls | 1849 | 35.00 | 35.00 | 42 | 4 | 3,894,952 |
| NEW JERSEY. | | | | | | | |
| *Delaware and Raritan* | N. Brunsw'k-Bordent'n. | 1834 | 44.00 | 44.00 | 80 | 8 | } 5,113,749 |
| Del. and Rar. (feeder) | Raven Rock-Trenton | 1834 | 22.00 | 22.00 | 60 | 6 | |
| Morris | Jersey City-Easton, Pa. | 1836 | 106.69 | 106.69 | 40 | 5 | 2,759,888 |
| PENNSYLVANIA. | | | | | | | |
| Schuylkill Nav. Co | Phila.-Port-Clinton | 1825 | 89.96 | 50.33 | 58 | 6 | 11,055,557 |
| Leh'h Coal and Nav. Co. | Mauch Chunk-Easton | 1821 | 47.25 | 37.25 | 60 | 6 | 4,633,109 |
| Del. Division Canal | Easton-Bristol | 1916 | 59.25 | 59.25 | 45 | 6 | 2,433350 |
| DELAWARE. | | | | | | | |
| *Chesapeake and Delaware.* | Del.R.-Chesapeake Bay. | 1829 | 29.63 | 13.63 | 60 | 10 | 5,000,000 |
| MARYLAND. | | | | | | | |
| Chesapeake and Ohio | Wash.,D.C.-Cumb'd.Md. | 1850 | 184.50 | 180.70 | 68 | 6 | 14,000,000 |
| VIRGINIA. | | | | | | | |
| *Lake Drum.* (Dis. Sw,) | Eliz. R.,Va-Pas'k R, N. C. | 1794 | 23.00 | 22.00 | 70 | 9 | 3,301,000 |
| NORTH CAROLINA. | | | | | | | |
| *Fairfield* | Fairfield-Alligator River. | 1868 | 4.00 | 4.00 | 26 | 7 | 60,000 |
| ILLINOIS. | | | | | | | |
| Illinois and Michigan | Chicago-La Salle | 1848 | 95.00 | 95.00 | 60 | 6 | 9,429,606 |
| *Chicago Drain. and Ship.* | Chicago-Lockport | 1900 | 38.60 | 32.35 | 226 | 22 | 55,208,889 |
| MICHIGAN. | | | | | | | |
| *Torch Lake* | Torch Lake-Torch Bay. | 1875 | 4.00 | 4.00 | 110 | 20 | 597,075 |
| LOUISIANA. | | | | | | | |
| *New Basin* | N. Or.-L. Ponchartrain | 1836 | 6.50 | 6.50 | 100 | 10 | 1,384,634 |
| *Old Basin* | N. Or.-St. Johns Bayou | 1794 | 5.50 | 2.00 | 84 | 5 | 227,352 |
| *Harvey's* | Miss. R. at N. Orleans | 1835 | 36.50 | 13.00 | 75 | 6 | 750,000 |
| Company's | Miss. R. at La Fourche | 1836 | 97.00 | 25.00 | 100 | 6 | 600,000 |
| *Lake Borgne* | Miss. R.-Lake Borgne | 1900 | 7.00 | 7.00 | 100 | 6 | 350,000 |
| Government Canals | ..... | ..... | 281.39 | 281.39 | ..... | ..... | 58,238,594 |
| NEW YORK. | | | | | | | |
| Black Rock | E. B'k Niag. R. at Buff'o. | 1914 | 3.20 | 3.20 | 200 | 20 | 3,943,702 |
| DELAWARE. | | | | | | | |
| Lewes | Del. Bay-Rehoboth Bay. | 1916 | 12.00 | 12.00 | ..... | 3 | 150,126 |
| VIRGINIA. | | | | | | | |
| Albemarle and Ches'ke | Eliz. R.-No. Lan l'g R | 1860 | 11.10 | 11.10 | ..... | 8 | 560,213 |
| SOUTH CAROLINA. | | | | | | | |
| Estherville-Minim Creek | Santee R.-Winyah Bay. | 1906 | 5.00 | 5.00 | 20 | 6 | 174,620 |
| FLORIDA | | | | | | | |
| Channel | Apal'la R.-St.And's Bay. | 1915 | 36.50 | 36.50 | ..... | 5 | 505,930 |
| MICHIGAN. | | | | | | | |
| St. Marys Falls-South | Ar'nd Falls-St. Marys R. | 1855 | 1.60 | 1.60 | 260 | 25 | 9,046,349 |
| St. Marys Falls-North | Ar'nd Falls-St. Marys R. | 1914 | 1.60 | 1.60 | 260 | 25 | 5,041,291 |
| Keweenaw | L.Sup.-Por.B'y-Kew.B'y | 1873 | 25.00 | 25.00 | ..... | 20 | 1,786,379 |
| St. Clair Flats | St. Clair R.-Lake St. Clair | 1889 | 3.33 | 3.33 | 300 | 20 | 1,288,891 |
| ILLINOIS. | | | | | | | |
| Illinois and Mississippi | La Salle, Ill.-Miss. R. | 1907 | 75.00 | 75.00 | 80 | 7 | 7,555,999 |
| KENTUCKY. | | | | | | | |
| Louisville and Portland | A'd Ohio R. F'ls at Lou'ie | 1830 | 2.00 | 2.00 | 200 | 9 | 6,960,920 |
| WISCONSIN. | | | | | | | |
| Sturgeon Bay-L. Mich | Sturgeon Bay-L. Mich | 1881 | 1.36 | 1.36 | 160 | 21 | 559,637 |
| ALABAMA. | | | | | | | |
| Mus. Sh'ls & Elk R. Sh'ls | Mus. Sh'ls & Elk R. Sh'ls | 1890 | 18.00 | 18.00 | ..... | 5 | 3,191,726 |
| Colbert Shoals | At Colbert Shoals | 1911 | 8.06 | 8.06 | ..... | 7 | 2,322,179 |
| TEXAS. | | | | | | | |
| Port Arthur | Tayl's B'y'u-Sabine Pass. | 1899 | 7.00 | 7.00 | 150 | 26 | 1,471,880 |
| Galveston and Brazos | W. Gal. Bay-Brazos R | 1853 | 36.00 | 36.00 | ..... | 4 | 233,654 |
| Sabine Neches | Pt. Art'r Canal-Sabine R. | 1916 | 16.00 | 16.00 | 90 | 25 | 443,933 |
| OREGON. | | | | | | | |
| Willamette River | Will't Falls nr. Ore. City | 1873 | 0.66 | 0.66 | ..... | 2 | 841,186 |
| Cascades | At the Cascades | 1896 | 0.57 | 0.57 | 90 | 8 | 3,913,198 |
| Dalles-Celilo | The Dalles-Celilo Falls | 1915 | 8.50 | 8.50 | ..... | 8 | 4,730,594 |
| WASHINGTON. | | | | | | | |
| Port Townsend-Oak Bay. | Port Townsend-Oak Bay. | 1915 | 0.91 | 0.91 | ..... | 15 | 73,322 |
| Lake Washington Ship | PugetSound-Lake Wash. | 1916 | 8.00 | 8.00 | ..... | 30 | 3,442,865 |
| Canalized Rivers | ..... | ..... | 4,385 06 | ..... | ..... | ..... | 108,919,650 |
| NEW YORK. | | | | | | | |
| Hudson River | Waterford-Hudson | 1915 | 38.00 | ..... | ..... | 14 | 3,807,833 |
| PENNSYLVANIA. | | | | | | | |
| Monongahela | Pittsb'h-Fairm't, W. Va. | 1879 | 128.00 | ..... | ..... | 6 | 8,105,050 |
| Ohio | Pittsburgh-Cairo | 1885 | 968.50 | ..... | ..... | 9 | 39,603,695 |
| Alleghany | Pittsburgh-Natrona | 1902 | 24.00 | ..... | ..... | 4 | 1,454,424 |
| WEST VIRGINIA. | | | | | | | |
| Great Kanawha | Loup Cr. Sh'ls-Pt. Pleas. | 1889 | 90.00 | ..... | ..... | 6 | 4,248,042 |
| Little Kanawha | Mouth to Creston | 1874 | 48.00 | ..... | ..... | 4 | 259,082 |
| NORTH CAROLINA. | | | | | | | |
| Cape Fear River | K'gs Bl'ff-Browns Land'g | 1916 | 32.00 | ..... | ..... | 8 | 824,462 |
| SOUTH CAROLINA. | | | | | | | |
| Congaree | G'v's St. B'ge-Col.-Gr'by | 1904 | 2.00 | ..... | ..... | 6 | 281,000 |
| OHIO. | | | | | | | |
| Muskingum | Dresden-Marietta | 1840 | 91.00 | ..... | ..... | 6 | 2,360,690 |
| ILLINOIS. | | | | | | | |
| Illinois | La Salle-Grafton | 1889 | 223.00 | ..... | ..... | 6 | 2,903,757 |
| Wabash | Gr. Rapids nr. Mt. Car'l. | 1893 | 12.00 | ..... | ..... | 4 | 260,000 |
| Galena | At Galena | 1894 | 6.00 | ..... | ..... | 2 | 100,000 |

| Class, State and Name. | Points Connected. | Opened. | Total Length. | Canal Length. | Width. | Depth. | Cost of Construction and Improvement. |
|---|---|---|---|---|---|---|---|
| | | *Year.* | *Miles.* | *Miles.* | *Feet.* | *Feet.* | *Dollars.* |
| WISCONSIN. | | | | | | | |
| Fox | Portage City-Green Bay. | 1856 | 176.00 | ..... | ..... | 5 | 3,894,159 |
| MINNESOTA. | | | | | | | |
| Mississippi River | St. P.-Min'lis; Keo'k, Ia. (D's M'n's Rap's); Moline, Ill. (R'k Is. Rap's) | 1907<br>1877<br>1907 | 19.36 | ..... | ..... | 7<br>7<br>6 | 8,354,430 |
| MISSOURI. | | | | | | | |
| Osage River | Mouth to 7 miles above. | 1906 | 7.00 | ..... | ..... | 3 | 635,809 |
| KENTUCKY. | | | | | | | |
| Kentucky | Carrollton-Beattyville | 1844 | 255.00 | ..... | ..... | 6 | 4,094,442 |
| Green and Barren | G.R.-Ma'n C.; B.R-B.G. | 1841 | 225.50 | ..... | ..... | 5 | 2,774,365 |
| Big Sandy, and Tug and Levisa Forks | Louisa<br>Catlettsburg<br>Gallup<br>Saltpetre | 1897 | 39.00 | ..... | ..... | 6 | 1,568,659 |
| Rough | Mouth-Hartford | 1896 | 29.50 | ..... | ..... | 4 | 106,500 |
| TENN. AND KY. | | | | | | | |
| Cumberland | Nashville-Burnside, Ky. | 1905 | 326.10 | ..... | ..... | 6 | 3,221,836 |
| Cumberland | Below Nash. 192.60 miles | 1905 | 192.60 | ..... | ..... | 6 | 2,092,173 |
| ALABAMA. | | | | | | | |
| Black War'r, Tombigbee | McG.Sh.,S'd'sFy,N'sSh. | 1895 | 362.50 | ..... | ..... | 6 | 9,652,881 |
| Coosa | Rome, Ga.-R'side, Ala. | 1890 | 165.50 | ..... | ..... | 3 | 2,357,517 |
| ARKANSAS. | | | | | | | |
| Upper White | 1m. b'w B't'sv'le to Guion | 1904 | 33.00 | ..... | ..... | 3 | 813,197 |
| Ouachita | F'k'nSh.,Ark.,toM'r'e,La | 1912 | 119.00 | ..... | ..... | 6 | 1,819,511 |
| TEXAS. | | | | | | | |
| Trinity River | Dallas-White Rock Sh'ls. | 1909 | 330.50 | ..... | ..... | 7 | 1,928,038 |
| Brazos River | Mouth-Waco | 1915 | 424.00 | ..... | ..... | 4 | 1,326,933 |
| OREGON. | | | | | | | |
| Yamhill | Mouth-McMinnville | 1900 | 18.00 | ..... | ..... | 3 | 72,165 |

Figures in above table are as gathered by U. S. Census Bureau for 1916, except as to Erie Canals, which are up to 1921.

CANALS IN CANADA (OFFICIALLY REVISED FOR THE ALMANAC).

(See United States list above for Sault Ste. Marie Canals.)

| | Cost. | L'gth. | Depth. | | Cost. | L'gth. | Depth. |
|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Miles.* | *Feet.* | | *Dollars.* | *Miles.* | *Feet.* |
| Chambly | 780,997 | 12 | 6½ | Trent | 18,274,531 | 236 | 6– 8½ |
| Cornwall | 7,246,304 | 11¼ | 14 | Welland | 29,399,406 | 26¾ | 14 |
| Lachine | 14,132,685 | 8½ | 14–18 | Welland Ship | 20,270,436 | 25 | 25–30 |
| Rideau | 4,699,873 | 133¼ | 5 | Williams-burg: Farrans Pt. | 877,091 | 1¼ | 14 |
| Soulanges | 7,904,044 | 14 | 15 | Williams-burg: Rapide Plat. | 6,143,468 | 7½ | 14 |
| S. S. Marie | 4,935,809 | 1¼ | 18¼ | Williams-burg: Galops | 2,159,881 | 3⅔ | 14 |

Welland Ship Canal is under construction, and is not yet open for traffic.

The Queenstown-Chippawa Power Canal of the Ontario Hydroelectric Commission, total cost about $80,000,000 (of which $15,000,000 is yet to be spent), was opened Dec. 28, 1921, at Niagara Falls, Ont. Construction was begun in 1917. About 275,000 horse-power is generated, which is to be increased ultimately to 550,000. The canal is 12¾ miles long.

SOME FOREIGN CANALS.

| | Length, Miles. | Depth, Feet. | Bottom Width, Feet. | Estimated Cost. |
|---|---|---|---|---|
| Suez—Mediterranean and Red Seas | 103 | 35 | 108 | $127,000,000 |
| Cronstadt—Petrograd | 16 | 20½ | ..... | 10,000,000 |
| Manchester—Manchester and Liverpool | 35½ | 28 | 120 | 85,000,000 |
| Kaiser Wilhelm (Kiel Canal)—Baltic and North Seas | 61 | 36 | 72 | 40,000,000 |
| Elbe and Trave | 41 | 10 | 72 | 6,000,000 |
| Berlin-Stettin (Hohenzollern Canal) | 136 | 9.8 | 32–39 | 12,500,000 |
| Marseilles—River Rhone | 60 | ..... | 82 | 20,000,000 |
| Odense—Denmark | 5 | 20 | ..... | 1,321,000 |

SUEZ CANAL STEAM VESSEL TRAFFIC.

| Year. | No. of Vessels. | Net Tonnage. | Year. | No. of Vessels. | Net Tonnage. | Year. | No. of Vessels. | Net Tonnage. |
|---|---|---|---|---|---|---|---|---|
| 1870 | 486 | 436,609 | 1888 | 3,440 | 6,640,834 | 1905 | 4,116 | 13,134,105 |
| 1871 | 765 | 761,467 | 1889 | 3,425 | 6,783,745 | 1906 | 3,975 | 13,445,504 |
| 1872 | 1,082 | 1,160,743 | 1890 | 3,389 | 6,890,094 | 1907 | 4,267 | 14,728,434 |
| 1873 | 1,173 | 1,367,767 | 1891 | 4,207 | 8,695,777 | 1908 | 3,795 | 13,633,283 |
| 1874 | 1,264 | 1,631,650 | 1892 | 3,559 | 7,712,028 | 1909 | 4,239 | 15,407,527 |
| 1875 | 1,494 | 2,009,984 | 1893 | 3,341 | 7,659,068 | 1910 | 4,533 | 16,581,898 |
| 1876 | 1,457 | 2,096,771 | 1894 | 5,352 | 8,039,175 | 1911 | 4,909 | 18,324,794 |
| 1877 | 1,663 | 2,355,447 | 1895 | 3,434 | 8,448,383 | 1912 | 5,373 | 20,275,120 |
| 1878 | 1,593 | 2,269,678 | 1896 | 3,409 | 8,560,288 | 1913 | 5,085 | 20,033,180 |
| 1879 | 1,477 | 2,263,332 | 1897 | 2,986 | 7,899,373 | 1914 | 4,802 | 19,499,495 |
| 1880 | 2,026 | 3,057,421 | 1898 | 3,503 | 9,238,603 | 1915 | 3,708 | 15,266,155 |
| 1881 | 2,727 | 4,136,779 | 1899 | 3,607 | 9,895,690 | 1916 | 3,110 | 12,325,347 |
| 1882 | 3,198 | 5,074,808 | 1900 | 3,441 | 9,738,152 | 1917 | 2,353 | 8,368,918 |
| 1883 | 3,307 | 5,775,861 | 1901 | 3,699 | 10,823,840 | 1918 | 2,522 | 9,251,601 |
| 1884 | 3,284 | 5,871,500 | 1902 | 3,708 | 11,248,413 | 1919 | 3,986 | 16,013,802 |
| 1885 | 3,624 | 6,335,752 | 1903 | 3,761 | 11,907,288 | 1920 | 4,009 | 17,574,657 |
| 1886 | 3,100 | 5,767,655 | 1904 | 4,237 | 13,401,835 | 1921 | 3,975 | 18,118,999 |
| 1887 | 3,137 | 5,903,024 | | | | | | |

Other than steam vessels using Suez Canal in 1921 numbered 3,257, of 155,820 net (metric) tons. The total receipts in 1921 were 149,251,000 francs. Southbound cargoes were chiefly metals and machinery, coal, railroad material, petroleum, salt, textiles and cement. Northbound cargoes were chiefly wheat, benzine and mazout, rich manganese, copra, sugar, oilseed, gunnies, wool, and jute. Of the 1921 net tonnage, 11,397,019 was British; 2,031,625, Dutch, 1,042,266, Japanese; 967,746, French; 934,146, Italian; 696,226, Scandinavian; 671,840, American; and 170,520, German.

## GREAT AQUEDUCTS OF THE WORLD.

| When Built. | Length, Miles. | Total. | Place Supplied. | Builder. |
|---|---|---|---|---|
| *B. C.* | | | | |
| 312 | 10 | Aqua Appia | Rome | Appius Claudius. |
| 144 | 60 | Aqua Marcia | Rome | Q. Marcius. |
| 33 | 15 | Aqua Julia | Rome | |
| 27 | 25 | Nismes (Pont du Gard) | Nismes, France | |
| *A. D.* | | | | |
| 38 | 46 | Aqua Claudia | Rome | |
| 52 | 59 | Anio Novus | Rome | |
| 360 | 10 | Arceuil | Paris | Julian. Rebuilt 1634, 1777. |
| 1550 | 8 | Belgrade Valley | Constantinople | Sultan. |
| 1801-1822 | 60 | Canal de l'Ourcq | Paris | City of Paris. |
| 1837-1842 | 38 | Croton | New York City | City of New York. |
| 1859 | 35 | Loch Katrine | Glasgow | City of Glasgow. |
| 1869 | 83 | Vanne | Paris | City of Paris. |
| 1869-1873 | 56 | Kaiserbrunn | Vienna | City of Vienna. |
| 1875-1878 | 16 | Sudbury | Boston | City of Boston. |
| 1875-1881 | 7 | Gunpowder | Baltimore | City of Baltimore. |
| 1882-1885 | 16 | Adriatic | Venice | City of Venice. |
| 1880-1891 | 68 | Vyrnwy | Liverpool | City of Liverpool. |
| 1905-1917 | 110 | Catskill | New York City | City of New York. |
| 1908-1913 | 250 | Los Angeles | Los Angeles | Municipality. |
| 1915-1919 | 97 | Greater Winnipeg Water | Winnipeg and environs. | Greater Winnipeg. |

### CATSKILL AND CROTON AQUEDUCTS.

Particulars of the Catskill and Croton Aqueducts, which supply the City of New York with water, are contained in the article on the water supply of that municipality, elsewhere in the ALMANAC.

## FAST OCEAN AND AIR PASSAGES.

*Sailing Ships*—Columbus, in 1492, sailed from Spain (Palos) to the Gulf of Mexico in thirty-seven days.

The American-built clipper, the Lightning, of the Black Ball (British) Australian Line, on March 1, 1854, sailed 436 nautical miles, on way from Boston to Liverpool, on her maiden voyage. A gale was blowing and the ship's log showed a speed as high as 18½ miles an hour. The same vessel, on March 19, 1857, sailed 430 nautical miles, on way from Liverpool to Melbourne, Australia. The clipper Donald McKay, Black Ball Line, on Feb. 27, 1855, sailed 421 nautical miles on maiden voyage from Boston to Liverpool.

The fastest day's record on a sailing ship on any sea—437 miles—was made by the Sovereign of the Seas, on a passage from New York to San Francisco. The Flying Cloud made 433½ miles in one day, New York to San Francisco.

The quickest passage of a clipper ship across the Atlantic was made, it is asserted in maritime circles, by the Dreadnaught, which cleared from New York on June 15, 1859, and arrived off Cape Clear, Ireland, on June 27—12 days. The clipper Red Jacket, built at Rockland, Me., sailed from Sandy Hook, N. Y., to Liverpool in 13 days 1 hour 25 minutes. The Dreadnaught once went from New York to Liverpool in 13 days 8 hours. She was built in 1853 at Newburyport, Mass. She was 217 feet long, 40 feet wide, 26 feet deep, 1,443 gross tons. She was lost, July 4, 1869, on Cape Penas, northeast of Terra del Fuego, South America, on the way from Liverpool to San Francisco.

The sailing ship Northern Light went from San Francisco to Boston, via Cape Horn, in 76 days and 8 hours. The Andrew Jackson sailed from New York to San Francisco in 80 days and 4 hours. The Dreadnaught went from Honolulu to New Bedford, Mass., 13,470 miles, in 82 days. The Sovereign of the Seas sailed from Honolulu to New York in 88 days. The Natchez sailed from Canton, China, to New York in 76 days. The Trade Wind, in 1853, sailed from San Francisco to New York in 75 days. The Lightning, in 1854, sailed from Australia to Liverpool in 64 days. The bark Dawn of New York sailed from Buenos Ayres to New York in 36 days. The Nabob, of Boston, went from New York to Rangoon (Burmah), India, in 75 days. The Flying Dutchman in 1852-3 made a round trip, New York to San Francisco and return (27,220 miles), in 201 days. On the way home she sailed from San Francisco to Cape Horn in 35 days.

The clipper ships often beat the time of the steamships between New York and Ireland.

*Steamships*—The first steamship to cross the Atlantic was the Savannah, 350 tons, built at New York City, which left Savannah, Ga., on May 24, 1819, and reached Liverpool in 26 days, during eighteen of which she used her side-paddles. The Great Western, on her maiden voyage, from Bristol, England, to New York, covered the distance, in April, 1838, in 15 days. The Sirius, in April, 1838, went from England to New York in 18½ days. The Britannia, first Cunard liner, in July, 1840, came from Liverpool to New York in 14 days 8 hours. The Great Western's best record across the ocean was 10 days 10 hours 15 minutes. In May, 1851, the Pacific reduced the Atlantic record to 9 days 19 hours 25 minutes. The Persia, in 1856, did it in 9 days 1 hour 45 minutes; the Scotia, in 1866, in 8 days 2 hours 48 minutes; the City of Brussels, in 1869, in 7 days 22 hours 3 minutes; the Baltic, in 1873, in 7 days 20 hours 9 minutes; the City of Berlin, in 1875, in 7 days 15 hours 48 minutes; the Arizona, in 1880, in 7 days 7 hours 23 minutes; the Alaska, in 1882, in 6 days 18 hours 37 minutes; the Etruria, in 1888, in 6 days 1 hour 55 minutes; the Majestic, in 1891, in 5 days 18 hours 8 minutes; the Lucania, in 1894, in 5 days 7 hours 23 minutes; the Lusitania, in 1908, in 4 days 15 hours; the Mauretania, in 1910, in 4 days 10 hours 41 minutes. The foregoing records, since and including 1856, are between New York and Queenstown.

The best run from New York to Havre was made by the France, of the French Line, in 5 days 17 hours.

The quickest run from New York to San Francisco, via Straits of Magellan, was made by the Santa Cruz, an oil burner, in 1914, in 47 days 5 hours.

The day's-run record—676 knots—was made by the Mauretania, in January, 1911.

The U. S. destroyer Cole made 43.75 miles an hour on her trial sea trip. The motor boat Miss America, in 1920, on Lake George, N. Y., went at the rate of 77.85 miles an hour; the motor boat Maple Leaf VII. (August, 1921) made 80 miles an hour on the Solent, England.

### ACROSS THE ATLANTIC BY AIR.

The U. S. naval seaplane NC-4 (Read), in 1919 (May 16-27), flew from Trepassy, British North America, via the Azores, to Lisbon, Portugal, 2,150 miles, in 26 hours 45 minutes, actual flying time.

A British biplane (Alcock-Brown), in 1919 (June 14-15), flew from St. John's, N. F., to Clifden, Ireland, 1,960 miles, in 16 hours 12 minutes.

The British dirigible balloon R-34 (Scott), in 1919 (July), flew from East Fortune, Scotland, to Mineola, N. Y., 3,130 miles, in 108 hours 12 minutes, and returned from Mineola to Pulham, England, 3,200 miles, in 74 hours 56 minutes.

A hydroplane flew in 1922 from Portugal to Brazil.

### FASTEST TRIPS AROUND THE WORLD.

1889, by Nellie Bly, 72 days 6 hours 11 minutes; 1903, by Henry Frederick, 54 days 7 hours 20 minutes; 1911, by Andre Jaeger-Schmidt, 39 days 42 minutes 38 seconds; 1913, by John H. Mears, 35 days 21 hours, 36 minutes.

## DISTANCES FROM NEW YORK, NEW ORLEANS, SAN FRANCISCO AND PORT TOWNSEND TO PRINCIPAL PORTS AND CITIES.

(Water routes in nautical miles; land routes in statute miles. Seattle is 38 miles from Port Townsend.)

FOREIGN CITIES.

| Port and Route. | New York. | New Orleans. | San Francisco. | Port Townsend. |
|---|---|---|---|---|
| Aden—Suez Canal | 6,532 | 7,870 | ..... | ..... |
| Cape of Good Hope | 10,985 | 11,408 | ..... | ..... |
| Suez Canal & N. York | ..... | ..... | 9,723 | 9,731 |
| C.of Good Hope &N.Y. | ..... | ..... | 14,176 | 14,184 |
| Suez & Tehuantepec | ..... | ..... | 9,500 | 10,300 |
| Suez & Panama | ..... | ..... | 10,800 | 11,600 |
| Suez & Magellan Strait | ..... | ..... | 15,900 | 16,700 |
| Singapore | ..... | ..... | 11,500 | 11,300 |
| Singap.& P Townsend | 14,499 | 14,279 | ..... | ..... |
| Antwerp | 3,325 | 4,853 | ..... | ..... |
| New York | ..... | ..... | 6,516 | 6,524 |
| Tehuantepec | ..... | ..... | 7,554 | 8,329 |
| Panama | ..... | ..... | 8,264 | 9,039 |
| Magellan Strait | ..... | ..... | 13,671 | 14,446 |
| Batavia (Java) | ..... | ..... | 7,800 | 7,600 |
| Tehuantepec | 12,323 | 11,075 | ..... | ..... |
| Panama | 13,167 | 12,566 | ..... | ..... |
| Suez Canal | 10,182 | 11,508 | ..... | ..... |
| Cape of Good Hope | 11,855 | 12,278 | ..... | ..... |
| Bombay—Suez Canal | 8,120 | 9,536 | ..... | ..... |
| Cape of Good Hope | 11,250 | 11,848 | ..... | ..... |
| Suez & New York | ..... | ..... | 11,311 | 11,319 |
| C.of Good Hope &N.Y. | ..... | ..... | 14,441 | 14,449 |
| Suez & Tehuantepec | ..... | ..... | 12,110 | 12,885 |
| Suez & Panama | ..... | ..... | 12,512 | 13,287 |
| C.ofG.Hope&Teh'n'pec | ..... | ..... | 15,108 | 15,800 |
| C.of G.Hope &Panama | ..... | ..... | 14,500 | 15,270 |
| Magellan Strait | ..... | ..... | 15,064 | 15,839 |
| Singapore | ..... | ..... | 9,780 | 9,580 |
| Singap & P. Townsend | 12,771 | 12,559 | ..... | ..... |
| Singap.& San Francisco | 12,971 | 12,262 | ..... | ..... |
| Singap. & Tehuantepec | 13,993 | 12,745 | ..... | ..... |
| Singap. & Panama | 14,837 | 14,236 | ..... | ..... |
| Brest, France | 2,954 | 4,458 | ..... | ..... |
| New York | ..... | ..... | 6,145 | 6,154 |
| Tehuantepec | ..... | ..... | 7,154 | 7,929 |
| Panama | ..... | ..... | 7,840 | 8,619 |
| Magellan Strait | ..... | ..... | 13,209 | 13,984 |
| Buenos Ayres | 5,868 | 6,318 | ..... | ..... |
| Magellan Strait | ..... | ..... | 7,511 | 8,286 |
| New York | ..... | ..... | 9,059 | 9,067 |
| Bermuda | 676 | 1,648 | ..... | ..... |
| New York | ..... | ..... | 3,867 | 3,875 |
| Calcutta—Suez Canal | 9,830 | 11,239 | ..... | ..... |
| Cape of Good Hope | 12,180 | 12,838 | ..... | ..... |
| Suez & New York | ..... | ..... | 13,021 | 13,029 |
| C.of Good Hope &N.Y. | ..... | ..... | 15,371 | 15,379 |
| Singapore | ..... | ..... | 8,990 | 8,896 |
| Singap.& San Francisco | 12,181 | 11,462 | ..... | ..... |
| Singap. & Tehuantepec | 13,405 | 12,181 | ..... | ..... |
| Singapore & Panama | 14,230 | 13,694 | ..... | ..... |
| Callao—Tehuantepec | 4,246 | 2,991 | ..... | ..... |
| Panama | 3,779 | 3,264 | ..... | ..... |
| Magellan Strait | 9,603 | 10,142 | ..... | ..... |
| Direct | ..... | ..... | 4,012 | 4,769 |
| Cape Town—Direct | 6,815 | 7,374 | ..... | ..... |
| New York | ..... | ..... | 10,006 | 10,014 |
| Tehuantepec | ..... | ..... | 9,700 | 10,475 |
| Panama | ..... | ..... | 9,898 | 10,676 |
| Magellan Strait | ..... | ..... | 10,454 | 11,229 |
| Colon (eastern end of Panama Canal) | 1,981 | 1,380 | ..... | ..... |
| Canal & Panama | ..... | ..... | 3,324 | 4,090 |
| Colombo—Suez Canal | 8,610 | 10,146 | ..... | ..... |
| Cape of GoodHope | 11,130 | 11,684 | ..... | ..... |
| Suez & New York | ..... | ..... | 11,801 | 11,809 |
| C. of GoodHope & N.Y. | ..... | ..... | 14,321 | 14,329 |
| Singapore | ..... | ..... | 8,900 | 8,700 |
| Copenhagen—Direct | 3,852 | 5,443 | ..... | ..... |
| New York | ..... | ..... | 7,043 | 7,051 |
| Gibraltar | 3,207 | 4,576 | ..... | ..... |
| New York | ..... | ..... | 6,398 | 6,406 |
| Tehuantepec | ..... | ..... | 7,240 | 8,015 |
| Panama | ..... | ..... | 7,642 | 8,417 |
| Magellan Strait | ..... | ..... | 12,734 | 13,509 |
| Guam | ..... | ..... | 5,054 | 4,908 |
| San Francisco | 8,245 | 7,536 | ..... | ..... |
| Port Townsend | 8,107 | 7,887 | ..... | ..... |
| Hamburg | 3,652 | 5,243 | ..... | ..... |
| New York | ..... | ..... | 6,843 | 6,851 |
| Habana | 1,227 | 597 | ..... | ..... |
| New Orleans | ..... | ..... | 3,079 | 4,006 |
| Tehuantepec | ..... | ..... | 3,219 | 3,992 |
| Panama | ..... | ..... | 4,337 | 5,112 |
| Havre | 3,169 | 4,760 | ..... | ..... |
| New York | ..... | ..... | 6,360 | 6,368 |
| Hongkong | ..... | ..... | 6,086 | 5,886 |
| Port Townsend | 9,085 | 8,865 | ..... | ..... |
| San Francisco | 9,277 | 8,565 | ..... | ..... |
| Tehuantepec | 10,572 | 9,317 | ..... | ..... |
| Panama | 11,431 | 10,830 | ..... | ..... |

| Port and Route. | New York. | New Orleans. | San Francisco. | Port Townsend. |
|---|---|---|---|---|
| Suez | 11,610 | 12,892 | ..... | ..... |
| Cape of Good Hope | 13,590 | 13,863 | ..... | ..... |
| Magellan Strait | 16,868 | 17,318 | ..... | ..... |
| Honolulu | ..... | ..... | 2,097 | 2,370 |
| San Francisco | 5,288 | 4,579 | ..... | ..... |
| Port Townsend | 5,569 | 5,349 | ..... | ..... |
| Panama | 6,686 | 6,085 | ..... | ..... |
| Tehuantepec | 5,806 | 4,582 | ..... | ..... |
| Magellan Strait | 13,269 | 13,719 | ..... | ..... |
| Kingston, Jamaica | 1,473 | 1,165 | ..... | ..... |
| Kongo River, mouth of | 5,662 | 6,580 | ..... | ..... |
| New Orleans | ..... | ..... | 9,062 | 9,559 |
| New York | ..... | ..... | 8,853 | 8,859 |
| Liverpool | 3,053 | 4,553 | ..... | ..... |
| New York | ..... | ..... | 6,244 | 6,250 |
| Tehuantepec | ..... | ..... | 7,169 | 7,944 |
| Panama | ..... | ..... | 8,038 | 8,813 |
| Magellan Strait | ..... | ..... | 13,503 | 14,278 |
| London | 3,233 | 4,507 | ..... | ..... |
| New York | ..... | ..... | 6,424 | 6,432 |
| Tehuantepec | ..... | ..... | 7,349 | 8,124 |
| Panama | ..... | ..... | 8,218 | 8,993 |
| Magellan Strait | ..... | ..... | 13,683 | 14,458 |
| Manila—Honolulu and San Bernardino Strait | ..... | ..... | 6,943 | 7,213 |
| Yokohama | ..... | ..... | 6,289 | 5,998 |
| Yokohama & S. Fran. | 9,480 | 8,771 | ..... | ..... |
| Yokohama & P.T'ns'nd | 9,192 | 8,972 | ..... | ..... |
| Tehuantepec | 10,735 | 9,480 | ..... | ..... |
| Panama | 11,546 | 10,993 | ..... | ..... |
| Suez | 11,556 | 12,946 | ..... | ..... |
| Cape of Good Hope | 13,536 | 13,986 | ..... | ..... |
| Suez & New York | ..... | ..... | 14,747 | 14,755 |
| C.ofGoodHope & N.Y. | ..... | ..... | 16,727 | 16,735 |
| Magellan Strait | 16,736 | 17,145 | ..... | ..... |
| Marseilles | 3,876 | 5,266 | ..... | ..... |
| New York | ..... | ..... | 7,067 | 7,073 |
| Tehuantepec | ..... | ..... | 7,930 | 8,705 |
| Panama | ..... | ..... | 8,332 | 9,107 |
| Magellan Strait | ..... | ..... | 13,324 | 14,099 |
| Melbourne | ..... | ..... | 7,040 | 7,311 |
| San Francisco | 10,231 | 9,522 | ..... | ..... |
| Panama | 10,028 | 9,427 | ..... | ..... |
| Tehuantepec | 9,852 | 8,604 | ..... | ..... |
| Magellan Strait | 12,880 | 13,143 | ..... | ..... |
| Suez Canal | 12,981 | 14,303 | ..... | ..... |
| Cape of Good Hope | 12,670 | 12,933 | ..... | ..... |
| Mexico City, land&wat'r | 2,399 | 1,172 | 2,142 | 2,917 |
| " " land | 2,898 | 1,526 | 2,512 | 3,349 |
| Naples | 4,172 | 5,562 | ..... | ..... |
| New York | ..... | ..... | 7,363 | 7,369 |
| N. Orleans, land & water | 1,741 | } .... | 2,482 | 2,979 |
| " " land | 1,372 | } .... | | |
| Tehuantepec | ..... | ..... | 3,191 | 3,966 |
| Panama | ..... | ..... | 4,704 | 5,479 |
| New York, land & water | ..... | 1,741 | 3,191 | 3,199 |
| " " land | ..... | 1,372 | 3,191 | 3,199 |
| Tehuantepec | ..... | ..... | 4,415 | 5,190 |
| Panama | ..... | ..... | 5,305 | 6,080 |
| Nome, Alaska | ..... | ..... | 2,705 | 2,356 |
| San Francisco | 5,896 | 5,187 | ..... | ..... |
| Port Townsend | 5,555 | 5,335 | ..... | ..... |
| Tehuantepec | 7,130 | 5,902 | ..... | ..... |
| Panama | 8,010 | 7,410 | ..... | ..... |
| Magellan Strait | 15,840 | 16,249 | ..... | ..... |
| Odessa, via Gibraltar | 5,370 | 6,760 | ..... | ..... |
| Panama (western end of Panama Canal) | ..... | ..... | 3,277 | 4,052 |
| " Canal & Colon | 2,028 | 1,427 | ..... | ..... |
| Pernambuco, Brazil | 3,696 | 3,969 | ..... | ..... |
| New York | ..... | ..... | 6,887 | 6,895 |
| New Orleans | ..... | ..... | 6,451 | 6,948 |
| Tehuantepec | ..... | ..... | 6,591 | 7,366 |
| Panama | ..... | ..... | 6,530 | 7,305 |
| Magellan Strait | ..... | ..... | 9,439 | 10,214 |
| Port Said, Egypt | 5,122 | 6,509 | ..... | ..... |
| New York | ..... | ..... | 8,321 | 8,327 |
| Tehuantepec | ..... | ..... | 9,160 | 9,935 |
| Panama | ..... | ..... | 9,562 | 10,337 |
| Port Townsend | 3,199 | 2,979 | 775 | ..... |
| Tehuantepec | 5,190 | 3,966 | ..... | ..... |
| Panama | 6,080 | 5,479 | ..... | ..... |
| Punta Arenas (Mag'n S.) | 6,890 | 7,340 | 6,199 | 6,958 |
| Rio de Janeiro | 4,778 | 5,218 | ..... | ..... |
| New York | ..... | ..... | 7,969 | 7,977 |
| New Orleans | ..... | ..... | 7,700 | 8,197 |
| Tehuantepec | ..... | ..... | 7,730 | 8,505 |
| Panama | ..... | ..... | 7,678 | 8,453 |
| Magellan Strait | ..... | ..... | 8,339 | 9,114 |
| San Francisco | 3,191 | 2,482 | ..... | 775 |
| Tehuantepec | 4,415 | 3,191 | ..... | ..... |

| Port and Route. | New York. | New Orleans. | San Francisco. | Port Townsend. |
|---|---|---|---|---|
| Panama | 5,305 | 4,704 | ..... | ..... |
| Petrograd—Direct | 4,632 | 6,223 | ..... | ..... |
| New York | ..... | ..... | 7,823 | 7,829 |
| San Juan, P. R. | 1,428 | 1,539 | ..... | ..... |
| New York | ..... | ..... | 4,619 | 4,627 |
| New Orleans | ..... | ..... | 4,021 | 4,518 |
| Tehuantepec | ..... | ..... | 4,182 | 4,957 |
| Panama | ..... | ..... | 4,345 | 5,120 |
| Magellan Strait | ..... | ..... | 12,199 | 12,974 |
| Shanghai | ..... | ..... | 5,550 | 5,290 |
| San Francisco | 8,741 | 8,032 | ..... | ..... |
| Port Townsend | 8,489 | 8,269 | ..... | ..... |
| Tehuantepec | 9,965 | 8,741 | ..... | ..... |
| Panama | 10,855 | 10,254 | ..... | ..... |
| Suez | 12,360 | 13,750 | ..... | ..... |
| Cape of Good Hope | 14,593 | 14,806 | ..... | ..... |
| Singapore | ..... | ..... | 7,502 | 7,206 |
| San Francisco | 10,693 | 9,984 | ..... | ..... |
| Port Townsend | 10,405 | 10,185 | ..... | ..... |
| Suez | 10,170 | 11,560 | ..... | ..... |
| Cape of Good Hope | 12,355 | 12,914 | ..... | ..... |
| Yokohama & Panama | 13,104 | 12,503 | ..... | ..... |
| Yokohama & Teh'n'pec | 12,209 | 10,961 | ..... | ..... |
| Sitka, Alaska | ..... | ..... | 1,302 | 732 |
| San Francisco | 4,493 | 3,784 | ..... | ..... |
| Port Townsend | 3,931 | 3,711 | ..... | ..... |
| Tehuantepec | 5,748 | 4,493 | ..... | ..... |
| Panama | 6,607 | 6,006 | ..... | ..... |
| Magellan Strait | 14,391 | 14,841 | ..... | ..... |
| Tehuantepec — western end of railroad | ..... | ..... | 2,189 | 2,964 |
| Eastern end of railroad | 2,036 | 812 | ..... | ..... |

| Port and Route. | New York. | New Orleans. | San Francisco. | Port Townsend. |
|---|---|---|---|---|
| Tutuila | ..... | ..... | 4,150 | 4,607 |
| San Francisco | 7,341 | 6,632 | ..... | ..... |
| Valparaiso | ..... | ..... | 5,140 | 5,902 |
| San Francisco | 8,331 | 7,622 | ..... | ..... |
| Tehuantepec | 5,480 | 4,256 | ..... | ..... |
| Panama | 4,637 | 4,035 | ..... | ..... |
| Magellan Strait | 8,460 | 8,733 | ..... | ..... |
| Vladivostok | ..... | ..... | 4,706 | 4,357 |
| San Francisco | 7,897 | 7,188 | ..... | ..... |
| Port Townsend | 7,556 | 7,336 | ..... | ..... |
| S. Fran. & Tehuantepec | 9,122 | 8,874 | ..... | ..... |
| San Fran. & Panama | 10,001 | 9,410 | ..... | ..... |
| Magellan Strait | 17,036 | 17,445 | ..... | ..... |
| Wellington, New Zealand | ..... | ..... | 5,909 | 6,415 |
| San Francisco | 9,100 | 8,391 | ..... | ..... |
| Tehuantepec | 8,344 | 7,096 | ..... | ..... |
| Panama | 8,540 | 7,939 | ..... | ..... |
| Magellan Strait | 11,500 | 11,773 | ..... | ..... |
| Suez | 14,230 | 15,620 | ..... | ..... |
| Cape of Good Hope | 13,710 | 14,058 | ..... | ..... |
| Yokohama | ..... | ..... | 4,536 | 4,240 |
| Honolulu | ..... | ..... | 5,500 | 5,770 |
| San Francisco | 7,727 | 7,018 | ..... | ..... |
| Port Townsend | 7,439 | 7,219 | ..... | ..... |
| Honolulu & Teh'ntepec | 9,243 | 7,995 | ..... | ..... |
| S. Fran. & Tehuantepec | 8,986 | 7,762 | ..... | ..... |
| Honolulu & Panama | 10,093 | 9,492 | ..... | ..... |
| San Fran'co & Panama | 9,869 | 9,268 | ..... | ..... |
| Magellan Strait | 16,205 | 16,614 | ..... | ..... |
| Singapore & Suez | 13,040 | 14,471 | ..... | ..... |
| Cape of Good Hope | 15,020 | 15,443 | ..... | ..... |

## DISTANCES FROM PANAMA CANAL TO CHIEF PORTS. (NAUTICAL MILES.)

| | | | | | |
|---|---|---|---|---|---|
| Montreal, Can. | 3,160 | Barbados, West Indies | 1,237 | Petrograd, Russia | 6,282 |
| Halifax, N. S. | 2,317 | Port of Spain, Trinidad | 1,159 | Vancouver, B. C. | 4,032 |
| Portland, Me. | 2,198 | Rio de Janeiro, Brazil | 4,349 | Port Townsend, Wash. | 3,985 |
| Boston, Mass. | 2,157 | Buenos Ayres, Argentina | 5,450 | Portland, Ore. | 3,869 |
| New York, N. Y. | 1,974 | Cape Town, Africa | 6,574 | San Francisco, Cal. | 3,245 |
| Philadelphia, Pa. | 1,946 | Gibraltar (Strait) | 4,343 | Los Angeles, Cal. | 2,913 |
| Baltimore, Md. | 1,901 | Marseilles, France | 5,036 | San Diego, Cal. | 2,843 |
| Norfolk, Va. | 1,779 | Genoa, Italy | 5,203 | Magdalena Bay, Mexico | 2,265 |
| Wilmington, N. C. | 1,730 | Naples, Italy | 5,325 | Salina Cruz, Mexico | 1,170 |
| Charleston, S. C. | 1,564 | Constantinople, Turkey | 6,166 | Callao, Peru | 1,346 |
| Savannah, Ga. | 1,607 | Odessa, Russia | 6,509 | Valparaiso, Chile | 2,616 |
| Key West, Fla. | 1,065 | Port Said, Egypt | 6,268 | Cape Horn, Chile | 4,260 |
| Mobile, Ala. | 1,393 | Lisbon, Portugal | 4,205 | Honolulu, Hawaii | 4,685 |
| New Orleans, La. | 1,403 | Havre, France | 4,610 | Yokohama, Japan | 7,682 |
| Galveston, Tex. | 1,493 | Liverpool, England | 4,548 | Vladivostok, Siberia | 7,833 |
| Tampico, Mexico | 1,485 | Glasgow, Scotland | 4,492 | Shanghai, China | 8,556 |
| Vera Cruz, Mexico | 1,420 | London, England | 4,763 | Hongkong, China | 9,195 |
| Bluefields, Nicaragua | 276 | Antwerp, Belgium | 4,808 | Manila, P. I. | 9,347 |
| Havana, Cuba | 1,003 | Amsterdam, Holland | 4,832 | Singapore, S. S. | 10,505 |
| Bermuda Islands | 1,643 | Hamburg, Germany | 5,070 | Batavia, Java | 10,610 |
| Kingston, Jamaica | 551 | Copenhagen, Denmark | 5,350 | Sydney, Australia | 7,674 |
| Port-au-Prince, Haiti | 774 | Christiania, Norway | 5,237 | Melbourne, Australia | 8,255 |
| San Juan, Porto Rico | 993 | Stockholm, Sweden | 5,897 | Wellington, New Zealand | 6,505 |

## DISTANCES BETWEEN EUROPEAN CITIES.

These are the mail-train route distances. The airline distances, used by aviators, are, on the average, from three-quarters to four-fifths the railroad distances.

| | Stockholm. | Petrograd. | Moscow. | Odessa. | Constantinople. | Warsaw. | Trieste. | Rome. | Munich. | Vienna. | Turin. | Berne. | Berlin. | Hamburg. | Antwerp. | Lisbon. | Madrid. | Paris. | Liverpool. | London. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copenhagen. | 416 | 846 | 1252 | 1510 | 1510 | 668 | 1067 | 1318 | 671 | 697 | 1047 | 885 | 270 | 208 | 620 | 2012 | 1600 | 812 | 1181 | 979 |
| Stockholm. | | 430 | 836 | 1510 | 2408 | 1082 | 1171 | 1731 | 1084 | 1110 | 1337 | 1176 | 685 | 580 | 993 | 2384 | 1972 | 1219 | 1491 | 4289 |
| Petrograd. | | | 406 | 1356 | 1733 | 693 | 1769 | 2239 | 1395 | 399 | 2119 | 1714 | 1091 | 1269 | 1588 | 3286 | 2874 | 1699 | 1976 | 1774 |
| Moscow. | | | | 950 | 1339 | 811 | 1617 | 2087 | 1513 | 1247 | 1967 | 1832 | 1209 | 1387 | 1706 | 3414 | 2904 | 1843 | 2117 | 1915 |
| Odessa. | | | | | 363 | 842 | 1330 | 1800 | 1226 | 960 | 1680 | 1545 | 1240 | 1418 | 1737 | 3117 | 2625 | 1760 | 2119 | 1917 |
| Constantinople. | | | | | | 1205 | 1725 | 2138 | 1564 | 1298 | 2018 | 1883 | 1699 | 1903 | 2025 | 3345 | 2718 | 1899 | 2232 | 2030 |
| Warsaw. | | | | | | | 806 | 1276 | 702 | 436 | 1156 | 1021 | 398 | 576 | 895 | 2593 | 1925 | 1067 | 1557 | 1135 |
| Trieste. | | | | | | | | 510 | 487 | 370 | 391 | 533 | 888 | 1066 | 1009 | 1828 | 1416 | 863 | 1352 | 1150 |
| Rome. | | | | | | | | | 647 | 840 | 414 | 639 | 1048 | 1180 | 1033 | 1746 | 1223 | 907 | 1397 | 1195 |
| Munich. | | | | | | | | | | 266 | 470 | 295 | 401 | 579 | 522 | 1897 | 1477 | 582 | 970 | 768 |
| Vienna. | | | | | | | | | | | 720 | 535 | 427 | 605 | 727 | 2157 | 1668 | 849 | 1182 | 980 |
| Turin. | | | | | | | | | | | | 297 | 837 | 839 | 719 | 1506 | 1073 | 500 | 989 | 787 |
| Berne. | | | | | | | | | | | | | 611 | 678 | 460 | 1602 | 1183 | 359 | 848 | 646 |
| Berlin. | | | | | | | | | | | | | | 178 | 497 | 1889 | 1582 | 674 | 948 | 746 |
| Hamburg. | | | | | | | | | | | | | | | 412 | 1804 | 1495 | 587 | 859 | 657 |
| Antwerp. | | | | | | | | | | | | | | | | 1530 | 1119 | 211 | 472 | 270 |
| Lisbon. | | | | | | | | | | | | | | | | | 415 | 1323 | 1812 | 1610 |
| Madrid. | | | | | | | | | | | | | | | | | | 908 | 1397 | 1195 |
| Paris. | | | | | | | | | | | | | | | | | | | 489 | 287 |
| Liverpool. | | | | | | | | | | | | | | | | | | | | 202 |
| London. | | | | | | | | | | | | | | | | | | | | |

## GREAT PORTS OF THE WORLD.

(Final .000 omitted. Figures show a year's traffic.)

| Port. | Country. | Imports. | Exports. | Port. | Country. | Imports. | Exports. |
|---|---|---|---|---|---|---|---|
| | | *Dollars.* | *Dollars.* | | | *Dollars.* | *Dollars.* |
| Alexandria (1919) | Egypt | 172,427 | 358,147 | London (1919) | England | 2,730,661 | 1,259,212 |
| Amsterdam (1920) | Holland | 670,000 | 503,000 | Manchester (1919) | England | 478,418 | 236,426 |
| Antwerp (1912) | Belgium | 623,164 | 588,181 | Marseilles (1917) | France | 823,975 | 1,110,634 |
| Auckland (1920) | New Zealand | 90,000 | 45,000 | Melbourne (1919) | Australia | 169,992 | 131,990 |
| Baltimore (1920) | United States. | 69,824 | 381,561 | Montreal (1920) | Canada | 246,899 | 349,077 |
| Barcelona (1917) | Spain | 128,577 | 66,188 | Naples (1916) | Italy | 139,282 | 37,438 |
| Bombay (1919) | India | 230,620 | 248,583 | N. Orleans (1920) | United States. | 274,073 | 712,380 |
| Bordeaux (1917) | France | 1,171,619 | 1,085,110 | New York (1920) | United States. | 2,893,536 | 3,284,705 |
| Boston (1920) | United States. | 392,753 | 192,802 | Norfolk (1920) | United States. | 14,826 | 316,903 |
| Bremen (1913) | Germany | 370,608 | 211,421 | Ogdensburg (1920) | United States. | 170,498 | 117,608 |
| Bristol (1919) | England | 240,209 | 25,464 | Osaka (1919) | Japan | 83,500 | 218,541 |
| B'nos Aires (1919) | Argentina | 186,312 | 481,978 | Philad'phia (1920) | United States. | 282,163 | 442,280 |
| Buffalo (1920) | United States. | 121,436 | 237,929 | P'rt'l'd, Ore. (1920) | United States. | 8,216 | 61,432 |
| Calcutta (1919) | India | 206,412 | 332,095 | Pt. Arthur (1920) | United States. | 8,820 | 113,072 |
| Callao (1919) | Peru | 42,565 | 35,336 | Rio Janeiro (1919) | Brazil | 165,433 | 102,420 |
| Canton (1919) | China | 42,294 | 87,895 | St. Albans (1920) | United States. | 68,344 | 86,304 |
| Cardiff (1919) | Wales | 65,519 | 147,798 | San Anton. (1920) | United States. | 10,323 | 55,615 |
| Chicago (1920) | United States. | 64,504 | 25,800 | S. Francisco (1920) | United States. | 211,928 | 225,828 |
| Cleveland (1920) | United States. | 26,184 | 60,541 | Santos (1919) | Brazil | 108,513 | 313,684 |
| Const'n'ple (1912) | Turkey | 74,360 | 28,600 | Savannah (1920) | United States. | 54,269 | 202,014 |
| Dairen (1919) | Manchuria | 135,000 | 142,700 | Seattle (1920) | United States. | 134,078 | 192,881 |
| Detroit (1920) | United States. | 107,350 | 356,220 | Shanghai (1919) | China | 355,652 | 352,971 |
| Duluth (1920) | United States. | 37,132 | 50,829 | Singapore (1918) | Strts. Set'm't. | 424,448 | 420,322 |
| Dunkirk (1917) | France | 153,641 | 25,427 | So'ampton (1919) | England | 152,110 | 47,642 |
| Fiume (1912) | Austria | 43,833 | 53,923 | Sydney (1919) | Australia | 208,847 | 229,368 |
| Galveston (1920) | United States. | 30,730 | 649,253 | Tampa (1920) | United States. | 21,006 | 125,580 |
| Genoa (1916) | Italy | 741,343 | 142,855 | Tampico (1913) | Mexico | 22,835 | 40,379 |
| Glasgow (1919) | Scotland | 312,379 | 224,146 | Tientsin (1919) | China | 90,894 | 37,408 |
| Grimsby (1919) | England | 69,358 | 87,319 | Trieste (1913) | Austria | 175,997 | 161,430 |
| Habana (1919) | Cuba | 232,734 | 89,577 | Tyne Ports (1919) | England | 60,211 | 183,040 |
| Hamburg (1913) | Germany | 1,084,325 | 817,275 | Talpalaiso (1918) | Chili | 87,705 | 28,799 |
| Havre (1917) | France | 921,225 | 156,601 | Vera Cruz (1913) | Mexico | 40,733 | 42,118 |
| Hull (1919) | England | 414,399 | 305,955 | Vladivost'k (1915) | Siberia | 151,079 | 3,972 |
| Kobe (1919) | Japan | 505,541 | 220,738 | Wellington (1920) | New Zealand | 105,000 | 35,000 |
| Leith (1919) | Scotland | 84,222 | 78,372 | Yokohama (1919) | Japan | 343,337 | 507,616 |
| Liverpool (1919) | England | 2,677,813 | 1,351,581 | | | | |

## CHIEF SUBMARINE CABLES OF THE WORLD.

| Companies. | No. of Cables. | Length Naut'l Miles. |
|---|---|---|
| *All American Cables, Inc.* | 39 | 31,600 |
| N. Y. City to Fisherman's Point, Guantanamo Bay (U. S. Naval Station), Cuba; thence via Colon to Argentina, Bolivia, Brazil, Chili, Colombia, Costa Rica, Ecuador, Guatemala, Nicaragua, Panama, Peru, Salvador, Uruguay. There are extensions from Guantanamo Bay to Santiago, Cuba, and to Porto Rico | | |
| Galveston, Texas, to Vera Cruz and Puerto Mexico; thence to all republics of Central and South America. | | |
| *Commercial Cable Co.* | 17 | 17,471 |
| Transatlantic System—Waterville (Ireland) to St. John's (Newfoundland). | | |
| Waterville to Canso (Nova Scotia). | | |
| Waterville to Azores Islands. | | |
| Azores Islands to Canso. | | |
| Communication in Europe—Waterville to Havre (France). | | |
| Waterville to Weston-Super-Mare (England) | | |
| Communication on the American Coast—St. John's to New York. | | |
| Canso, N. S., to New York. | | |
| Canso to Rockport, Mass. | | |
| *Commercial Pacific Cable Co.* | 6 | 10,010 |
| San Francisco to Honolulu, to Midway Island, to Guam, to Manila, to Shanghai, and Guam to Bonin Island (Japan). | | |
| *Commercial Cable Co. of Cuba.* | 2 | 1,550 |
| New York to Havana, Cuba. | | |
| Miami, Fla., to Havana. | | |
| *Western Union Telegraph Co.* | 33 | 22,378 |
| Transatlantic Systems as follows: | | |
| Western Union—Penzance, England, to Bay Roberts, N. F., and thence via No. Sydney, N. S., to Rockaway Beach, N. Y. | | |
| Anglo-Amer. Tele. Co. — Valentia (Ireland) to Heart's Content, N. F., thence to No. Sydney, N. S. | | |
| Penzance, Eng., to Bay Roberts, N. F., and thence via No. Sydney, N. S., to Rockaway Beach, N. Y. | | |
| Barbados, W. I., to Miami, Fla. | | |
| Gulf of Mexico System. | | |
| *Compagnie Francaise des Cables Telegraphiques* | 25 | 11,657 |
| Brest to Horta, to N. Y.; Brest to St. Pierre Miquelon, to Cape Cod; Brest to Senegal (Kakar); to Pernambuco, Brazil. | | |
| The West Indies system which connects N. Y. by the U. S. and Hayti cable from Cape Hayti, covers Porto Rico, Martinique, and Guadeloupe, Paramaribo, Dutch Guiana, Cayenne, French Guiana, Para, Brazil. Also Cuba, Santo Domingo, Curacao and Venezuela (Caracas). | | |
| *African Direct Telegraph Co.* | 9 | 3,058 |
| *Western Telegraph Co.* | 40 | 23,887 |
| Carcavellos, near Lisbon (Portugal), to Madeira, to St. Vincent (Cape Verde Islands), to Pernambuco, Rio de Janeiro, Santos, Montevideo, Fayal (Azores) to St. Vincent (Cape Verde Islands). Ascension Island to Buenos Ayres. Maranham, Brazil, to Barbados, West Indies. | | |
| *Cuba Submarine Telegraph Co.* | 11 | 1,343 |
| *Direct West India Cable Co.* | 2 | 1,263 |
| *Eastern and South African Telegraph Co.* | 16 | 10,394 |
| *Eastern Extension Australasia and China Telegraph Co.* | 33 | 25,927 |
| *Eastern Telegraph Co.* | 148 | 46,615 |
| *Grande Compagnie des Telegraphes du Nord* | 30 | 8,413 |
| *Halifax and Bermudas Cable Co.* | 1 | 852 |
| *"Imperial" (ex-German Cable System) owned by British Government.* | 3 | 5,560 |
| Ballinskelligs Bay, Ireland, to Harbor Grace, Newfoundland, thence to Halifax, N. S. | | |
| Penzance, England, to the Azores, thence to Halifax, N. S. | | |
| *United States and Hayti Telegraph and Cable Co.* | 1 | 1,415 |
| *West African Telegraph Co.* | 8 | 1,470 |
| *West Coast of America Telegraph Co.* | 7 | 1,977 |
| *West India & Panama Telegraph Co.* | 22 | 4,355 |
| All other and total | 514 | 246,862 |

## TELEPHONE DEVELOPMENT OF PRINCIPAL CITIES OF THE WORLD.

(Compiled from latest available records by the Chief Statistician, American Telephone and Telegraph Company, New York City.)

| City (or Exchange Area). | No. of Telephones. | Per 100 Pop. | City (or Exchange Area). | No. of Telephones. | Per 100 Pop. | City (or Exchange Area). | No. of Telephones. | Per 100 Pop. |
|---|---|---|---|---|---|---|---|---|
| Amsterdam | 31,392 | 4.9 | Hamburg-Altona | 85,748 | 7.4 | Newark | 54,015 | 10.6 |
| Antwerp | 10,028 | 2.0 | Jersey City | 42,506 | 7.0 | New Orleans | 38,316 | 9.3 |
| Baltimore | 92,259 | 12.0 | Kobe | 9,869 | 1.6 | New York | 1,010,056 | 16.9 |
| Berlin | 199,555 | 9.2 | Kyoto | 13,281 | 2.2 | Osaka | 33,004 | 2.6 |
| Birmingham | 26,477 | 2.1 | Leeds | 12,999 | 2.4 | Paris | 159,692 | 5.5 |
| Bombay | 7,153 | 0.6 | Leipzig | 38,830 | 6.4 | Philadelphia | 265,429 | 14.1 |
| Boston | 313,295 | 19.5 | Liverpool | 38,475 | 3.2 | Pittsburgh | 141,820 | 16.0 |
| Breslau | 26,198 | 5.0 | London | 330,002 | 4.7 | Rio de Janeiro | 30,522 | 2.7 |
| Brussels | 23,809 | 2.7 | Los Angeles | 162,118 | 22.5 | Rome | 13,000 | 1.9 |
| Budapest | 24,205 | 2.6 | Lyons | 10,986 | 2.0 | Rotterdam | 24,848 | 4.9 |
| Buenos Ayres | 65,383 | 3.8 | Madras | 1,766 | 0.3 | Santiago, Chili | 7,900 | 1.6 |
| Buffalo | 72,949 | 13.1 | Manchester | 46,313 | 2.9 | St. Louis | 144,186 | 15.3 |
| Calcutta | 7,429 | 0.6 | Marseilles | 11,859 | 2.0 | San Francisco | 162,430 | 30.5 |
| Canton | 2,125 | 0.2 | Melbourne | 48,461 | 6.3 | Shanghai | 13,372 | 0.9 |
| Chicago | 605,495 | 21.6 | Mexico City | 23,503 | 3.9 | Sheffield | 11,916 | 2.4 |
| Cincinnati | 102,166 | 17.5 | Milan | 15,000 | 2.1 | Sydney | 58,594 | 6.5 |
| Cleveland | 153,951 | 15.9 | Milwaukee | 88,746 | 16.1 | Tokio | 64,564 | 3.0 |
| Cologne | 35,514 | 5.6 | Minneapolis | 96,166 | 23.4 | Toronto, Ont | 101,452 | 17.8 |
| Copenhagen | 96,008 | 14.4 | Montreal | 83,917 | 10.0 | Vienna | 98,000 | 5.3 |
| Detroit | 154,077 | 14.3 | Munich | 42,174 | 6.7 | Warsaw | 22,400 | 2.4 |
| Dresden | 33,150 | 6.3 | Naples | 6,800 | 0.9 | Washington, D.C. | 96,111 | 21.4 |
| Glasgow | 43,263 | 3.4 | | | | | | |

The population figures used in calculating the number of telephones per 100 population represent the population of the telephone area of the city, which may extend considerably beyond the municipal boundaries.

## FOREIGN TELEPHONE AND TELEGRAPH STATISTICS.

(Compiled from latest available records by the Chief Statistician of the American Telephone and Telegraph Company, New York City.)

| Country. | Telephones. | | Telegrams Sent | | Country. | Telephones. | | Telegrams Sent | |
|---|---|---|---|---|---|---|---|---|---|
| | Number. | Per 100 of Population. | Total Yearly. | Per Capita. | | Number. | Per 100 of Population. | Total Yearly. | Per Capita. |
| Austria | 133,480 | 2.2 | 9,200,000 | 1.50 | Italy | 114,977 | 0.3 | 21,212,000 | 0.56 |
| Belgium | 62,867 | 0.8 | 6,647,000 | 0.86 | Japan | 330,597 | 0.6 | 60,129,000 | 1.09 |
| Canada | 856,266 | 9.8 | 15,501,000 | 1.80 | Jugo-Slavia | 16,439 | 0.1 | 6,038,000 | 0.54 |
| Czecho-Slovakia | 77,195 | 0.6 | 6,428,000 | 0.48 | Netherlands | 161,933 | 2.4 | 7,556,000 | 1.11 |
| Denmark | 252,321 | 7.7 | 2,887,000 | 0.89 | Norway | 135,372 | 5.0 | 5,886,000 | 2.18 |
| France | 473,212 | 1.2 | 49,890,000 | 1.34 | Poland | 72,450 | 0.3 | 5,600,000 | 0.20 |
| Germany | 1,809,574 | 3.0 | 81,228,000 | 1.35 | Sweden | 388,130 | 6.6 | 5,999,000 | 1.02 |
| Great Britain | 985,964 | 2.1 | 81,086,000 | 1.72 | Switzerland | 152,336 | 3.8 | 4,843,000 | 1.23 |

## RAILWAY AND TELEGRAPH LINES OF THE WORLD.

(Figures cover latest available year, usually 1919).

| Country. | Length of Railways, Miles. | Telegraphs. | | Country. | Length of Railways, Miles. | Telegraphs. | |
|---|---|---|---|---|---|---|---|
| | | Miles of Line. | Miles of Wire. | | | Miles of Line. | Miles of Wire. |
| Argentina | 22,587 | 54,812 | 164,707 | Hayti | 114 | 124 | 124 |
| Australia | 25,657 | 64,811 | 137,663 | Hungary | 13,589 | 16,682 | 110,195 |
| New Zealand | 3,009 | 13,813 | 50,742 | India, British | 36,616 | 87,814 | 357,472 |
| Austria | 3,892 | 8,377 | 47,965 | Italy | 11,891 | 35,901 | 227,165 |
| Belgium | 5,451 | 5,206 | 28,014 | Japan | 7,834 | 27,629 | 119,138 |
| Bolivia | 1,354 | 5,114 | 6,843 | Luxemburg | 330 | 339 | 794 |
| Brazil | 18,662 | 26,037 | 45,047 | Mexco | 15,840 | 28,086 | 51,716 |
| Bulgaria | 1,824 | 3,701 | 11,653 | Netherlands | 2,113 | 5,218 | 27,073 |
| Canada | 39,058 | 52,664 | 229,598 | Norway | 2,010 | 15,044 | 73,180 |
| Cent Am. Costa Rica | 402 | 1,533 | 15,170 | Paraguay | 266 | 2,050 | 2,050 |
| Guatemala | 516 | 4,523 | 4,523 | Persia | 97 | 6,312 | 10,754 |
| Honduras | 360 | 4,529 | 4,529 | Peru | 1,889 | 9,321 | 78,510 |
| Nicaragua | 209 | 2,825 | 3,637 | Portugal | 2,047 | 4,671 | 12,540 |
| Panama | 301 | 1,004 | 3,618 | Roumania | 2,382 | 5,944 | 16,039 |
| Salvador | 241 | 2,357 | 2,357 | Russia | 29,996 | 153,168 | 537,208 |
| Chili | 5,611 | 18,181 | 32,942 | Serb, Croat State | 3,390 | 7,271 | 27,026 |
| China | 6,836 | 42,097 | 56,280 | Siam | 1,333 | 4,532 | 6,353 |
| Colombia | 740 | 12,117 | 12,117 | Spain | 9,347 | 31,285 | 69,894 |
| Cuba | 3,200 | 5,065 | 6,184 | Sweden | 9,385 | 13,819 | 47,500 |
| Czecho-Slovakia | 8,303 | 13,890 | 67,082 | Switzerland | 3,719 | 5,679 | 24,174 |
| Denmark | 2,641 | 2,269 | 8,479 | Turkey | 3,842 | 19,269 | 37,231 |
| Dominican Republic | 408 | 1,071 | 1,071 | Union of South Africa | 10,049 | 15,951 | 53,850 |
| Ecuador | 365 | 4,370 | 4,370 | United Kingdom | 23,709 | 81,000 | 264,480 |
| Egypt | 4,565 | 10,869 | 28,436 | United States | 264,233 | 245,660 | 1,433,978 |
| Finland | 2,553 | | | Uruguay | 1,654 | 4,819 | 6,214 |
| France | 31,958 | 120,738 | 452,192 | Venezuela | 535 | 5,814 | 5,814 |
| Germany | 39,600 | 148,192 | 475,551 | | | | |
| Greece | 1,460 | 5,748 | 10,253 | Other and total | 730,988 | 1,576,659 | 5,700,489 |

### NOTE TO THE ABOVE TABLE.

Brazil telegraph lines do not include 17,159 miles of rail wires and 11,267 miles of cables; Canada wires do not include 12,017 miles owned by govt.; Egypt wires do not include Soudan; Italy wires do not include Eritrea and Libia; U. S. rail figures do not include Alaska and Hawaii.

## RAILWAY TRAFFIC STATISTICS OF THE WORLD.

(From data compiled by the Bureau of Railway Economics, Washington, D. C.)

| Country. | Passengers Carried in Year. | Tons of Freight Carried in Year. | Capital. | Operating Revenues. | Operating Expenses. | Year. |
|---|---|---|---|---|---|---|
| | | | *Dollars.* | *Dollars.* | *Dollars.* | |
| Argentina | 58,891,405 | 40,620,693 | 1,408,830,764 | 175,316,467 | 132,906,359 | 1918 |
| Australia | 274,549,967 | 31,301,379 | 998,444,534 | 108,178,275 | 79,077,642 | 1916 |
| Austria | 301,915,375 | 175,067,219 | 1,746,517,847 | 233,387,566 | 176,559,793 | 1913 |
| Belgium | 207,193,257 | 74,218,532 | 532,168,550 | 65,980,138 | 48,032,103 | 1913 |
| Brazil | 48,351,056 | 10,778,743 | ..... | 88,174,397 | 78,996,677 | 1915 |
| Bulgaria | 4,184,719 | 2,363,467 | 64,135,251 | 6,729,717 | 4,321,849 | 1914 |
| Canada | 50,737,294 | 127,543,687 | 2,341,038,368 | 330,220,150 | 273,955,436 | 1918 |
| China | 25,475,379 | 20,777,886 | 170,932,212 | 30,983,209 | 13,694,723 | 1918 |
| Denmark | 2,949,544 | 8,093,179 | 86,614,116 | 24,662,968 | 28,971,604 | 1919 |
| Egypt | 27,910,000 | 5,018,492 | ..... | 24,984,450 | 16,049,537 | 1917 |
| France | 547,885,773 | 229,301,308 | 3,895,584,986 | 396,786,737 | 252,300,073 | 1913 |
| Germany | ..... | ..... | 5,045,641,405 | 1,114,346,685 | 924,165,968 | 1917 |
| Holland | 64,288,328 | 145,703,354 | ..... | 40,156,584 | ..... | 1917 |
| India | 459,732,400 | 102,100,320 | 1,783,371,158 | 279,914,379 | 135,604,714 | 1919 |
| Italy | ..... | 42,607,588 | ..... | 259,004,649 | 244,137,280 | 1918 |
| Japan | 245,234,480 | 54,602,406 | 593,171,996 | 91,487,284 | 42,058,458 | 1918 |
| New Zealand | 11,725,645 | 6,285,147 | 176,010,020 | 24,277,178 | 16,106,180 | 1919 |
| Norway | 26,550,463 | 6,510,876 | 101,125,416 | 20,524,635 | 22,549,200 | 1918 |
| Russia | 216,042,000 | 288,351,000 | 3,316,674,020 | 542,664,427 | 338,254,699 | 1911 |
| Siam | 2,578,066 | 445,954 | 22,224,377 | 1,864,551 | 761,397 | 1918 |
| Sweden | 75,694,330 | 61,581,099 | 339,733,476 | 73,853,394 | 60,443,716 | 1916 |
| Switzerland | 103,642,226 | 21,303,692 | 454,508,505 | 55,848,471 | 50,608,980 | 1918 |
| Union of South Africa | 51,493,889 | 15,804,472 | 457,006,898 | 74,371,211 | 56,844,968 | 1919 |
| United Kingdom | 1,591,146,000 | 416,672,532 | 6,565,974,264 | 751,718,522 | 498,918,447 | 1916 |
| United States | 1,084,997,896 | 2,305,824,940 | 20,084,021,468 | 4,880,953,480 | 3,982,068,197 | 1918 |

## RAILROAD TRAIN SPEED.

The modern locomotive can run 112 miles an hour on a heavy-rail, straight track, provided it is ballasted by a train behind it to keep it from jumping off. On account of curves and switches, the big coal consumption at high speed, and the frictional wear on the equipment 60 miles an hour is not often exceeded.

NOTABLE FAST RUNS OF PASSENGER TRAINS FOR LONG DISTANCES.

| Date. | Railroad. | Terminals. | Distance, Miles. | Inclusive. Time, H. M. | Inclusive. Miles Per Hour. |
|---|---|---|---|---|---|
| May, 1848 | Great Western (England) | London—Didcot | 53.25 | 0.47 | 68 |
| April, 1895 | Pennsylvania | Camden—Atlantic City | 58.3 | 0.45¾ | 76.50 |
| Aug., 1895 | London & Northwestern | London—Aberueen | 540 | 8.32 | 63.28 |
| Sept., 1895 | N. Y. Central "World Flyer" | Albany—Syracuse | 148 | 2.10 | 68.3 |
| April, 1897 | Lehigh Val., Black Diamond Exp. | Alpine, N. Y.—Geneva Junc., N. Y. | 43.96 | 0.33 | 80 |
| Mar., 1902 | Burlington Route | Eckley—Wray | 14.8 | 0.9 | 98.7 |
| Mar., 1903 | Atlantic Coast Line | Jacksonville—Savannah | 172 | 2.32 | 70.7 |
| April, 1904 | Michigan Central | Niagara Falls—Windsor | 225.66 | 3.11½ | 70.74 |
| July, 1904 | Great Western (England) | Paddington—Bristol | 118.5 | 1.24 | 84.6 |
| June, 1905 | Pennsylvania | Chicago—Pittsburgh | 468 | 7.20 | 63.53 |
| June, 1905 | Lake Shore & Mich. Southern | Buffalo—Chicago | 525 | 7.50 | 69.69 |
| June, 1905 | New York Central | Chicago—New York | 960.5 | 15.56 | 60.28 |
| July, 1905 | Pennsylvania | Washington, Ohio—Fort Wayne | 81 | 1.4 | 75.84 |
| Feb., 1911 | Pennsylvania | Altoona—Philadelphia | 235 | 3.29 | 67.2 |
| April, 1911 | "20th Century Ltd.," on L. Shore | Toledo—Elkhart | 133 | 1.46 | 75.28 |
| May, 1912 | "20th Century Ltd.," on L. Snore | Elkhart—Toledo | 133 | 1.47 | 74.26 |

FAST RECORDED RUNS FOR SHORT DISTANCES.

| Date. | Railroad. | Terminals. | Distance, Miles. | Time, M. S. | Miles Per Hour. |
|---|---|---|---|---|---|
| May, 1893 | N. Y. Central & H. R. | Crittenden—"Empire State Exp." | 1 | 0.32 | 112.5 |
| Aug., 1895 | Pennsylvania | Landover—Anacosta | 5.1 | 3.00 | 102 |
| Jan., 1899 | Burlington Route | Siding—Arion | 2.4 | 1.20 | 108 |
| Mar., 1901 | Plant System | Run from Fleming to Jacksonville | 5 | 2.30 | 120 |
| Jan., 1903 | N. Y. Central & H. R. | Palmyra—Macedon | 7.29 | 4.00 | 109.35 |
| April, 1904 | Michigan Central | Crisman—Lake | 3.73 | 2.00 | 111.90 |
| July, 1904 | Philadelphia & Reading | Egg Harbor—Brigantine Junction | 4.8 | 2.30 | 115.20 |
| Oct., 1904 | N. Y. Central & H. R. | Croton—Ossining | 3.51 | 2.00 | 105 |

The fastest time on record for a distance of over 440 miles was made by the Lake Shore & Michigan Southern R.R. from Buffalo to Chicago, in June, 1905, noted above. The fastest long distance run less than 440 miles was on the New York Central R. R., September 11, 1895, from New York to Buffalo, 436½ miles, in 407 minutes actual time. Average speed, 64½ miles an hour, with two stops and 28 slow-ups, and on January 1, 1903, from Albany to Buffalo, 302 miles, in 295 minutes.

On August 15, 1898, on P. & R. and C. R. R. of N. J., "Royal Blue Line," between Elizabeth, N. J. and Jenkintown, a distance of 69 miles, in 61 minutes, including 2 slow-ups, some of the miles being traversed in 38 seconds.

On October 7, 1913, a special train on the Baltimore & Ohio, occupied by a party of baseball writers en route to report the World's Series, ran from Pittsburgh to Cumberland, Md., 147 miles, in 3 hours and 37 minutes, without stops, and from Cumberland to Baltimore, 190 miles, without stops, in 3 hours and 55 minutes, an average of 48.7 miles per hour. Both of these runs were made without taking water.

The Jarrett and Palmer special theatrical train, Jersey City to Oakland (San Francisco), 3,311 miles, June, 1876, 83 hours, 45 minutes; average speed, 39.53 miles per hour.

In May, 1906, the "Harriman Special" made the run from Oakland, Cal., to New York City in 71 hours, 27 minutes.

A special train of an engine and two cars, which was run in January, 1911, to carry J. P. Morgan from Washington to New York over the Pennsylvania Railroad, made the trip of 226.8 miles in 3 hours, 55 minutes and 30 seconds, or at the rate of 57.8 miles an hour.

## IMPORTANT TUNNELS OF THE WORLD.

ALBERG—Under the Alps at the Arl Mountains, and extends from Langen to St. Anton, 6¾ miles: opened 1884.
Andes Mountains—See "Trans-Andine."
Big Bend—Drains the Feather River in California, 2 miles; opened 1886.
Bitter Root Mountains (Montana and Idaho)—10,100 feet long.
Blackwell—Under River Thames, England, 1½ miles; opened 1897.
Busk-Ivanhoe Tunnel on the Colorado Midland R. R., 9,600 feet long, single track, under the Continental Divide, in Lake and Pitkin Counties.
Cascade Mountain—Through the Cascade Mountains in Washington, 3 miles.
Catskill Aqueduct—92 miles to N. Y. City, and 35 miles of distributing tunnels deep down under the city itself; partly opened in 1915, completely in 1917.
Connaught—Through Selkirk Mountains, under Rogers Pass, Canada; on Canadian Pacific Railway, double track, about five miles long; completed 1916.
Continental Divide, for the Denver and Salt Lake R. R., 6.4 miles long (under survey).
Croton Aqueduct—33⅛ miles to N. Y. City; opened 1888.
Cumberland—Under Cumberland Mountains, Tennessee, 8,000 feet long.
Detroit (Mich. Central Ry.)—Under Detroit River.
Gunnison—Southwestern Colorado, 6 miles; opened 1909.
Hoosac—Through Hoosac Mountains, Mass., 4¾ miles; opened 1873.
Khojak Pass—India, Quetta to Kandahar, 2 miles.
Loetschberg—Through the Alps, in Oberland, Switzerland, 9¼ miles; opened June 20, 1913, costing nearly $10,000,000.
Mont Cenis—Italy to France, under the Col de Frejus, 8 miles; opened 1871.
Mont d'Or—Between France and Switzerland, was bored through October 2, 1913. The tunnel pierces the Jura Mountains from Fresne to Vallorbe, and is 3¾ miles long.
Mt. Roberts—From the shore of Gastineau Channel at Juneau, Alaska, into Silver Bow Basin, 1 1-3 miles.
Otira—In New Zealand. 5 1-3 miles.
Rove—Northwest from l'Estaque, France, part of canal connecting Marseilles with Rhone River; 4½ miles, 72 feet wide, 47 feet high; opened 1916.
Rothschönberg—Drains the Felberg mines, Saxony, 31½ miles; opened 1877.
St. Clair—Under St. Clair River from Sarnia, Ont., to Port Huron, Mich., 2 miles; opened 1891.
St. Gothard—Through the Alps, connects Goschenen with Airolo, in Switzerland, 9 1-3 miles; opened 1881.
Severn—From Monmouthshire to Gloucestershire England, 4½ miles; opened 1886.
Simplon—Through the Alps, 12½ miles; opened 1905.
Spiral—The tunnels on the Canadian Pacific Railway, between Hector and Fields, B. C., consists of two spiral tubes, the westerly, 3,255 feet long, under Catnedral Mountain; and the easterly, 2,921 feet long, under Mt. Ogden, with the Kicking Horse River between. This line was built to reduce grades through the Kicking Horse Pass, and cut the gradient on tne line from 4.5% to 2.2%, and cost approximately $1,500,000.
Strawberry—Through tne Wasatch Mountains.
Sutro—Drains the Comstock Lode in Nevada, 4½ miles; opened 1879.
Totley—England, 3¾ miles.
Trans-Andine Ry. Tunnel—5 miles long, 10,486 feet above sea level and affords direct communication between Valparaiso and Buenos Ayres; opened April 5, 1910.
Wasserfluh—In the Alps, between Bunnadern and Lichtensteig, Switz., 2 miles, opened 1909.
Woodhead—Liverpool to Birkenhead, Eng., under the River Mersey, 3 miles.

## NOTED INVENTIONS.

### AMERICAN (WITH FOREIGN DATA AS TO PRINTING).

| INVENTION. | Inventor. | Date. |
|---|---|---|
| Printing, block | In China | 593 |
| " by movable type | In China | 10th Cent. |
| " " " " | Coster | 1438 |
| " " cut metal type | Gutenberg | 1455 |
| Lightning rod | Franklin | 1752 |
| Steamboat | Fitch | 1784 |
| Steamboat | Fulton | 1793 |
| Nail machine | Perkins | 1787 |
| Cast-iron plough | Newbold | 1797 |
| Cotton gin | Whitney | 1793 |
| Carding (textile) machine | Whittemore | 1797 |
| High-pressure steam engine | Evans | 1799 |
| Screw propeller | Stevens | 1804 |
| Tack machine | Blanchard | 1806 |
| Electro-magnet | Henry | 1828 |
| Revolver (pistol) | Colt | 1835 |
| Electric telegraph | Morse | 1835 |
| Vulcanized rubber | Goodyear | 1839 |
| Sewing machine | Howe | 1846 |
| Electric locomotive | Vail | 1851 |
| Monitor (warship) | Ericsson | 1861 |
| Airbrake | Westinghouse | 1869 |
| Celluloid | Hyatt | 1870 |
| Welt machine | Goodyear | 1871 |
| Block signals for railways | Robinson | 1872 |
| Automatic car-coupler | Janney | 1873 |
| Quadruplex telegraph | Edison | 1874 |
| Water gas | Lowe | 1875 |
| Mowing machine (differential gear) | Eickemeyer (R.) | 1876 |
| Telephone | Bell | 1876 |
| Talking machine | Edison | 1877 |
| Typewriter | Sholes | 1878 |
| Incandescent lamp | Edison | 1878 |
| Arc lamp | Brush | 1879 |
| Automatic knot-tying harvester machine | Appleby | 1880 |
| Chrome tanning | Schulz | 1884 |
| Trolley car | Van Depoele & Sprague | 1884-87 |
| Type-bar casting (linotype) | Mergenthaler | 1885 |
| Cash register | Patterson | 1885 |
| Electric furnace reduction | Cowles | 1885 |
| Split-phase induction motor | Tesla | 1887 |
| Single-type composing machine | Lanston | 1887 |
| Rotary converter | Bradley | 1887 |
| Recording adding machine | Burroughs | 1888 |
| Transp'rent photograph film | Eastman | 1888 |
| Calcium carbide | Willson | 1888 |
| Electric welding | Thomson | 1889 |
| Electrolytic alkali prod'ction | Castner | 1890 |
| Carborundum | Acheson | 1891 |
| Harveyized armor plate | Harvey | 1891 |
| Alternate-current motor | Tesla | 1892 |
| Motion-picture machine | Edison | 1893 |
| Dry-air process for blast furnace | Gayley | 1894 |
| Disk ploughs (modern type) | Hardy | 1896 |
| High-speed steel | Taylor & White | 1901 |
| Aeroplane | Orville & Wilbur Wright | 1903 |
| Hydro-aeroplane | Glenn H. Curtiss | 1911 |
| Machine gun | Isaac N. Lewis | 1912 |
| Gas engine (compound) | Eickemeyer (C.) | 1921 |

### FOREIGN.

| INVENTION. | Date | Inventor. | Nationality. |
|---|---|---|---|
| Leyden jar | 1745 | Kleist | German |
| Voltaic pile | 1800 | Volta | Italian |
| Electro-mag. telegraph | 1836 | Wheatstone | English |
| Duplex telegraphy | 1853 | Gintl | Austrian |
| Dynamite | 1867 | Nobel | Swedish |
| Siphon recorder | 1874 | Thompson | English |
| Gas engine, Otto cycle | 1877 | Otto | German |
| Centrifugal creamer | 1880 | De Laval | Swedish |
| Manganese steel | 1884 | Hadfield | English |
| Smokeless powder | 1886 | Vielle | French |
| Mantle burner | 1890 | Welsbach | Austrian |
| By-product coke oven | 1893 | Hoffman | Austrian |
| Wireless teleg. (low frequency) | 1895 | Preece | English |
| Wireless teleg. (high frequency) | 1896 | Marconi | Italian |
| Electric steel | 1900 | Heroult | French |
| Diesel oil motor | 1900 | Diesel | German |
| Depth bomb | 1903 | W. T. Unge | Swedish |

# Weights and Measures.

## U. S. WEIGHTS AND MEASURES.

**Apothecaries' Weight:** 20 grains = 1 scruple; 3 scruples = 1 dram; 8 drams = 1 ounce; 12 ounces = 1 pound.

**Avoirdupois Weight** (short ton): 27 11-32 grains = 1 dram; 16 drams = 1 ounce; 16 ounces = 1 pound; 25 pounds = 1 quarter; 4 quarters = 1 cwt.; 20 cwt. = 1 ton.

**Avoirdupois Weight** (long ton): 27 11-32 grains = 1 dram; 16 drams = 1 ounce; 16 ounces = 1 pound; 112 pounds = 1 cwt.; 20 cwt. = 1 ton.

**Troy Weight:** 24 grains = 1 pennyweight; 20 pennyweights = 1 ounce; 12 ounces = 1 pound.

**Circular Measure:** 60 seconds = 1 minute; 60 minutes = 1 degree; 30 degrees = 1 sign; 12 signs = 1 circle or circumference.

**Cubic Measure:** 1,728 cubic inches = 1 cubic foot; 27 cubic feet = 1 cubic yard.

**Dry Measure:** 2 pints = 1 quart; 8 quarts = 1 peck; 4 pecks = 1 bushel.

**Liquid Measure:** 4 gills = 1 pint; 2 pints = 1 quart; 4 quarts = 1 gallon; 31½ gallons = 1 barrel; 2 barrels = 1 hogshead.

**Long Measure:** 12 inches = 1 foot; 3 feet = 1 yard; 5½ yards = 1 rod or pole; 40 rods = 1 furlong; 8 furlongs = 1 statute mile (1,760 yards or 5,280 feet); 3 miles = 1 league.

**Mariners' Measure:** 6 feet = 1 fathom; 120 fathoms = 1 cable length; 7½ cable lengths = 1 mile; 5,280 feet = 1 statute mile; 6,085 feet = 1 nautical mile.

**Paper Measure:** 24 sheets = 1 quire; 20 quires = 1 ream (480 sheets); 2 reams = 1 bundle; 5 bundles = 1 bale.

**Square Measure:** 144 square inches = 1 square foot; 9 square feet = 1 square yard; 30¼ square yards = 1 square rod or perch; 40 square rods = 1 rood; 4 roods = 1 acre; 640 acres = 1 square mile; 36 square miles (6 miles square) = 1 township.

**Time Measure:** 60 seconds = 1 minute; 60 minutes = 1 hour; 24 hours = 1 day; 7 days = 1 week; 365 days = 1 year; 366 days = 1 leap year.

### BRITISH LIQUID MEASURE WITH U. S. EQUIVALENTS.

| Names. | | Pounds of Water. | | Cubic Inches. | Litres. | United States' Equivalents. |
|---|---|---|---|---|---|---|
| 4 gills | = 1 pint | 1.25 | | 34.66 | 0.56793 | 1.20032 liquid pints. |
| 2 pints | = 1 quart | 2.5 | | 69.32 | 1.13586 | 1.20032 " quarts. |
| 2 quarts | = 1 pottle | 5 | | 138.64 | 2.27173 | 2.40064 " " |
| 2 pottles | = 1 gallon | 10 | | 277.27 | 4.54346 | 1.20032 " gallons. |
| 2 gallons | = 1 peck | 20 | Dry measure | 554.55 | 9.08692 | 1.03152 dry pecks. |
| 4 pecks | = 1 bushel | 80 | | 2219.36 | 36.34766 | 1.03152 " bushels. |
| 4 bushels | = 1 coomb | 320 | | 8872.77 | 145.39062 | 4.12606 " " |
| 2 coombs | = 1 quarter | 640 | | 17745.54 | 290.7813 | 8.2521 " " |

A cubic foot of pure gold weighs 1,210 pounds; pure silver, 655 pounds; cast iron, 450 pounds; copper, 550 pounds; lead, 710 pounds; pure platinum, 1,220 pounds; tin, 456 pounds; aluminum, 163 pounds.

### Size of Barrels.

| | | | |
|---|---|---|---|
| Firkin or quarter barrel | 9 gallons | Tierce | 42 gallons |
| Anker (10 gallons) | 10 gallons | Hogshead of ale (1½ barrels) | 54 gallons |
| Kilderkin, rundlet, or ½ barrel | 18 gallons | Puncheon | 72 gallons |
| Barrel | 36 gallons | Butt of ale | 108 gallons |

### Bottle Measure.

The customary glass bottle of wine or spirits should contain one-sixth of a gallon, or 26⅔ fluid ounces. In the drug trade two large bottles are used, the corbyn, of 40 fluid ounces (quart), and the Winchester quart, of 80 fluid ounces (½ gallon).

## BUSHEL WEIGHTS WITH PROPORTIONAL WEIGHTS FOR SUBDIVISIONS.

| Bushel Weight in Lbs. | ½ Bu. | | 1 Peck. | | ½ Peck. | | ¼ Peck. | | 1 Quart. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Lbs | Ozs | Lbs | Ozs | Lbs | Ozs | Lbs | Ozs | Lbs | Ozs. |
| 4..... | 2 | 0 | 1 | 0 | 0 | 8 | 0 | 7 | 0 | 2 |
| 8..... | 4 | 0 | 2 | 0 | 1 | 0 | 0 | 8 | 0 | 4 |
| 10..... | 5 | 0 | 2 | 8 | 1 | 4 | 0 | 10 | 0 | 5 |
| 11..... | 5 | 8 | 2 | 12 | 1 | 6 | 0 | 11 | 0 | 5.5 |
| 12..... | 6 | 0 | 3 | 0 | 1 | 8 | 0 | 12 | 0 | 6 |
| 14..... | 7 | 0 | 3 | 8 | 1 | 12 | 0 | 14 | 0 | 7 |
| 20..... | 10 | 0 | 5 | 0 | 2 | 8 | 1 | 4 | 0 | 10 |
| 22..... | 11 | 0 | 5 | 8 | 2 | 12 | 1 | 6 | 0 | 11 |
| 23..... | 11 | 8 | 5 | 12 | 2 | 14 | 1 | 7 | 0 | 11.5 |
| 24..... | 12 | 0 | 6 | 0 | 3 | 0 | 1 | 8 | 0 | 12 |
| 25..... | 12 | 8 | 6 | 4 | 3 | 2 | 1 | 9 | 0 | 12.5 |
| 26..... | 13 | 0 | 6 | 8 | 3 | 4 | 1 | 10 | 0 | 13 |
| 28..... | 14 | 0 | 7 | 0 | 3 | 8 | 1 | 12 | 0 | 14 |
| 30..... | 15 | 0 | 7 | 8 | 3 | 12 | 1 | 14 | 0 | 15 |
| 32..... | 16 | 0 | 8 | 0 | 4 | 0 | 2 | 0 | 1 | 0 |
| 33..... | 16 | 8 | 8 | 4 | 4 | 2 | 2 | 1 | 1 | 0.5 |
| 34..... | 17 | 0 | 8 | 8 | 4 | 4 | 2 | 2 | 1 | 1 |
| 35..... | 17 | 8 | 8 | 12 | 4 | 6 | 2 | 3 | 1 | 1.5 |
| 36..... | 18 | 0 | 9 | 0 | 4 | 8 | 2 | 4 | 1 | 2 |
| 38..... | 19 | 0 | 9 | 8 | 4 | 12 | 2 | 6 | 1 | 3 |
| 39..... | 19 | 8 | 9 | 12 | 4 | 14 | 2 | 7 | 1 | 3.5 |
| 40..... | 20 | 0 | 10 | 0 | 5 | 0 | 2 | 8 | 1 | 4 |
| 42..... | 21 | 0 | 10 | 8 | 5 | 4 | 2 | 10 | 1 | 5 |
| 43..... | 21 | 8 | 10 | 12 | 5 | 6 | 2 | 11 | 1 | 5.5 |
| 44..... | 22 | 0 | 11 | 0 | 5 | 8 | 2 | 12 | 1 | 6 |

| Bushel Weight in Lbs. | ½ Bu. | | 1 Peck. | | ½ Peck. | | ¼ Peck. | | 1 Quart. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Lbs | Ozs | Lbs | Ozs | Lbs | Ozs | Lbs | Ozs | Lbs | Ozs. |
| 45..... | 22 | 8 | 11 | 4 | 5 | 10 | 2 | 13 | 1 | 6.5 |
| 46..... | 23 | 0 | 11 | 8 | 5 | 12 | 2 | 14 | 1 | 7 |
| 47..... | 23 | 8 | 11 | 12 | 5 | 14 | 2 | 15 | 1 | 7.5 |
| 48..... | 24 | 0 | 12 | 0 | 6 | 0 | 3 | 0 | 1 | 8 |
| 50..... | 25 | 0 | 12 | 8 | 6 | 4 | 3 | 2 | 1 | 9 |
| 52..... | 26 | 0 | 13 | 0 | 6 | 8 | 3 | 4 | 1 | 10 |
| 54..... | 27 | 0 | 13 | 8 | 6 | 12 | 3 | 6 | 1 | 11 |
| 55..... | 27 | 8 | 13 | 12 | 6 | 14 | 3 | 7 | 1 | 11.5 |
| 56..... | 28 | 0 | 14 | 0 | 7 | 0 | 3 | 8 | 1 | 12 |
| 57..... | 28 | 8 | 14 | 4 | 7 | 2 | 3 | 9 | 1 | 12.5 |
| 58..... | 29 | 0 | 14 | 8 | 7 | 4 | 3 | 10 | 1 | 13 |
| 60..... | 30 | 0 | 15 | 0 | 7 | 8 | 3 | 12 | 1 | 14 |
| 62..... | 31 | 0 | 15 | 8 | 7 | 12 | 3 | 14 | 1 | 15 |
| 64..... | 32 | 0 | 16 | 0 | 8 | 0 | 4 | 0 | 2 | 0 |
| 68..... | 34 | 0 | 17 | 0 | 8 | 8 | 4 | 4 | 2 | 2 |
| 70..... | 35 | 0 | 17 | 8 | 8 | 12 | 4 | 6 | 2 | 3 |
| 72..... | 36 | 0 | 18 | 0 | 9 | 0 | 4 | 8 | 2 | 4 |
| 74..... | 37 | 0 | 18 | 8 | 9 | 4 | 4 | 10 | 2 | 5 |
| 75..... | 37 | 8 | 18 | 12 | 9 | 6 | 4 | 11 | 2 | 5.5 |
| 76..... | 38 | 0 | 19 | 0 | 9 | 8 | 4 | 12 | 2 | 6 |
| 80..... | 40 | 0 | 20 | 0 | 10 | 0 | 5 | 0 | 2 | 8 |
| 85..... | 42 | 8 | 21 | 4 | 10 | 10 | 5 | 5 | 2 | 10.5 |
| 100..... | 50 | 0 | 25 | 0 | 12 | 8 | 6 | 4 | 3 | 2 |
| 130..... | 65 | 0 | 32 | 8 | 16 | 4 | 8 | 2 | 4 | 1 |

## VALUE AND WEIGHT OF GOLD.

(By the United States Assay Office, New York.)

The unit in weighing gold is the troy ounce. A "fine" ounce means an ounce of pure gold. The mint value of gold does not fluctuate but remains constant at $20.67183462 per fine ounce. Troy measure is used in weighing gold. The grain is the same in both troy and avoirdupois measure but the ounce and the pound are not the same. The troy ounce contains 480 grains and the troy pound 5,760 grains, there being 12 ounces to the pound. The troy pound is never used in weighing gold, even when the weights of large quantities are to be computed. The avoirdupois ounce contains 437½ grains and the avoirdupois pound contains 7,000 grains, there being 16 ounces to the pound.

## FOREIGN COINS VALUED IN UNITED STATES MONEY.

(Proclaimed by the Secretary of the Treasury as of July 1, 1922.)

Argentine Republic, G., Peso ($0.9648). Currency: Paper, normally convertible at 44 per cent. of face value; now inconvertible.
Austria, G., Krone ($0.2026).
Belgium, G. and S., Franc ($0.1930). Member Latin Union; gold is actual standard.
Bolivia, G., Boliviana ($0.3893). 12½ bolivianos equal 1 pound sterling.
Brazil, G., Milreis ($0.5462). Currency: Government paper normally convertible at 16 pence (—$0.3244) per milreis.
British Colonies in Australasia and Africa, G., Pound sterling ($4.8665).
British Honduras, G., Dollar ($1.0000).
Bulgaria, G., Lev ($0.1930).
Canada, G., Dollar ($1.0000).
Chili, G., Peso ($0.3650). Currency: Inconvertible paper.
China, S., Tael, Haikwan (customs) ($0.8463). The tael is a unit of weight, not a coin. The customs unit is the Haikwan tael. The values of other taels are based on their relation to the value of the Haikwan tael. The Yuan silver dollar of 100 cents is the monetary unit of the Chinese Republic; it is equivalent to .644+ of the Haikwan tael. Dollar, Yuan ($0.5390). Mexican silver pesos issued under Mexican decree of Nov. 13, 1918, are of silver content approximately 41% less than the dollar here quoted; and those issued under decree of Oct. 27, 1919, contain about 51% less silver.
Colombia, G., Peso ($0.9733). Currency: Government paper and gold.
Costa Rica, G., Colon ($0.4653).
Cuba, G., Peso ($1.0000).
Denmark, G., Krone ($0.2680).
Ecuador, G. Sucre ($0.4867).
Egypt, G., Pound (100 piasters) ($4.9431). The actual standard is the British pound sterling, which is legal tender for 97½ piasters.
Finland, G., Markka ($0.1930).
France, G. and S., Franc ($0.1930). Member Latin Union; gold is actual standard.
Germany, G., Mark ($0.2382).
Great Britain, G., Pound sterling ($4.8665).
Greece, G. and S., Drachma ($0.1930). Member Latin Union; gold is actual standard.
Guatemala, S., Peso ($0.5074). Currency: Inconvertible paper.
Hayti, G., Gourde ($0.2000). Currency: Inconvertible paper.
Honduras, S., Peso ($0.5074). Currency, bank notes.
India (British), G., Mohurand Sovereign ($4.8665); S. Rupee ($0.2411). The British sovereign and half sovereign are legal tender in India at 10 rupees per sovereign.
Indo-China, S., Piaster ($0.5480).
Italy, G., Lira ($0.1930). Member Latin Union; gold is actual standard.
Japan, G., Yen ($0.4985).
Liberia, G., Dollar ($1.0000). Currency: Depreciated silver token coins. Customs duties are collected in gold.
Mexico, G., Peso ($0.4985).
Netherlands, G., Guilder (florin), ($0.4020).
Newfoundland, G., Dollar ($1.0000).
Nicaragua, G., Cordoba ($1.0000).
Norway, G., Krone ($0.2680).
Panama, G., Balboa ($1.0000).
Paraguay, G., Peso (Argentine), ($0.9648). Currency: Depreciated Paraguayan paper currency.
Persia, S., Kran ($0.0934). Currency: Silver circulating above its metallic value. Gold coin is a commodity only, normally worth double the silver.
Peru, G., Libra ($4.8665).
Philippine Islands, G., Peso ($0.5000).
Portugal, G., Escudo ($1.0805). Currency: Inconvertible paper.
Roumania, G. Leu ($0.1930).
Russia, G., Ruble ($0.5146).
Salvador, G., Colon ($0.5000).
Santo Domingo, G., Dollar ($1.0000).
Serbia, G., Dinar ($0.1930).
Siam, G., Tical ($0.3709).
Spain, G. and S., Peseta ($0.1930). Valuation is for gold peseta; currency is notes of the Bank of Spain.
Straits Settlements, G., Dollar ($0.5678).
Sweden, G., Krona ($0.2680).
Switzerland, G., Franc ($0.1930). Member Latin Union; gold is actual standard.
Turkey, G., Piaster ($0.0440). (100 piasters equal to the Turkish £.)
Uruguay, G., Peso ($1.0342). Currency: Inconvertible paper.
Venezuela, G., Bolivar ($0.1930).

G, means gold standard country; S, silver. Value in U. S. money is stated in parentheses.

### FOREIGN MONEY UNITS OF VALUE.

**English Money:** 4 farthings—1 penny (*d*); 12 pence—1 shilling (*s*); 20 shillings—1 pound (£); 21 shillings—one guinea; 5 shillings—one crown. **French Money:** 100 centimes—1 franc. **German Money:** 100 pfennig—1 mark. **Russian Money:** 100 copecks—1 ruble. **Austro-Hungarian Money:** 100 heller—1 krone (crown).

### JAPANESE WEIGHTS, MEASURES AND MONEYS, WITH ENGLISH, AMERICAN, FRENCH AND GERMAN EQUIVALENTS.

| JAPAN. | GREAT BRITAIN. | UNITED STATES. | FRANCE. | GERMANY. |
|---|---|---|---|---|
| *Ri* | 2.44030 miles | 2.44029 miles | 3.92727 kilometres | 3.92727 kilometer |
| *Ri (marine)* | 1.15152 miles | 1.15151 miles | 1.85318 kilometres | 1.85318 kilometer |
| *Square Ri* | 5.95505 sq. miles | 5.95501 sq. miles | 15.42347 kilometres | 15.42347 quadrat-kilometer |
| *Cho* = 10 *Tan*... } = 3,000 *Tsubo* } | 2.45064 acres | 2.45062 acres | 99.17355 ares | 99.17355 ar |
| *Tsubo* | 3.95369 sq. yards | 3.95367 sq. yards | 3.30579 centiares | 3.30579 quadrat-meter |
| *Koku* = 10 *To*... } = 100 *Sho* } (Capacity of vessels) | 4.96005 bushels | 47.65389 gals. (liquid) 5.11902 bush. (dry) | 1.80391 hectolitre | 1.80391 hectoliter |
| *Kwan* = 1,000 *Momme*. | 1-10 of one ton 8.26733 lb. (avoir.) 10.04711 lb. (troy) | 1-10 of one ton 8.26733 lb. (avoir.) 10.04711 lb. (troy) | 1-10 de tonne 3.75000 kilogrammes | 1-10 tonne 3.75000 kilo-gramm |
| *Kin* = 160 *Momme*. | 1.32277 lb. (avoir.) 1.60754 lb. (troy) | 1.32277 lb. (avoir.) 1.60754 lb. (troy) | 0.60000 kilo-gramme | 0.60000 kilogramm |
| *Momme* | 2.11644 drams 2.41131 dwts. | 0.13228 oz. (avoir) 0.12057 oz. (troy) | 3.75000 grammes | 3.75000 gramm |
| *Yen* = 100 *Sen* | 2s. 0d. 582. | 0.4984 dollar | 2.583 francs | 2.0924 mark |

The value of the yen is as follows: Prior to December, 1885, gold yen, 0.4 momme of pure gold; from January, 1886, to September, 1897, silver yen, 6.7 momme of pure silver; subsequent to October, 1897, gold yen, 0.2 momme of pure gold.

## SIMPLE INTEREST TABLE.

(Showing at Different Rates the Interest on $1 from 1 Month to 1 Year, and on $100 from 1 Day to 1 Year.)

| TIME. | 4% | 5% | 6% | 7% | 8% | TIME. | 4% | 5% | 6% | 7% | 8% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $1.00 1 month | $.003 | $.004 | $.005 | $.005 | $.006 | $100.00 4 days | $.045 | $.053 | $.066 | $.077 | $.089 |
| " 2 " | .007 | .008 | .010 | .011 | .013 | " 5 " | .056 | .069 | .082 | .097 | .111 |
| " 3 " | .011 | .013 | .015 | .017 | .020 | " 6 " | .067 | .083 | .100 | .116 | .133 |
| " 6 " | .020 | .025 | .030 | .035 | .040 | " 1 month | .334 | .416 | .500 | .583 | .667 |
| " 12 " | .040 | .050 | .060 | .070 | .080 | " 2 " | .667 | .832 | 1.000 | 1.166 | 1.333 |
| $100.00 1 day | .011 | .013 | .016 | .019 | .022 | " 3 " | 1 000 | 1.250 | 1.500 | 1.750 | 2.000 |
| " 2 " | .022 | .027 | .032 | .038 | .044 | " 6 " | 2.000 | 2.500 | 3.000 | 3.500 | 4.000 |
| " 3 " | .034 | .041 | .050 | .058 | .067 | " 12 " | 4.000 | 5.000 | 6.000 | 7.000 | 8.000 |

## YEARS IN WHICH A GIVEN AMOUNT WILL DOUBLE AT INTEREST.

| Rate. | At Simple Interest. | At Compound Interest. Compounded Yearly. | Compounded Semi-Annually. | Compounded Quarterly. | Rate. | At Simple Interest. | At Compound Interest. Compounded Yearly. | Compounded Semi-Annually. | Compounded Quarterly. |
|---|---|---|---|---|---|---|---|---|---|
| | *Years.* | *Years.* | *Years.* | *Years.* | | *Years.* | *Years.* | *Years.* | *Years.* |
| 1 | 100.00 | 69.660 | 69.487 | 69.237 | 6 | 16.67 | 11.896 | 11.725 | 11.639 |
| 1½ | 66.66 | 46.556 | 46.382 | 46.297 | 6½ | 15.38 | 11.007 | 10.836 | 10.750 |
| 2 | 50.00 | 35.003 | 34.830 | 34.743 | 7 | 14.29 | 10.245 | 10.074 | 9.966 |
| 2½ | 40.00 | 28.071 | 27.899 | 27.748 | 7½ | 13.33 | 9.584 | 9.414 | 9.328 |
| 3 | 33.33 | 23.450 | 23.278 | 23.191 | 8 | 12.50 | 9.006 | 8.837 | 8.751 |
| 3½ | 28.57 | 20.149 | 19.977 | 19.890 | 8½ | 11.76 | 8.497 | 8.327 | 8.241 |
| 4 | 25.00 | 17.673 | 17.501 | 17.415 | 9 | 11.11 | 8.043 | 7.874 | 7.788 |
| 4½ | 22.22 | 15.747 | 15.576 | 15.490 | 9½ | 10.52 | 7.638 | 7.468 | 7.383 |
| 5 | 20.00 | 14.207 | 14.035 | 13.949 | 10 | 10.00 | 7.273 | 7.103 | 7.018 |
| 5½ | 18.18 | 12.942 | 12.775 | 12.689 | 12 | 8.34 | 6.116 | 5.948 | 5.862 |

## INTEREST ON $1,000 FOR 1 TO 365 DAYS.

| Days. | 3% | 3½% | 4% | 4½% | 5% | 6% | 7% |
|---|---|---|---|---|---|---|---|
| 1 | $0.082 | $0.096 | $0.110 | $0.123 | $0.137 | $0.164 | $0.192 |
| 2 | .164 | .192 | .219 | .247 | .274 | .329 | .384 |
| 3 | .247 | .288 | .329 | .370 | .411 | .493 | .575 |
| 4 | .329 | .384 | .438 | .493 | .548 | .658 | .767 |
| 5 | .411 | .479 | .548 | .616 | .685 | .822 | .959 |
| 6 | .493 | .575 | .658 | .740 | .822 | .986 | 1.151 |
| 7 | .575 | .671 | .767 | .863 | .959 | 1.151 | 1.342 |
| 8 | .658 | .767 | .877 | .986 | 1.096 | 1.315 | 1.534 |
| 9 | .740 | .863 | .986 | 1.110 | 1.233 | 1.479 | 1.726 |
| 10 | .822 | .959 | 1.096 | 1.233 | 1.370 | 1.644 | 1.918 |
| 20 | 1.644 | 1.918 | 2.192 | 2.466 | 2.740 | 3.288 | 3.836 |
| 30 | 2.466 | 2.877 | 3.288 | 3.699 | 4.110 | 4.932 | 5.753 |
| 40 | 3.288 | 3.836 | 4.384 | 4.932 | 5.479 | 6.575 | 7.671 |
| 50 | 4.110 | 4.795 | 5.479 | 6.164 | 6.849 | 8.219 | 9.589 |
| 60 | 4.932 | 5.753 | 6.575 | 7.397 | 8.219 | 9.863 | 11.507 |
| 70 | 5.753 | 6.712 | 7.671 | 8.630 | 9.589 | 11.507 | 13.425 |
| 80 | 6.575 | 7.671 | 8.767 | 9.863 | 10.959 | 13.151 | 15.342 |
| 90 | 7.397 | 8.630 | 9.863 | 11.096 | 12.329 | 14.795 | 17.260 |
| 100 | 8.219 | 9.589 | 10.959 | 12.329 | 13.699 | 16.438 | 19.178 |
| 110 | 9.041 | 10.548 | 12.055 | 13.562 | 15.068 | 18.082 | 21.096 |
| 120 | 9.863 | 11.507 | 13.151 | 14.795 | 16.438 | 19.726 | 23.014 |
| 130 | 10.685 | 12.466 | 14.247 | 16.027 | 17.808 | 21.370 | 24.932 |
| 140 | 11.507 | 13.425 | 15.342 | 17.260 | 19.178 | 23.014 | 26.849 |
| 150 | 12.329 | 14.384 | 16.438 | 18.493 | 20.548 | 24.658 | 28.767 |
| 160 | 13.151 | 15.342 | 17.534 | 19.726 | 21.918 | 26.301 | 30.685 |
| 170 | 13.973 | 16.301 | 18.630 | 20.959 | 23.288 | 27.945 | 32.603 |
| 180 | 14.795 | 17.260 | 19.726 | 22.192 | 24.658 | 29.589 | 34.521 |
| 190 | 15.616 | 18.219 | 20.822 | 23.425 | 26.027 | 31.233 | 36.438 |
| 200 | 16.438 | 19.178 | 21.918 | 24.658 | 27.397 | 32.877 | 38.356 |
| 210 | 17.260 | 20.137 | 23.014 | 25.890 | 28.767 | 34.521 | 40.274 |
| 220 | 18.082 | 21.096 | 24.110 | 27.123 | 30.137 | 36.164 | 42.192 |
| 230 | 18.904 | 22.055 | 25.205 | 28.356 | 31.507 | 37.808 | 44.110 |
| 240 | 19.726 | 23.014 | 26.301 | 29.589 | 32.877 | 39.452 | 46.027 |
| 250 | 20.548 | 23.973 | 27.397 | 30.822 | 34.247 | 41.096 | 47.945 |
| 260 | 21.370 | 24.932 | 28.493 | 32.055 | 35.616 | 42.740 | 49.863 |
| 270 | 22.192 | 25.890 | 29.589 | 33.288 | 36.986 | 44.384 | 51.781 |
| 280 | 23.014 | 26.849 | 30.685 | 34.521 | 38.356 | 46.027 | 53.699 |
| 290 | 23.836 | 27.808 | 31.781 | 35.753 | 39.726 | 47.671 | 55.616 |
| 300 | 24.658 | 28.767 | 32.877 | 36.986 | 41.096 | 49.315 | 57.534 |
| 310 | 25.479 | 29.726 | 33.973 | 38.219 | 42.466 | 50.959 | 59.452 |
| 320 | 26.301 | 30.685 | 35.068 | 39.452 | 43.836 | 52.603 | 61.370 |
| 330 | 27.123 | 31.644 | 36.164 | 40.685 | 45.205 | 54.247 | 63.288 |
| 340 | 27.945 | 32.603 | 37.260 | 41.918 | 46.575 | 55.890 | 65.205 |
| 350 | 28.767 | 33.562 | 38.356 | 43.151 | 47.945 | 57.534 | 67.123 |
| 360 | 29.589 | 34.521 | 39.452 | 44.384 | 49.315 | 59.178 | 69.041 |
| 365 | 30.000 | 35.000 | 40.000 | 45.000 | 50.000 | 60.000 | 70.000 |

## INTEREST ON $1,000 FOR ONE TO THIRTY DAYS.

(Interest figures based on 360 days in a year.)

| Days. | 3½% | 4% | 4½% | 5% | 6% | 7% | Days. | 3½% | 4% | 4½% | 5% | 6% | 7% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Dolls.* | *Dolls.* | *Dolls.* | *Dolls.* | *Dolls.* | *Dolls.* | | *Dolls.* | *Dolls.* | *Dolls.* | *Dolls.* | *Dolls* | *Dolls.* |
| 1 | 0.0972 | 0.1111 | 0.125 | 0.1389 | 0.1667 | 0.1944 | 16 | 1.5555 | 1.7778 | 2.000 | 2.2222 | 2.6667 | 3.1111 |
| 2 | 0.1924 | 0.2222 | 0.250 | 0.2778 | 0.3333 | 0.3889 | 17 | 1.6528 | 1.8889 | 2.125 | 2.3611 | 2.8333 | 3.3055 |
| 3 | 0.2916 | 0.3333 | 0.375 | 0.4167 | 0.5000 | 0.5833 | 18 | 1.7500 | 2.0000 | 2.250 | 2.5000 | 3.0000 | 3.5000 |
| 4 | 0.3889 | 0.4444 | 0.500 | 0.5556 | 0.6667 | 0.7778 | 19 | 1.8472 | 2.1111 | 2.375 | 2.6389 | 3.1667 | 3.6944 |
| 5 | 0.4861 | 0.5555 | 0.625 | 0.6944 | 0.8333 | 0.9722 | 20 | 1.9444 | 2.2222 | 2.500 | 2.7778 | 3.3333 | 3 8889 |
| 6 | 0.5833 | 0.6667 | 0.750 | 0.8333 | 1.0000 | 1.1667 | 21 | 2.0417 | 2.3333 | 2.625 | 2.9167 | 3.5000 | 4.0833 |
| 7 | 0.6805 | 0.7778 | 0.875 | 0.9722 | 1.1667 | 1.3611 | 22 | 2.1389 | 2.4444 | 2.750 | 3.0555 | 3.6667 | 4.2778 |
| 8 | 0.7778 | 0.8889 | 1.000 | 1.1111 | 1.3333 | 1.5555 | 23 | 2.2361 | 2.5555 | 2.875 | 3.1944 | 3.8333 | 4.4722 |
| 9 | 0.8750 | 1.0000 | 1.125 | 1.2500 | 1.5000 | 1.7500 | 24 | 2.3333 | 2.6667 | 3.000 | 3.3333 | 4.0000 | 4.6667 |
| 10 | 0.9722 | 1.1111 | 1.250 | 1.3889 | 1.6667 | 1.9444 | 25 | 2.4305 | 2.7778 | 3.125 | 3.4722 | 4.1667 | 4.8611 |
| 11 | 1.0694 | 1.2222 | 1.375 | 1.5278 | 1.8333 | 2.1389 | 26 | 2.5278 | 2.8889 | 3.250 | 3.6111 | 4.3333 | 5.0555 |
| 12 | 1.1667 | 1.3333 | 1.500 | 1.6667 | 2.0000 | 2.3333 | 27 | 2.6250 | 3 0000 | 3.375 | 3.7500 | 4.5000 | 5.2500 |
| 13 | 1.2639 | 1.4444 | 1.625 | 1.8055 | 2.1667 | 2.5278 | 28 | 2.7222 | 3.1111 | 3.500 | 3.8889 | 4 6667 | 5.4444 |
| 14 | 1.3611 | 1.5555 | 1.750 | 1.9444 | 2.3333 | 2.7222 | 29 | 2.8194 | 3.2222 | 3.625 | 4.0278 | 4.8333 | 5.6389 |
| 15 | 1.4583 | 1.6667 | 1.875 | 2.0833 | 2.5000 | 2.9167 | 30 | 2.9167 | 3.3333 | 3.750 | 4.1667 | 5.0000 | 5.8333 |

## PRESENT VALUE OF AN ANNUITY OF $1,000.

(Calculated at Compound Interest.)

| YEARS. | 3% | 4% | 4½% | 5% | 6% | YEARS. | 3% | 4% | 4½% | 5% | 6% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| 5..... | 4,580 | 4,452 | 4,390 | 4,329 | 4,212 | 35..... | 21,487 | 18,664 | 17,461 | 16,374 | 14,498 |
| 10..... | 8,530 | 8,111 | 7,913 | 7,722 | 7,360 | 40..... | 23,115 | 19,793 | 18,401 | 17,159 | 15,046 |
| 15..... | 11,938 | 11,118 | 10,740 | 10,380 | 9,712 | 45..... | 24,519 | 20,720 | 19,156 | 17,774 | 15,456 |
| 20..... | 14,877 | 13,590 | 13,008 | 12,462 | 11,470 | 50..... | 25,730 | 21,482 | 19,762 | 18,256 | 15,762 |
| 25..... | 17,413 | 15,622 | 14,828 | 14,094 | 12,783 | 100..... | 31,599 | 24,505 | 21,950 | 19,848 | 16,618 |
| 30..... | 19,600 | 17,292 | 16,289 | 15,372 | 13,765 | | | | | | |

## AMOUNT OF ONE DOLLAR AT COMPOUND INTEREST.

| YEARS. | 3% | 4% | 4½% | 5% | 6% | YEARS. | 3% | 4% | 4½% | 5% | 6% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1..... | 1.03 | 1.04 | 1.04 | 1.05 | 1.06 | 19..... | 1.75 | 2.10 | 2.30 | 2.52 | 3.02 |
| 2..... | 1.06 | 1.08 | 1.09 | 1.10 | 1.12 | 20..... | 1.80 | 2.19 | 2.41 | 2.65 | 3.20 |
| 3..... | 1.09 | 1.12 | 1.14 | 1.15 | 1.19 | 21..... | 1.86 | 2.27 | 2.52 | 2.78 | 3.40 |
| 4..... | 1.12 | 1.17 | 1.19 | 1.21 | 1.26 | 22..... | 1.91 | 2.37 | 2.63 | 2.92 | 3.60 |
| 5..... | 1.15 | 1.21 | 1.24 | 1.27 | 1.33 | 23..... | 1.97 | 2.46 | 2.75 | 3.07 | 3.82 |
| 6..... | 1.19 | 1.26 | 1.30 | 1.34 | 1.41 | 24..... | 2.03 | 2.56 | 2.87 | 3.22 | 4.04 |
| 7..... | 1.23 | 1.31 | 1.36 | 1.40 | 1.50 | 25..... | 2.09 | 2.66 | 3.00 | 3.38 | 4.29 |
| 8..... | 1.26 | 1.36 | 1.42 | 1.47 | 1.59 | 26..... | 2.15 | 2.77 | 3.14 | 3.55 | 4.54 |
| 9..... | 1.30 | 1.42 | 1.48 | 1.55 | 1.68 | 27..... | 2.22 | 2.88 | 3.28 | 3.73 | 4.82 |
| 10..... | 1.34 | 1.48 | 1.55 | 1.62 | 1.79 | 28..... | 2.28 | 2.99 | 3.43 | 3.92 | 5.11 |
| 11..... | 1.38 | 1.53 | 1.62 | 1.71 | 1.89 | 29..... | 2.35 | 3.11 | 3.58 | 4.11 | 5.41 |
| 12..... | 1.42 | 1.60 | 1.69 | 1.79 | 2.01 | 30..... | 2.42 | 3.24 | 3.74 | 4.32 | 5.74 |
| 13..... | 1.46 | 1.66 | 1.77 | 1.88 | 2.13 | 31..... | 2.50 | 3.37 | 3.91 | 4.53 | 6.08 |
| 14..... | 1.51 | 1.73 | 1.85 | 1.98 | 2.26 | 32..... | 2.57 | 3.50 | 4.09 | 4.76 | 6.45 |
| 15..... | 1.55 | 1.80 | 1.93 | 2.07 | 2.39 | 33..... | 2.65 | 3.64 | 4.27 | 5.00 | 6.84 |
| 16..... | 1.60 | 1.87 | 2.02 | 2.18 | 2.54 | 34..... | 2.73 | 3.79 | 4.46 | 5.25 | 7.25 |
| 17..... | 1.65 | 1.94 | 2.11 | 2.29 | 2.69 | 35..... | 2.81 | 3.94 | 4.66 | 5.51 | 7.68 |
| 18..... | 1.70 | 2.02 | 2.20 | 2.40 | 2.85 | 100..... | 19.21 | 50.50 | 81.58 | 131.50 | 339.30 |

## NUMBER OF DAYS FROM A GIVEN DAY IN ONE MONTH TO SAME DAY IN ANY OTHER MONTH.

(Prepared by the Mutual Life Insurance Co., of New York.)

| FROM TO | Jan. | Feb. | March | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| January..... | 365 | 31 | 59 | 90 | 120 | 151 | 181 | 212 | 243 | 273 | 304 | 334 |
| February..... | 334 | 365 | 28 | 59 | 89 | 120 | 150 | 181 | 212 | 242 | 273 | 303 |
| March..... | 306 | 337 | 365 | 31 | 61 | 92 | 122 | 153 | 184 | 214 | 245 | 275 |
| April..... | 275 | 306 | 334 | 365 | 30 | 61 | 91 | 122 | 153 | 183 | 214 | 244 |
| May..... | 245 | 276 | 304 | 335 | 365 | 31 | 61 | 92 | 123 | 153 | 184 | 214 |
| June..... | 214 | 245 | 273 | 304 | 334 | 365 | 30 | 61 | 92 | 122 | 153 | 183 |
| July..... | 184 | 215 | 243 | 274 | 304 | 335 | 365 | 31 | 62 | 92 | 123 | 153 |
| August..... | 153 | 184 | 212 | 243 | 273 | 304 | 334 | 365 | 31 | 61 | 92 | 121 |
| September..... | 122 | 153 | 181 | 212 | 242 | 273 | 303 | 334 | 365 | 30 | 61 | 91 |
| October..... | 92 | 123 | 151 | 182 | 212 | 243 | 273 | 304 | 335 | 365 | 31 | 61 |
| November..... | 61 | 92 | 120 | 151 | 181 | 212 | 242 | 273 | 304 | 334 | 365 | 30 |
| December..... | 31 | 62 | 90 | 121 | 151 | 182 | 212 | 243 | 274 | 304 | 335 | 365 |

EXAMPLE: To find the number of days from April 10 to October 10 (including one of the given days): By the calendar April 10 to October 10 gives 183 days, the number required.

## ANCIENT GREEK AND ROMAN WEIGHTS AND MEASURES.

WITH AMERICAN EQUIVALENTS.

### WEIGHTS.

The Roman libra or pound = 10 oz. 18 pwt. 13 5-7 gr., Troy.
The Attica mina or pound = 11 oz. 7 pwt. 16 2-7 gr., Troy.
The Attica talent (60 minae) = 56 lbs. 11 oz. 0 pwt. 17 1-7 gr., Troy.

### DRY MEASURE.

The Roman modus = 1 pk. 2-9 pint.
The Attic choenix = nearly 1½ pints.
The Attic medimnus = 4 pk. 6 1-10 pints.

### LIQUID MEASURE.

The cotyle = a little over ½ pint.
The cyathus = a little over 1½ pints.
The chus = a little over 6¾ pints.

### LONG MEASURE.

The Roman foot = 11 3-5 inches.
The Roman cubit = 1 ft. 5¾ inches.
The Roman pace = 4 ft. 10 inches.
The Roman furlong = 604 ft. 10 inches.
The Roman mile = 4,835 feet.
The Grecian cubit = 1 ft. 6½ inches.
The Grecian furlong = 504 ft. 4 1-5 inches.
The Grecian mile = 4,030 feet.

### MONEY.

The quadrans = 1 1-10 mills.
The as = 1 3-10 mills.
The sestertius = 3.58 + cents.
The sestertium (1,000 sestertii) = $35.80.
The denarius = 14.35 + cents.
The Attic obolus = 2.39 + cents.
The drachma = 14.35 + cents.
The mina (100 drachmae) = $14.35 +.
The talent (60 minae) = $861.00.
The Greek stater was worth $4; the Persian, $5.35. Each coin was of silver, composed of 20 drachmas, each drachma equal in value to 19½ cents, American money.

The modern drachma equals 19.3 cents. The Greek stater weighed 134.75 grains avoirdupois. The Roman aureus was worth $4.50.

## BIBLICAL WEIGHTS REDUCED TO TROY WEIGHT.

THE Gerah, one-twentieth of a Shekel, 12 grains; the Bekah, half a Shekel, 5 pennyweight; the Shekel, 10 pennyweight; the Maneh, 60 Shekels, 2 lbs. 6 oz.; the Talent, 50 Manehs, or 3,000 Shekels, 125 lbs.

## MEDICAL SIGNS AND ABBREVIATIONS.

℞ (Lat. Recipe), take; āā, of each; ℔, pound; ʒ, ounce; ʒ, drachm; ℈, scruple; ♏, minim, or drop; O or o, pint; f ʒ, fluid ounce; f ʒ, fluid drachm; as, ʒ ss, half an ounce; ʒ i, one ounce; ʒ iss, one ounce and a half; ʒ ij, two ounces; gr., grain; Q. S., as much as sufficient; Ft. Mist., let a mixture be made; Ft. Haust., let a draught be made; Ad., add to; Ad lib., at pleasure; Aq., water; M., mix; Mac., macerate; Pulv., powder; Pil., pill; Solv., dissolve; St., let it stand; Sum., to be taken; D., dose; Dil., dilute; Filt., filter; Lot., a wash; Garg., a gargle; Hor. Decub., at bed time; Inject., injection; Gtt., drops; ss, one-half; Ess., essence.

## FOREIGN WEIGHTS AND MEASURES.

(For "Foreign Coins Valued in U. S. Money" See Index.)

| Denominations. | Where Used. | American Equivalents. |
|---|---|---|
| Almude | Portugal | 4.422 gals. |
| Ardeb | Egypt | 7.6907 bu. |
| Are | Metric | 0.02471 acre. |
| Arobe | Paraguay | 25 lbs. |
| Arratel or libra | Portugal | 1.011 lbs. |
| Arroba (dry) | Argentine Republic | 25.3175 lbs. |
| " | Brazil | 32.38 lbs. |
| " | Cuba | 25.3664 lbs. |
| " | Portugal | 32.38 lbs. |
| " | Spain | 25.36 lbs. |
| " | Venezuela | 25.4024 lbs. |
| " (liqu'd) | Cuba, Spain, and Venezuela | 4.263 gals. |
| Arshine | Russia | 28 in. |
| " (sq.) | " | 5.44 sq. ft. |
| Artel | Morocco | 1.12 lbs. |
| Baril | Argentine Republic and Mexico | 20.0787 gals. |
| Barrel | Malta (customs) | 11.4 gals. |
| " | Spain (raisins) | 100 lbs. |
| Berkovets | Russia | 361.12 lbs. |
| Boll or Bole | Scotland, Ireland | 4 Winch'r bu. |
| Bongkal | India | 832 grains. |
| Bouw | Sumatra | 7,096.5 sq. meters |
| Bu | Japan | 0.1 inch. |
| Butt (wine) | Spain | 140 gals. |
| Caffiso | Malta | 5.4 gals. |
| Candy | India (Bombay) | 529 lbs. |
| " | India (Madras) | 500 lbs. |
| Cantar | Egypt | 99.05 lbs. av. |
| " | Morocco | 113 lbs. |
| " | Syria (Damascus) | 575 lbs. |
| " | Turkey | 124.7036 lbs. |
| Cantaro (cantar) | Malta | 175 lbs. |
| Carga | Mexico, Salvador | 300 lbs. |
| Catty | China | 1.333⅓ lbs. |
| " | Japan | 1.31 lbs. |
| " | Java, Siam, Malac'a | 1.35 lbs. |
| " | Sumatra | 2.12 lbs. |
| Centaro | Central America | 4.2631 gals. |
| Centner | Bremen, Brunswick | 117.5 lbs. |
| " | Denmark, Norway | 110.11 lbs. |
| " | Prussia | 113.44 lbs. |
| " | Sweden | 93.7 lbs. |
| " | Vienna | 123.5 lbs. |
| " | Zollverein | 110.24 lbs. |
| " | Double or metric | 220.46 lbs. |
| Chetvert | Russia | 5.7748 bu. |
| Chih | China | 14 inches. |
| Cho | Japan | 2.4507 acres. |
| Comb | England | 4 bu. |
| Coyan | Sarawak | 3,098 lbs. |
| " | Siam (Koyan) | 2,667 lbs. |
| Cuadra | Argentine Republic | 4.2 acres. |
| " | Paraguay | 78.9 yds. |
| " | Paraguay (sq.) | 8.077 sq. ft. |
| " | Uruguay | Nearly 2 acres. |
| Cubic meter | Metric | 35.3 cu. ft. |
| Cwt. (hundredweight) | British | 112 lbs. |
| Dessiatine | Russia | 2.6997 acres. |
| " | Spain | 1.599 bu. |
| Drachme | Greece | Half ounce. |
| Fanega (dry) | Central America | 1.5745 bu. |
| " | Chile | 2.575 bu. |
| " | Cuba | 1.599 bu. |
| " | Mexico | 1.54728 bu. |
| " | Uruguay (double) | 7.776 bu. |
| " | Uruguay (single) | 3.888 bu. |
| " | Venezuela | 1.599 bu. |
| " (liquid) | Spain | 16 gals. |
| Feddan | Egypt | 1.03 acres. |
| Frail (raisins) | Spain | 50 lbs. |
| Frasco | Argentine Republic | 2.5096 qts. |
| " | Mexico | 2.5 qts. |
| Frasila | Zanzibar | 35 lbs. |
| Fuder | Luxemburg | 264.17 gals. |
| Funt | Russia | 0.9028 lb. |
| Garnice | Russian Poland | 0.88 gal. |
| Gram | Metric | 15.432 grains. |
| Hectare | " | 2.471 acres. |
| Hectoliter: Dry | " | 2.838 bu. |
| Liquid | " | 26.417 gals. |
| Joch | Austria, Hungary | 1.422 acres. |
| Ken | Japan | 6 feet. |
| Kilogram (kilo) | Metric | 2.2046 lbs. |
| Kilometer | " | 0.621376 mile. |
| Klafter | Russia | 216 cu. ft. |
| Koku | Japan | 4.9629 Imp. bu. |
| Korree | Russia | 3.5 bu. |
| Kwamme | Japan | 8.28 lbs. |
| Last | Belgium, Holland | 85.134 bu. |
| " | England (dry malt) | 82.52 bu. |
| Last | Germany | 2 metric tons (4,480 lbs.) |
| " | Prussia | 112.29 bu. |
| " | Russian Poland | 11⅜ bu. |
| " | Scotland, Ireland | 10 quarters. |
| " | Spain (salt) | 4,760 lbs. |
| League (land) | Paraguay | 4,633 acres. |
| Li | China | 2,115 ft. |
| Libra (lb.) | Argentine Republic | 1.0127 lbs. |
| " | Central America | 1.043 lbs. |
| " | Chile | 1.014 lbs. |
| " | Cuba | 1.0161 lbs. |
| " | Mexico | 1.01465 lbs. |
| " | Peru | 1.0143 lbs. |
| " | Portugal | 1.011 lbs. |
| " | Spain | 1.0144 lbs. |
| " | Uruguay | 1.0143 lbs. |
| " | Venezuela | 1.0161 lbs. |
| Liter | Metric | 1.0567 quarts. |
| Livre (lb.) | Greece | 1.1 lbs. |
| " | Guiana | 1.0791 lbs. |
| Load | England (timber) | Sq., 50 cu. ft. |
| Manzana | Costa Rica | 1 5-6 acres. |
| " | Nicaragua Salvad'r | 1.727 acres |
| Maie | Bolivia | 0.507 lb. |
| Maund | India | 82 2-7 lbs. |
| Meter | Metric | 39.37 inches. |
| Mil | Denmark | 4.68 miles. |
| " | Denmark (geog'cal) | 4.61 miles. |
| Milla | Nicaragua & Honduras | 1.1493 miles |
| Mna | Greece | 3.3069 lbs. av. |
| Morgen | Prussia | 0.63 acre. |
| Ocque | Greece | 2.84 lbs. av. |
| Oke | Egypt | 2.8052 lbs. |
| " | Greece | 2.84 lbs. |
| " | Turkey | 2.82838 lbs. |
| Pic | Egypt | 21¼ inches. |
| Picul | Borneo & Celebes | 135.64 lbs. |
| " | China, Japan, | 133⅓ lbs. |
| " | Java | 135.1 lbs. |
| " | Philippine Islands | 137.9 lbs. |
| Pie | Argentine Republic | 0.9478 foot. |
| " | Spain | 0.91407 foot. |
| Pik | Turkey | 27.9 inches. |
| Pood | Russia | 36.112 lbs. |
| Pund (lb.) | Denmark & Sweden | 1.102 lbs. |
| Quarter | Great Britain | 8.252 bu |
| " | London (coal) | 36 bu. |
| Quintal | Argentine Republic | 101.42 lbs. |
| " | Brazil | 130.06 lbs. |
| " | Castile, Chile, Mexico and Peru | 101.41 lbs. |
| " | Greece | 123.2 lbs. |
| " | Paraguay | 100 lbs. |
| " | Metric | 220.46 lbs. |
| Rottle | Palestine | 6 lbs. |
| " | Syria | 5¾ lbs. |
| Sack | England | 4 bu.; of flour, it is 480 lbs. |
| Sagene | Russia | 7 feet. |
| Salm | Malta | 490 lbs. |
| Se | Japan | 0.02451 acre. |
| Seer | India | 1 lb. 13 ozs. |
| Shaku | Japan | 11.9305 inches. |
| Sno | " | 1.6 quarts. |
| Standard (Petrograd) | Lumber measure | 165 cu. ft. |
| Stone | British | 14 lbs. |
| Sun | Japan | 1.193 inches. |
| Tael | Cochin China | 590.75 grs. (troy) |
| Tan | Japan | 0.25 acre. |
| Tchetvert | Russia | 5.77 Imper. bu., or 5.95 Winchester bu. |
| To | Japan | 2 pecks. |
| Ton | Space measure | 40 cu. ft. |
| Tonde(cereals) | Denmark | 3.94783 Win. bu. |
| Tondeland | " | 1.36 acres. |
| Tonne | France | 2204.62 lbs. av. |
| Tsubo | Japan | 6 ft. sq. |
| Tsun | China | 1.41 inches. |
| Tunna | Sweden | 4.5 bu. |
| Tunnland | " | 1.22 acres. |
| Vara | Argentine Republic | 34.1208 inches. |
| " | Central America | 32.87 inches |
| " | Chile and Peru | 33.367 inches. |
| " | Cuba | 33.384 inches. |
| " | Mexico | 33 inches. |
| " | Spain | 0.914117 yd |
| Vedro | Russia | 2.707 gals. |
| Vergees | Isle of Jersey | 71.1 sq. rods. |
| Verst | Russia | 0.663 mile. |
| Vlocka | Russian Poland | 41.98 acres. |
| Wey | Scotland & Ireland | 5 quarters. |

## STANDARD NEWSPAPER MEASURES.

TYPE is measured by the number of "points" in the height of the face thereof. A "point" is approximately one-seventy-second of an inch (actually .01383 inch). There are 996 "points" in 35 centimeters. Nonpareil type, the size generally used by newspapers, is a 6-point type, and therefore sets 12 lines to an inch, measuring up and down the column. Twenty-four lines of nonpareil type make what is commonly called a "stick." There are usually ten "sticks" of type in a newspaper column. The smallest type in ordinary use is ruby, which is 3½ points in height. Diamond type is 4 or 4½ points; pearl, 5 points; agate, 5½ points; nonpareil, 6 points; minion, 7 points; brevier, 8 points; bourgeois, 9 points; long primer, 10 points; small pica, 11 points; pica, 12 points; English, 14 points; great primer, 18 points. The news columns in The World are almost 2 and three-sixteenths inches wide, equal to 12½ "picas" or pica M-quads. Each size of type has its own M-quad, which is the square of the face of the capital M of that size of type. A quadrat, or quad, is the type without a letter on it, and is used in spacing between words and in filling out blank lines. The quad is usually of four sizes—N-quad, M-quad, 2M-quad, and 3M-quad. In the old days of setting type by hand, a good printer could average 40 lines of nonpareil an hour, equal to 1,000 Ms of that type. A good operator, setting by machine, say on the linotype, can average 180 lines of nonpareil an hour.

## ROMAN AND ARABIC NUMERALS.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I | 1 | VI | 6 | XI | 11 | XVI | 16 |
| II | 2 | VII | 7 | XII | 12 | XVII | 17 |
| III | 3 | VIII | 8 | XIII | 13 | XVIII | 18 |
| IV | 4 | IX | 9 | XIV | 14 | XIX | 19 |
| V | 5 | X | 10 | XV | 15 | XX | 20 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| XXX | 30 | *L*XXX | | CCC | 300 | DCCC | 800 |
| XL | 40 | or XXC | 80 | CCCC | 400 | CM | 900 |
| L | 50 | XC | 90 | D | 500 | M or | |
| LX | 60 | C | 100 | DC | 600 | cIc | 1000 |
| LXX | 70 | CC | 200 | DCC | 700 | MM | 2000 |

NOTE—A dash line over a numeral, multiplies the value by 1,000: thus, $\overline{X}$=10,000; $\overline{L}$=50,000; $\overline{C}$=100,000; $\overline{D}$=500,000; $\overline{M}$=1,000,000; $\overline{CLIX}$=159,000; $\overline{DLCX}$=550,140.

Other general rules in Roman numerals are as follows: (1), repeating a letter repeats its value—XX=20; CCC=300; (2), a letter placed after one of greater value adds thereto—VI=6; DC=600; (3), a letter placed before one of greater value subtracts therefrom—IV=4; IX=9; XC=90; (4), a letter between two of greater value gives to the three, taken together, a value equal to that caused by subtracting the middle letter from the sum of the others—XIV=14; LIX=59.

*Arabic* numerals are those now commonly in use—0, 1, 2, 3, 4, 5, 6, 7, 8, 9, etc.

## KNOTS AND MILES.

THE **U. S. and British Statute Mile** is 5,280 feet. The **British Admiralty Knot or Nautical Mile** is 6,080 feet. The **Statute Knot** is 6,082.66 feet, and is generally considered the standard. The number of feet in a statute knot is arrived at thus: The circumference of the earth is divided into 360 degrees, each degree containing 60 knots or (360x60) 21,600 knots to the circumference. 21,600 divided into 131,385,456—the number of feet in the earth's circumference—gives 6,082.66 feet—the length of a standard mile.

**A Knot** = 1.151 statute miles; a **Fathom** = 6 feet; a **Cable** = 600 feet.

## THE ENGLISH OR AMERICAN MILE VS. OTHERS, IN PERCENTAGE VALUES.

| | English Mile. | English Geog.M. | French Kilom. | German Geog.M. | Russian Verst. | Austrian Mile. | Dutch Ure. | Norweg. Mile. | Swedish Mile. | Danish Mile. | Swiss Stunde. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| English Statute Mile | 1.000 | 0.867 | 1.609 | 0.217 | 1.508 | 0.212 | 0.289 | 0.142 | 0.151 | 0.213 | 0.335 |
| English Geog. Mile | 1.150 | 1.000 | 1.855 | 0.250 | 1.738 | 0.245 | 0.333 | 0.164 | 0.169 | 0.246 | 0.386 |
| French Kilometer | 0.621 | 0.540 | 1.000 | 0.135 | 0.937 | 0.132 | 0.180 | 0.088 | 0.094 | 0.133 | 0.208 |
| German Geog. Mile | 4.610 | 4.000 | 7.420 | 1.000 | 6.953 | 0.978 | 1.333 | 0.657 | 0.694 | 0.985 | 1.543 |
| Russian Verst | 0.663 | 0.575 | 1.067 | 0.144 | 1.000 | 0.141 | 0.192 | 0.094 | 0.100 | 0.142 | 0.222 |
| Austrian Mile | 4.714 | 4.089 | 7.586 | 1.022 | 7.112 | 1.000 | 1.363 | 0.672 | 0.710 | 1.006 | 1.578 |
| Dutch Ure | 3.458 | 3.000 | 5.565 | 0.750 | 5.215 | 0.734 | 1.000 | 0.493 | 0.520 | 0.738 | 1.157 |
| Norwegian Mile | 7.021 | 6.091 | 11.299 | 1.523 | 10.589 | 1.489 | 2.035 | 1.000 | 1.057 | 1.499 | 2.350 |
| Swedish Mile | 6.644 | 5.764 | 10.692 | 1.441 | 10.019 | 1.409 | 1.921 | 0.948 | 1.000 | 1.419 | 2.224 |
| Danish Mile | 4.682 | 4.062 | 7.536 | 1.016 | 7.078 | 0.994 | 1.354 | 0.667 | 0.705 | 1.000 | 1.567 |
| Swiss Stunde | 2.987 | 2.592 | 4.808 | 0.648 | 4.505 | 0.634 | 0.864 | 0.425 | 0.449 | 0.638 | 1.000 |

The English Statute Mile is the same as the American—1,760 yards, or 5,280 feet. The Danish Foot = 0.9711 English or American feet; the Spanish = 1.0783; the Dutch = 1.0768; the German = 1.0639.

## TENSILE STRENGTH OF MATERIALS.

EXPRESSED IN POUNDS PER SQUARE INCH.

| MATERIALS. | Lbs. | MATERIALS. | Lbs. | MATERIALS. | Lbs. | MATERIALS. | Lbs. |
|---|---|---|---|---|---|---|---|
| METALS. | | METALS. | | METALS. | | WOODS. | |
| Alum'um casting | 15,000 | Cast iron | 20,000 | Nickel vanadium steel | 99,700 | Poplar | 7,000 |
| " sheets | 24,000 | " steel | 60,000 | Chrome nickel vanadium steel | 129,100 | Redwood | 8,500 |
| " wire | 50,000 | Wrought iron | 50,000 | Manganese steel (cast) | 90,000 | Spruce | 14,500 |
| " bars | 28,000 | Soft steel | 58,000 | Manganese steel (rolled) | 140,000 | White pine | 15,000 |
| Nickel alum'um | 40,000 | Carbon steel (not annealed) | 75,000 | WOODS. | | Yellow " | 11,000 |
| Alum'um bronze | 70,000 | Carbon steel (annealed) | 80,000 | Ash | 14,000 | Red fir | 10,000 |
| Manganese " | 60,000 | Carbon steel oil tempered | 85,000 | Black walnut | 12,000 | Yellow fir | 12,000 |
| Phosphor " | 46,000 | Nickel steel (annealed) | 80,000 | Beech | 14,500 | Teak | 14,000 |
| Tobin " | 66,000 | Nickel steel oil tempered | 90,000 | Cedar | 10,000 | MISCELLANEOUS. | |
| Bronze gun metal | 30,000 | Rivet steel | 53,000 | Chestnut | 10,000 | Blue Stone | 1,400 |
| Platinum wire (annealed) | 32,000 | Steel for bridges | 60,000 | Elm | 13,400 | Granite | 600 |
| Platinum wire (not annealed) | 56,000 | Medium steel | 65,000 | Hemlock | 8,700 | Limestone | 1,000 |
| Tin | 3,500 | Vanadium steel (cast) | 70,000 | Hickory | 15,000 | Marble | 700 |
| Gold (cast) | 20,000 | Chromium nickel steel | 81,400 | Locust | 22,000 | Sandstone | 100 |
| Silver (cast) | 40,000 | Chromium vanadium steel | 100,000 | Lignum vitae | 11,000 | Bricks (common) | 200 |
| Lead | 2,000 | | | Maple | 10,500 | " (best hand pressed) | 400 |
| Zinc | 5,400 | | | White oak | 14,500 | Ordinary single leather belting | 3,000 |
| Brass (cast) | 24,000 | | | Live " | 13,000 | Ordinary double leather belting | 6,000 |
| Copper (cast) | 24,000 | | | | | Cotton belting | 6,000 |
| Soft copper wire | 35,000 | | | | | | |
| Hard " " | 60,000 | | | | | | |

**Tensile Strength** is resistance to separation. The fibres of wood are strongest near the centre of the trunk or limb.

## SPECIFIC GRAVITY OF VARIOUS SUBSTANCES.

(Compared with water, which is rated at 100.)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Water | 100 | Goat's milk | 104 | Beech | 85 | Opium | 134 |
| Sea-water | 103 | Porter | 104 | Mahogany | 106 | Honey | 145 |
| Dead Sea | 124 | Cork | 24 | Oak | 117 | Ivory | 183 |
| Alcohol | 84 | Poplar | 38 | Ebony | 133 | Sulphur | 203 |
| Turpentine | 99 | Fir | 55 | Indigo | 77 | Marble | 270 |
| Wine | 100 | Cedar | 61 | Ice | 92 | Chalk | 279 |
| Urine | 101 | Pear | 66 | Gunpowder | 93 | Glass | 289 |
| Cider | 102 | Walnut | 67 | Butter | 94 | Granite | 278 |
| Beer | 102 | Cherry | 72 | Clay | 120 | Diamond | 353 |
| Woman's milk | 102 | Maple | 75 | Coal | 130 | Cast Iron | 721 |
| Cow's milk | 103 | Ash | 84 | | | | |

| | | | |
|---|---|---|---|
| Tin | 729 | | |
| Bar Iron | 779 | | |
| Steel | 783 | | |
| Brass | 840 | | |
| Copper | 895 | | |
| Silver | 1,047 | | |
| Lead | 1,135 | | |
| Mercury | 1,357 | | |
| Gold | 1,926 | | |
| Platina | 2,150 | | |

The weight of a cubic foot of distilled water at a temperature of 60 F. is 1,000 ounces avoirdupois, *very nearly*, therefore the weight (in ounces, avoirdupois) of a cubic foot of any of the substances in the above table is found by multiplying the specific gravities by 10, thus:—one cubic foot of oak weighs 1,170 ounces; one cubic foot of marble 2,700 ounces, and so on.

### SPECIFIC GRAVITY OF GASES.

| Name. | Chemical Formula. | Specific Gravity. | Name. | Chemical Formula. | Specific Gravity. |
|---|---|---|---|---|---|
| Oxygen | O | 1.105 | Methane | $CH_4$ | .555 |
| Nitrogen | N | .967 | Acetylene | $C_2H_2$ | .906 |
| Carbon dioxide | $CO_2$ | 1.529 | Hydrogen | H | .070 |
| Carbon monoxide | CO | .967 | Hydrogen sulphide | $H_2S$ | 1.191 |

## WEIGHT OF WATER.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | cubic inch | .03617 | pound. | 1 | cylindrical foot | 6.0 | U. S. gals. |
| 12 | cubic inches | .434 | pound. | 2.282 | cylindrical feet | 112.0 | pounds. |
| 1 | cubic foot | 62.5 | pounds. | 45.64 | cylindrical feet | 2240.0 | pounds. |
| 1 | cubic foot | 7.48052 | U. S. gals. | 1 | imperial gallon | 10.0 | pounds. |
| 1.8 | cubic feet | 112.0 | pounds. | 11.2 | imperial gallons | 112.0 | pounds. |
| 35.84 | cubic feet | 2240.0 | pounds. | 224 | imperial gallons | 2240.0 | pounds. |
| 1 | cylindrical inch | .02842 | pound. | 1 | U. S. gallon | 8.355 | pounds. |
| 12 | cylindrical inches | 341 | pound. | 13.44 | U. S. gallons | 112.0 | pounds. |
| 1 | cylindrical foot | 49.10 | pounds. | 268.8 | U. S. gallons | 2240.0 | pounds. |

NOTE—The centre of pressure of water against the side of the containing vessel or reservoir is at two-thirds the depth from the surface. One cubic foot of salt water weighs 64.3 pounds.

### PRESSURE OF WATER PER SQUARE INCH AT DIFFERENT DEPTHS.

| Depth in Feet. | Pressure (lbs.) | Depth in Feet. | Pressure (lbs.) | Depth in Feet. | Pressure (lbs.) | Depth in Feet. | Pressure (lbs.) |
|---|---|---|---|---|---|---|---|
| 6 | 2.60 | 35 | 15.16 | 90 | 38.98 | 160 | 69.31 |
| 8 | 3.40 | 40 | 17.32 | 100 | 43.31 | 170 | 73.64 |
| 10 | 4.33 | 45 | 19.49 | 110 | 47.64 | 180 | 77.97 |
| 15 | 6.49 | 50 | 21.65 | 120 | 51.98 | 190 | 82.30 |
| 20 | 8.66 | 60 | 25.99 | 130 | 56.31 | 200 | 86.63 |
| 25 | 10.82 | 70 | 30.32 | 140 | 60.64 | 215 | 93.14 |
| 30 | 12.99 | 80 | 34.65 | 150 | 64.97 | 230 | 99.63 |

## TEMPERATURE OF STEAM.

ATMOSPHERIC PRESSURE 14.7 LBS. DEGREES IN FAHRENHEIT SCALE.

| Pressure Per Sq. Inch. | Degrees of Temperature. | Pressure Per Sq. Inch. | Degrees of Temperature | Pressure Per Sq. Inch. | Degrees of Temperature. | Pressure Per Sq. Inch. | Degrees of Temperature. |
|---|---|---|---|---|---|---|---|
| 1 | 216.3 | 12 | 244.3 | 32 | 277.0 | 80 | 323.9 |
| 2 | 219.4 | 14 | 248.3 | 34 | 279.6 | 85 | 327.6 |
| 3 | 222.4 | 16 | 252.1 | 40 | 286.9 | 90 | 331.1 |
| 4 | 225.2 | 18 | 255.7 | 45 | 292.5 | 95 | 334.5 |
| 5 | 227.9 | 20 | 259.2 | 50 | 297.8 | 100 | 337.8 |
| 6 | 230.5 | 22 | 262.5 | 55 | 302.7 | 105 | 341.0 |
| 7 | 233.0 | 24 | 265.6 | 60 | 307.4 | 110 | 344.0 |
| 8 | 235.4 | 26 | 268.6 | 65 | 311.8 | 115 | 347.0 |
| 9 | 237.7 | 28 | 271.5 | 70 | 316.0 | 120 | 350.0 |
| 10 | 240.0 | 30 | 274.3 | 75 | 320.0 | 125 | 352.8 |

Steam flows into atmosphere at the rate of 650 feet per second.

## DISTANCE TO PLANT TREES, ETC.

The convenient and common distances are given herewith:

| | Feet. | | Feet. | | Feet. | | Feet. |
|---|---|---|---|---|---|---|---|
| Apples | 30 to 40 | Pears | 25 to 30 | Apricots | 18 to 20 | Gooseberries | 4 to 5 |
| Apples, dwarf (Pdse. stk.) | 12 to 15 | Pears, dwarf | 15 to 20 | Quinces | 12 to 15 | Raspberries, bl'k | 3 to 6 |
| | | Plums | 20 to 25 | Pecans | 40 to 60 | Raspberries, red | 3 to 5 |
| Apples, dwarf (D'cin stk.) | 18 to 25 | Peaches | 18 to 20 | Grapes | 8 to 10 | Blackberries | 4 to 7 |
| | | Cherries | 20 to 30 | Currants | 4 to 5 | Strawberries | 1 to 2 |

## NUMBER OF TREES PER ACRE AT DIFFERENT DISTANCES.

| | | | | | |
|---|---|---|---|---|---|
| 1½ feet apart each way | 19,360 | 5 feet apart each way | 1,742 | 25 feet apart each way | 70 |
| 1½ feet by 2 feet | 14,520 | 6 feet apart each way | 1,210 | 30 feet apart each way | 50 |
| 2 feet apart each way | 10,890 | 8 feet apart each way | 680 | | |
| 2 feet by 3 feet | 7,260 | 10 feet apart each way | 435 | Rows 6 ft. apart and trees 1 ft. apart in the row | 7,260 |
| 2 feet by 4 feet | 5,445 | 12 feet apart each way | 302 | | |
| 3 feet apart each way | 4,840 | 15 feet apart each way | 200 | Rows 8 ft. apart and trees 1 ft. apart in the row | 5,445 |
| 3 feet by 4 feet | 3,630 | 18 feet apart each way | 135 | | |
| 4 feet apart each way | 2,722 | 20 feet apart each way | 110 | Rows 10 ft. apart and trees 1 ft. apart in the row | 4,356 |
| | | 22 feet apart each way | 90 | | |

### A CORD OF WOOD OR STONE.

A cord of wood or stone contains 128 cubic feet. The standard size of a piled cord of wood is 8 feet long, by 4 feet wide, by 4 feet high.

## HOW LONG IT TAKES TREES TO GROW.

| SPECIES | Fence Posts (6-in. trees) | Pulpwood, Fuel (8-in. trees) | Ties (11-in trees) | Poles & Piling (14-in trees) | Saw-logs (18-in trees) |
|---|---|---|---|---|---|
| | *Years* | *Years* | *Years* | *Years* | *Years* |
| *Northern:* | | | | | |
| Aspen | 25–35 | 30–40 | 45– 55 | 60– 70 | ..... |
| Beech | 65–80 | 80–95 | 110–125 | 145–160 | 185–200 |
| Birch, paper | 30–35 | 50–55 | ..... | ..... | ..... |
| Birch yellow | 45–55 | 60–70 | 75– 85 | 100–110 | 130–140 |
| Hemlock | 25–40 | 35–50 | 50– 65 | 65– 80 | 85–100 |
| Maple, sugar | 55–70 | 70–85 | 90–105 | 110–125 | 145–160 |
| Pine, jack | 25–35 | 30–40 | 50– 60 | 75– 85 | ..... |
| Pine, red | 15–25 | 25–35 | 30– 40 | 40– 50 | 55– 65 |
| Pine, white | 25–35 | 35–45 | 50– 60 | 65– 75 | 90–100 |
| Spruce, red | 30–40 | 45–55 | 60– 70 | ..... | ..... |
| Tamarack | 50–60 | 45–55 | 110–120 | 160–170 | ..... |
| *Central hardwood:* | | | | | |
| Chestnut | 15–25 | 25–35 | 30– 40 | 45– 55 | 65– 75 |
| Hickory | 40–50 | 50–60 | 70– 80 | 90–100 | 110–120 |
| Oak, black | 25–35 | 35–45 | 45– 55 | 75– 85 | 125–135 |
| Oak, red | 25–35 | 35–45 | 45– 55 | 60– 70 | 100–110 |
| Oak, white | 30–40 | 40–50 | 55– 65 | 90–100 | 150–160 |
| Poplar, yellow | 16–37 | 22–50 | 32– 70 | 45–100 | 65–135 |
| Catalpa | 25–30 | ..... | ..... | ..... | ..... |
| Larch, Euro | 20–30 | 25–35 | 45– 55 | ..... | ..... |
| Maple, silver | 15–25 | 20–30 | 25– 35 | ..... | ..... |
| Walnut, black | 15–25 | 20–30 | 30– 40 | ..... | ..... |
| *Southern:* | | | | | |
| Cottonwood | 5–15 | 10–20 | 15– 25 | 20– 30 | 25– 35 |
| Ash, white | 15–25 | 20–30 | 25– 35 | 35– 45 | 50– 60 |
| Cedar, red | 25–35 | 35–45 | 50– 60 | 65– 75 | ..... |
| Cypress | 15–25 | 20–30 | 25– 35 | 35– 45 | 40– 50 |
| Gum, red | 10–20 | 15–25 | 15– 30 | 20– 30 | 30– 40 |
| Pine, loblolly | 15–25 | 20–30 | 25– 35 | 35– 45 | 45– 55 |
| Pine, long leaf | 20–30 | 25–35 | 45– 55 | 65– 80 | 90–110 |
| Pine, scrub | 15–25 | 20–30 | 30– 40 | 40– 50 | 50– 60 |
| Pine, short | 10–20 | 15–25 | 20– 30 | 25– 35 | 55– 65 |
| Pine, slash | 15–25 | 20–30 | 30– 40 | 60– 70 | ..... |
| *Rocky Mountain:* | | | | | |
| Fir, Douglas | 20–30 | 25–35 | 30– 40 | 45– 55 | 60– 70 |
| Pine, lodge | 35–45 | 50–60 | 75– 85 | 150–160 | ..... |
| Pine, yellow | 25–40 | 35–50 | 45– 60 | 60– 75 | 80–100 |
| *Pacific:* | | | | | |
| Fir, white | 60–70 | 70–80 | 85– 95 | 100–110 | 120–130 |
| Hemlock | ..... | 45–55 | 65– 75 | 90–100 | 120–130 |
| Pine, sugar | 35–45 | 45–55 | 60– 70 | 70– 80 | 100–110 |
| Redwood | 15–25 | 20–30 | 30– 40 | 45– 55 | 65– 75 |

One northern hardwood tree of any variety, 21 inches in diameter 5 feet above the ground, will yield one cord of wood. A southern softwood tree 23 inches in diameter will yield a cord. It takes 35 northern and 25 southern hardwood trees 5 inches in diameter 5 feet above the ground, to yield one cord.

## TABLE OF DEPRECIATION IN BUILDINGS.

(By R. M. Hurd.)

| CONSTRUCTION AND OCCUPANCY. | Term of Life in Years. | Rate of Fund Proposed in % | Term of Sinking Fd. @ 3% in Years. | CONSTRUCTION AND OCCUPANCY. | Term of Life in Years. | Rate of Fund Proposed in % | Term of Sinking Fd. @ 3% in Years. |
|---|---|---|---|---|---|---|---|
| Cheap frame, ten | 10 to 15 | 10 to 5 | 9 to 16 | Cheap brick, res | 35 to 50 | 2 to 1 | 31 to 47 |
| Cheap frame, res | 25 to 30 | 3 to 2 | 23 to 31 | Cheap br., off. bldg. | 25 to 30 | 3 to 2 | 23 to 31 |
| Better frame, res | 50 to 75 | 2 to 1 | 31 to 47 | Better brick, res | 50 to 75 | 1½ to 1 | 37 to 47 |
| Cheap brick, ten | 25 to 30 | 3 to 2 | 23 to 31 | Gd. br., or st., off. bldg | 75 to 100 | 1 | 47 |

## VELOCITY OF SOUND.

| FAHRENHEIT. | Feet Per Sec. | Mile Per Sec. | Mile. | Seconds. | FAHRENHEIT. | Feet Per Sec. | Mile Per Sec. | Mile. | Seconds. | FAHRENHEIT. | Feet Per Sec. | Mile Per Sec. | Mile. | Seconds. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30° | 1,030 | 0.1951 | 1 | 5.13 | 20° | 1,080 | 0.2045 | 1 | 4.88 | 70° | 1,130 | 0.2140 | 1 | 4.68 |
| 20° | 1,040 | 0.1970 | 1 | 5.08 | 32° | 1,092 | 0.2068 | 1 | 4.83 | 80° | 1,140 | 0.2159 | 1 | 4.63 |
| 10° | 1,050 | 0.1989 | 1 | 5.03 | 40° | 1,100 | 0.2083 | 1 | 4.80 | 90° | 1,150 | 0.2178 | 1 | 4.59 |
| 0 | 1,060 | 0.2008 | 1 | 4.98 | 50° | 1,110 | 0.2102 | 1 | 4.78 | 100° | 1,160 | 0.2197 | 1 | 4.55 |
| 10° | 1,070 | 0.2027 | 1 | 4.93 | 60° | 1,120 | 0.2121 | 1 | 4.73 | 110° | 1,170 | 0.2216 | 1 | 4.51 |

Wind reduces the velocity of sound much more than fog or rain does. Explosions cannot be distinguished separately when but 1-16 second apart. Sound in water travels 4,708 feet a second; in wood it goes at least 10,000 feet a second; in metals, at least 4,000 feet a second.

## SPEED OF A FALLING BODY.

(By Prof. George B. Pegram of Columbia.)

IN the first second of its descent a body falls 16 feet; second second, 16+32=48 feet; third second, 16+64=80 feet; fourth second, 16+96=112 feet; fifth second, 16+128=144 feet; nth second, 16+32 (n-1) feet.

The total distance fallen by a body at the end of the nth second is 16n2 feet, thus at the end of the first second it has fallen 16 feet, at the end of the second 64 feet, at the end of the fifth 400 feet. The figures given above are only approximate ones and in them no account is taken of air resistance. As the air resistance encountered by a falling body depends on the shape and size of the body no general rule can be given for taking account of it, except to say that the air resistance increases with the velocity. The force of gravity on a body one mile above the surface of the earth is less than if the body were at the surface of the earth by about one-twentieth of one per cent., a difference which it would be difficult to measure in the rate of fall of the body.

## AREAS OF CIRCLES.

To find the circumference of a circle multiply the diameter by 3.14159265 (commonly expressed as 3.1416). To find the area of a circle multiply the square of the diameter by .785398 (usually expressed as .7854). To find the cubic contents of a cylinder or pipe, multiply the area by the height or depth. Thus, a pipe 1 foot in diameter and 1 foot in length, contains .7854 cubic feet. To find how many gallons are contained in a pipe or cylinder, divide the cubic contents by 231, which is the number of cubic inches in a United States gallon.

CIRCLE AREAS IN EIGHTHS OF A UNIT.

| DIAMETER. | Circumference. | Area. | DIAMETER. | Circumference. | Area. | DIAMETER. | Circumference. | Area. | DIAMETER. | Circumference. | Area. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-32 | .09817 | .0007 | 9-16 | 1.76715 | .2485 | 1 | 3.14159 | .7854 | 2 | 6.28319 | 3.1416 |
| 1-16 | .19635 | .0030 | 19-32 | 1.86532 | .2768 | 1 1-16 | 3.33794 | .8866 | 2 3-16 | 6.87223 | 3.7583 |
| 3-32 | .29452 | .0069 | 21-32 | 2.06167 | .3382 | 1 3-16 | 3.73064 | 1.1075 | 2 5-16 | 7.26493 | 4.2000 |
| 3-16 | .58904 | .0276 | 11-16 | 2.15984 | .3712 | 1 5-16 | 4.12334 | 1.3530 | 2 7-16 | 7.65763 | 4.6664 |
| 7-32 | .68722 | .0375 | 23-32 | 2.25802 | .4057 | 1 7-16 | 4.51604 | 1.6230 | 2 9-16 | 8.05033 | 5.1572 |
| 9-32 | .88357 | .0621 | 25-32 | 2.45437 | .4793 | 1 9-16 | 4.90874 | 1.9175 | 2 11-16 | 8.44303 | 5.6727 |
| 11-32 | 1.07992 | .0928 | 27-32 | 2.65072 | .5591 | 1 11-16 | 5.30144 | 2.2365 | 2 13-16 | 8.83573 | 6.2126 |
| 13-32 | 1.27627 | .1296 | 29-32 | 2.84707 | .6450 | 1 13-16 | 5.69414 | 2.5802 | 2 15-16 | 9.22843 | 6.7771 |

## MELTING POINTS OF CHEMICAL ELEMENTS, ETC.

(By the Bureau of Standards, U. S. Dept. of Commerce.)

THE values of the melting points used by the Bureau of Standards as standard temperatures for the calibration of thermometers and pyrometers are indicated in capitals. The other values have been assigned after a careful survey of all the available data. As nearly as may be, all values, in particular the standard points, have been reduced to a common scale, the thermodynamic scale. For all purposes except the most accurate investigations, the thermodynamic scale is identical with any of the gas scale. At high temperatures some of the values are quite uncertain; thus, while the melting point of platinum may be considered accurately known to 10° C., that of tungsten is possibly uncertain by 50° C. or more. Temperatures centigrade are rounded off, and the exact Fahrenheit equivalents are usually given.

MELTING POINTS OF THE CHEMICAL ELEMENTS.

| ELEMENT. | C. | F. | ELEMENT. | C. | F. | ELEMENT. | C. | F. |
|---|---|---|---|---|---|---|---|---|
| Helium | —271 | —456 | Thallium | 302 | 576 | Silicon | 1420 | 2588 |
| Hydrogen | —259 | —434 | Cadmium | 320.9 | 609.6 | Nickel | 1452 | 2646 |
| Neon | —352? | —423 | Lead | 327.4 | 621.3 | Cobalt | 1480 | 2696 |
| Fluorine | —223 | —369 | Zinc | 419.4 | 786.9 | Yttrium | 1490 | 2714 |
| Oxygen | —218 | —360 | Tellurium | 452 | 846 | Iron | 1530 | 2786 |
| Nitrogen | —210 | —346 | Antimony | 630.0 | 1166.0 | Palladium | 1549 | 2820 |
| Argon | —188 | —306 | Cerium | 640 | 1184 | Chromium | 1615 | 2939 |
| Krypton | —169 | —272 | Magnesium | 651 | 1204 | Zirconium | 1700? | 3090 |
| Xenon | —140 | —220 | Aluminum | 658.7 | 1217.7 | Columbium (Niobium) | 1700? | 3090 |
| Chlorine | —101.5 | —150.7 | Radium | 700 | 1292 | Thorium | 1700 | 3090 |
| Mercury | — 38.87 | — 37.97 | Calcium | 810 | 1490 | | Mo. | Mo. |
| Bromine | — 7.3 | + 18.9 | Lanthanum | 810? | 1490 | Vanadium | 1720 | 3128 |
| Caesium | + 26 | 79 | Strontium | Ca Ba? | ..... | Platinum | 1755 | 3191 |
| Gallium | 30 | 86 | Neodymium | 840? | 1544 | Ytterbium | ? | ..... |
| Rubidium | 38 | 100 | Arsenic | 850 | 1562 | Titanium | 1800 | 3272 |
| Phosphorus | 44 | 111 | Barium | 850 | 1562 | Uranium | 1850 | 3360 |
| Potassium | 62.3 | 144.1 | Praseodymium | 940 | 1724 | Rhodium | 1950 | 3542 |
| Sodium | 97.5 | 207.5 | Germanium | 958 | 1756 | Boron | 2200–2500? | 4000–4500 |
| Iodine | 113.5 | 236.3 | Silver | 960.5 | 1760.9 | Iridium | 2350? | 4260 |
| Sulphur | 112.8 | 235.0 | Gold | 1063.0 | 1945.5 | Ruthenium | 2450? | 4440 |
| | 119.2 | 246.6 | Copper | 1083.0 | 1981.4 | Molybdenum | 2550 | 4620 |
| | 106.8 | 224.2 | Manganese | 1230 | 2246 | Osmium | 2700? | 4890 |
| Indium | 155 | 311 | Beryllium (Glucinum) | 1280 | 2336 | Tantalum | 2900 | 5250 |
| Lithium | 186 | 367 | Samarium | 1300–1400 | 2370–2550 | Tungsten | 3400 | 6152 |
| Selenium | 217 | 423 | Scandium | ? | ..... | Carbon | 3600 | 6500 |
| | 220 | 428 | | | | | | |
| Tin | 231.9 | 449.4 | | | | | | |
| Bismuth | 271 | 520 | | | | | | |

OTHER STANDARD TEMPERATURES.

| SUBSTANCE. | Phenomenon. | C. | F. | SUBSTANCE. | Phenomenon. | C. | F. |
|---|---|---|---|---|---|---|---|
| Oxygen | Boiling | —183.0 | —297.4 | Water | Boiling | 100 | 212 |
| Carbon dioxide | Sublimation | — 78.5 | —109.3 | Naphthalene | Boiling | 217.96 | 424.33 |
| Sodium sulphate | Transformat'n into anhydrous salt | 32.384 | 90.291 | Benzophenone | Boiling | 305.9 | 582.6 |
| | | | | Sulphur | Boiling | 444.6 | 832.3 |
| | | | | Sodium chloride | Freezing | 801. | 1474. |

## HEIGHT, WEIGHT AND CHEST MEASUREMENTS.

(In official use at U. S. Military Acad., West Point.)

| AGE. | Height, Inches. | Weight, Pounds. | Chest Measurement—Expiration, Inches. | Chest Mobility, Inches. |
|---|---|---|---|---|
| 17 Yrs. | 64 | 110 | 29 | 2 |
| | 65 | 112 | 29¼ | 2 |
| | 66 | 114 | 29½ | 2 |
| | 67 | 116 | 29¾ | 2 |
| | 68 | 119 | 30 | 2½ |
| | 69 | 122 | 30¼ | 2½ |
| | 70 | 125 | 30½ | 2½ |
| | 71 | 128 | 30¾ | 2½ |
| 18 Yrs. | 64 | 117 | 30¼ | 2 |
| | 65 | 117 | 30¼ | 2 |
| | 66 | 119 | 30½ | 2 |
| | 67 | 121 | 30¾ | 2 |
| | 68 | 124 | 31 | 2½ |
| | 69 | 127 | 31¼ | 2½ |
| | 70 | 130 | 31½ | 2½ |
| | 71 | 133 | 31¾ | 2½ |
| | 72 | 136 | 32 | 3 |
| 19 Yrs. | 64 | 121 | 30¾ | 2 |
| | 65 | 121 | 30¾ | 2 |
| | 66 | 123 | 31 | 2 |
| | 67 | 125 | 31¼ | 2 |
| | 68 | 129 | 31½ | 2½ |
| | 69 | 133 | 31¾ | 2½ |
| | 70 | 137 | 32 | 2½ |
| | 71 | 141 | 32¼ | 2½ |
| | 72 | 145 | 32½ | 3 |
| | 73 | 149 | 32¾ | 3 |
| 20 Yrs. | 64 | 121 | 31 | 2 |
| | 65 | 122 | 31 | 2 |
| | 66 | 124 | 31¼ | 2 |
| | 67 | 126 | 31½ | 2 |
| | 68 | 130 | 31¾ | 2½ |
| | 69 | 134 | 32 | 2½ |
| | 70 | 138 | 32¼ | 2½ |
| | 71 | 142 | 32½ | 2½ |
| | 72 | 146 | 32¾ | 3 |
| | 73 | 150 | 33 | 3 |
| | 74 | 154 | 33¼ | 3½ |
| 21 Yrs. | 64 | 121 | 31¼ | 2 |
| | 65 | 123 | 31¼ | 2 |
| | 66 | 125 | 31½ | 2 |
| | 67 | 127 | 31¾ | 2 |
| | 68 | 132 | 32 | 2½ |
| | 69 | 137 | 32¼ | 2½ |
| | 70 | 142 | 32½ | 2½ |
| | 71 | 147 | 32¾ | 2½ |
| | 72 | 152 | 33 | 3 |
| | 73 | 157 | 33¼ | 3 |
| | 74 | 162 | 33½ | 3½ |
| | 75 | 167 | 33¾ | 3½ |
| 22 Yrs. | 64 | 123 | 31½ | 2 |
| | 65 | 125 | 31½ | 2 |
| | 66 | 127 | 31¾ | 2 |
| | 67 | 129 | 32 | 2 |
| | 68 | 134 | 32¼ | 2½ |
| | 69 | 139 | 32½ | 2½ |
| | 70 | 144 | 32¾ | 2½ |
| | 71 | 149 | 33 | 2½ |
| | 72 | 154 | 33¼ | 3 |
| | 73 | 159 | 33½ | 3 |
| | 74 | 164 | 33¾ | 3½ |
| | 75 | 169 | 34 | 3½ |
| | 76 | 174 | 34¼ | 4 |

## AVERAGE HEIGHT AND WEIGHT OF MEN AND WOMEN.

COMPILED BY THE ASSOCIATION OF LIFE INSURANCE MEDICAL DIRECTORS AND THE ACTUARIAL SOCIETY OF AMERICA.

The weights are for persons with shoes on, and without coat and vest, which weigh from 3 to 7 pounds, depending on height of individual and season of year.

MEN.

| AGE GROUP. | Height and Weight. | Height and Weight. | Height and Weight. | Height and Weight. | Height and Weight. | Height and Weight. | Height and Weight. | Height and Weight. |
|---|---|---|---|---|---|---|---|---|
| | 5′ | 5′ 1″ | 5′ 2″ | 5′ 3″ | 5′ 4″ | 5′ 5″ | 5′ 6″ | 5′ 7″ |
| 15-19 | 113 | 115 | 118 | 121 | 124 | 128 | 132 | 136 |
| 20-24 | 119 | 121 | 124 | 127 | 131 | 135 | 139 | 142 |
| 25-29 | 124 | 126 | 128 | 131 | 134 | 138 | 142 | 146 |
| 30-34 | 127 | 129 | 131 | 134 | 137 | 141 | 145 | 149 |
| 35-39 | 129 | 131 | 133 | 136 | 140 | 144 | 148 | 152 |
| 40-44 | 132 | 134 | 136 | 139 | 142 | 146 | 150 | 154 |
| 45-49 | 134 | 136 | 138 | 141 | 144 | 148 | 152 | 156 |
| 50-54 | 135 | 137 | 139 | 142 | 145 | 149 | 153 | 157 |
| | 5′ 8″ | 5′ 9″ | 5′ 10″ | 5′ 11″ | 6′ | 6′ 1″ | 6′ 2″ | 6′ 3″ |
| 15-19 | 140 | 144 | 148 | 153 | 158 | 163 | 168 | 173 |
| 20-24 | 146 | 150 | 154 | 158 | 163 | 168 | 173 | 178 |
| 25-29 | 150 | 154 | 158 | 163 | 169 | 175 | 181 | 187 |
| 30-34 | 154 | 158 | 163 | 168 | 174 | 180 | 186 | 192 |
| 35-39 | 157 | 162 | 167 | 172 | 178 | 184 | 191 | 197 |
| 40-44 | 159 | 164 | 169 | 175 | 181 | 187 | 194 | 201 |
| 45-49 | 161 | 166 | 171 | 177 | 183 | 190 | 197 | 204 |
| 50-54 | 162 | 167 | 172 | 178 | 184 | 191 | 198 | 205 |

WOMEN.

| | 4′ 11″ | 5′ | 5′ 1″ | 5′ 2″ | 5′ 3″ | 5′ 4″ | 5′ 5″ | |
|---|---|---|---|---|---|---|---|---|
| 15-19 | 110 | 112 | 114 | 117 | 120 | 123 | 126 | ..... |
| 20-24 | 113 | 115 | 117 | 120 | 123 | 126 | 129 | ..... |
| 25-29 | 116 | 118 | 120 | 122 | 125 | 129 | 132 | ..... |
| 30-34 | 119 | 121 | 123 | 125 | 128 | 132 | 136 | ..... |
| 35-39 | 122 | 124 | 126 | 129 | 132 | 136 | 140 | ..... |
| 40-44 | 126 | 128 | 130 | 133 | 136 | 139 | 143 | ..... |
| 45-49 | 129 | 131 | 133 | 136 | 139 | 142 | 146 | ..... |
| 50-54 | 131 | 133 | 135 | 138 | 141 | 144 | 148 | ..... |
| | 5′ 6″ | 5′ 7″ | 5′ 8″ | 5′ 9″ | 5′ 10″ | 5′ 11″ | 6′ | ..... |
| 15-19 | 130 | 134 | 138 | 141 | 145 | 150 | 155 | ..... |
| 20-24 | 133 | 137 | 141 | 145 | 149 | 153 | 157 | ..... |
| 25-29 | 136 | 140 | 144 | 148 | 152 | 155 | 159 | ..... |
| 30-34 | 140 | 144 | 148 | 152 | 155 | 158 | 162 | ..... |
| 35-39 | 144 | 148 | 152 | 156 | 159 | 162 | 165 | ..... |
| 40-44 | 147 | 151 | 155 | 159 | 162 | 166 | 169 | ..... |
| 45-49 | 151 | 155 | 159 | 163 | 166 | 170 | 173 | ..... |
| 50-54 | 152 | 157 | 162 | 166 | 170 | 174 | 177 | ..... |

## U. S. GOV'T TABLE OF HEIGHTS AND WEIGHTS OF CHILDREN.

| AGE. | BOYS. | | GIRLS. | | AGE. | BOYS. | | GIRLS. | |
|---|---|---|---|---|---|---|---|---|---|
| | Height, Inches. | Weight, Pounds. | Height, Inches. | Weight, Pounds. | | Height, Inches. | Weight, Pounds. | Height, Inches. | Weight, Pounds. |
| Birth..... | 20.6 | 7.6 | 20.5 | 7.16 | 33 months... | 36⅛ | 30⅝ | 35⅝ | 29⅛ |
| 3 months.... | 23½ | 13 | .... | .... | 34 months... | 36½ | 31⅛ | 36⅛ | 30⅛ |
| 6 months.... | 26½ | 18 | 25⅞ | 16¾ | 35 months... | 36¾ | 31⅞ | 36½ | 30¼ |
| 7 months.... | 27¼ | 19⅛ | 26½ | 17⅜ | 36 months... | 37⅛ | 32¼ | 36¾ | 30½ |
| 8 months.... | 27⅝ | 19¾ | 27 | 18¼ | 37 months... | 37⅜ | 32¼ | 36¾ | 30¾ |
| 9 months.... | 28⅛ | 20⅜ | 27⅝ | 19⅛ | 38 months... | 37½ | 32⅜ | 37 | 31 |
| 10 months... | 28½ | 20⅞ | 27⅞ | 19½ | 39 months... | 37⅞ | 33⅛ | 37¼ | 31⅝ |
| 11 months... | 29 | 21⅜ | 28⅜ | 20⅛ | 40 months... | 38½ | 33½ | 37½ | 32 |
| 12 months... | 29⅜ | 21⅞ | 28⅞ | 20¾ | 41 months... | 38⅝ | 33⅝ | 37¾ | 32¼ |
| 13 months... | 29⅞ | 22⅞ | 29⅜ | 21 | 42 months... | 38⅝ | 33¾ | 38 | 32½ |
| 14 months... | 30⅛ | 23 | 29½ | 21⅝ | 43 months... | 38¾ | 33¾ | 38¼ | 32¾ |
| 15 months... | 30¾ | 23⅝ | 30⅛ | 21⅞ | 44 months... | 38⅞ | 34¼ | 38½ | 33 |
| 16 months... | 31⅛ | 24⅛ | 30½ | 22⅜ | 45 months... | 39 | 34½ | 38½ | 33¼ |
| 17 months... | 31⅜ | 24½ | 30¾ | 22⅞ | 46 months... | 39 | 34¾ | 38¾ | 33½ |
| 18 months... | 31¾ | 24⅝ | 31⅛ | 23⅜ | 47 months... | 39¼ | 35¼ | 38⅞ | 33½ |
| 19 months... | 32¼ | 25⅛ | 31½ | 23¾ | 48 months... | 39½ | 35⅞ | 39 | 33¾ |
| 20 months... | 32⅝ | 25¾ | 32 | 24⅛ | 5 years..... | 41.6 | 41.1 | 41.3 | 39.7 |
| 21 months... | 32⅞ | 25¾ | 32¼ | 24¾ | 6 years..... | 43.8 | 45.2 | 43.4 | 43.3 |
| 22 months... | 33¼ | 26⅛ | 32⅝ | 25¼ | 7 years..... | 45.7 | 49.1 | 45.5 | 47.5 |
| 23 months... | 33⅝ | 27 | 32⅞ | 25⅝ | 8 years..... | 47.8 | 53.9 | 47.6 | 52.0 |
| 24 months... | 33¾ | 27⅜ | 33⅜ | 26⅛ | 9 years..... | 49.7 | 59.2 | 49.4 | 57.1 |
| 25 months... | 34 | 27⅞ | 33¾ | 26⅞ | 10 years..... | 51.7 | 65.3 | 51.3 | 62.4 |
| 26 months... | 34⅛ | 28¼ | 33⅞ | 27¼ | 11 years..... | 53.3 | 70.2 | 53.4 | 68.8 |
| 27 months... | 34¼ | 29 | 33⅞ | 27¼ | 12 years..... | 55.1 | 76.9 | 55.9 | 78.3 |
| 28 months... | 35⅛ | 29⅛ | 34⅝ | 27⅝ | 13 years..... | 57.2 | 84.8 | 58.2 | 88.7 |
| 29 months... | 35⅜ | 29¼ | 34¾ | 27¾ | 14 years..... | 59.9 | 94.9 | 59.9 | 98.4 |
| 30 months... | 35⅝ | 29½ | 34⅞ | 28¼ | 15 years..... | 62.3 | 107.1 | 61.1 | 106.1 |
| 31 months... | 35½ | 30½ | 35⅛ | 28¾ | 16 years..... | 65.0 | 121.0 | 61.6 | 112.0 |

## SEVEN WONDERS OF THE WORLD.

| ANCIENT. | MEDIAEVAL. | MODERN. |
|---|---|---|
| Pyramids of Egypt. | Coliseum of Rome. | Wireless Telegraphy. |
| Pharos of Egypt. | Catacombs of Alexandria. | Telephone (also now wireless). |
| Hanging Gardens of Babylon. | Great Wall of China. | Aeroplane. |
| Temple of Diana at Ephesus. | Stonehenge. | Radium. |
| Statue of Jupiter by Phidias. | Leaning Tower of Pisa. | Antiseptics and Antitoxins. |
| Mausoleum of Artemisia. | Porcelain Tower of Nankin. | Spectrum Analysis. |
| Colossus of Rhodes. | Mosque of St. Sophia in Constantinople. | X-Rays. |

Poison gas, used in World War, is accounted a modern marvel.

## AMERICAN EXPERIENCE TABLE OF MORTALITY.

| Age. | Number Living. | Number Dying. | Death Rate Per 1,000. | Ave. Future Life, in Years. | Age. | Number Living. | Number Dying. | Death Rate Per 1,000. | Ave. Future Life, in Years. |
|---|---|---|---|---|---|---|---|---|---|
| 10..... | 10,000.0 | 74.9 | 7.490 | 48.72 | 53..... | 6,679.7 | 109.1 | 16.333 | 18.79 |
| 11..... | 9,925.1 | 74.6 | 7.516 | 48.08 | 54..... | 6,570.6 | 114.3 | 17.396 | 18.09 |
| 12..... | 9,850.5 | 74.3 | 7.543 | 47.45 | 55..... | 6,456.3 | 119.9 | 18.571 | 17.40 |
| 13..... | 9,776.2 | 74.0 | 7.569 | 46.80 | 56..... | 6,336.4 | 126.0 | 19.885 | 16.72 |
| 14..... | 9,702.2 | 73.7 | 7.596 | 46.16 | 57..... | 6,210.4 | 132.5 | 21.335 | 16.05 |
| 15..... | 9,628.5 | 73.5 | 7.634 | 45.50 | 58..... | 6,077.9 | 139.4 | 22.936 | 15.39 |
| 16..... | 9,555.0 | 73.2 | 7.661 | 44.85 | 59..... | 5,938.5 | 146.8 | 24.720 | 14.74 |
| 17..... | 9,481.8 | 72.9 | 7.688 | 44.19 | 60..... | 5,791.7 | 154.6 | 26.693 | 14.10 |
| 18..... | 9,408.9 | 72.7 | 7.727 | 43.53 | 61..... | 5,637.1 | 162.8 | 28.880 | 13.47 |
| 19..... | 9,336.2 | 72.5 | 7.765 | 42.87 | 62..... | 5,474.3 | 171.3 | 31.292 | 12.86 |
| 20..... | 9,263.7 | 72.3 | 7.805 | 42.20 | 63..... | 5,303.0 | 180.0 | 33.943 | 12.26 |
| 21..... | 9,191.4 | 72.2 | 7.855 | 41.53 | 64..... | 5,123.0 | 188.9 | 36.873 | 11.67 |
| 22..... | 9,119.2 | 72.1 | 7.906 | 40.85 | 65..... | 4,934.1 | 198.0 | 40.129 | 11.10 |
| 23..... | 9,047.1 | 72.0 | 7.958 | 40.17 | 66..... | 4,736.1 | 207.0 | 43.707 | 10.54 |
| 24..... | 8,975.1 | 71.9 | 8.011 | 39.49 | 67..... | 4,529.1 | 215.8 | 47.647 | 10.00 |
| 25..... | 8,903.2 | 71.8 | 8.065 | 38.81 | 68..... | 4,313.3 | 224.3 | 52.002 | 9.47 |
| 26..... | 8,831.4 | 71.8 | 8.130 | 38.12 | 69..... | 4,089.0 | 232.1 | 56.762 | 8.97 |
| 27..... | 8,759.6 | 71.8 | 8.197 | 37.43 | 70..... | 3,856.9 | 239.1 | 61.993 | 8.48 |
| 28..... | 8,687.8 | 71.8 | 8.264 | 36.73 | 71..... | 3,617.8 | 244.8 | 67.665 | 8.00 |
| 29..... | 8,616.0 | 71.9 | 8.345 | 36.03 | 72..... | 3,373.0 | 248.7 | 73.733 | 7.55 |
| 30..... | 8,544.1 | 72.0 | 8.427 | 35.33 | 73..... | 3,124.3 | 250.5 | 80.178 | 7.11 |
| 31..... | 8,472.1 | 72.1 | 8.510 | 34.63 | 74..... | 2,873.8 | 250.1 | 87.028 | 6.68 |
| 32..... | 8,400.0 | 72.3 | 8.607 | 33.92 | 75..... | 2,623.7 | 247.6 | 94.371 | 6.27 |
| 33..... | 8,327.7 | 72.6 | 8.718 | 33.21 | 76..... | 2,376.1 | 243.1 | 102.311 | 5.88 |
| 34..... | 8,255.1 | 72.9 | 8.831 | 32.50 | 77..... | 2,133.0 | 236.9 | 111.064 | 5.49 |
| 35..... | 8,182.2 | 73.2 | 8.946 | 31.78 | 78..... | 1,896.1 | 229.1 | 120.827 | 5.11 |
| 36..... | 8,109.0 | 73.7 | 9.089 | 31.07 | 79..... | 1,667.0 | 219.6 | 131.734 | 4.74 |
| 37..... | 8,035.3 | 74.2 | 9.234 | 30.35 | 80..... | 1,447.4 | 209.1 | 144.466 | 4.39 |
| 38..... | 7,961.1 | 74.9 | 9.408 | 29.62 | 81..... | 1,238.3 | 196.4 | 158.605 | 4.05 |
| 39..... | 7,886.2 | 75.6 | 9.586 | 28.90 | 82..... | 1,041.9 | 181.6 | 174.297 | 3.71 |
| 40..... | 7,810.6 | 76.5 | 9.794 | 28.18 | 83..... | 860.3 | 164.8 | 191.561 | 3.39 |
| 41..... | 7,734.1 | 77.4 | 10.008 | 27.45 | 84..... | 695.5 | 147.0 | 211.359 | 3.08 |
| 42..... | 7,656.7 | 78.5 | 10.252 | 26.72 | 85..... | 548.5 | 129.2 | 235.552 | 2.77 |
| 43..... | 7,578.2 | 79.7 | 10.517 | 26.00 | 86..... | 419.3 | 111.4 | 265.681 | 2.47 |
| 44..... | 7,498.5 | 81.2 | 10.829 | 25.27 | 87..... | 307.9 | 93.3 | 303.020 | 2.18 |
| 45..... | 7,417.3 | 82.8 | 11.163 | 24.54 | 88..... | 214.6 | 74.4 | 346.692 | 1.91 |
| 46..... | 7,334.5 | 84.8 | 11.562 | 23.81 | 89..... | 140.2 | 55.5 | 395.863 | 1.66 |
| 47..... | 7,249.7 | 87.0 | 12.000 | 23.08 | 90..... | 84.7 | 38.5 | 454.545 | 1.42 |
| 48..... | 7,162.7 | 89.6 | 12.509 | 22.36 | 91..... | 46.2 | 24.6 | 532.466 | 1.19 |
| 49..... | 7,073.1 | 92.7 | 13.106 | 21.63 | 92..... | 21.6 | 13.7 | 634.259 | .98 |
| 50..... | 6,980.4 | 96.2 | 13.781 | 20.91 | 93..... | 7.9 | 5.8 | 734.177 | .80 |
| 51..... | 6,884.2 | 100.1 | 14.541 | 20.20 | 94..... | 2.1 | 1.8 | 857.143 | .64 |
| 52..... | 6,784.1 | 104.4 | 15.389 | 19.49 | 95..... | .3 | .3 | 1,000.000 | .50 |

Average Future Lifetime is sometimes called "Expectation of Life."

## EXPECTATION OF LIFE (PERCENTAGE) TABLE.

(Per cent. that live to the end of a term of years, according to the American Experience Table of Mortality.)

| Age. | End of 5 Years | End of 10 Years | End of 15 Years | End of 20 Years | End of 25 Years | End of 30 Years | End of 35 Years | Age. | End of 5 Years | End of 10 Years | End of 15 Years | End of 20 Years | End of 25 Years | End of 30 Years | End of 35 Years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25..... | 95.97 | 91.90 | 87.73 | 83.33 | 78.40 | 72.52 | 65.05 | 43..... | 94.52 | 88.14 | 80.20 | 69.98 | 56.92 | 41.23 | 25.01 |
| 26..... | 95.93 | 91.82 | 87.57 | 83.05 | 77.95 | 71.75 | 63.80 | 44..... | 94.33 | 87.63 | 79.20 | 68.32 | 54.53 | 38.32 | 22.23 |
| 27..... | 95.89 | 91.73 | 87.41 | 82.76 | 77.45 | 70.90 | 62.49 | 45..... | 94.11 | 87.04 | 78.08 | 66.52 | 52.00 | 35.37 | 19.51 |
| 28..... | 95.86 | 91.63 | 87.23 | 82.45 | 76.89 | 69.96 | 61.04 | 46..... | 93.86 | 86.39 | 76.86 | 64.57 | 49.33 | 32.40 | 16.88 |
| 29..... | 95.81 | 91.53 | 87.03 | 82.09 | 76.26 | 68.92 | 59.46 | 47..... | 93.58 | 85.66 | 75.51 | 62.47 | 46.53 | 29.42 | 14.37 |
| 30..... | 95.76 | 91.41 | 86.81 | 81.70 | 75.57 | 67.79 | 57.75 | 48..... | 93.25 | 84.85 | 74.04 | 60.22 | 43.62 | 26.47 | 12.01 |
| 31..... | 95.71 | 91.29 | 86.57 | 81.26 | 74.79 | 66.54 | 55.90 | 49..... | 92.90 | 83.96 | 72.42 | 57.81 | 40.63 | 23.57 | 9.83 |
| 32..... | 95.66 | 91.15 | 86.31 | 80.76 | 73.93 | 65.17 | 53.92 | 50..... | 92.49 | 82.97 | 70.68 | 55.25 | 37.59 | 20.74 | 7.86 |
| 33..... | 95.60 | 91.00 | 86.01 | 80.21 | 72.98 | 63.68 | 51.79 | 51..... | 92.04 | 81.88 | 68.80 | 52.55 | 34.59 | 17.99 | ..... |
| 34..... | 95.53 | 90.83 | 85.68 | 79.59 | 71.94 | 62.06 | 49.53 | 52..... | 91.54 | 80.69 | 66.76 | 49.72 | 31.44 | 15.36 | ..... |
| 35..... | 95.46 | 90.65 | 85.31 | 78.91 | 70.78 | 60.30 | 47.14 | 53..... | 90.99 | 79.39 | 64.57 | 46.77 | 28.39 | 12.86 | ..... |
| 36..... | 95.38 | 90.45 | 84.90 | 78.14 | 69.52 | 58.41 | 44.61 | 54..... | 90.38 | 77.97 | 62.23 | 43.74 | 25.37 | 10.59 | ..... |
| 37..... | 95.29 | 90.22 | 84.43 | 77.29 | 68.13 | 56.37 | 41.98 | 55..... | 89.71 | 76.42 | 59.74 | 40.64 | 22.42 | 8.50 | ..... |
| 38..... | 95.19 | 89.97 | 83.90 | 76.34 | 66.61 | 54.18 | 39.24 | 56..... | 88.96 | 74.74 | 57.09 | ..... | ..... | ..... | ..... |
| 39..... | 95.08 | 89.69 | 83.32 | 75.30 | 64.96 | 51.85 | 36.44 | 57..... | 88.15 | 72.93 | 54.31 | ..... | ..... | ..... | ..... |
| 40..... | 94.96 | 89.37 | 82.66 | 74.15 | 63.17 | 49.38 | 33.59 | 58..... | 87.25 | 70.97 | 51.40 | ..... | ..... | ..... | ..... |
| 41..... | 94.83 | 89.01 | 81.93 | 72.89 | 61.24 | 46.78 | 30.72 | 59..... | 86.27 | 68.86 | 48.39 | ..... | ..... | ..... | ..... |
| 42..... | 94.68 | 88.60 | 81.11 | 71.50 | 59.15 | 44.05 | 27.86 | 60..... | 85.19 | 66.59 | 45.30 | ..... | ..... | ..... | ..... |

## MINUTES OR SECONDS IN DECIMALS OF A DEGREE.

| Min. | Degree. | Min. | Degree. | Min. | Degree. | Sec. | Degree. | Sec. | Degree. | Sec. | Degree. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.016 | 21 | 0.350 | 41 | 0.683 | 1 | 0.00027 | 21 | 0.00583 | 41 | 0.01138 |
| 2 | 0.033 | 22 | 0.366 | 42 | 0.700 | 2 | 0.00055 | 22 | 0.00611 | 42 | 0.01166 |
| 3 | 0.050 | 23 | 0.383 | 43 | 0.716 | 3 | 0.00083 | 23 | 0.00638 | 43 | 0.01194 |
| 4 | 0.066 | 24 | 0.400 | 44 | 0.733 | 4 | 0.00111 | 24 | 0.00666 | 44 | 0.01222 |
| 5 | 0.083 | 25 | 0.416 | 45 | 0.750 | 5 | 0.00138 | 25 | 0.00694 | 45 | 0.01250 |
| 6 | 0.100 | 26 | 0.433 | 46 | 0.766 | 6 | 0.00166 | 26 | 0.00722 | 46 | 0.01277 |
| 7 | 0.116 | 27 | 0.450 | 47 | 0.783 | 7 | 0.00194 | 27 | 0.00750 | 47 | 0.01305 |
| 8 | 0.133 | 28 | 0.466 | 48 | 0.800 | 8 | 0.00222 | 28 | 0.00777 | 48 | 0.01333 |
| 9 | 0.150 | 29 | 0.483 | 49 | 0.816 | 9 | 0.00250 | 29 | 0.00805 | 49 | 0.01361 |
| 10 | 0.166 | 30 | 0.500 | 50 | 0.833 | 10 | 0.00277 | 30 | 0.00833 | 50 | 0.01388 |
| 11 | 0.183 | 31 | 0.516 | 51 | 0.850 | 11 | 0.00305 | 31 | 0.00861 | 51 | 0.01416 |
| 12 | 0.200 | 32 | 0.533 | 52 | 0.866 | 12 | 0.00333 | 32 | 0.00888 | 52 | 0.01444 |
| 13 | 0.216 | 33 | 0.550 | 53 | 0.883 | 13 | 0.00361 | 33 | 0.00916 | 53 | 0.01472 |
| 14 | 0.233 | 34 | 0.566 | 54 | 0.900 | 14 | 0.00388 | 34 | 0.00944 | 54 | 0.01500 |
| 15 | 0.250 | 35 | 0.583 | 55 | 0.916 | 15 | 0.00416 | 35 | 0.00972 | 55 | 0.01527 |
| 16 | 0.266 | 36 | 0.600 | 56 | 0.933 | 16 | 0.00444 | 36 | 0.01000 | 56 | 0.01555 |
| 17 | 0.283 | 37 | 0.616 | 57 | 0.950 | 17 | 0.00472 | 37 | 0.01027 | 57 | 0.01583 |
| 18 | 0.300 | 38 | 0.633 | 58 | 0.966 | 18 | 0.00500 | 38 | 0.01055 | 58 | 0.01611 |
| 19 | 0.316 | 39 | 0.650 | 59 | 0.983 | 19 | 0.00527 | 39 | 0.01083 | 59 | 0.01638 |
| 20 | 0.333 | 40 | 0.666 | 60 | 1.000 | 20 | 0.00555 | 40 | 0.01111 | 60 | 0.01666 |

## COMMON FRACTIONS REDUCED TO DECIMALS.

| 8ths. | 16ths | 32ds. | 64ths | | 8ths. | 16ths | 32ds. | 64ths | | 8ths. | 16ths | 32ds. | 64ths | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | .015625 | | | | 23 | .359375 | | | | 45 | .703125 |
| | | 1 | 2 | .03125 | 3 | 6 | 12 | 24 | .375 | | | 23 | 46 | .71875 |
| | | | 3 | .046875 | | | | 25 | .390625 | | | | 47 | .734375 |
| | 1 | 2 | 4 | .0625 | | | 13 | 26 | .40625 | 6 | 12 | 24 | 48 | .75 |
| | | | 5 | .078125 | | | | 27 | .421875 | | | | 49 | .765625 |
| | | 3 | 6 | .09375 | | 7 | 14 | 28 | .4375 | | | 25 | 50 | .78125 |
| | | | 7 | .109375 | | | | 29 | .453125 | | | | 51 | .796875 |
| 1 | 2 | 4 | 8 | .125 | | | 15 | 30 | .46875 | | 13 | 26 | 52 | .8125 |
| | | | 9 | .140625 | | | | 31 | .484375 | | | | 53 | .828125 |
| | | 5 | 10 | .15625 | 4 | 8 | 16 | 32 | .5 | | | 27 | 54 | .84375 |
| | | | 11 | .171875 | | | | 33 | .515625 | | | | 55 | .859375 |
| | 3 | 6 | 12 | .1875 | | | 17 | 34 | .53125 | 7 | 14 | 28 | 56 | .875 |
| | | | 13 | .203125 | | | | 35 | .546875 | | | | 57 | .890625 |
| | | 7 | 14 | .21875 | | 9 | 18 | 36 | .5625 | | | 29 | 58 | .90625 |
| | | | 15 | .234375 | | | | 37 | .578125 | | | | 59 | .921875 |
| 2 | 4 | 8 | 16 | .25 | | | 19 | 38 | .59375 | | 15 | 30 | 60 | .9375 |
| | | | 17 | .265625 | | | | 39 | .609375 | | | | 61 | .953125 |
| | | 9 | 18 | .28125 | 5 | 10 | 20 | 40 | .625 | | | 31 | 62 | .96875 |
| | | | 19 | .296875 | | | | 41 | .640625 | | | | 63 | .984375 |
| | 5 | 10 | 20 | .3125 | | | 21 | 42 | .65625 | 8 | 16 | 32 | 64 | 1. |
| | | | 21 | .328125 | | | | 43 | .671875 | | | | | |
| | | 11 | 22 | .34375 | | 11 | 22 | 44 | .6875 | | | | | |

## MULTIPLICATION AND DIVISION TABLE.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 27 | 54 | 81 | 108 | 135 | 162 | 189 | 216 | 243 | 270 |
| 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 28 | 56 | 84 | 112 | 140 | 168 | 196 | 224 | 252 | 280 |
| 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 29 | 58 | 87 | 116 | 145 | 174 | 203 | 232 | 261 | 290 |
| 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 |
| 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 31 | 62 | 93 | 124 | 155 | 186 | 217 | 248 | 279 | 310 |
| 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 32 | 64 | 96 | 128 | 160 | 192 | 224 | 256 | 288 | 320 |
| 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 33 | 66 | 99 | 132 | 165 | 198 | 231 | 264 | 297 | 330 |
| 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 | 34 | 68 | 102 | 136 | 170 | 204 | 238 | 272 | 306 | 340 |
| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 35 | 70 | 105 | 140 | 175 | 210 | 245 | 280 | 315 | 350 |
| 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 36 | 72 | 108 | 144 | 180 | 216 | 252 | 288 | 324 | 360 |
| 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 37 | 74 | 111 | 148 | 185 | 222 | 259 | 296 | 333 | 370 |
| 13 | 26 | 39 | 52 | 65 | 78 | 91 | 104 | 117 | 130 | 38 | 76 | 114 | 152 | 190 | 228 | 266 | 304 | 342 | 380 |
| 14 | 28 | 42 | 56 | 70 | 84 | 98 | 112 | 126 | 140 | 39 | 78 | 117 | 156 | 195 | 234 | 273 | 312 | 351 | 390 |
| 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 40 | 80 | 120 | 160 | 200 | 240 | 280 | 320 | 360 | 400 |
| 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 41 | 82 | 123 | 164 | 205 | 246 | 287 | 328 | 369 | 410 |
| 17 | 34 | 51 | 68 | 85 | 102 | 119 | 136 | 153 | 170 | 42 | 84 | 126 | 168 | 210 | 252 | 294 | 336 | 378 | 420 |
| 18 | 36 | 54 | 72 | 90 | 108 | 126 | 144 | 162 | 180 | 43 | 86 | 129 | 172 | 215 | 258 | 301 | 344 | 387 | 430 |
| 19 | 38 | 57 | 76 | 95 | 114 | 133 | 152 | 171 | 190 | 44 | 88 | 132 | 176 | 220 | 264 | 308 | 352 | 396 | 440 |
| 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 45 | 90 | 135 | 180 | 225 | 270 | 315 | 360 | 405 | 450 |
| 21 | 42 | 63 | 84 | 105 | 126 | 147 | 168 | 189 | 210 | 46 | 92 | 138 | 184 | 230 | 276 | 322 | 368 | 414 | 460 |
| 22 | 44 | 66 | 88 | 110 | 132 | 154 | 176 | 198 | 220 | 47 | 94 | 141 | 188 | 235 | 282 | 329 | 376 | 423 | 470 |
| 23 | 46 | 69 | 92 | 115 | 138 | 161 | 184 | 207 | 230 | 48 | 96 | 144 | 192 | 240 | 288 | 336 | 384 | 432 | 480 |
| 24 | 48 | 72 | 96 | 120 | 144 | 168 | 192 | 216 | 240 | 49 | 98 | 147 | 196 | 245 | 294 | 343 | 392 | 441 | 490 |
| 25 | 50 | 75 | 100 | 125 | 150 | 175 | 200 | 225 | 250 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
| 26 | 52 | 78 | 104 | 130 | 156 | 182 | 208 | 234 | 260 | | | | | | | | | | |

## SQUARES, SQ. ROOTS, CUBES AND CU. ROOTS OF NOS. 1 TO 100.

| No. | Sq. | Cube. | Square Root. | Cube Root. | No. | Sq. | Cube. | Square Root. | Cube Root. | No. | Sq. | Cube. | Square Root. | Cube Root. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| .1 | 0.01 | 0.001 | 0.316 | 0.464 | 23 | 529 | 12167 | 4.795 | 2.843 | 63 | 3969 | 250047 | 7.937 | 3.979 |
| .15 | 0.022 | 0.003 | 0.387 | 0.531 | 24 | 576 | 13824 | 4.899 | 2.884 | 64 | 4096 | 262144 | 8.000 | 4.000 |
| .2 | 0.04 | 0.008 | 0.447 | 0.585 | 25 | 625 | 15625 | 5.000 | 2.924 | 65 | 4225 | 274625 | 8.062 | 4.020 |
| .25 | 0.062 | 0.015 | 0.500 | 0.630 | 26 | 676 | 17576 | 5.099 | 2.962 | 66 | 4356 | 287496 | 8.124 | 4.041 |
| .3 | 0.09 | 0.027 | 0.548 | 0.669 | 27 | 729 | 19683 | 5.196 | 3.000 | 67 | 4489 | 300763 | 8.185 | 4.061 |
| .35 | 0.122 | 0.042 | 0.592 | 0.705 | 28 | 784 | 21952 | 5.291 | 3.036 | 68 | 4624 | 314432 | 8.246 | 4.081 |
| .4 | 0.16 | 0.064 | 0.633 | 0.737 | 29 | 841 | 24389 | 5.385 | 3.072 | 69 | 4761 | 328509 | 8.306 | 4.101 |
| .45 | 0.202 | 0.091 | 0.671 | 0.766 | 30 | 900 | 27000 | 5.477 | 3.107 | 70 | 4900 | 343000 | 8.366 | 4.121 |
| .5 | 0.25 | 0.125 | 0.707 | 0.794 | 31 | 961 | 29791 | 5.567 | 3.141 | 71 | 5041 | 357911 | 8.426 | 4.140 |
| .55 | 0.302 | 0.166 | 0.742 | 0.819 | 32 | 1024 | 32768 | 5.656 | 3.174 | 72 | 5184 | 373248 | 8.485 | 4.160 |
| .6 | 0.36 | 0.216 | 0.775 | 0.843 | 33 | 1089 | 35937 | 5.744 | 3.207 | 73 | 5320 | 389017 | 8.544 | 4.179 |
| .65 | 0.422 | 0.274 | 0.806 | 0.866 | 34 | 1156 | 39304 | 5.831 | 3.239 | 74 | 5476 | 405224 | 8.602 | 4.198 |
| .7 | 0.49 | 0.343 | 0.837 | 0.888 | 35 | 1225 | 42875 | 5.916 | 3.271 | 75 | 5625 | 421875 | 8.660 | 4.217 |
| .75 | 0.562 | 0.421 | 0.866 | 0.909 | 36 | 1296 | 46656 | 6 000 | 3.301 | 76 | 5776 | 438976 | 8.717 | 4.235 |
| .8 | 0.64 | 0.512 | 0.894 | 0.928 | 37 | 1369 | 50653 | 6.082 | 3.332 | 77 | 5929 | 456533 | 8.775 | 4.254 |
| .85 | 0.722 | 0.614 | 0.922 | 0.947 | 38 | 1444 | 54872 | 6.164 | 3.362 | 78 | 6084 | 474552 | 8.831 | 4.272 |
| .9 | 0.81 | 0.729 | 0.949 | 0.965 | 39 | 1521 | 59319 | 6.245 | 3.391 | 79 | 6241 | 493039 | 8.888 | 4.290 |
| .95 | 0.902 | 0.857 | 0.975 | 0.983 | 40 | 1600 | 64000 | 6.324 | 3.420 | 80 | 6400 | 512000 | 8.944 | 4.308 |
| 1 | 1.000 | 1.000 | 1.000 | 1.000 | 41 | 1681 | 68921 | 6.403 | 3.448 | 81 | 6561 | 531441 | 9.000 | 4.326 |
| 2 | 4 | 8 | 1.414 | 1.259 | 42 | 1764 | 74088 | 6.480 | 3.476 | 82 | 6724 | 551368 | 9.055 | 4.344 |
| 3 | 9 | 27 | 1.732 | 1.442 | 43 | 1849 | 79507 | 6.557 | 3.503 | 83 | 6889 | 571787 | 9.110 | 4.362 |
| 4 | 16 | 64 | 2.000 | 1.587 | 44 | 1936 | 85184 | 6.633 | 3.530 | 84 | 7056 | 592704 | 9.165 | 4.379 |
| 5 | 25 | 125 | 2.236 | 1.710 | 45 | 2025 | 91125 | 6.708 | 3.556 | 85 | 7225 | 614125 | 9.219 | 4.396 |
| 6 | 36 | 216 | 2.449 | 1.817 | 46 | 2116 | 97336 | 6.782 | 3.583 | 86 | 7396 | 636056 | 9.273 | 4.414 |
| 7 | 49 | 343 | 2.645 | 1.912 | 47 | 2209 | 103823 | 6.855 | 3.608 | 87 | 7569 | 658503 | 9.327 | 4.431 |
| 8 | 64 | 512 | 2.828 | 2.000 | 48 | 2304 | 110592 | 6.928 | 3.634 | 88 | 7744 | 681472 | 9.380 | 4.448 |
| 9 | 81 | 729 | 3.000 | 2.080 | 49 | 2401 | 117649 | 7.000 | 3.659 | 89 | 7921 | 704969 | 9.434 | 4.464 |
| 10 | 100 | 1000 | 3.162 | 2.154 | 50 | 2500 | 125000 | 7.071 | 3.684 | 90 | 8100 | 729000 | 9.486 | 4.481 |
| 11 | 121 | 1331 | 3.316 | 2.224 | 51 | 2601 | 132651 | 7.141 | 3.708 | 91 | 8281 | 753571 | 9.539 | 4.497 |
| 12 | 144 | 1728 | 3.464 | 2.289 | 52 | 2704 | 140608 | 7.211 | 3.732 | 92 | 8464 | 778688 | 9.591 | 4.514 |
| 13 | 169 | 2197 | 3.605 | 2.351 | 53 | 2809 | 148877 | 7.280 | 3.756 | 93 | 8649 | 804357 | 9.643 | 4.530 |
| 14 | 196 | 2744 | 3.741 | 2.410 | 54 | 2916 | 157464 | 7.348 | 3.779 | 94 | 8836 | 830584 | 9.695 | 4.546 |
| 15 | 225 | 3375 | 3.873 | 2.466 | 55 | 3025 | 166375 | 7.416 | 3.803 | 95 | 9025 | 857375 | 9.746 | 4.562 |
| 16 | 256 | 4096 | 4.000 | 2.519 | 56 | 3136 | 175616 | 7.483 | 3.825 | 96 | 9216 | 884736 | 9.798 | 4.578 |
| 17 | 289 | 4913 | 4.123 | 2.571 | 57 | 3249 | 185193 | 7.549 | 3.848 | 97 | 9409 | 912673 | 9.848 | 4.594 |
| 18 | 324 | 5832 | 4.246 | 2.620 | 58 | 3364 | 195112 | 7.615 | 3.870 | 98 | 9604 | 941192 | 9.899 | 4.610 |
| 19 | 361 | 6859 | 4.358 | 2.668 | 59 | 3481 | 205379 | 7.681 | 3.893 | 99 | 9801 | 970299 | 9.949 | 4.626 |
| 20 | 400 | 8000 | 4.472 | 2.714 | 60 | 3600 | 216000 | 7.746 | 3.914 | 100 | 10000 | 1000000 | 10.000 | 4.641 |

## SQUARE ROOTS AND CUBE ROOTS, 1000 TO 2000.

| Number. | Square Root. | Cube Root. | Number. | Square Root. | Cube Root. | Number. | Square Root. | Cube Root. | Number. | Square Root. | Cube Root. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 31.62 | 10.00 | 1255 | 35.43 | 10.79 | 1510 | 38.86 | 11.47 | 1765 | 42.01 | 12.09 |
| 1005 | 31.70 | 10.02 | 1260 | 35.50 | 10.80 | 1515 | 38.92 | 11.49 | 1770 | 42.07 | 12.10 |
| 1010 | 31.78 | 10.03 | 1265 | 35.57 | 10.82 | 1520 | 38.99 | 11.50 | 1775 | 42.13 | 12.11 |
| 1020 | 31.94 | 10.07 | 1275 | 35.71 | 10.84 | 1530 | 39.12 | 11.52 | 1785 | 42.25 | 12.13 |
| 1025 | 32.02 | 10.08 | 1280 | 35.78 | 10.86 | 1535 | 39.18 | 11.54 | 1790 | 42.31 | 12.14 |
| 1030 | 32.09 | 10.10 | 1285 | 35.85 | 10.87 | 1540 | 39.24 | 11.55 | 1795 | 42.37 | 12.15 |
| 1035 | 32.17 | 10.12 | 1290 | 35.92 | 10.89 | 1545 | 39.31 | 11.56 | 1800 | 42.43 | 12.16 |
| 1045 | 32.33 | 10.15 | 1300 | 36.06 | 10.91 | 1555 | 39.43 | 11.59 | 1810 | 42.54 | 12.19 |
| 1050 | 32.40 | 10.16 | 1305 | 36.12 | 10.93 | 1560 | 39.50 | 11.60 | 1815 | 42.60 | 12.20 |
| 1060 | 32.56 | 10.20 | 1315 | 36.26 | 10.96 | 1570 | 39.62 | 11.62 | 1825 | 42.72 | 12.22 |
| 1065 | 32.63 | 10.21 | 1320 | 36.33 | 10.97 | 1575 | 39.69 | 11.63 | 1830 | 42.78 | 12.23 |
| 1075 | 32.79 | 10.24 | 1330 | 36.47 | 11.00 | 1585 | 39.81 | 11.66 | 1840 | 42.90 | 12.25 |
| 1080 | 32.86 | 10.26 | 1335 | 36.54 | 11.01 | 1590 | 39.87 | 11.67 | 1845 | 42.95 | 12.26 |
| 1085 | 32.94 | 10.28 | 1340 | 36.61 | 11.02 | 1595 | 39.94 | 11.68 | 1850 | 43.01 | 12.28 |
| 1090 | 33.02 | 10.29 | 1345 | 36.67 | 11.04 | 1600 | 40.00 | 11.70 | 1855 | 43.07 | 12.29 |
| 1095 | 33.09 | 10.31 | 1350 | 36.74 | 11.05 | 1605 | 40.06 | 11.71 | 1860 | 43.13 | 12.30 |
| 1100 | 33.17 | 10.32 | 1355 | 36.81 | 11.07 | 1610 | 40.12 | 11.72 | 1865 | 43.19 | 12.31 |
| 1105 | 33.24 | 10.34 | 1360 | 36.88 | 11.08 | 1615 | 40.19 | 11.73 | 1870 | 43.24 | 12.32 |
| 1110 | 33.32 | 10.35 | 1365 | 36.95 | 11.09 | 1620 | 40.25 | 11.74 | 1875 | 43.30 | 12.33 |
| 1115 | 33.39 | 10.37 | 1370 | 37.01 | 11.11 | 1625 | 40.31 | 11.76 | 1880 | 43.36 | 12.34 |
| 1120 | 33.47 | 10.38 | 1375 | 37.08 | 11.12 | 1630 | 40.37 | 11.77 | 1885 | 43.42 | 12.35 |
| 1125 | 33.54 | 10.40 | 1380 | 37.15 | 11.13 | 1635 | 40.44 | 11.78 | 1890 | 43.47 | 12.36 |
| 1130 | 33.62 | 10.42 | 1385 | 37.22 | 11.15 | 1640 | 40.50 | 11.79 | 1895 | 43.53 | 12.37 |
| 1135 | 33.69 | 10.43 | 1390 | 37.28 | 11.16 | 1645 | 40.56 | 11.80 | 1900 | 43.59 | 12.39 |
| 1140 | 33.76 | 10.45 | 1395 | 37.35 | 11.17 | 1650 | 40.62 | 11.82 | 1905 | 43.65 | 12.40 |
| 1145 | 33.84 | 10.46 | 1400 | 37.42 | 11.19 | 1655 | 40.68 | 11.83 | 1910 | 43.70 | 12.41 |
| 1150 | 33.91 | 10.48 | 1405 | 37.48 | 11.20 | 1660 | 40.74 | 11.84 | 1915 | 43.76 | 12.42 |
| 1155 | 33.99 | 10.49 | 1410 | 37.55 | 11.21 | 1665 | 40.80 | 11.85 | 1920 | 43.82 | 12.43 |
| 1160 | 34.06 | 10.51 | 1415 | 37.62 | 11.23 | 1670 | 40.87 | 11.86 | 1925 | 43.87 | 12.44 |
| 1165 | 34.13 | 10.52 | 1420 | 37.68 | 11.24 | 1675 | 40.93 | 11.88 | 1930 | 43.93 | 12.45 |
| 1170 | 34.21 | 10.54 | 1425 | 37.75 | 11.25 | 1680 | 40.99 | 11.89 | 1935 | 43.99 | 12.46 |
| 1175 | 34.28 | 10.55 | 1430 | 37.82 | 11.27 | 1685 | 41.05 | 11.90 | 1940 | 44.05 | 12.47 |
| 1180 | 34.35 | 10.57 | 1435 | 37.88 | 11.28 | 1690 | 41.11 | 11.91 | 1945 | 44.10 | 12.48 |
| 1185 | 34.42 | 10.58 | 1440 | 37.95 | 11.29 | 1695 | 41.17 | 11.92 | 1950 | 44.16 | 12.49 |
| 1190 | 34.50 | 10.60 | 1445 | 38.01 | 11.31 | 1700 | 41.23 | 11.93 | 1955 | 44.22 | 12.50 |
| 1195 | 34.57 | 10.61 | 1450 | 38.08 | 11.32 | 1705 | 41.29 | 11.95 | 1960 | 44.27 | 12.51 |
| 1200 | 34.64 | 10.63 | 1455 | 38.14 | 11.33 | 1710 | 41.35 | 11.96 | 1965 | 44.33 | 12.53 |
| 1205 | 34.71 | 10.64 | 1460 | 38.21 | 11.34 | 1715 | 41.41 | 11.97 | 1970 | 44.38 | 12.54 |
| 1210 | 34.79 | 10.66 | 1465 | 38.28 | 11.36 | 1720 | 41.47 | 11.98 | 1975 | 44.44 | 12.55 |
| 1215 | 34.86 | 10.67 | 1470 | 38.34 | 11.37 | 1725 | 41.53 | 11.99 | 1980 | 44.50 | 12.56 |
| 1220 | 34.93 | 10.69 | 1475 | 38.41 | 11.38 | 1730 | 41.59 | 12.00 | 1985 | 44.55 | 12.57 |
| 1225 | 35.00 | 10.70 | 1480 | 38.47 | 11.40 | 1735 | 41.65 | 12.02 | 1990 | 44.61 | 12.58 |
| 1235 | 35.14 | 10.73 | 1490 | 38.60 | 11.42 | 1745 | 41.77 | 12.04 | 1995 | 44.67 | 12.59 |
| 1245 | 35.28 | 10.76 | 1500 | 38.73 | 11.45 | 1755 | 41.89 | 12.06 | 2000 | 44.72 | 12.60 |

## HUMAN WEIGHTS AND MEASURES.

(By Arthur MacDonald, Anthropologist, Washington, D. C.)

APPROXIMATE WEIGHTS OF ORGANS IN AN ADULT.

| | Grains. | Ounces. | Percentage Relation to Body Weight. | | Grains. | Ounces. | Percentage Relation to Body Weight. | | Grains. | Ounces. | Percentage Relation to Body Weight. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain... | 1,400 | 49 | 2.37 | Spleen.. | 170 | 6 | 0.346 | Adrenals | 10 | 0.35 | 0.014 |
| Heart... | 300 | 10 | 0.46 | Liver... | 1,600 | 57 | 2.75 | Muscles. | 30,000 | 1,050 | 43.09 |
| Lungs... | 1,175 | 41 | 2.0 | Pancreas | 200 | 7 | 0.346 | Skeleton | 11,500 | 400 | 15.35 |
| Thymus gland. | 5 | 0.13 | 0.0086 | Kidneys. | 300 | 10.5 | 0.44 | | | | |

Every human death may be attributed to one of three causes: (1) Interference with respiration (asphyxia or apnea); (2) Interference with the heart's action (syncope), and (3) Interference with the nervous system (coma or shock). The number of distinct diseases producing death is limited.

The length of the humerus multiplied by 5.06, or the length of the femur multiplied by 3.66, equals the height of the man. Thus the height of prehistoric peoples can be worked out.

In height man may vary from 1m. 25 (4 feet 1 inch) to 1m. 99 (6 feet 6¾ inches). Below 1m. 25 man is abnormal or pathological (dwarfism); above 2 meters man is also abnormal (giantism). Both these extremes are sterile. The extreme averages of different populations run from 1m. 38 (4 feet 6 inches) to 1m. 79 (5 feet 10.5 inches); the Scots of Galloway or Scots or the North are 1m. 78. The stature of man is not more than 2 or 3 centimeters higher than his skeleton.

The length of the trunk in man is more than one-third and less than two-fifths of the height. The arm reach in American soldiers, compared to their height, is as 1,043 to 1,000. The brains of the higher apes are much less complex in their convolutions and much less in both relative and absolute weight. The gorilla's brain barely exceeds twenty ounces in weight, while man's brain hardly weighs less than thirty-two.

From 11,000 brains weighed, Topinard finds an average weight of 1,361 grains for man and 1,290 grains for woman.

The gray substance represents 37 to 38 per cent. of the total weight of the brain. The differences in the form and the dimensions of the skull in correlation with those of the brain serve to distinguish races and species. Thus the Inka bone (one of the wormian bones), between the parietal and occipital bones, is frequent in Peruvian crania—20 times in 100; in negroes 6 times; in Europeans it is still more rare; among Indians of Arizona this bone is more frequent than among Peruvians. The suture of the alar bone is peculiar to Japanese crania—25 to 40 per cent., and only 9 per cent. in European races.

## LONGEVITY OF ANIMALS.

(Figures represent years.)

Ass, from 25 to 50; bee, 4; beaver, 50; beetle, 1 to 4; birds, 3 to 30; camel, 50 to 60; carp, 100 to 150; cat, 18; cow, 20; crocodile, 100; crow, 100; deer, 20; dog, 23 to 30; eagle, 100; elephant, 150 to 200; fox, 15.

Fowl, 10; goose, 50; hare, 7 to 8; heron, 60; hog, 20; horse, 25 to 30; lark, 16 to 18; lion, 60; monkey, 16 to 18; ox, 19; parrot, 100; peacock, 24; pelican, 40 to 50; pigeon, 20; pike, 100; rabbit, 8 or 9.

Raven, 100; rhinoceros, 20; salmon, 10; sheep, 10; sparrow-hawk, 40; spider, 1; squirrel, 7; stag, under 50; swan, 100; tiger and leopard, 25; toad, 20 to 30; tortoise, over 100; viper, 6 or 7; wolf, 20; wren, 2 or 3.

# The Metric System.

(Prepared for the U. S. Government by the Bureau of Standards Department of Commerce.)

## UNITS OF WEIGHT AND MEASURE.

THE fundamental unit of the metric system is the meter, the unit of length. From this the units of capacity (liter) and of weight (gram) were derived. All other units are the decimal subdivisions or multiples of these. These three units are simply related, e. g., for all practical purposes 1 cubic decimeter equals 1 liter and 1 liter of water weighs 1 kilogram. The metric tables are formed by combining the words "meter," "gram," and "liter" with the six numerical prefixes, as in the following tables:

| PREFIXES. | Meaning. | | Units. |
|---|---|---|---|
| milli- | = *one-thousandth* . . | .001 | |
| centi- | = *one-hundredth* . . . | .01 | "meter" *for length* |
| deci- | = *one-tenth* . . . . . | .1 | "gram" *for weight* |
| . . . . . | *Unit* = *one* . . . . . | 1 | *or mass.* |

| PREFIXES. | Meaning. | | Units. |
|---|---|---|---|
| deka- | = *ten* . . . . . | 10 | |
| hecto- | = *one hundred* . . . . . | 100 | "liter" *for capacity.* |
| kilo- | = *one thousand* . . . . | 1000 | |

All lengths, areas, and cubic measures in the following tables are derived from the international meter, the legal equivalent being 1 meter = 39.37 inches (law of July 28, 1866). In 1893 the United States Office of Standard Weights and Measures was authorized to derive the yard from the meter, using for the purpose the relation legalized in 1866, 1 yard = 3600-3937 meter. The customary weights are likewise referred to the kilogram (Executive order approved April 5, 1893). This action fixed the values, inasmuch as the reference standards are as perfect and unalterable as it is possible for human skill to make them at this time. All capacities are based on the equivalent 1 liter equals 1.000027 cubic decimeters. The decimeter is equal to 3.937 inches in accordance with the legal equivalent of the meter given above. The gallon referred to in the tables is the United States gallon of 231 cubic inches. The bushel is the United States bushel of 2,150.42 cubic inches. These units must not be confused with the British units of the same name, which differ from those used in the United States. The British gallon is approximately 20 per cent. larger and the British bushel 3 per cent. larger than the corresponding units used in this country. The customary weights derived from the international kilogram are based on the value 1 avoirdupois pound = 453.5924277 grams. The value of the troy pound is based upon the relation just mentioned and also the equivalent 5760-7000 avoirdupois pounds equals 1 troy pound.

## STANDARDS FOR MEASUREMENT.

Units of measurement should be distinguished from standards for measurement, particularly in the case of length and capacity. Units of length are fixed distances, independent of any other consideration, while length standards are affected by the expansion and contraction with changes of temperature of the material of which the standard may be composed. It is therefore necessary to fix upon some temperature at which the distance between the defining lines or end surfaces of the standards shall be equal to the unit. The same is true of standards of capacity, which at some definite temperature contain a given number of units of volume. The temperature at which metric length standards are customarily made correct is 0° C, although 20° C is also used for steel tapes and some other standards intended for use at room or average outdoor temperatures. The temperature at which standards of length of the customary system are made correct is 62° F.

For measurements of high precision it is also necessary to specify the manner of support of the standards, whether at certain points only or throughout their entire length, and in the case of tapes it is also necessary to give the tension applied to the tape when in use. In the United States the capacity standards, both metric and customary, are made to hold the specified volumes at 4° C. Standards of capacity are usually made of brass so the capacity at any other temperature may be computed by the use of the coefficient of cubical expansion, usually assumed to be 0.000054 per degree Centigrade. In the purchase and sale of liquids a more important consideration than the temperature of the measures is the temperature of the liquid when measured, for the reason that the large coefficient of expansion of many liquids makes the actual mass of a given volume delivered vary considerably with temperature. For this reason, the custom of buying and selling liquids by weight instead of by measure is recommended. It is further recommended that, when liquids are sold by volume, 68° F or 20° C be adopted as the standard temperature of the liquid.

While the temperature of a weight does not affect its mass, it is nevertheless important that when two weights are compared in air they both be at the same temperature as the air. If there is a difference between the temperature of the air and the weights, convection currents will be set up and the readings of the balance will be thereby affected. Also, since weights are buoyed up by the surrounding air by amounts dependent upon their volumes, it is desirable that the weights of any set be of the same material. If two weights of the same density balance in air of a certain density they will balance in vacuo or in air of a different density. Brass is the material most widely used for standard weights, although platinum is quite commonly used for weights of 1 gram or less. In the absence of any knowledge as to the actual density of weights, those made of brass are assumed to have a density of 8.4 at 0° C, while those of platinum are assumed to have a density of 21.5 at 0° C.

## SPELLING AND ABBREVIATION OF UNITS.

Following the names of each unit in the list below is given the abbreviation which the Bureau has adopted. Attention is called to the following principles: 1. The period is omitted after the abbreviations of the metric units, while it is used after those of the customary system. 2. The exponents, "2" and "3," are used to signify area and volume, respectively, in the case of the metric units instead of the longer prefixes "sq." or "cu." In conformity with this principle the abbreviation for cubic centimeter is "cm3," instead of "c. c." or "c. cm." The term "cubic centimeter" as used in chemical work is, in fact, a misnomer, since the unit actually used is the "milliliter," which has a slightly larger volume. 3. The use of the same abbreviation for both singular and plural is recommended. This practice is already established in expressing metric units and is in accordance with the spirit and chief purpose of abbreviations.

## DEFINITIONS OF UNITS.

### LENGTH.

*Fundamental Units*—A meter (m) is a unit of length equivalent to the distance between the defining lines of the international prototype meter at the International Bureau of Weights and Measures when this standard is at the temperature of melting ice (0° C).

A yard (yd.) is a unit of length equivalent to 3600-3937 of a meter.

*Multiples and submultiples:*

1 kilometer = 1000 meters.
1 hectometer = 100 meters.
1 dekameter = 10 meters.
1 decimeter = 0.1 meter.
1 centimeter = 0.01 meter.
1 millimeter = 0.001 meter = 0.1 centimeter.
1 micron = 0.000001 meter = 0.001 millimeter.
1 millimicron = 0.000000001 meter = 0.001 micron.
1 foot = 1-3 yard = 1200-3937 meter.
1 inch = 1-36 yard = 1-12 foot = 100-3937 meter.
1 link = 0.22 yard = 7.92 inches.
1 rod = 5½ yards = 16½ feet.
1 chain = 22 yards = 100 links = 66 feet = 4 rods.
1 furlong = 220 yards = 40 rods = 10 chains.
1 statute mile = 1760 yards = 5280 feet = 320 rods.
1 hand = 4 inches.
1 point = 1-72 inch.
1 mil = 0.001 inch.
1 fathom = 6 feet.
1 span = 9 inches = 1-8 fathom.
1 nautical mile { United States = 6080.20 feet
1 sea mile { = 1.151553 statute miles.
1 geographical mile { = 1853.249 meters.

## AREA.

*Fundamental Units:*

A square meter is a unit of area equivalent to the area of a square the sides of which are 1 meter.

A square yard is a unit of area eq ivalent to the area of a square the sides of which are 1 yard.

*Multiples and Submultiples:*

1 square kilometer = 1,000,000 square meters.
1 hectare or square hectometer = 10,000 square meters.
1 are or square dekameter = 100 square meters.
1 centare = 1 square meter.
1 square decimeter = 0.01 square meter.
1 square centimeter = 0.0001 square meter.
1 square millimeter = 0 000001 square meter = 0.01 square centimeter.
1 square foot = 1-9 square yard.
1 square inch = 1-1296 square yard = 1-144 square foot.
1 square link = 0.0484 square yard = 62.7264 square inches.
1 square rod = 30.25 square yards = 272.25 square feet = 625 square links.
1 square chain = 484 square yards = 16 square rods = 100,000 square links.
1 acre = 4840 square yards = 160 square rods = 10 square chains.
1 square mile = 3,097,600 square yards = 640 acres.

## VOLUME.

*Fundamental Units:*

A cubic meter is a unit of volume equivalent to a cube the edges of which are 1 meter.

A cubic yard is a unit of volume equivalent to a cube the edges of which are 1 yard.

*Multiples and Submultiples:*

1 cubic kilometer = 1,000,000,000 cubic meters.
1 cubic hectometer = 1,000,000 cubic meters.
1 cubic dekameter = 1,000 cubic meters.
1 stere = 1 cubic meter
1 cubic decimeter = 0.001 cubic meter.
1 cubic centimeter = 0.000001 cubic meter = 0.001 cubic decimeter.
1 cubic millimeter = 0 000000001 cubic meter = 0.001 cubic centimeter.
1 cubic foot = 1-27 cubic yard.
1 cubic inch = 1-46656 cubic yard = 1-1728 cubic foot.
1 board foot = 144 cubic inches = 1-12 cubic foot.
1 cord = 128 cubic feet.

## CAPACITY.

*Fundamental Units:*

A liter is a unit of capacity equivalent to the volume occupied by the mass of 1 kilogram of pure water at its maximum density (at a temperature of 4° C, practically) and under the standard atmospheric pressure (of 760 mm). It is equivalent in volume to 1.000027 cubic decimeters.

A gallon is a unit of capacity equivalent to the volume of 231 cubic inches. It is used for the measurement of liquid commodities only.

A bushel is a unit of capacity equivalent to the volume of 2150.42 cubic inches. It is used in the measurement of dry commodities only.

The above bushel is the so-called stricken or struck bushel. Many dry commodities are sold by heaped bushel, which is generally specified in the State laws to be the usual stricken bushel measure "duly heaped in the form of a cone as high as the article will admit" or "heaped as high as may be without special effort or design." The heaped bushel was originally intended to be 25 per cent. greater than the stricken bushel.

*Multiples and Submultiples:*

1 hectoliter = 100 liters.
1 dekaliter = 10 liters.
1 deciliter = 0.1 liter.
1 centiliter = 0.01 liter.
1 milliliter = 0.001 liter = 1.000027 cubic centimeters
1 liquid quart = 1-4 gallon = 57.75 cubic inches.
1 liquid pint = 1-8 gallon = 1-2 liquid quart = 28.875 cubic inches.
1 gill = 1-32 gallon = 1-4 liquid pint = 7.21875 cubic inches.
1 fluid ounce = 1-128 gallon = 1-16 liquid pint.
1 fluid dram = 1-8 fluid ounce = 1-128 liquid pint
1 minim = 1-60 fluid dram = 1-480 fluid ounce.
1 firkin = 9 gallons
1 peck = 1-4 bushel = 537.605 cubic inches.
1 dry quart = 1-32 bushel = 1-8 peck = 67.200625 cubic inches.
1 dry pint = 1-64 bushel = 1-2 dry quart = 33.600-3125 cubic inches.
1 barrel (for fruit, vegetables and other dry commodities) = 7056 cubic inches = 105 dry quarts.

The barrel capacity was fixed by United States statute, approved March 4, 1915.

## MASS.

*Fundamental Units:*

A kilogram is a unit of mass equivalent to the mass of the international prototype kilogram at the International Bureau of Weights and Measures.

An avoirdupois pound is a unit of mass equivalent to 0.4535924277 kilogram.

A gram is a unit of mass equivalent to one-thousandth of the mass of the international prototype kilogram at the International Bureau of Weights and Measures.

A troy pound is a unit of mass equivalent to 5760-7000 of that of the avoirdupois pound.

*Multiples and Submultiples:*

1 metric ton = 1000 kilograms.
1 hectogram = 100 grams = 0.1 kilogram.
1 dekagram = 10 grams = 0.01 kilogram.
1 decigram = 0.1 gram.
1 centigram = 0.01 gram.
1 milligram = 0.001 gram.
1 avoirdupois ounce = 1-16 avoirdupois pound.
1 avoirdupois dram = 1-256 avoirdupois pound = 1-16 avoirdupois ounce.
1 grain = 1-7000 avoirdupois pound = 10-4375 avoirdupois ounce = 1-5760 troy pound.
1 apothecaries' pound = 1 troy pound = 5760-7000 avoirdupois pound.
1 apothecaries' or troy ounce = 1-12 troy pound = 480-7000 avoirdupois pound = 480 grains.
1 apothecaries dram = 1-96 apothecaries' pound = 1-8 apothecaries' ounce = 60 grains.
1 pennyweight = 1-20 troy ounce = 24 grains.
1 apothecaries' scruple = 1-3 apothecaries' dram = 20 grains.
1 metric carat = 200 milligrams = 0.2 gram.
1 short hundredweight = 100 avoirdupois pounds.
1 long hundredweight = 112 avoirdupois pounds.
1 short ton = 2000 avoirdupois pounds.
1 long ton = 2240 avoirdupois pounds.

## FEET, YARDS, MILES, WITH METRIC EQUIVALENTS.

(By S. W. Stratton, Director of the United States Bureau of Standards, Department of Commerce.)

| Feet | Meters | Meters | Feet | Cubic Yards | Cubic Meters | Cubic Meters | Cubic Yards | Miles | Kilometers | Kilometers | Miles |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 1 | 0.30480 | 1 | 3.28083 | 1 | 0.76456 | 1 | 1.30794 | 1 | 1.6093 | 1 | 0.62137 |
| 2 | .60960 | 2 | 6.56167 | 2 | 1.52912 | 2 | 2.61589 | 2 | 3.2187 | 2 | 1.24274 |
| 3 | .91440 | 3 | 9.84250 | 3 | 2.29368 | 3 | 3.92383 | 3 | 4.8280 | 3 | 1.86411 |
| 4 | 1.21920 | 4 | 13.12333 | 4 | 3.05824 | 4 | 5.23177 | 4 | 6.4374 | 4 | 2.48548 |
| 5 | 1.52400 | 5 | 16.40417 | 5 | 3.82280 | 5 | 6.53971 | 5 | 8.0467 | 5 | 3.10685 |
| 6 | 1.82880 | 6 | 19.68500 | 6 | 4.58736 | 6 | 7.84766 | 6 | 9.6561 | 6 | 3.72822 |
| 7 | 2.13360 | 7 | 22.96583 | 7 | 5.35192 | 7 | 9.15560 | 7 | 11.2654 | 7 | 4.34959 |
| 8 | 2.43840 | 8 | 26.24667 | 8 | 6.11648 | 8 | 10.46354 | 8 | 12.8748 | 8 | 4.97096 |
| 9 | 2.74321 | 9 | 29.52750 | 9 | 6.88104 | 9 | 11.77148 | 9 | 14.4841 | 9 | 5.59233 |
| 10 | 3.04801 | 10 | 32.80833 | 10 | 7.64559 | 10 | 13.07943 | 10 | 16.0935 | 10 | 6.21370 |
| 1 | 3.35281 | 1 | 36.08917 | 1 | 8.41015 | 1 | 14.38737 | 1 | 17.7028 | 1 | 6.83507 |
| 2 | 3.65761 | 2 | 39.37000 | 2 | 9.17471 | 2 | 15.69531 | 2 | 19.3122 | 2 | 7.45644 |
| 3 | 3.96241 | 3 | 42.65083 | 3 | 9.93927 | 3 | 17.00326 | 3 | 20.9215 | 3 | 8.07781 |
| 4 | 4.26721 | 4 | 45.93167 | 4 | 10.70383 | 4 | 18.31120 | 4 | 22.5309 | 4 | 8.69918 |
| 5 | 4.57201 | 5 | 49.21250 | 5 | 11.46839 | 5 | 19.61914 | 5 | 24.1402 | 5 | 9.32055 |
| 6 | 4.87681 | 6 | 52.49333 | 6 | 12.23295 | 6 | 20.92708 | 6 | 25.7496 | 6 | 9.94192 |
| 7 | 5.18161 | 7 | 55.77417 | 7 | 12.99751 | 7 | 22.23503 | 7 | 27.3589 | 7 | 10.56329 |

MILES, ACRES, QUARTS, ETC., WITH METRIC EQUIVALENTS.

| Naut. Miles | Kilometers | Kilometers | Naut. Miles | Acres | Hectares | Hectares | Acres | Liquid Quarts | Liters | Liters | Liquid Quarts |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 1 | 1.8532 | 1 | 0.53959 | 1 | 0.40469 | 1 | 2.47104 | 1 | 0.9463 | 1 | 1.0567 |
| 2 | 3.7065 | 2 | 1.07919 | 2 | 0.80937 | 2 | 4.94209 | 2 | 1.8927 | 2 | 2.1134 |
| 3 | 5.5597 | 3 | 1.61878 | 3 | 1.21406 | 3 | 7.41313 | 3 | 2.8390 | 3 | 3.1701 |
| 4 | 7.4130 | 4 | 2.15837 | 4 | 1.61875 | 4 | 9.88418 | 4 | 3.7853 | 4 | 4.2268 |
| 5 | 9.2662 | 5 | 2.69796 | 5 | 2.02344 | 5 | 12.35522 | 5 | 4.7317 | 5 | 5.2836 |
| 6 | 11.1195 | 6 | 3.23756 | 6 | 2.42812 | 6 | 14.82626 | 6 | 5.6780 | 6 | 6.3403 |
| 7 | 12.9727 | 7 | 3.77715 | 7 | 2.83281 | 7 | 17.29731 | 7 | 6.6243 | 7 | 7.3970 |
| 8 | 14.8260 | 8 | 4.31674 | 8 | 3.23750 | 8 | 19.76835 | 8 | 7.5707 | 8 | 8.4537 |
| 9 | 16.6792 | 9 | 4.85634 | 9 | 3.64219 | 9 | 22.23940 | 9 | 8.5170 | 9 | 9.5104 |
| 10 | 18.5325 | 10 | 5.39593 | 10 | 4.04687 | 10 | 24.71044 | 10 | 9.4633 | 10 | 10.5671 |
| 1 | 20.3857 | 1 | 5.93552 | 1 | 4.45156 | 1 | 27.18148 | 1 | 10.4097 | 1 | 11.6238 |
| 2 | 22.2390 | 2 | 6.47512 | 2 | 4.85625 | 2 | 29.65253 | 2 | 11.3560 | 2 | 12.6805 |
| 3 | 24.0922 | 3 | 7.01471 | 3 | 5.26093 | 3 | 32.12357 | 3 | 12.3023 | 3 | 13.7372 |
| 4 | 25.9455 | 4 | 7.55430 | 4 | 5.66562 | 4 | 34.59462 | 4 | 13.2487 | 4 | 14.7939 |
| 5 | 27.7987 | 5 | 8.09390 | 5 | 6.07031 | 5 | 37.06566 | 5 | 14.1950 | 5 | 15.8507 |
| 6 | 29.6520 | 6 | 8.63349 | 6 | 6.47300 | 6 | 39.53670 | 6 | 15.1413 | 6 | 16.9074 |
| 7 | 31.5052 | 7 | 9.17308 | 7 | 6.87968 | 7 | 42.00775 | 7 | 16.0877 | 7 | 17.9641 |
| 8 | 33.3585 | 8 | 9.71267 | 8 | 7.28437 | 8 | 44.47879 | 8 | 17.0340 | 8 | 19.0208 |
| 9 | 35.2117 | 9 | 10.25227 | 9 | 7.68906 | 9 | 46.94983 | 9 | 17.9803 | 9 | 20.0775 |
| 20 | 37.0650 | 20 | 10.79186 | 20 | 8.09375 | 20 | 49.42088 | 20 | 18.9267 | 20 | 21.1342 |
| 1 | 38.9182 | 1 | 11.33145 | 1 | 8.49843 | 1 | 51.89192 | 1 | 19.8739 | 1 | 22.1909 |
| 2 | 40.7715 | 2 | 11.87105 | 2 | 8.90312 | 2 | 54.36297 | 2 | 20.8193 | 2 | 23.2476 |
| 3 | 42.6247 | 3 | 12.41064 | 3 | 9.30781 | 3 | 56.83401 | 3 | 21.7657 | 3 | 24.3043 |

| Gallons | Liters | Liters | Gallons | Pounds | Kilos | Kilos | Pounds | Bushels | Hectoliters | Hectoliters | Bushels |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 1 | 3.7853 | 1 | 0.26418 | 1 | 0.45359 | 1 | 2.2046 | 1 | 0.35238 | 1 | 2.8378 |
| 2 | 7.5707 | 2 | 0.52836 | 2 | .90718 | 2 | 4.4092 | 2 | 0.70477 | 2 | 5.6756 |
| 3 | 11.3560 | 3 | 0.79253 | 3 | 1.36078 | 3 | 6.6139 | 3 | 1.05715 | 3 | 8.5135 |
| 4 | 15.1413 | 4 | 1.05671 | 4 | 1.81437 | 4 | 8.8185 | 4 | 1.40953 | 4 | 11.3513 |
| 5 | 18.9267 | 5 | 1.32089 | 5 | 2.26796 | 5 | 11.0231 | 5 | 1.76192 | 5 | 14.1891 |
| 6 | 22.7120 | 6 | 1.58507 | 6 | 2.72155 | 6 | 13.2277 | 6 | 2.11430 | 6 | 17.0269 |
| 7 | 26.4973 | 7 | 1.84924 | 7 | 3.17515 | 7 | 15.4324 | 7 | 2.46668 | 7 | 19.8647 |
| 8 | 30.2827 | 8 | 2.11342 | 8 | 3.62874 | 8 | 17.6370 | 8 | 2.81907 | 8 | 22.7026 |
| 9 | 34.0680 | 9 | 2.37760 | 9 | 4.08233 | 9 | 19.8416 | 9 | 3.17145 | 9 | 25.5404 |
| 10 | 37.8533 | 10 | 2.64178 | 10 | 4.53592 | 10 | 22.0462 | 10 | 3.52383 | 10 | 28.3782 |
| 1 | 41.6387 | 1 | 2.90595 | 1 | 4.98952 | 1 | 24.2508 | 1 | 3.87622 | 1 | 31.2160 |
| 2 | 45.4240 | 2 | 3.17013 | 2 | 5.44311 | 2 | 26.4555 | 2 | 4.22860 | 2 | 34.0538 |
| 3 | 49.2093 | 3 | 3.43431 | 3 | 5.89670 | 3 | 28.6601 | 3 | 4.58098 | 3 | 36.8916 |
| 4 | 52.9947 | 4 | 3.69849 | 4 | 6.35029 | 4 | 30.8647 | 4 | 4.93337 | 4 | 39.7295 |
| 5 | 56.7800 | 5 | 3.96266 | 5 | 6.80389 | 5 | 33.0693 | 5 | 5.28575 | 5 | 42.5673 |
| 6 | 60.5653 | 6 | 4.22684 | 6 | 7.25748 | 6 | 35.2740 | 6 | 5.63813 | 6 | 45.4051 |
| 7 | 64.3506 | 7 | 4.49102 | 7 | 7.71107 | 7 | 37.4786 | 7 | 5.99052 | 7 | 48.2429 |
| 8 | 68.1360 | 8 | 4.75520 | 8 | 8.16466 | 8 | 39.6832 | 8 | 6.34290 | 8 | 51.0807 |
| 9 | 71.9213 | 9 | 5.01937 | 9 | 8.61826 | 9 | 41.8878 | 9 | 6.69528 | 9 | 53.9186 |
| 20 | 75.7066 | 20 | 5.28355 | 20 | 9.07185 | 20 | 44.0924 | 20 | 7.04767 | 20 | 56.7564 |
| 1 | 79.4920 | 1 | 5.54773 | 1 | 9.52544 | 1 | 46.2971 | 1 | 7.40005 | 1 | 59.5942 |
| 2 | 83.2773 | 2 | 5.81191 | 2 | 9.97903 | 2 | 48.5017 | 2 | 7.75243 | 2 | 62.4320 |
| 3 | 87.0626 | 3 | 6.07608 | 3 | 10.43263 | 3 | 50.7063 | 3 | 8.10482 | 3 | 65.2698 |

## ENERGY RESOURCES OF THE WORLD.

THE United States is literally the most powerful country in the world, according to a statement made by Dr. Thomas T. Read of the Federal Bureau of Mines, before the School of Foreign Service of Georgetown University. "The real basis of power of a nation is its energy resources rather than its man-power strength," said Dr. Read. "The modern way to use the energy of a man is to employ it in a way similar to the little detonator of the big explosive shell—the little charge sets off the big one and does an amount of work far in excess of its own capacity. The energy output of an average workman is about a tenth of a horsepower. The energy expended by a coal miner in an eight-hour day thus amounts to about that available from two pounds of coal. A Japanese miner who gets out 1,400 pounds of coal a day, thus multiplies his energy by 700. It is somewhat like planting one grain of wheat and having 700 grow from it.

"The American miner gets out 8,800 pounds of coal in a day and so multiplies his energy by 4,400. There are 41,000,000 wage earners in the United States and their energy output is a little over 4,000,000 horsepower, or only nine times the potential energy output in the form of coal of 100 miners. The power minerals, coal, petroleum, and waterpower, are, therefore, the real sources of strength in an industrial civilization. Just where the United States stands on this basis is best brought out by some comparative figures which may be stated in millions of horsepower years, so that the figures will be easier to handle. Taking the estimates of probable and possible available coal, petroleum, and waterpower in the principal countries of the world, and reckoning them in terms of millions of horsepower years, they line up something like this:

| COUNTRY. | Coal (Millions of Hp. Years). | Petr'le'm (Millions of Hp. Years). | Waterpower (Millions of Hp. Years). | COUNTRY. | Coal (Millions of Hp. Years). | Petr'le'm (Millions of Hp. Years). | Waterpower (Millions of Hp. Years). |
|---|---|---|---|---|---|---|---|
| United States | 500,000 | 400 | 37 | Australasia | 19,000 | (?) | 4 |
| China | 200,000 | 60 | 20 | Russia | 17,000 | 280 | 16 |
| Germany | 48,000 | 2 | 2½ | Poland and Czecho-Slovakia | 14,000 | 45 | 1 |
| Canada | 40,000 | 40 | 22½ | India | 11,000 | 70 | 27 |
| Great Britain | 27 000 | (?) | 1 | | | | |

"No other country has as much as one-fiftieth part of the total energy resources as the United States. The United States had resources before 1492 even greater than now because they were all unused. China is in somewhat the same position to-day as the United States was 400 years ago. Japan, on the other hand, is an example of a country that has developed its very limited resources to a large extent. Japan's energy resources are less than one five-hundredth part of those of the United States, and therefore the Japanese cannot afford to use their energy for rough uses that require large quantities, such as in breaking stone.

## CLASSIFICATION OF ROCKS AND DIVISIONS OF GEOLOGIC TIME.

(Prepared by the U. S. Geological Survey.)

THE rocks composing the earth's crust are grouped by geologists into three great classes—igneous, sedimentary, and metamorphic. The igneous rocks have solidified from a molten state. Those that have solidified beneath the surface are known as intrusive rocks. Those that have flowed out over the surface are known as effusive rocks, extrusive rocks, or lavas. The term volcanic rock includes not only lavas but bombs, pumice, tuff, volcanic ash and other fragmental materials thrown out from volcanoes. Sedimentary rocks are formed by the accumulation of sediment in water (aqueous deposits or eolian deposits). The sediment may consist of rock fragments or particles of various sizes (conglomerate, sandstone, shale); of the remains or products of animals or plants (certain limestones and coal); of the product of chemical action or of evaporation (salt, gypsum, &c.); or of mixtures of these materials. A characteristic feature of sedimentary deposits is a layered structure known as bedding or stratification. Metamorphic rocks are derivatives of igneous or sedimentary rocks produced through mechanical or chemical activities in the earth's crust. The unaltered sedimentary rocks are commonly stratified, and it is from their order of succession and that of their contained fossils that the fundamental data of historical geology have been deduced.

| ERA. | Period. | Epoch. | Characteristic Life. |
|---|---|---|---|
| Cenozoic (RecentLife.) | Quaternary. | Recent.<br>Pleistocene, or Glacial. | "Age of man." Animals and plants of modern types. |
| | Tertiary. | Pliocene.<br>Miocene.<br>Oligocene.<br>Eocene. | "Age of mammals." Possible first appearance of man. Rise and development of highest orders of plants. |
| Mesozoic. (Intermedate Life) | Cretaceous. | Upper.<br>Lower | "Age of reptiles." Rise and culmination of huge land reptiles (dinosaurs). First appearance of birds and mammals; and palms and hardwood trees. |
| | Jurassic. | | |
| | Triassic | | |
| Paleozoic. (Old Life.) | Carboniferous. | Permian.<br>Pennsylvanian.<br>Mississippian. | "Age of amphibians." Dominance of tree ferns and huge mosses. Primitive flowering plants and earliest cone-bearing trees. Beginnings of backboned land animals. Insects. |
| | Devonian. | | "Age of fishes." Shellfish (mollusks) also abundant. Rise of amphibians and land plants. |
| | Silurian. | | Shell-forming sea animals dominant. Rise of fishes and of reef-building corals. |
| | Ordovician. | | Shell-forming sea animals. Culmination of the buglike marine crustaceans known as trilobites. First trace of insect life. |
| | Cambrian. | | Trilobites, brachiopods and other sea shells. Seaweeds (algae) abundant. No trace of land animals. |
| Proterozoic. (Primordial Life.) | Algonkian. | | First life that has left distinct record. Crustaceans, brachiopods and seaweeds. |
| | Archean. | Crystalline Rocks. | No fossils found. |

### EARTHQUAKE AREAS OF THE EARTH.

| AREA. | Earthquakes. | AREA. | Earthquakes. | AREA. | Earthquakes. |
|---|---|---|---|---|---|
| Scandinavian | 646 | Greece | 10,306 | United States, Atlantic Coast | 937 |
| British Isles | 1,139 | Russia | 258 | Mexico | 5,586 |
| France | 2,793 | Asia Minor | 4,451 | Central America | 2,739 |
| Spain and Portugal | 2,656 | India | 813 | West Indies | 2,561 |
| Switzerland | 3,895 | Japan | 27,562 | South America | 8,081 |
| Italy | 27,672 | Africa | 179 | Java | 2,155 |
| Holland and North Germany | 2,326 | Atlantic Islands | 1,704 | Australia and Tasmania | 83 |
| Sicily | 4,331 | United States, Pacific Coast | 4,467 | New Zealand | 1,925 |

### LAND AND WATER AREAS.

THE superficial area of the earth is 196,940,000 square miles—140,295,000 square miles of water and 56,255,000 square miles of land. The three great oceans comprise the Atlantic, 41,321,000 square miles; Pacific, 68,634,000 square miles, and Indian, 29,430,000 square miles. There are about 1,000,000 square miles of lake and river surface on the land, and 1,910,000 square miles of islands in the seas. The diameter of the earth at the equator is 7,926 miles, and through the poles 7,899.6 miles. The average elevation of the land above sea level is 2,300 feet. The average depth of the ocean below sea level is 12,600 feet. The deepest place in the ocean yet found is off Mindanao, Philippine Islands, 32,088 feet. The highest mountain is Mount Everest, in the Himalayas, 29,002 feet. This gives a range of 61,090 feet or more than 11½ miles between the bottom of the oceans and the top of the land. The greatest depth in the Atlantic Ocean is near Porto Rico, 31,366 feet; in the Indian Ocean, 22,968; in the Arctic, 13,200; in the Malay, 21,342; in the Caribbean, 20,568; in the Mediterranean, 12,276; in the Bering, 13,422.

The best estimates of the earth's area place the fertile regions at 29,000,000 square miles; steppes at 14,000,000 square miles; deserts at 4,861,000 square miles.

Areas in square miles of seas: Okhotsk, 580,000; Yellow, 480,000; Japan, 405,000; Andaman, 300,000; North, 220,000; Red, 178,000; Baltic, 160,000; Hudson Bay, 472,000.

The population of the earth at the death of Emperor Augustus, estimated by Bodio, was 54,000,000. The population of Europe hardly exceeded 50,000,000 before the fifteenth century.—*Mulhall.* The population of the earth at its present ratio of gain will be about 4,000,000,000 in 2014.

Abbe Theodore Moreaux, director of the observatory of Bourges, in an article in La Revue du Ciel, declares the world to be 500,000,000 years old. Life, Abbe Moreaux says, has existed on the earth for at least 240,000,000 to 260,000,000 years, although it has not been human life. He says the moon was not once part of the earth, but was a sun, since extinct, but it formerly aided in warming the earth.

## AREA OF ISLANDS.

| Islands. | Square Miles. | Islands. | Square Miles. | Islands. | Square Miles. | Islands. | Square Miles. |
|---|---|---|---|---|---|---|---|
| Amboyna | 262 | Formosa | 14,000 | Madura | 2,000 | Reunion | 970 |
| Australia | 2,946,651 | Gotland | 1,150 | Malay Archi. *b.* | | Sakhalin | 29,100 |
| Azores *a* | 920 | Governor's | †½ | Malta | 100 | Samoan *a* | 1,100 |
| Baffin Land | 236,000 | Greenland | 827,300 | Man | 230 | Sardinia | 9,306 |
| Bahamas *a* | 5,400 | Great Britain | 88,600 | Manhattan (N. Y. City) | 22 | Scilly *a* | †30 |
| Balearic *a* | 1,935 | Guam | 210 | Martha's Vineyard | 120 | Shetland *a* | 551 |
| Banks | 25,000 | Hawaiian *a* | 6,449 | | | Sicily | 9,800 |
| Bermudas *a* | 20 | Hayti | 28,800 | Mauritius | 710 | Skye | 535 |
| Block | *8 | Hebrides *a* | 3,000 | Melville Land | 20,000 | South (N. Z.) | 58,525 |
| Borneo | 284,000 | Helgoland § | | Mindanao | 36,290 | Southampton | 17,800 |
| Bornholm | 210 | Hainan | 13,000 | Nantucket | 60 | Sumatra | 162,000 |
| Canary *a* | 2,850 | Hokkaido | 36,500 | Newfoundland | 42,000 | Tasmania | 26,200 |
| Cape Breton | 3,120 | Hongkong | 30 | New Guinea | 330,000 | Terra del Fuego | 18,500 |
| Cape Cod | 380 | Honshiu | 87,500 | New Hebrides *a* | 5,106 | Teneriffe | 900 |
| Cape Verde *a* | 1,480 | Iceland | 39,800 | North (N. Z.) | 44,468 | Trinidad | 1,750 |
| Caroline *a* | 560 | Ireland | 32,600 | North Devon | 24,000 | Tutuila | 55 |
| Celebes | 72,000 | Jamaica | 4,200 | North Somerset | 12,000 | Vancouver | 18,000 |
| Ceylon | 24,700 | Japan *c* | 160,000 | Nova Zembla | 35,000 | West Indies, British *a* | 13,750 |
| Corfu | 300 | Java | 48,400 | Orkney *a* | 375 | | |
| Corsica | 3,400 | Jersey | 45 | Pemba | 380 | Tasmania | 26,200 |
| Crete | 2,900 | Ladrones *d* | | Philippines *a* | 115,026 | Terra del Fuego | 18,500 |
| Cuba | 44,164 | Leeward *a* | 701 | Pines | 614 | Teneriffe | 900 |
| Cyprus | 3,600 | Long Is., N. Y. | 1,376 | Prince Edward | 2,134 | Trinidad | 1,750 |
| East Indies *c* | | Luzon | 41,000 | Prince of Wales | 15,000 | Tutuila | 55 |
| Ellsmere | 40,000 | Madagascar | 227,000 | Porto Rico | 3,604 | Vancouver | 18,000 |
| Falkland *a* | 5,500 | Madeira | 510 | | | West Indies, British *a* | 13,750 |
| | | | | | | W. Spitzbergen | 15,260 |
| | | | | | | Windward *a* | 519 |
| | | | | | | Zanzibar | 640 |

* Miles in length. † In circumference. ‡ In diameter. § Former German naval base—a rock rising about 175 feet above the sea, one mile long by about one-third mile wide. *a* Area of entire group. *b* See Philippines, etc. *c* See Borneo, etc. *d* See Guam.

## AREA AND POPULATION OF THE EARTH BY CONTINENTS.

| Continental Divisions. | Area in Square Miles. | Inhabitants. | | Continental Divisions. | Area in Square Miles. | Inhabitants. | |
|---|---|---|---|---|---|---|---|
| | | Number. | Per Sq. Mile. | | | Number. | Per Sq. Mile. |
| Africa | 11,622,619 | 142,000,000 | 12.2 | Europe | 3,872,561 | 476,000,000 | 122.9 |
| America, N. | 8,589,257 | 136,000,000 | 15.8 | Polar Regions | 5,081,935 | | |
| America, S. | 7,570,015 | 64,000,000 | 8.4 | | | | |
| Asia | 17,206,000 | 921,000,000 | 53.5 | Total | 57,255,000 | 1,747,000,000 | 30.5 |
| Australasia | 3,312,613 | 9,000,000 | 2.7 | | | | |

### POPULATION OF THE EARTH ACCORDING TO RACE.

| Race. | Location. | Number. | Race. | Location. | Number. |
|---|---|---|---|---|---|
| Indo-Germanic or Aryan (white) | Europe, America, Persia, India, Australia | 821,000,000 | Malay and Polynesian (brown) | Australasia | 39,500,000 |
| Mongolian or Turanian (yellow and brown) | Asia | 645,000,000 | American Indian, North and South (red and half-breeds) | West'n Hemisphere | 28,000,000 |
| Semitic (white) | Africa, Arabia, etc. | 74,500,000 | Total | | 1,747,000,000 |
| Negro and Bantu (black) | Africa | 139,000,000 | | | |

### JEWISH POPULATION OF THE WORLD.

The Jews in the world are estimated at 15,500,000, of whom 3,500,000 are in the United States (1,500,000 in N. Y. City); 10,500,000 in Europe; in Asia, 500,000; and the rest chiefly in Africa and South America.

## UPPER AIR WINDS AND CONDITIONS.

Numerous observations with kites and balloons give the following information relative to upper air winds:

1. In general winds a short distance above the ground blow from points slightly to the right of those at the surface; at greater heights this clockwise turning increases in the case of southerly winds, i. e., ESE to WSW, but northerly winds, especially those from NNW to ENE, turn counter-clockwise with altitude. For example, above SE winds at the surface there are found SSW to WSW winds as a rule; above NE winds, it is usual to find NNW to WNW winds.

2. On the average, wind speeds increase sharply, about 100%, within 1,500 feet above the surface. This rule applies to all directions. At greater heights the increase is more gradual, and in many cases, especially with easterly winds in summer, there is an actual decrease. The largest increases are found above surface SW to NW winds.

3. Winds in the upper air are prevailingly from a westerly direction, i. e., SSW to NNW. At heights of two or three miles and thence to six or seven miles this preponderance amounts to about 90%. When easterly winds are found at these heights they are usually of low velocity. Westerly winds, on the other hand, continue to increase in speed, reaching a maximum at altitudes of about six or seven miles. At still greater heights a decrease in speed is found.

4. The characteristics indicated in 1, 2, and 3 are more pronounced in winter than in summer and in the northern than in the southern part of the country.

5. Although westerly winds are usually found, they are not to be placed in the category of "trade winds," since large variations, both in speed and direction, are found from place to place, from season to season, and even from day to day.

The Weather Bureau, Washington, D. C., issues twice daily "flying weather" forecasts which are sent to all aviation fields in the country and in addition are broadcast from Arlington, so that any one having a radio receiving set can easily obtain information as to the probable upper air conditions of wind, etc. A similar message is broadcast from San Francisco for the benefit of Pacific Coast flyers. In addition to this service, the Weather Bureau is in possession of much detailed information as to upper air conditions, means, extremes, etc., and careful attention is always given to specific requests by letter, or otherwise, for such information.

AVERAGE UPPER AIR CONDITIONS AT ABOUT LATITUDE 40° IN THE U. S.
*SUMMER.*

| Altitude, M. S. L. Feet. | Pressure, Inches. | Temperature, ° F. | Vapor Pressure, Inches. | Density. Pct. Standard. | Density. Lbs. Per Cubic Foot. | Altitude, M. S. L. Feet. | Pressure, Inches. | Temperature, ° F. | Vapor Pressure, Inches. | Density. Pct. Standard. | Density. Lbs. Per Cubic Foot. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.94 | 77.0 | .65 | 90.9 | .0734 | 16,000 | 16.67 | 23.5 | .06 | 56.6 | .0457 |
| 1,000 | 28.92 | 73.5 | .57 | 88.4 | .0714 | 18,000 | 15.42 | 16.0 | .05 | 53.2 | .0429 |
| 2,000 | 27.92 | 70.5 | .50 | 85.9 | .0694 | 20,000 | 14.24 | 8.5 | .03 | 49.9 | .0403 |
| 3,000 | 26.95 | 67.0 | .43 | 83.6 | .0674 | 25,000 | 11.61 | —10.5 | ..... | 42.5 | .0343 |
| 4,000 | 26.01 | 64.0 | .37 | 81.2 | .0655 | 30,000 | 9.39 | —28.0 | ..... | 35.7 | .0288 |
| 5,000 | 25.10 | 60.5 | .32 | 78.9 | .0637 | 35,000 | 7.52 | —46.0 | ..... | 29.9 | .0241 |
| 6,000 | 24.22 | 57.0 | .27 | 76.7 | .0619 | 40,000 | 5.97 | —62.5 | ..... | 24.7 | .0199 |
| 7,000 | 23.35 | 54.0 | .23 | 74.4 | .0600 | 45,000 | 4.71 | —67.0 | ..... | 19.7 | .0159 |
| 8,000 | 22.52 | 50.5 | .20 | 72.3 | .0583 | 50,000 | 3.71 | —67.0 | ..... | 15.5 | .0125 |
| 9,000 | 21.71 | 47.5 | .17 | 70.1 | .0566 | 55,000 | 2.92 | —67.0 | ..... | 12.2 | .0099 |
| 10,000 | 20.92 | 44.0 | .15 | 68.0 | .0549 | 60,000 | 2.30 | —67.0 | ..... | 9.6 | .0078 |
| 12,000 | 19.42 | 37.0 | .12 | 64.1 | .0517 | 65,000 | 1.81 | —67.0 | ..... | 7.6 | .0061 |
| 14,000 | 18.00 | 30.0 | .09 | 60.3 | .0487 | | | | | | |

AVERAGE UPPER AIR CONDITIONS AT ABOUT LATITUDE 40° IN THE U. S.
*WINTER.*

| Altitude, M. S. L. Feet. | Pressure, Inches. | Temperature, ° F. | Vapor Pressure, Inches. | Density. Pct. Standard. | Density. Lbs. Per Cubic Foot. | Altitude, M. S. L. Feet. | Pressure, Inches. | Temperature, ° F. | Vapor Pressure, Inches. | Density. Pct. Standard. | Density. Lbs. Per Cubic Foot. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.12 | 28.5 | .13 | 101.2 | .0817 | 16,000 | 16.07 | — 3.5 | .01 | 57.9 | .0467 |
| 1,000 | 28.99 | 27.5 | .11 | 97.6 | .0788 | 18,000 | 14.80 | —11.0 | ..... | 54.2 | .0437 |
| 2,000 | 27.89 | 26.5 | .10 | 94.1 | .0760 | 20,000 | 13.60 | —18.5 | ..... | 50.6 | .0409 |
| 3,000 | 26.84 | 26.5 | .09 | 90.6 | .0731 | 25,000 | 10.95 | —37.5 | ..... | 42.6 | .0344 |
| 4,000 | 25.82 | 26.0 | .08 | 87.2 | .0704 | 30,000 | 8.73 | —52.5 | ..... | 35.2 | .0284 |
| 5,000 | 24.84 | 24.5 | .07 | 84.2 | .0679 | 35,000 | 6.92 | —61.0 | ..... | 28.5 | .0230 |
| 6,000 | 23.90 | 23.5 | .06 | 81.2 | .0655 | 40,000 | 5.46 | —65.5 | ..... | 22.8 | .0184 |
| 7,000 | 22.99 | 22.0 | .06 | 78.4 | .0632 | 45,000 | 4.31 | —67.0 | ..... | 18.0 | .0146 |
| 8,000 | 22.12 | 20.0 | .06 | 75.7 | .0611 | 50,000 | 3.39 | —67.0 | ..... | 14.2 | .0115 |
| 9,000 | 21.27 | 17.5 | .05 | 73.2 | .0591 | 55 000 | 2.67 | —67.0 | ..... | 11.2 | .0090 |
| 10,000 | 20.45 | 15.5 | .04 | 70.6 | .0570 | 60,000 | 2.11 | —67.0 | ..... | 8.8 | .0071 |
| 12,000 | 18.89 | 9.5 | .03 | 66.1 | .0534 | 65,000 | 1.66 | —67.0 | ..... | 7.0 | .0056 |
| 14,000 | 17.44 | 3.0 | .02 | 61.9 | .0500 | | | | | | |

AVERAGE UPPER AIR CONDITIONS AT ABOUT LATITUDE 40° IN THE U. S.
*ANNUAL.*

| Altitude, M. S. L. Feet. | Pressure, Inches. | Temperature, ° F. | Vapor Pressure, Inches. | Density. Pct. Standard. | Density. Lbs. Per Cubic Foot. | Altitude, M. S. L. Feet. | Pressure, Inches. | Temperature, ° F. | Vapor Pressure, Inches. | Density. Pct. Standard. | Density. Lbs. Per Cubic Foot. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.03 | 52.5 | .34 | 95.9 | .0774 | 16,000 | 16.38 | 10.0 | .03 | 57.3 | .0462 |
| 1,000 | 28.95 | 50.5 | .30 | 92.9 | .0750 | 18,000 | 15.12 | 2.5 | .02 | 53.7 | .0434 |
| 2,000 | 27.91 | 48.5 | .27 | 89.9 | .0726 | 20,000 | 13.93 | — 5.0 | .01 | 50.3 | .0406 |
| 3,000 | 26.90 | 47.0 | .23 | 86.9 | .0702 | 25,000 | 11.29 | —24.0 | ..... | 42.6 | .0344 |
| 4,000 | 25.93 | 45.0 | .20 | 84.2 | .0679 | 30,000 | 9.07 | —40.5 | ..... | 35.6 | .0287 |
| 5,000 | 24.98 | 42.5 | .18 | 81.5 | .0658 | 35,000 | 7.22 | —53.5 | ..... | 29.2 | .0236 |
| 6,000 | 24.07 | 40.5 | .16 | 78.9 | .0637 | 40,000 | 5.72 | —64.0 | ..... | 23.8 | .0192 |
| 7,000 | 23.18 | 38.0 | .14 | 76.4 | .0616 | 45,000 | 4.51 | —67.0 | ..... | 18.9 | .0152 |
| 8,000 | 22.33 | 35.0 | .12 | 74.0 | .0597 | 50,000 | 3.55 | —67.0 | ..... | 14.9 | .0120 |
| 9,000 | 21.50 | 32.5 | .11 | 71.6 | .0578 | 55,000 | 2.80 | —67.0 | ..... | 11.7 | .0095 |
| 10,000 | 20.70 | 29.5 | .09 | 69.4 | .0560 | 60,000 | 2.20 | —67.0 | ..... | 9.2 | .0074 |
| 12,000 | 19.16 | 23.0 | .07 | 65.1 | .0526 | 65,000 | 1.74 | —67.0 | ..... | 7.3 | .0059 |
| 14,000 | 17.73 | 16.5 | .05 | 61.1 | .0493 | | | | | | |

Standard density, as here used and as generally defined, is that of dry air at a pressure of 29.92 inches and temperature of 32° F. (or 760 mm. and 0° C., respectively) at latitude 45°.

## CHIEF VOLCANIC PEAKS OF THE WORLD.

| *Peak and Country.* | *Altitude.* | *Peak and Country.* | *Altitude.* | *Peak and Country.* | *Altitude.* |
|---|---|---|---|---|---|
| Sahama, Bolivia | 21,000 | Fujiyama, Japan | 12,365 | Ruapehu, New Zealand | 9,008 |
| Pomarepe, Chili | 20,500 | Erebus, South Pacific | 12,360 | Hualalai, Hawaii | 8,275 |
| Cotopaxi, Ecuador | 19,550 | Semeru, Java | 12,000 | Coseguina, Nicaragua | 5,830 |
| Misti, Peru | 19,200 | Kirungu-Cha-Gungo, Central Africa | 11,300 | Aso-San, Japan | 5,600 |
| Demavena, Persia | 18,000 | Irazu, Costa Rica | 11,200 | La Pelee, Martinique, W. I. | 5,200 |
| Popocatepetl, Mexico | 17,843 | Turri Alba, Costa Rica | 10,900 | Hecla, Iceland | 5,100 |
| Sangay, Ecuador | 17,124 | Terror, South Pacific | 10,884 | Kilauea, Hawaii | 4,400 |
| Ararat, Persia | 17,000 | Etna, Italy | 10,755 | Vesuvius, Italy | 4,300 |
| Mauna Loa, Hawaii | 13,675 | Ontake, Japan | 10,000 | Soufriere, St. Vincent, W. I. | 4 050 |
| Santa Maria, Guatemala | 12,500 | Tateyama, Japan | 10,000 | Stromboli, Mediterranean Isle | 3,040 |
| Fuego, Guatemala | 12,500 | | | Skaptar Jokul, Iceland | 2,790 |

## CHIEF ASIAN PEAKS.

THE HIMALAYAS.

| *Mountains.* | *Feet.* |
|---|---|
| Mount Everest | 29,002 |
| Godwin-Austen (K2 or Dapsang) | 28,278 |
| Kinchinjinga | 28,156 |
| Makalu | 27,790 |
| Dhawalagiri | 26,826 |
| Nanga-Parbat | 26,629 |
| Nandadevi | 25,700 |
| Chumalhari | 23,944 |
| Trisul | 23,400 |
| Dunagiri | 23,200 |
| Kedarnath | 22,900 |
| Panch Chuli | 22,700 |
| Api | 22,700 |
| Nanda Kot | 22,600 |
| Badarinath | 22,400 |
| Yirnajang | 21,300 |
| Dhaola-dhar (White Mt.) | 17,000 |

There are several hundred peaks in the Himalayas 20,000 feet or over in altitude. The Himalayan range is in places 500 miles wide, as against a width of 50 to 75 miles in the Alps.

OTHER ASIAN PEAKS.

| *Mountains and Country.* | *Feet.* |
|---|---|
| Tiratch-Mir, Afghanistan | 25,400 |
| Ulug Mustagh, Tibet | 25,300 |
| Tengri Khan, China | 24,132 |
| Aling Gungri, Tibet | 24,000 |
| Kinting-Shan, China | 18,000 |
| Koh-i-Dena, Persia | 17,000 |
| Hong-Shan, China | 16,400 |
| Klutchev, Kamtchatka | 15,750 |
| Bielukha ("White"), Siberia | 14,800 |
| Kinabalu, Borneo | 13,690 |
| Mount Morrison, Formosa | 13,595 |

Great Britain in 1922 sent an expedition to climb Mount Everest, but the attempt failed. The height is yet to be definitely ascertained.

in

## THE ALTITUDES OF THE GLOBE.

### HIGHEST AND LOWEST CONTINENTAL ALTITUDES.

| CONTINENTS. | HIGHEST POINT. | Elevation (Ft.). | Lowest Point. | Below Sea Level (Ft.). |
|---|---|---|---|---|
| North America | Mount McKinley, Alaska | 20,300 | Death Valley, California | 276 |
| South America | Mount Aconcagua, Chile-Argentina | 23,080 | Sea level | ..... |
| Europe | Mont El Bruz, Caucasus | 18,465 | Caspian Sea, Russia | 86 |
| Asia | Mount Everest, India-China | 29,002 | Dead Sea, Palestine | 1,290 |
| Africa | Kibo Peak, East Africa | 19,320 | Desert of Sahara | 150 |
| Australia | Mount Kosciusko, New South Wales | 7,777 | Lake Torrens, South Australia | 25 |

### HIGHEST AND LOWEST ALTITUDES IN THE UNITED STATES.

(Data supplied by the United States Geological Survey. Sign — means below sea level.)

NOTE.—For extended tables of altitudes of places, mountains, and lakes in the various States of the Union, see the 1922 ALMANAC.

| STATE. | HIGHEST POINT. | | | LOWEST POINT. | | | Approximate Mean Elevation (Feet). |
|---|---|---|---|---|---|---|---|
| | Name. | County. | Elevation (Feet). | Name. | County. | Elevation (Feet). | |
| Alabama | Cheaha Mountain | Clay-Talladega | 2,407 | Gulf of Mexico | ..... | Sea lev. | 500 |
| Alaska | Mount McKinley | ..... | 20,300 | Pacific Ocean | ..... | Sea lev. | ..... |
| Arizona | S. Francisco Peak | Coconino | 12,611 | Colorado R. | Yuma | 100 | 4,100 |
| Arkansas | Blue Mountain / Magazine Mountain | Polk-Scott / Logan | 2,800 / 2,800 | Ouachita R. | Ashley-Un. | 55 | 650 |
| California | Mount Whitney | Inyo-Tulare | 14,501 | Death Valley | Inyo | —276 | 2,900 |
| Canal Zone | Cerro Galera | S. W. part Zone | 1,223 | ..... | ..... | ..... | ..... |
| Colorado | Mount Elbert | Lake | 14,420 | Arkansas R. | Prowers | 3,350 | 6,800 |
| Connecticut | Bear Mountain | Litchfield | 2,355 | L. I. Sound | ..... | Sea lev. | 500 |
| Delaware | Centreville | New Castle | 440 | Atlantic Ocean | ..... | Sea lev. | 60 |
| Dist. of Col. | Tenleytown | N. W. part | 420 | Potomac R. | ..... | Sea lev. | 150 |
| Florida | Iron Mountain | Polk | 325 | Atlantic Ocean | ..... | Sea lev. | 100 |
| Georgia | Brasstown Bald | Towns-Union | 4,768 | Atlantic Ocean | ..... | Sea lev. | 600 |
| Guam | Mt. Hun'y'gManglo | ..... | 1,27 | Pacific Ocean | ..... | Sea lev. | ..... |
| Hawaii | Mauna Kea | Hawaii | 13,823 | Pacific Ocean | ..... | Sea lev. | ..... |
| Idaho | Hyndman Peak | Blaine-Custer | 12,078 | Snake R. | Nez Perce | 720 | 5,000 |
| Illinois | Charles Mound | Jo Daviess | 1,241 | Mississippi R. | Alexander | 279 | 600 |
| Indiana | Carlos | Randolph | 1,210 | Ohio R. | Vanderb'g | 316 | 700 |
| Iowa | On N. boundary | Osceola | 1,600 | Mississippi R. | Lee | 477 | 1,100 |
| Kansas | On W. boundary | Gre'ley-Wal'ce | 4,135 | Verdigris R. | Montg'm'y | 700 | 2,000 |
| Kentucky | Big Black Mountain | Harlan | 4,100 | Mississippi R. | Fulton | 257 | 750 |
| Louisiana | N.W.part of county | Claiborne | 400 | Gulf of Mexico | ..... | Sea lev. | 100 |
| Maine | Mount Katahdin | Piscataquis | 5,273 | Atlantic Ocean | ..... | Sea lev. | 600 |
| Maryland | Backbone Mountain | Garrett | 3,340 | Atlantic Ocean | ..... | Sea lev. | 350 |
| Massachusetts | Mount Greylock | Berkshire | 3,505 | Atlantic Ocean | ..... | Sea lev. | 500 |
| Michigan | Porcupine Mount ns | Ontonagon | 2,023 | Lake Erie | ..... | 573 | 900 |
| Minnesota | Mesabi Range | St. Louis | 1,920 | Lake Superior | ..... | 602 | 1,200 |
| Mississippi | Near Iuka | Tishomingo | 780 | Gulf of Mexico | ..... | Sea lev. | 300 |
| Missouri | Taum Sauk M't'n | Iron | 1,750 | St. Francis R. | Dunklin | 230 | 800 |
| Montana | Granite Peak | Carbon | 12,850 | Kootenai R. | Flathead | 1,800 | 3,400 |
| Nebraska | S.W.part of county | Banner | 5,350 | S.E. cor. State | Richardson | 825 | 2,600 |
| Nevada | Boundary Peak | Esmeralda | 13,145 | Colorado R. | Clark | 470 | 5,500 |
| New Hampshire | Mt. Washington | Coos | 6,293 | Pacific Ocean | ..... | Sea lev. | 1,000 |
| New Jersey | High Point | Sussex | 1,805 | Atlantic Ocean | ..... | Sea lev. | 250 |
| New Mexico | North Truchas Peak | Rio Arriba | 13,306 | Red Bluff | Eddy | 2,876 | 5,700 |
| New York | Mount Marcy | Essex | 5,344 | Atlantic Ocean | ..... | Sea lev. | 900 |
| North Carolina | Mount Mitchell | Yancey | 6,711 | Atlantic Ocean | ..... | Sea lev. | 700 |
| North Dakota | Summit of county | Bowman | 3,500 | Pembina | Pembina | 790 | 1,900 |
| Ohio | Near Bellefontaine | Logan | 1,550 | Ohio R. | Hamilton | 425 | 850 |
| Oklahoma | Black Mesa | Cimarron | 4,800 | Red R. | Mc Curtain | 300 | 1,300 |
| Oregon | Mount Hood | Clackamas R. | 11,253 | Pacific Ocean | ..... | Sea lev. | 3,300 |
| Pennsylvania | Mount Davis | Somerset | 3,213 | Delaware R. | ..... | Sea lev. | 1,100 |
| Philippine Islands | Mount Apo | Mindanao Is. | 9,610 | Pacific Ocean | ..... | Sea lev. | ..... |
| Porto Rico | Luquillo Mountains | Humacao | 3,532 | Atlantic Ocean | ..... | Sea lev. | ..... |
| Rhode Island | Durfee Hill | Providence | 805 | Atlantic Ocean | ..... | Sea lev. | 200 |
| South Carolina | Sassafras Mountain | S. C.-N. C. line | 3,548 | Atlantic Ocean | ..... | Sea lev. | 350 |
| South Dakota | Harney Peak | Pennington | 7,242 | Big Stone Lake | Roberts | 962 | 2,200 |
| Tennessee | Clingman's Dome | Tenn.-N. C. line | 6,644 | Mississippi R. | Shelby | 182 | 900 |
| Texas | El Capitan | El Paso | 9,020 | Gulf of Mexico | ..... | Sea lev. | 1,700 |
| Utah | Kings Peaks | Wasatch | 13,498 | Beaverd'm Ck. | Washingt'n | 2,000 | 6,100 |
| Vermont | Mount Mansfield | Chitd'n-L'm'le | 4,406 | LakeChamplt'n | Franklin | 95 | 1,000 |
| Virginia | Mount Rogers | Grayson-Smith | 5,719 | Atlantic Ocean | ..... | Sea lev. | 950 |
| Virgin Islands | Crown Hill | Is. St. Thomas | 1,550 | Atlantic Ocean | ..... | Sea lev. | ..... |
| Washington | Mount Rainier | Pierce | 14,408 | Pacific Ocean | ..... | Sea lev. | 1,700 |
| West Virginia | Spruce Knob | Pendleton | 4,860 | Potomac R. | Jefferson | 240 | 1,500 |
| Wisconsin | Rib Hill | Marathon | 1,940 | Lake Michigan | ..... | 582 | 1,050 |
| Wyoming | Gannett Peak | Fremont | 13,785 | B. Fourche R. | Crook | 3,100 | 6,700 |
| U. S. (ex. Alaska) | Mount Whitney | Inyo-T'l're,Cal. | 14,501 | Death Valley | Inyo, Cal. | —276 | 2,500 |

The loftiest peak in the Philippines is Mount Apo, on Mindanao Island, 9,610 feet.
The highest point in Porto Rico is in the Luquillo Mountains, 3,532 feet.

### SOUTH AMERICAN PEAKS.

| *Mountains.* | *Feet.* | *Mountains.* | *Feet.* | *Mountains.* | *Feet.* | *Mountains.* | *Feet.* |
|---|---|---|---|---|---|---|---|
| Aconcagua | 23,290 | Illimani | 21,181 | Cayambe | 19,534 | Huila | 18,000 |
| Tupungato | 23,000 | Veladeres | 21,000 | Licancaur | 19,521 | Aconquija | 17,740 |
| Seehama | 22,340 | Chuquibamba | 21,000 | Cotopaxi | 19,500 | Malpo | 17,421 |
| Cerrodel Merced'io | 22,000 | Parinacota | 20,950 | Chipicani | 18,898 | Ruiz | 17,400 |
| Huascaran | 21,812 | Antofalla | 20,900 | Arequipa | 18,373 | Sangay | 17,124 |
| Llullayaco | 21,500 | Nevado de Herveo | | 18,350 | Santa Isabel | 16,760 | |
| Chimborazo | 21,424 | Famantina | 20,700 | Tolima | 18,320 | Concha | 15,400 |
| Incanguassi | 21,400 | Juncal | 20,500 | El Potra | 18,045 | Coluna | 15,400 |
| Nevado de Sorata | 21,286 | Azupe de Copiapo | 19,700 | | | | |

## CANADIAN PEAKS—ROCKY AND SELKIRK RANGES.

| *Mountains.* | *Feet.* | *Mountains.* | *Feet.* | *Mountains.* | *Feet.* | *Mountains.* | *Feet.* |
|---|---|---|---|---|---|---|---|
| Robson | 13,068 | Forbes | 12,000 | Douglas | 11,700 | Victoria | 11 500 |
| Columbia | 12,500 | Assiniboia | 11,800 | Goodwin | 11,600 | Lyell | 11,500 |
| Alberta | 12,500 | Twins | 11,800 | | | | |

Greenland's only high Peak is Peterman, 9,000 feet.

## MEXICO.

| *Mountains.* | *Feet.* | *Mountains.* | *Feet.* | *Mountains.* | *Feet.* | *Mountains.* | *Feet.* |
|---|---|---|---|---|---|---|---|
| Citlaltepetl (Peak of Orizaba, or "Star Mountain") | 18,564 | Ixtaccihuatl ("White Woman") | 16,960 | Nevado de Colima | 14,100 | Tancitaro | 12,650 |
| Popocatepetl ("Smoky Mt.") | 17,540 | Nevado de Toluca | 14,950 | Nauhcampatepetl (Cofre de Perote) | 13,400 | GUATEMALA. | |
| | | Malinche | 14,630 | Volcan de Colima | 12,750 | Tajamulco | 13,800 |
| | | | | | | Tacana | 13,300 |

## EUROPEAN MOUNTAIN PEAKS AND PASSES.

### MARITIME ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Aiguille de Chambeyron | 11,155 |
| Grand Riobourent | 11,142 |
| Rocca dell' Argentera | 10,617 |
| Pointe Haute de Mary | 10,537 |

The lowest carriage-road pass is from Albenga to Garessio (Col di San Bernardo), at an altitude of 3,301 feet. The highest pass is from Val Tinea to Valdieri (Col di Fremo Morta), a bridle path.

### COTTIAN ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Monte Viso | 12,605 |
| Monte Chardonnet | 12,373 |
| Clamarella | 12,081 |
| Mont Albaron | 12,014 |
| Rocne Melon | 11,621 |

The lowest pass, a footpath, is from Bardonneche to Briancon, at an altitude of 5,873 feet. The highest pass that is a footpath is from Crissola to Abries, 9,827 feet high. The Mont Canis Pass, where there is a railroad and also a carriage road, is from Susa to Lansle-bourg, 6,772 feet up.

### DAUPHINE ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Pic des Ecrins | 13,462 |
| La Meije | 13,081 |
| Pic d' Ailefrode | 13,000 |
| Mont Pelvoux | 12,973 |

The highest footpath across, 9,154 feet up, is by the Col de Galiber, from Briancon to St. Michel. The only carriage road, 6,791 feet high, is from Monestier to Bourg d' Oisans, by the Col de Lautaret.

### GRAIAN ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Grand Parodis | 13,300 |
| La Grivola | 13,028 |
| Grand Casse | 12,780 |
| Mont Pourri | 12,491 |
| Dent Parassee | 12,137 |

There is a carriage road (7,192 feet up) through the Pass of Little St. Bernard, from Bourg St. Maurice to Aosta. The highest bridle path pass (9,500 feet up) is through the Col de Lauzon, from Cogne to Val Savaranche.

### PENNINE ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Mont Blanc (Calotte) | 15,781 |
| Mte. Rosa | 15,217 |
| Mischabelhorner (Dom.) | 14,935 |
| Lys Kamm | 14,889 |
| Weisshorn | 14,804 |
| Matterhorn | 14,780 |
| Dent Blanche | 14,318 |
| Grand Combin | 14,164 |
| Rothhorn (Moming) | 13,855 |
| Grandes Jorasses | 13,799 |
| Strahlhorn | 13,750 |
| Dent d' Herens | 13,714 |
| Breithorn | 13,685 |
| Aiguille Verte | 13,527 |
| Gobelhorn | 13,363 |

There is a bridle path through Great St. Bernard Pass (8,120 feet up), from Orsieres to Aosta; also one through the Augstbord Pass (9,515 feet up), from Gruben to St. Niklaus. There is a carriage road as well as a railroad through the Simplon Pass (6,595 feet up), from Brieg to Domo d'Ossola. In this, as in other ranges of the Alps, most of the high passes are glaciers.

### BERNESE ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Finsteraarhorn | 14,026 |
| Alestschhorn | 13,803 |
| Jungfrau | 13,671 |
| Monch | 13,438 |
| Bietschhorn | 12,969 |
| Wetterhorn (Mittelhorn) | 12,166 |
| Baimhorn | 12,100 |
| Blumlisalp | 12,041 |

There is a bridle path through the Surenen Pass (7,562 feet up), from Engelberg to Altdorf, and one through the Susten Pass (7,440 feet up), from Meyringen to Wasen.

### NORTH SWISS ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Todi | 11,887 |
| Bifertenstock | 11,237 |
| Scheerhorn | 11,142 |
| Oberalpstock | 10,925 |
| Segneshorn | 10,870 |
| Claridenstock | 10,709 |
| Piz Tumbif | 10,663 |

There is a carriage road through the Oberalp Pass (6,732 feet up), from Dissentis to Andermatt, and a bridle path through the Panixer Pass (7,907 feet up), from Ilanz to Elm.

### LEPONTINE ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Monte Leone | 11,696 |
| Piz Valrhein | 11,148 |
| Blinnenhorn | 10,932 |
| Monte Basodine | 10,748 |

The highest footpath (8,165 feet up) is through the Lochliberg Pass from Reichenau to Splugen. There is a carriage road through the Furka Pass (7,992 feet up), from Obergestelen to Hospenthal. There is a carriage road and a railroad through the St. Gothard Pass (6,936 feet up), from Hospenthal to Airolo.

### RHAETIAN ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Piz Bernina | 13,294 |
| Piz Roseg | 12,936 |
| Orteler Spitze | 12,814 |
| Konigs Spitze | 12,646 |
| Monte Cevalde | 12,505 |
| Monte della Disgrazia | 12,074 |
| Pallon della Mare | 12,038 |

The highest bridle path is through the Septimer Pass (7,582 feet up), from Casaccia to Molins. The highest footpath is through the Sertig Pass (9,062 feet up), from Scanfs to Bergun. The highest carriage road is through the Bernina Pass (7,658 feet up), from Pontresina to Poschiabo.

### LOMBARD ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Monte Adamello | 11,832 |
| Presanella (Cima di Nardis) | 11,688 |
| Care Alto | 11,352 |
| Crozzon di Laris | 10,889 |

There is a carriage road through the Tonale Pass (6,483 feet up), from Edolo to Val di Sole. There is a footpath (7,500 feet up), from Sondrio to Val Seriana, through the Paso del Salto.

### VINDELICIAN ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Zugspitz | 9,716 |
| Lavatscherspitz | 9,081 |

There is a carriage road through the Arlberg Pass (5,902 feet up), from Bludenz to Landeck.

### NORTHERN NORIC ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Dachstein | 9,845 |
| Thorstein | 9,677 |
| Uebergossenealp | 9,643 |

A carriage road runs through the Thurn Pass (4,371 feet up), from Kitzbuhel to Mittersill.

### CENTRAL TYROL ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Gross Glockner | 12,405 |
| Wild Spitz | 12,390 |
| Weiskugel | 12,277 |
| Gross Venediger | 12,053 |

There is a carriage road through the Reschen Scheideck Pass (4,596 feet up), from Landeck to Meran.

### STYRIAN ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Hafnereck | 10,044 |
| Hoch Goling | 9,383 |
| Markkahrspitz | 9,245 |

There is a carriage road through the Turrach Pass (5,825 feet up), from Feldkirchen to Tansweg.

### S. TYROL & VENETIAN ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Marmolata | 11,045 |
| Cimon della Pala | 11,000 |
| Sorapis | 10,798 |

There is a carriage road through the Passo di Tresassi (7,073 feet up), from Andraz to Corvina.

### SOUTHEASTERN ALPS.

| *Mountains.* | *Feet.* |
|---|---|
| Kellerwand | 9,500 |
| Terglou | 9,371 |
| Monte Paralba | 9,097 |
| Job di Montasio | 9,000 |

There is a carriage road through the Cartischer Joch Pass (5,363 feet up), from Sillian to Tilliach.

### THE PYRENEES.

| *Mountains.* | *Feet.* |
|---|---|
| Maladetta | 11,165 |
| Pic des Possets | 11,045 |
| Mont Perdu | 10,994 |
| Pic de Vignemale | 10,792 |
| Pic Long | 10,478 |

### THE CAUCASUS RANGE. (EUROPE—ASIA).

| *Mountains.* | *Feet.* |
|---|---|
| El Bruz | 18,465 |
| Koshtan-tau | 17,096 |
| Dykh-tau | 17,054 |
| Shkara | 17,038 |
| Yanga | 16,880 |
| Kasbek | 16,346 |
| Tetnuld | 15,935 |
| Mizhirgi-tau | 15,932 |
| Ushba | 15,409 |
| Adaikhokh | 15,274 |
| Alagoz, or Alagheuz | 13,500 |

## AFRICA AND AUSTRALASIA.

| *Mountains and Country.* | *Feet.* |
|---|---|
| Ruwenzori, Africa | 20,150 |
| Kilimanjaro (2 peaks): 1—Kibo; 2—Mawenzi, Ger. E. Africa | 19,710 17,570 |
| Ras Dashan, Abyssinia | 15,150 |
| Ala Goz, Abyssinia | 14,277 |
| Jabel Ayashi, Morocco | 14,000 |
| Pico de Teide, Teneriffe (Canary Islands) | 12,200 |
| Charles Louis, New Guinea | 18,000 |
| Cook, New Zealand | 12,350 |

## ILLITERACY IN FOREIGN COUNTRIES.

The term illiterate, as here used, includes all persons unable to write their own language, except in cases indicated by an asterisk (*), where the basis is inability to read (a).

| Country. | Illiterate. | Basis. | Year. |
|---|---|---|---|
| | *Pct.* | | |
| EUROPE: | | | |
| Austria | 13.7 | Pop. over 11 yrs. | 1910 |
| Belgium (b) | 12.7 | Pop. over 10 yrs. | 1910 |
| " | 7.9 | Army recruits | 1913 |
| Bulgaria | 65.5 | Pop. over 10 yrs. | 1905 |
| " | 25.4 | Army recruits | 1909 |
| " | 58.4 | Marriages | 1901-10 |
| Denmark | 0.2 | Army recruits | 1907 |
| England & Wales | 1.8 | Marriages | 1901-10 |
| France | 14.1 | Pop. over 10 yrs. | 1906 |
| " | 4.3 | Army recruits | 1912 |
| " | 4.1 | Marriages | 1901-10 |
| German Empire (c) | 0.05 | Army recruits | 1912 |
| Greece (d) | 57.2 | Pop. over 10 yrs. | 1907 |
| " | 30.0 | Army recruits | No date |
| Hungary (b) | 33.3 | Pop. over 6 yrs. | 1910 |
| Ireland* | 9.2 | Pop. over 9 yrs. | 1911 |
| " | 8.1 | Marriages | 1901-10 |
| Italy* | 37.0 | Pop. over 10 yrs. | 1911 |
| " | 31.1 | Army recruits | 1910 |
| " | 38.7 | Marriages | 1901-10 |
| Maltese Islands (e) | 57.5 | Pop. over 5 yrs. | 1901 |
| Netherlands (f) | 0.8 | Army recruits | 1912 |
| " | 2.2 | Marriages | 1901-10 |
| Portugal* (g) | 68.9 | Pop. over 10 yrs. | 1911 |
| Prussia (c) | 0.02 | Army recruits | 1910 |
| " | 0.4 | Marriages | 1901-10 |
| Roumania (f) | 60.6 | Pop. over 7 yrs. | 1909 |
| " (d) | 41.0 | Army recruits | 1911 |
| Russia (h) | 69.0 | Pop. over 10 yrs. | 1897 |
| " (h) | 61.7 | Army recruits | 1894 |
| Scotland | 1.6 | Marriages | 1901-10 |
| Serbia | 78.9 | Pop. over 11 yrs. | 1900 |
| " | 43.4 | Army recruits | 1911 |
| " | 36.7 | Marriages | 1901-10 |
| Spain | 58.7 | Pop. over 10 yrs. | 1900 |
| Sweden | 0.2 | Army recruits | 1911 |
| Switzerland (i) | 0.3 | Army recruits | 1911 |
| United Kingdom | 1.0 | Army recruits | 1902-04 |
| AMERICA: | | | |
| Argentina | 54.4 | Pop. over 6 yrs. | 1895 |
| Bolivia | 82.9 | Pop. over 7 yrs. | 1900 |
| Brazil | 85.2 | All ages | 1890 |
| British Honduras | 68.8 | All ages | 1901 |
| Canada | 11.0 | Pop. over 5 yrs. | 1911 |
| Chile* | 49.9 | Pop. over 10 yrs. | 1907 |
| Colombia* | 73.0 | Males of all ages. | 1912 |
| Costa Rica | 80.2 | All ages | 1892 |
| Cuba* | 43.4 | Pop. over 10 yrs. | 1907 |
| Guatemala | 92.7 | All ages | 1893 |
| Mexico | 70.7 | Pop. over 12 yrs. | 1910 |

| Country. | Illiterate. | Basis. | Year. |
|---|---|---|---|
| | *Pct.* | | |
| AMERICA—*Cont.* | | | |
| Newfoundland | 45.8 | Pop. over 5 yrs. | 1901 |
| Porto Rico | 66.5 | Pop. over 10 yrs. | 1910 |
| Uruguay | 39.8 | Pop. over 5 yrs. | 1908 |
| AUSTRALIA: | | | |
| Commonwealth of Australia* (j) | 1.8 | Pop. over 10 yrs. | 1911 |
| New So. Wales* (j) | 2.0 | Pop. over 10 yrs. | 1911 |
| " " " | 1.0 | Marriages | 1901-10 |
| New Zealand* (k) | 0.9 | Pop. over 10 yrs. | 1911 |
| " " | 0.3 | Marriages | 1901-10 |
| Queensland* (j) | 2.5 | Pop. over 10 yrs. | 1911 |
| " | 2.0 | Marriages | 1901-10 |
| South Australia* (j) | 1.8 | Pop. over 10 yrs. | 1911 |
| " | 0.8 | Marriages | 1901-10 |
| Tasmania* (j) | 3.3 | Pop. over 10 yrs. | 1911 |
| " | 2.4 | Marriages | 1901-10 |
| Victoria* (j) | 1.1 | Pop. over 10 yrs. | 1911 |
| " | 0.4 | Marriages | 1901-10 |
| West. Australia* (j) | 1.6 | Pop. over 10 yrs. | 1911 |
| " | 0.6 | Marriages | 1901-10 |
| ASIA AND OCEANIA: | | | |
| Ceylon: All races | 78.3 | All ages | 1901 |
| European race | 11.9 | All ages | 1901 |
| Oth. than Europ'n | 78.4 | All ages | 1901 |
| India (l) | 92.1 | Pop. over 10 yrs. | 1911 |
| Philippine Isl. (m) | 55.5 | Pop. over 10 yrs. | 1903 |
| Russia (n) | 87.3 | Pop. over 10 yrs. | 1897 |
| Hawaii | 26.8 | Pop. over 10 yrs. | 1910 |
| AFRICA: | | | |
| Algeria | 13.0 | Army recruits | 1912 |
| Cape of Good Hope: | | | |
| All races | 64.0 | Pop. over 10 yrs. | 1911 |
| European race | 3.8 | Pop. over 10 yrs. | 1911 |
| Oth. than Europ'n | 82.8 | Pop. over 10 yrs. | 1911 |
| Egypt | 92.7 | Pop. over 10 yrs. | 1907 |
| Natal: All races | 86.7 | Pop. over 10 yrs. | 1911 |
| European race | 1.6 | Pop. over 10 yrs. | 1911 |
| Oth. than Europ'n | 94.8 | Pop. over 10 yrs. | 1911 |
| Orange Free State: | | | |
| All races | 58.0 | Pop. over 10 yrs. | 1911 |
| European race | 2.7 | Pop. over 10 yrs. | 1911 |
| Oth. than Europ'n | 85 8 | Pop. over 10 yrs. | 1911 |
| Transvaal: All races | 69.4 | Pop. over 10 yrs. | 1911 |
| European race | 2.5 | Pop. over 10 yrs. | 1911 |
| Oth. than Europ'n | 91.1 | Pop. over 10 yrs. | 1911 |
| Union of So. Africa: | | | |
| All races | 69.7 | Pop. over 10 yrs. | 1911 |
| European race | 3.0 | Pop. over 10 yrs. | 1911 |
| Oth. than Europ'n | 88.2 | Pop. over 10 yrs. | 1911 |

(a) Figures for army recruits largely from Huebner's Statistical Tables, 1914. (b) Based on number unable to read and write. (c) Based on number without schooling. (d) Based on number illiterate, but this term is not defined in official report. (e) Native Maltese population. (f) Based on number unable either to read or write. (g) Including Azores and Madeira. (h) Excluding Finland. (i) Based on number without any proficiency in writing. (j) Excluding full-blooded aboriginals. (k) Excluding Maoris and Chinese. (l) Based on number unable to write letter to friend and read reply. (m) Civilized population. (n) Caucasia, Siberia and Central Asia.

## RELIGIOUS MEMBERSHIP OF THE WORLD.

| Sect. | North America. | South America. | Europe. | Asia. | Africa. | Oceania. | Total. |
|---|---|---|---|---|---|---|---|
| CHRISTIANS: | | | | | | | |
| Roman Catholics | 37,000,000 | 36,000,000 | 184,000,000 | 5,500,000 | 2,000,000 | 9,000,000 | 273,500,000 |
| Orthodox Catholics | 1,200,000 | 1,000 | 100,000,000 | 17,500,000 | 3,000,000 | 100,000 | 121,801,000 |
| Protestants | 66,000,000 | 400,000 | 90,000,000 | 7,000,000 | 2,500,000 | 5,000,000 | 170,900,000 |
| Total Christians | 104,200,000 | 36,401,000 | 374,000,000 | 30,000,000 | 7,500,000 | 14,100,000 | 566,201,000 |
| NON-CHRISTIANS: | | | | | | | |
| Jews | 2,500,000 | 35,000 | 10,000,000 | 1,500,000 | 500,000 | 50,000 | 14,585,000 |
| Mohammedans | 20 000 | 10,000 | 4,000,000 | 140,000,000 | 45,000,000 | 30,000,000 | 219,030,000 |
| Buddhists | 5,000 | 1,000 | 100,000 | 135,000,000 | 5,000 | 50,000 | 135,161,000 |
| Hindus | 100,000 | 100,000 | 50,000 | 210,000,000 | 100,000 | 50,000 | 210,400,000 |
| Confucianists, Taoists | 100,000 | 5.000 | 25,000 | 300,000,000 | 25,000 | 1,000,000 | 301,155,000 |
| Shintoists | 1,000 | 1.000 | 5,000 | 20,000,000 | 5,000 | 500,000 | 20,512,000 |
| Animists | 20,000 | 1,330.000 | 5,000 | 30,000,000 | 85,000,000 | 20,000,000 | 136,325,000 |
| Miscellaneous | 8,000,000 | 1,000,000 | 2,000,000 | 5,000,000 | 100,000 | 200,000 | 16,300,000 |
| Total Non-Christian | 10.346,000 | 2,452,000 | 16,185,000 | 841,000,000 | 130,735,000 | 51,850,000 | 1,052,568,000 |
| Grand total | 114,546,000 | 38,853,000 | 390,185,000 | 871,000,000 | 138,235,000 | 65,950,000 | 1,618,769,000 |

## WORLD'S SUNDAY SCHOOL STATISTICS.

| Grand Divisions. | No. of Schools. | Total Enrolment. | Grand Divisions. | No. of Schools. | Total Enrolment. | Grand Divisions. | No. of Schools. | Total Enrolment. |
|---|---|---|---|---|---|---|---|---|
| No. America | 155,944 | 18,762,581 | Europe | 68,189 | 8,623,629 | Oceania | 14,856 | 495,159 |
| Cent. America | 167 | 13,667 | Asia | 32,854 | 1,379,860 | | | |
| So. America | 3,246 | 162,344 | Africa | 10,015 | 706,225 | Grand total | 287,426 | 30,296,531 |
| West Indies | 1,617 | 137,390 | Malaysia | 538 | 15,676 | | | |

## SAVINGS BANKS IN FOREIGN COUNTRIES.

| Country. | Kind of Bank. | Number of Depositors. | Total Deposits. |
|---|---|---|---|
| Argentina | Postal | 312,383 | 7,882,158 |
| Australia | Government and private | 3,171,230 | 510,163,974 |
| British Colonies, n. e. s. | Government and P. O. Savings | 279,635 | 17,205,547 |
| British India | Postal Savings | 1,677,407 | 61,072,871 |
| British West Indies | Government and P. O. Savings | 89,567 | 6,242,420 |
| Canada | Postal | 116,541 | 41,654,920 |
| | Dominion Government Savings | 30,277 | 13,633,610 |
| Chili | Public Savings | 985,692 | 40,101,996 |
| Denmark | Communal and corporate | 1,611,544 | 389,210,173 |
| Egypt | Postal | 224,760 | 3,961,419 |
| Finland | Postal | 104,062 | 1,051,521 |
| | Private | 488,764 | 75,286,010 |
| France | Private | 1,922,365 | 591,352,006 |
| | Postal | 6,908,854 | 194,119,692 |
| Algeria | Municipal | 20,511 | 885,945 |
| Tunis | Postal | 1,883 | 1,416,199 |
| Germany | Public and corporate | 32,769,470 | 3,858,832,710 |
| Italy | Communal and corporate | 2,639,201 | 410,338,436 |
| | Postal | 6,273,500 | 547,211,842 |
| Japan | Private | 9,705,600 | 99,759,850 |
| | Postal | 20,088,713 | 301,832,170 |
| Formosa | Private | 8,065 | 172,732 |
| | Postal | 358,204 | 2,750,812 |
| Chosen | Postal | 1,406,259 | 7,440,556 |
| Netherlands | Private | 561,179 | 70,915,614 |
| | Postal | 1,887,362 | 107,811,734 |
| Dutch East Indies | Private | 8,473 | 2,050,642 |
| | Postal | 182,348 | 5,602,219 |
| Dutch Guiana | Postal | 12,211 | 409,047 |
| Dutch West Indies | Postal | 4,793 | 101,229 |
| New Zealand | Postal | 630,783 | 147,813,554 |
| | Private | 95,472 | 14,231,580 |
| Norway | Communal and private | 1,530,807 | 419,798,216 |
| Spain | Private | 926,718 | 123,014,227 |
| | Postal | 325,144 | 14,745,821 |
| Sweden | Communal and trustee | 2,200,067 | 501,366,871 |
| | Postal | 661,686 | 22,607,418 |
| Switzerland | Communal and private | 2,597,947 | 496,732,891 |
| Union of South Africa | Postal | 306,103 | 33,933,496 |
| United Kingdom | Trustee Savings | 2,046,996 | 254,758,195 |
| | Postal | 15,215,824 | 989,174,810 |
| Total foreign countries | | 120,388,410 | 10,388,647,133 |
| United States | Postal | 466,109 | 152,389,903 |
| | Mutual and Stock Savings | 10,737,843 | 6,018,258,000 |
| Philippines | Postal | 110,574 | 3,052,844 |
| Grand total | | 131,702,936 | 16,562,347,880 |

## TELESCOPES.

The magnifying power of telescopes is generally expressed in diameters, the practical limit of power being 100 diameters per inch of diameter of the telescope. Thus the 36-inch telescope at the Lick Observatory may give a magnifying power of 3,600 diameters. But such high power can only be used in a very tranquil atmosphere; consequently most astronomical observations are made at 1,000 diameters or less.

The largest refracting telescopes in the world are in the United States. The one at Yerkes Observatory, Geneva Lake, Wis., has an object lens 40 inches in diameter, with a focal length of 64 feet. The movable part of the instrument turning on the polar axis weighs about 12 tons, and the clock 1½ tons. Other large telescopes are the 36-inch at Lick Observatory, Mt. Hamilton, Cal., where many important astronomical discoveries have been made; the 26-inch at the U. S. Observatory, Washington, D. C., and the 24-inch (photographic objective) belonging to Harvard University, now at the Arequipa, Peru, station of the Harvard Observatory. There is a 30-inch refracting telescope at the Allegheny Observatory, Riverview Park, Pa.

Abroad is the 30-inch at the Imperial Observatory Pulkova (near Petrograd), Russia. This telescope has a platform at the lower end of the polar axis from which observers can readily operate the instrument. The Meudon Observatory (near Paris, France), has a 32-inch; the Potsdam, Prussia, a 31-inch; and the Royal Observatory, at Greenwich, England, a 28-inch.

Two of the most perfect reflecting telescope instruments ever built are at Mt. Wilson Observatory, Pasadena, Cal. One mirror is silver on glass, 60 inches in diameter, and weighs nearly a ton. The telescope is moved by electric motors in right ascension and declination. An important feature in this instrument is the different focal lengths that can be obtained. The 60-inch mirror has a 25-foot focus, but by a suitable arrangement of mirrors it is possible to get focal lengths of 80, 100 and 150 feet. At the same observatory is a 100-inch reflector, the tube with the mirror at the bottom is 43 feet long, and with the mountings weighs nearly 20 tons. There is a 36-inch reflector at Lick Observatory, Harvard University has a 28-inch and a 60-inch, and at the Yerkes Observatory is a 24-inch. Other notable reflectors are the Lord Rosse, at Birr Castle, Ireland, which has a mirror 72 inches in diameter of speculum metal and a focal length of 54 feet; a 48-inch at Melbourne, Australia; a 60-inch at Ealing, England; a 48-inch at Paris, France, and a 39-inch at Meudon, France. A 61-inch reflecting telescope at the National Astronomic Observatory, Cordoba, Argentina, is under construction. The Dominion Astronomical Observatory, Victoria, B. C., Canada, has a 72-inch reflector.

## POETS-LAUREATE OF ENGLAND.

There is no authentic record of the origin of the office of Poet-Laureate of England. According to Warton, there was a *Versificator Regis*, or King's Poet, in the reign of Henry III. (1216-1272), and he was paid 100 shillings a year. Geoffrey Chaucer (1328-1400) assumed the title of Poet-Laureate, and in 1389 got a royal grant of a yearly allowance of wine. In the reign of Edward IV. (1461-1483) John Kay held the post. Under Henry VII. (1485-1509) Andrew Bernard was the Poet-Laureate, and was succeeded under Henry VIII. (1509-1547) by John Skelton. Next came Edmund Spenser, who died in 1599; then Samuel Daniel, who died in 1619; and after him, Ben Johnson (1574-1637), Sir William Davenant (1637-1668), John Dryden (1631-1700), who was deposed at the time of the Revolution. The others, with the date of appointment, when known, have been: Thomas Shadwell, 1689; Nahum Tate, 1692; Nicholas Rowe, 1715; the Rev. Laurence Eusden, 1718; Colly Cibber, 1730; William Whitehead, 1758, on the refusal of Gray; Rev. Thomas Warton, 1785, on the refusal of Mason; Henry J. Pye, 1790; Robert Southey, 1813, on the refusal of Sir Walter Scott; William Wordsworth, 1843; Alfred Tennyson, 1850; Alfred Austin, 1896; Robert Bridges, 1913.

## HISTORY OF WIRELESS TELEGRAPHY AND TELEPHONY.

(Prepared for THE WORLD ALMANAC by the American Telephone and Telegraph Co.)

EFFORTS to develop one form or another of wireless telegraphy go back nearly a century. Early experiments involved either volume distribution of electric current throughout a large area of moist earth or water, the propagation of energy from one circuit to another by electro-magnetic induction, or such propagation by means of electrostatic induction. These early systems, although experimentally tried, failed to become practicable, and the electric wave wireless telegraphy of the present day differs fundamentally in principle from any of them.

Wireless telegraphy may be said to trace its descent directly from the theoretical work of J. C. Maxwell who in 1865, as a result of his researches in mathematical physics, was led to make the prediction that visible light consists of electric waves in the ether. For years the importance of Maxwell's prediction was unrecognized because it lay undissociated from the complicated mathematical reasoning by which he had arrived at it. It was not until 1887 that interest was really aroused in the subject when Heinrich Hertz gave an experimental proof of the truth of Maxwell's prediction. Hertz showed that the ether of space would transmit electric waves and he showed how these waves might be produced and detected.

Following the work of Hertz, which received widespread attention, the suggestion was frequently made that the newly discovered waves might open the way to successful wireless telegraphy. However, the apparatus devised by Hertz for producing and detecting electric waves was in no way suitable to practicable adaptation.

### INVENTION OF THE COHERER.

In 1890 the remarkable fact was noted by Branly that metal filings when loosely packed in a small glass tube normally formed a very poor conductor of electricity but that they became a good conductor under the influence of a nearby electric spark, the action of the spark apparently being to weld the metal grains lightly together. Branly's device received the name *coherer* and it was found to be a much more sensitive means of detecting electric waves than the device which Hertz had used.

Between the years 1894 and 1896 Marconi initiated his experiments which were destined to become famous, first devoting himself to improvements in the coherer. He adopted an idea originating with Popoff of using an electro-magnetic buzzer to decohere the coherer between signals and also found that the coherer when placed between an earth connection and a wire running to a large metal screen supported in the air became a very sensitive detector of electric waves. At about the same time Marconi modified the original oscillator of Hertz by connecting one terminal of the spark gap to the earth and the other to a large aerial conductor. By this means, which constitutes the first use of what is now known as antenna, he was able to greatly increase the efficiency and amount of energy radiated from the oscillator.

Marconi tried out his developments in the field of space telegraphy in England in 1896 and by 1898 had succeeded in telegraphing a distance of 14½ miles. During the same year his apparatus was applied to a lightship and communication successfully established over a short stretch of water. By 1901 he had telegraphed from Cornwall to the Isle of Wight, a distance of 200 miles. At about this time he developed an oscillation transformer by means of which the coherer was inductively coupled to the receiving antenna.

### INDUCTIVE COUPLING.

In the use of inductive coupling, Marconi was anticipated by Sir Oliver Lodge who devised a wireless telegraph system in which such coupling was used and in which the natural period of the antenna circuit was made equal to the period of the oscillating circuit. Lodge's antenna was not earth connected like Marconi's but consisted of an upper and lower conducting surface, an arrangement which is coming into quite general use in recent years and is known as an antenna with counterpoise. Patents on inductive coupling and tuning were also taken out by Marconi, Arco and Slaby, Braun, Stone, and others. By the use of an auxiliary oscillating circuit, the capacity of which could be made much larger than the capacity of the antenna, means were provided for greatly increasing the amount of energy radiated as well as sharpening the frequency of radiation. In 1900 both Arco and Slaby and Marconi showed that two messages could be simultaneously received on different wave lengths by one antenna.

The next important development in spark sets came in 1908 with the invention by Wien of the quenched spark. The use of the quenched spark narrowed materially the band of wave lengths radiated from a transmitting station and made sharper tuning possible.

In 1902 Castelli, an officer in the Italian Navy, invented the first self-restoring coherer. This permitted the use of the ordinary telephone receiver as a receiving instrument and thereby very greatly improved the sensitiveness of the receiving set. Shortly afterward the magnetic and electrolytic detectors were developed, but while they were self-restoring they were never generally used because the crystal detectors, introduced in 1906 as a result of the work of Dunwoody and Picard in America, proved far more satisfactory in practically every respect.

### DEVELOPMENT OF THE ARC.

In 1903, Poulsen, of Denmark, developed a form of arc which was characterized by a hydrogen atmosphere surrounding the electrodes and a transverse magnetic electric field between the electrodes, the field being formed by solenoids through which the current feeding the arc flows. The Poulsen arc proved a very satisfactory generator of oscillating currents up to frequencies of 20,000 to 30,000 and as subsequently developed is used in many of the largest radio telegraph stations throughout the world. Arcs have recently been built, as for the Lafayette Station in France, which are capable of delivering 1,000 k. w. to an antenna.

The development of the arc, because it supplied a source of continuous waves, held certain promise of making radio telephony practicable but until the advent of the vacuum tube no satisfactory means was found of effecting the necessary modulation with speech frequencies.

Another form of continuous wave generator which has received much attention is the high frequency alternator. The names best known in this field are those of Goldschmidt and Alexanderson. In recent years the Alexanderson type of alternator has been the object of important developments by the General Electric Company and is being used extensively by the Radio Corporation of America in its large telegraph stations.

Briefly, the importance of continuous wave radio telegraph lies in the fact that it makes possible the use of larger amounts of power than the spark and it permits the generation of narrower bands of waves, thus tending to reduce interference between simultaneous messages. It also led to the introduction of heterodyne reception, by Fessenden about 1905.

### THE VACUUM TUBE.

Within the past few years the vacuum tube or thermionic amplifier has become one of the most important types of generator for continuous waves. It was introduced in 1906 by De Forest as a detector and amplifier of electric waves and although it proved under favorable conditions, to be extremely sensitive in these capacities it was not entirely reliable. The vacuum tube or "audion," as made by De Forest, contained an appreciable amount of residual gas within the evacuated bulb which proved to be largely responsible for its uncertain behavior. Because it gave promise of containing the germ of a sensitive electric amplifier, the Bell Telephone System became interested in developing it, beginning 1912, as a means of attaining transcontinental telephony. The telephone engineers undertook a thorough study of its electrical characteristics and applied means for thoroughly exhausting the gas. The resulting tubes acted so satisfactorily as telephone repeaters that the development of much larger power tubes was immediately undertaken with the object of applying them to radio telephony.

These developments produced vacuum tubes which were used successfully as continuous wave generators and speech modulators and led, in the year 1915, to a successful trial of transoceanic radio-telephony. The development of a vacuum tube in very large sizes is still in its infancy and there is every reason to believe that in the near future it will take its place beside the arc and alternator for the handling of very large amounts of energy, both for radio telegraphy and telephony.

The use of the vacuum tube detector and amplifier for receiving purposes, by making possible the detection of very faint signals, is at present giving rise to extensive use of the loop antenna for directive reception, and this in turn is leading to the erection of many radio compass stations and radio beacons for the supplying of ships' bearings to navigators at sea.

The vacuum tube has also been generally responsible for the rapid development during the past few years of radio-telephony for ship-to-shore

communication, for military purposes—especially for guiding aircraft—and for radio broadcasting.

Following are a few of the more important dates relating to the application of the radio telegraph and telephone to commercial and other uses, notably military and broadcasting:

### WIRELESS CHRONOLOGY.

1901—Marconi first succeeded in telegraphing certain signals across the Atlantic and in 1903 a complete message was sent.

1904—A regular telegraph service to handle press news and private messages was begun from Poldhu and Cape Breton to Atlantic liners. This led to the publication of small daily newspapers on board many of the transatlantic steamships.

1906—The use of radio-telegraphy by steamships had so demonstrated its value as a means of increasing the safety of travel at sea that an International Radio Convention was called in Berlin to consider the desirability of establishing certain uniform international practices. The articles of this convention, which dealt largely with the international use of the radio telegraph, particularly as concerned its use by ships at sea, were subscribed to by practically all nations.

1907—Press despatches were being handled by radio-telegraphy across the Atlantic.

1909—Collision between the steamships Republic and Florida occurred, and by summoning aid the radio-telegraph was instrumental in saving the lives of all on board. The first wireless shipping report was published at Lloyd's in 1910.

1912—The second International Radio-Telegraph Convention was signed at London; like the first one signed at Berlin it had to do especially with safety at sea.

1915—Experimental transoceanic telephony was first achieved, speech being transmitted by the Bell Telephone System engineers from Washington, D. C., to Paris and to Honolulu, the latter distance being nearly 5,000 miles. During the demonstration a telephone message was sent by wire from New York to Washington and then radiated from Washington to San Francisco, thus establishing the radio-telephone as a supplement to the wire system. It is this possibility which must lie at the heart of all successful ship-to-shore and transoceanic telephone systems.

1914-19—During the World War the value of the radio telegraph and telephone for many military and naval purposes was thoroughly established. The wireless telephone proved particularly useful as a means of directing aircraft.

1920—Following the close of the war, the development of the radio art in the United States was in danger of being seriously retarded because of the diversified ownership of essential patents. At the suggestion of the United States Government, the leading holders of these patents, namely the American Telephone & Telegraph Company, the General Electric Company, the Radio Corporation of America and the Westinghouse Electric and Manufacturing Company entered into a cross-licensing agreement permitting each company to avail itself of the patents of the others in its particular fields. By means of this agreement the greatest research and development staffs in the world have been freed to develop the public service feature of radio without fear of patent infringements.

1921-22—Many radio-telephone stations, located at New York, Newark, Pittsburgh, Schenectady, Chicago, and certain other cities, adopted the programme of broadcasting music and other entertainment regularly for the purpose of focusing popular interest upon radio. By October 6 the number of broadcasting stations was 546. California led with 66, Ohio second with 35, and New York third with 30. Fully 2,000,000 were "listening in" nightly and, as the average cost of a radio set is $75, the amount invested is $150,000,000.

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## WHAT IT WAS THAT ALEXANDER GRAHAM BELL DISCOVERED.

(A. C. Curacy in the N. Y. Evening Post).

L'Illustration, Paris, August 26, 1854, contained an article by Charles Boursel, in which the electrical transmission of speech was predicted in the following words: "Suppose that a man speaks near a movable disk sufficiently flexible to lose none of the vibrations of the voice; that this disk alternately *makes and breaks* the connection from a battery; you may have at a distance another disk which will simultaneously execute the same vibrations."

Six years later, 1860, Philipp Reis built a device that he called a "telephone" upon the principle laid down by Boursel. The tenth and final form of the "transmitter" is known as the "square box pattern." It consists essentially of a square box, with a membrane in the cover and a mouthpiece in the side. At the centre of the membrane is a loose contact that *makes and breaks* the circuit when a sound directed into the box through the mouthpiece causes the membrane to vibrate. The best known form of "receiver" is the "knitting needle receiver." It consists essentially of a knitting needle wrapped with silk-insulated copper wire and mounted on a box which serves as a sounding board.

The Reis "receiver" operates on a principle that was discovered by C. G. Page, of Salem, Mass., in July, 1837—namely, that when a piece of iron is suddenly magnetized or demagnetized it will emit a feeble click. This sound is due, of course, to the adjusting and readjusting of the molecules of the piece of iron.

Specimens of Reis's apparatus are to be found in the Smithsonian Institution in Washington, D. C., and in semi-private museums in the United States.

Why do not these inventions transmit speech satisfactorily?

### CHARACTERISTICS OF SOUND.

A sound possesses three characteristics: Pitch, which depends upon the frequency of the vibrations; loudness, which depends upon the amplitude of the vibrations, and timbre, which depends upon the source of the sound. The tones of a piano and of a violin may be the same as to pitch and loudness, yet the tones are radically different. That difference is what I mean by timbre.

Reis's telephone will transmit pitch and loudness, but it cannot transmit timbre, because it operates on the *make and break* principle.

In the summer of 1874, Alexander Graham Bell conceived an apparatus that possessed the power of transmitting speech sounds by means of a self-generated *unbroken undulating current*, and on June 2, 1875, satisfactorily tested this apparatus. The device consisted essentially of a diaphragm of gold-beater's skin, which, when vibrated by the voice, set into similar vibration a steel armature mounted in association with an electromagnet. This motion of the armature generated an *unbroken undulating current* in the telephone circuit, in accordance with a principle discovered by the Russian scientist, E. Lenz, in 1834, and a principle discovered by the German scientist, F. E. Newmann, in 1845. These principles may be combined in a single sentence, as follows: Any change in the magnetic field, with respect to a conductor, induces a current in the conductor whose direction is such as to oppose the change which produced it, and the induced electromotive force is proportional to the rate of change of the field.

Bell's first receiver was an electromagnet with a vibrating steel reed armature. The attraction exerted by the electromagnet upon its armature varied exactly the same as the *unbroken undulating current* generated by the transmitting apparatus varied. Bell's apparatus transmitted and received timbre as well as pitch and loudness. For this reason Bell succeeded in transmitting intelligible speech while Reis failed.

### BELL'S FIRST PATENT.

Bell's first telephone patent, No. 174465, covered the use of an *unbroken undulating current* for the transmission of speech. It included the use of the alternating undulating current, which is produced by the device that I have just discussed, and the use of a uni-directional undulating current, which is produced by incorporating in the circuit a battery in association with a transmitter, the resistance of which is varied by the voice of the speaker. A second patent covered the use of a permanent magnet instead of an electromagnet.

Until March 7, 1893, and January 30, 1894 respectively, these patents controlled the manufacture of transmitters and receivers. No one challenged Bell's claim that he was the inventor of the telephone until the first patent was about eighteen months old. During the succeeding twenty years some fifty of the most eminent lawyers in the country tried to demolish Bell's claim and failed.

## FOOD CROPS OF THE WORLD (BUSHELS).

| Year. | Corn. | Wheat. | Oats. | Barley. | Rye. | Potatoes. |
|---|---|---|---|---|---|---|
| 1900..... | 2,792,561,000 | 2,640,751,000 | 3,166,002,000 | 959,622,000 | 1,557,634,000 | 4,382,031,000 |
| 1905..... | 3,461,181,000 | 3,327,084 000 | 3,510,067,000 | 1,180,053,000 | 1,495,751,000 | 5,254,598,000 |
| 1910..... | 4,031,630,000 | 3,575,055,000 | 4,182,410,000 | 1,388,734,000 | 1,673,473,000 | 5,274,724,000 |
| 1911..... | 3,461,187,000 | 3,540,717,000 | 3,785,806,000 | 1,375,411,000 | 1,578,547,000 | 4,748,711,000 |
| 1912..... | 4,054,838,000 | 3,759,533,000 | 4,585,231,000 | 1,457,000,000 | 1,901,181,000 | 5,872,953,000 |
| 1913..... | 3,587,429,000 | 4,127,437,000 | 4,697,437,000 | 1,650,265,000 | 1,880,387,000 | 5,802,910,000 |
| 1914..... | 3,877,913,000 | 3,485,982,000 | 4,034,857,000 | 1,463,289,000 | 1,596,882,000 | |
| 1915..... | 4,212,733,000 | 4,173,305,000 | 4,389,374,000 | 1,560,143,000 | 1,586,440,000 | 3,044,014,000 |
| 1916..... | 3,101,238,000 | 2,279,259,000 | 3,941,101,000 | 1,436,926,000 | 530,020,000 | 1,720,356,000 |
| 1917..... | 3,483,476,000 | 2,224,142,000 | 2,974,750,000 | 913,827,000 | 434,219,000 | 2,734,156,000 |
| 1918..... | 3,037,649,000 | 2,818,052,000 | 3,052,246,000 | 1,076,869,000 | 528,952,000 | 2,600,000,000 |
| 1919..... | 3,438,666,000 | 2,612,032,000 | 2,729,426,000 | 797,534,000 | 502,903,000 | 2,800,000,000 |
| 1920..... | 4,144,821,000 | 2,867,864 000 | 3,548,621,000 | 1,145,779,000 | 596,845,000 | 3,815,826,000 |
| 1921..... | 3,710,115,000 | 3,035,338,000 | 2,955,079,000 | 968,916,000 | 783,234,000 | 3,303,480,000 |

Wheat figures, 1920, exclude Russia; and for 1921 exclude Russia, Mexico, and Morocco. The wheat crop of the world for 1922 is estimated at 3,073,032,000 bushels, exclusive of Russia, Mexico and Morocco.

## WORLD'S COTTON PRODUCTION.

(In bales of approximately 500 pounds.)

| Annual Average. | World. | United States. | Per Ct. U. S. | Annual Average. | World. | United States. | Per Ct. U. S. |
|---|---|---|---|---|---|---|---|
| 1800-10..... | 1,060,000 | 140,000 | 13.20 | 1901-05..... | 18,070,000 | 10,801,000 | 59.77 |
| 1811-21..... | 1,172,000 | 231,000 | 19.70 | 1906-10..... | 20,956,000 | 11,847,000 | 56.53 |
| 1821-30..... | 1,541,000 | 566,000 | 36.72 | 1911..... | 24,723,000 | 15,693,000 | 63.47 |
| 1831-40..... | 2,317,000 | 1,123,000 | 48.46 | 1912..... | 24,158,000 | 13,703,000 | 56.72 |
| 1841-50..... | 2,692,000 | 1,953,000 | 72.54 | 1913..... | 25,796,000 | 14,136,000 | 54.79 |
| 1851-60..... | 4,216,000 | 3,242,000 | 76.89 | 1914..... | 26,022,000 | 16,135,000 | 62.00 |
| 1861-70..... | 5,027,000 | 2,186,000 | 43.48 | 1915..... | 22 175,000 | 11,192,000 | 50.47 |
| 1871-75..... | 6,810,000 | 3,623,000 | 53.20 | 1916..... | 22,678,000 | 11,450,000 | 50.48 |
| 1876-80..... | 7,812,000 | 5,036,000 | 64.46 | 1917..... | 20,970,000 | 11,302,000 | 53.89 |
| 1881-85..... | 9,224,000 | 5,867,000 | 63.60 | 1918..... | 20,461,000 | 12,041,000 | 58.84 |
| 1886-90..... | 11,002,000 | 7,232,000 | 65.73 | 1919..... | 23,023,000 | 11,421,000 | 49.60 |
| 1891-95..... | 12,149,000 | 8,041,000 | 66.18 | 1920..... | 21,787,000 | 13,440,000 | 61.68 |
| 1896-1900..... | 15,162,000 | 10,081,000 | 66.48 | 1921..... | 15,593,000 | 8,340,000 | 53.48 |

The world's production of raw cotton in 1920-21 is estimated at 19,595,000 bales of 500 lbs. gross, or 478 lbs. net, by the U. S. Dept. of Agriculture. United States, 13,366,000; India, 2,976,000; Egypt, 1,251,000; China, 1,000,000; Russia, 180,000; Brazil, 100,000; Mexico, 165,000; Peru, 157,000; and all other countries, 400,000 bales. A normal world crop is about 22,000,000 bales.

There are about 152,000,000 cotton spinning spindles in the world, of which 130,000,000 are actively at work, as a rule.

## WORLD'S WOOL PRODUCTION—MILLS IN UNITED STATES.

The world's production of wool averages about 2,600,000,000 pounds, of which 800,000,000 pounds comes from Australasia, 460,000,000 from South America, 200,000,000 from Russia, 225,000,000 from the U. S.

The number of woolen mills in the United States exceeds 1,000, and there are about 80,000 looms, over 8,000 of which are used in making carpets and rugs. The number of active spinning spindles exceeds 4,000,000, pretty evenly divided between woolens and worsteds. There are usually from 250,000 to 500,000 idle spindles.

## WORLD'S RAW SILK PRODUCTION.

The world's raw silk production in the 1921-1922 season is estimated at 59,437,000 lbs., of which Asia exported 48,740,000 lbs.

Raw silk production in the 1920-1921 season (pounds): Europe, 8,025,000 (Italy, 7,330,000; France, 551,000; Spain, 144,000); Levant, 1,654,000. Asia, 35,138,500 (China: Shanghai, 6,518,500; Canton, 4,210,000); Japan, 24,300,000; India, 110,000. Total for world, 44,817,500. Tussah silk, 1,650,000. Figures for Asia cover exports only. Actual production there last year was estimated as follows: China, 22,506,300 lbs.; Japan, 37,385,000 lbs.

## WORLD'S TOBACCO PRODUCTION.

Yearly average production (pounds)—Algeria, 23,000,000; Argentina, 35,000,000; Austria-Hungary, 170,000,000; Brazil, 100,000,000; Belgium, 20,000,000; Bulgaria, 30,000,000; Canada, 13,000,000; Ceylon, 25,000,000; Cuba, 75,000,000; China, 500,000,000; Chili, 9,000,000; Colombia, 20,000,000; Dutch E. Indies, 200,000,000; France, 50,000,000; Germany, 60,000,000; Greece, 22,000,000; India, 1,000,000,000; Italy, 20,000,000; Japan, 120,000,000; Korea, 35,000,000; Mexico, 35,000,000; Persia, 20,000,000; Philippines, 100,000,000; Porto Rico, 10,000,000; Paraguay, 18,000,000; Roumania, 20,000,000; Russia, 255,000,000; Santo Domingo, 23,000,000; Serbia, 7,500,000; Turkey, 90,000,000; Union of So. Africa, 15,000,000; United States, 1,400,000; Venezuela, 8,000,000. Total, 4,500,000,000 pounds.

## LIVE STOCK IN THE WORLD.

| Country. | Cattle. | Sheep. | Swine. | Country. | Cattle. | Sheep. | Swine. |
|---|---|---|---|---|---|---|---|
| Alsace-Lorraine... | 435,000 | 34,000 | 358,000 | India..... | 129,591,000 | 21,984,000 | 1,000 |
| Argentina..... | 27,721,000 | 45,767,000 | 3,199,000 | Italy..... | 6,240,000 | 11,754,000 | 2,339,000 |
| Australia..... | 12,711,000 | 75,554,000 | 696,000 | Japan..... | 1,345,000 | 500 | 470,000 |
| Austria..... | 1,842,000 | 2,000,000 | 1,270,000 | Jugo-Slavia..... | 5,497,000 | 9,772,000 | 4,849,000 |
| Belgium..... | 1,292,000 | 126,000 | 546,000 | New Zealand..... | 3,113,000 | 23,285,000 | 342,000 |
| Brazil..... | 37,500,000 | 7,205,000 | 17,329,000 | Norway..... | 1,038,000 | 1,185,000 | 209,000 |
| Bulgaria..... | 852,000 | 8,600,000 | 500,000 | Poland..... | 2,100,000 | 600,000 | 500,000 |
| Canada..... | 10,206,000 | 3,676,000 | 3,905,000 | Portugal..... | 741,000 | 3,851,000 | 921,000 |
| Chosen..... | 1,480,000 | 1,000 | 924,000 | Roumania..... | 4,634,000 | 7,791,000 | 2,298,000 |
| Czecho-Slovakia.. | 4,213,000 | 976,000 | 2,015,000 | Russia (Europe)... | 32,000,000 | 60,000,000 | 15,000,000 |
| Denmark..... | 2,591,000 | 522,000 | 1,430,000 | Russia (Asia)..... | 18,000,000 | 35,000,000 | 4,000,000 |
| Finland..... | 1,445,000 | 828,000 | 111,000 | Spain..... | 3,718,000 | 20,522,000 | 5,152,000 |
| Formosa..... | 1,000 | 500 | 1,279,000 | Sweden..... | 2,551,000 | 564,000 | 717,000 |
| France..... | 12,782,000 | 9,372,000 | 4,584,000 | Switzerland..... | 1,425,000 | 244,000 | 639,000 |
| Germany..... | 16,790,000 | 6,139,000 | 14,149,000 | Union of So. Africa | 7,655,000 | 29,305,000 | 943,000 |
| Greece..... | 537,000 | 5,468,000 | 365,000 | United Kingdom.. | 11,854,000 | 24,161,000 | 3,628,000 |
| Holland..... | 1,969,000 | 437,000 | 450,000 | United States.... | 67,464,000 | 36,499,000 | 59,634,000 |
| Hungary..... | 2,223,000 | 1,816,000 | 3,729,000 | | | | |

## CULTIVATED AND ARABLE LAND IN CHIEF COUNTRIES.

| Country. | Year. | Total Prod'tive Area. | Arable Land. |
|---|---|---|---|
| | | *Thou'nds of Acres.* | *Thou'nds of Acres.* |
| NORTH AMERICA. | | | |
| United States | 1910 | ..... | 293,794 |
| | 1921 | ..... | ..... |
| Canada | 1911 | 109,945 | 48,319 |
| | 1921 | ..... | ..... |
| Costa Rica | 1909-10 | 3,090 | 442 |
| Cuba | 1899 | 8,717 | 778 |
| Porto Rico | 1918 | 2,017 | 541 |
| SOUTH AMERICA. | | | |
| Argentina | 1909-10 | 537,805 | 44,446 |
| | 1917-18 | ..... | 59,167 |
| Chile | 1910-11 | 15,144 | 2,557 |
| | 1917-18 | 29,772 | 3,090 |
| Uruguay | 1908 | 40,875 | 1,962 |
| EUROPE. | | | |
| Austria | 1911 | 69,939 | 26,272 |
| | 1920 | 17,688 | 4,182 |
| Belgium | 1910 | 6,387 | 3,339 |
| | 1920 | ..... | 2,990 |
| Bulgaria | 1910 | 18,959 | 8,574 |
| | 1920 | ..... | 8,165 |
| Denmark | 1912 | 6,198 | 6,385 |
| | 1919 | 10,019 | 6,949 |
| Serbia | 1897 | 6,246 | 2,534 |
| Czecho-Slovakia | 1920 | 33,155 | 14,811 |
| Finland | 1910 | ..... | 4,628 |
| France | 1910 | 123,642 | 59,124 |
| | 1919 | 123,240 | 54,405 |
| Germany | 1913 | 126,063 | 63,066 |
| | 1913 | 110,422 | 53,742 |
| | 1921 | ..... | 49,566 |
| Greece | 1911 | 7,009 | 2,333 |
| Great Britain | 1911 | 47,737 | 14,587 |
| | 1920 | 47,608 | ..... |
| Hungary | 1910 | 77,225 | 35,178 |
| Ireland | 1911 | 17,591 | 3,275 |
| | 1918 | 17,541 | 4,188 |
| Italy | 1910 | ..... | 33,815 |
| | 1911 | 65,164 | ..... |
| | 1919 | 65,228 | ..... |
| Latvia | 1921 | 15,908 | 4,576 |
| Luxemburg | 1911 | 616 | 300 |
| | 1920 | 611 | 273 |
| Netherlands | 1911 | 7,258 | 2,210 |
| | 1920 | 7,245 | 2,311 |
| Norway | 1907 | 22,942 | 1,830 |
| | 1917 | 23,476 | 1,712 |
| Poland | 1921 | 79,627 | 42,034 |
| Portugal | 1902 | 17,281 | 5,777 |
| Roumania | 1905 | 24,645 | 14,829 |
| | 1921 | 61,479 | 31,448 |
| Russia, (European 63 Govt.) | 1911 | 698,902 | 245,755 |
| Spain | 1908-11 | 112,665 | 41,264 |
| Sweden | 1911 | 65,196 | 9,144 |
| | 1918 | 71,024 | 9,578 |
| Switzerland | 1905 | 7,635 | ..... |
| | 1919 | 7,914 | 2,573 |
| ASIA. | | | |
| British India (British Provinces) | 1910-11 | 465,706 | 264,858 |
| | 1918-19 | 475,577 | 267,716 |
| Chosen | 1918-19 | 50,754 | 11,832 |
| Formosa | 1911 | 1,972 | 1,884 |
| French Indo-China | 1918 | 74,050 | 12,039 |
| Japan | 1911 | 74,180 | 17,639 |
| | 1918 | ..... | 17,379 |
| | 1919 | 74,014 | ..... |
| Java | 1913 | 19,098 | 13,759 |
| Russia, Asiatic, (28 Govts and Prov.) | 1911 | 715,838 | 33,860 |
| AFRICA. | | | |
| Algeria | 1910 | 50,846 | 11,434 |
| | 1915 | ..... | 13,176 |
| Egypt | 1911-12 | 5,486 | 5,457 |
| | 1919-20 | 5,507 | 5,477 |
| Morocco (French) | 1918 | 18,135 | 5,039 |
| Tunis | 1918 | 22,239 | 6,919 |
| Union of So. Africa | 1909-10 | 3,569 | 3,385 |
| | 1918 | 10,086 | 9,624 |
| OCEANIA. | | | |
| Australia | 1910-11 | 119,942 | 14,987 |
| | 1919-20 | 113,416 | 16,809 |
| New Zealand | 1910-11 | 57,310 | 6,955 |
| | 1919-20 | 53,971 | 17,855 |

Productive area includes arable land; natural meadows and pastures, nurseries and orchards; woods and forests, and marsh, heath and uncultivated productive land.

Arable land includes land used for cereals, grass and other fodder crops, food crops, industrial crops, crops for seeding purposes, bare fallow, fertilizer crops and fields under natural grass, and other and unspecified classification.

Changed boundaries in Austria, Bulgaria, Germany and Roumania partly account for differences in figures.

### WHEAT HARVEST SEASONS OF THE WORLD.

January—Australia, New Zealand and Chili.

February and March—East India, Upper Egypt.

April—Lower Egypt, Syria, Cyprus, Persia, Asia Minor, India, Mexico and Cuba.

May—Algeria, Central Asia, China, Japan, Morocco, Texas and Florida.

June—Turkey, Greece, Italy, Spain, Portugal, South of France, California, Louisiana, Mississippi, Alabama, Georgia, Carolinas, Tennessee, Virginia, Kentucky, Kansas, Arkansas, Utah, Missouri.

July—Roumania, Bulgaria, Austria-Hungary, South of Russia, Germany, Switzerland, France, South of England, Oregon, Nebraska, Minnesota, Wisconsin, Colorado, Washington, Iowa, Illinois, Indiana, Michigan, Ohio, New York, New England and Upper Canada.

August—Belgium, Holland, Great Britain, Denmark, Poland, Lower Canada, Columbia, Manitoba, North and South Dakota.

September and October—Scotland, Sweden, Norway, and North of Russia.

November—Peru, South Africa and Argentina.

December—Burmah and Argentina.

### CORN HARVEST TIME.

January—New South Wales.

March and April—Argentina.

September and October—All European countries.

October—The crop of the United States is harvested principally in this month.

## FISHERIES OF THE WORLD.

(Compiled by the U. S. Bureau of Fisheries, Washington, D. C.)

| Country. | Year. | Products. | |
|---|---|---|---|
| | | Pounds. | Value. |
| Africa | ..... | ..... | $5,000,000 |
| Australasia | ..... | ..... | 5,561,000 |
| Austria-Hungary | 1911-1912 | ..... | 2,078,535 |
| Belgium | 1912 | ..... | 1,114,375 |
| Canada | 1920 | 851,293,364 | 49,241,339 |
| China and other Asia | ..... | ..... | 34,000,000 |
| Denmark | 1919 | 195,997,312 | 14,502,096 |
| Egypt | 1920 | 77,920,216 | 9,489,926 |
| England and Wales | 1921 | 1,251,554,752 | 80,467,005 |
| France | 1919 | ..... | 84,725,590 |
| Faroe | 1919 | 51,172,472 | 3,519,296 |
| Germany | 1919 | 254,407,720 | 10,764,605 |
| Holland | 1921 | 373,705,832 | 10,790,290 |
| Italy | 1916 | ..... | 3,372,387 |
| Ireland | 1920 | 2,317,984 | 121,061 |
| India and E. Indies | ..... | ..... | $20,000,000 |
| Japan | 1911 | ..... | 63,147,550 |
| Newfoundland | 1914 | ..... | 7,971,355 |
| Norway | 1920 | ..... | 11,337,096 |
| Portugal | 1918 | ..... | 36,875,943 |
| Russia | ..... | 1,206,000,000 | 50,000,000 |
| Scotland | 1921 | 582,425,548 | 24,362,965 |
| So. and Cent. Am. & W. Ind. | ..... | ..... | 13,035,000 |
| Spain | 1920 | 889,763,226 | 72,197,408 |
| Sweden | 1918 | 300,414,016 | 22,726,412 |
| Other Europe | ..... | ..... | 4,800,000 |
| U. S. (including Alaska) | ..... | 2,500,000,000 | 80,000,000 |
| U. S. Ins. Pos. | ..... | ..... | 15,800,000 |
| Total | ..... | ..... | 737,004,234 |

## THE FIVE GREAT FOOD GROUPS.

(Prepared by the U. S. Department of Agriculture.)

Every food may be put into one of five groups. Each of these groups serves a special purpose in nourishing the body. Some food from each group is needed regularly by the body.

1. Vegetables and fruits.
2. Meat, fish, eggs, milk, cheese, soy beans, and peanuts.
3. Cereal grains and their products.
4. Sweets—Sugar syrups, honey, jelly, and candies.
5. Fats and fat foods—Butter, cooking fats, and table oils; suet, salt pork and bacon; nuts.

1. *Vegetables and fruits* furnish some of the material from which the body is made and keep its many parts working smoothly. They help to prevent constipation.

2. *Meat, fish, eggs, milk, cheese, soy beans, and peanuts* help to build up the growing body and renew used-up parts. That is their main business, though they also serve as fuel. Milk is important for children.

3. *Cereals, and the flours, meals, breads, cakes, breakfast foods, and other dishes made from them* act as fuel for the work of the body, much as the gasoline burning in an automobile engine makes the car go. This is their chief business. Moreover they give the body some building material.

4. *Sweets*, too, are fuel. They also give flavor to other foods. They are valuable food, but many persons eat more of them than they need, and one could get along better without this group than without any of the others. Sweet fruits, especially dried ones like dates and raisins, contain much sugar and are better for the children than candy.

5. *Fats.* These furnish body-fuel in a concentrated form. Some are needed especially by hard-working people. Expensive fats are no better fuel than cheap ones. Drippings from bacon and other left-over fats can well be used. Children need some butter fat.

## HUNDRED-CALORIE PORTIONS IN COMMON FOOD MATERIALS.

The fuel value of food is measured in calories just as length is measured in inches. For convenience in meal planning, the hundred-calorie portion is sometimes used, as is done in the following table:

### GROUP I. VEGETABLES AND FRUITS.

| MATERIALS. | No. of Hundred-Calorie Portions. |
|---|---|
| VEGETABLES, FRESH. | |
| Asparagus | 1 per lb. |
| Beans, lima, sh'd | 5½ per lb. |
| " " " | 7 per quart. |
| Beans, string | 1¾ per lb. |
| " " " | 1½ per quart. |
| Beets | 1½ per pound. |
| Cabbage | 1 per lb. |
| " | 3 per medium-sized head (3lbs) |
| Carrots | 1½ per lb. |
| Cauliflower | 1½ per lb. |
| " | 2 per med.-sized head (1½ lbs.) |
| " | ¾ per lb. |
| Corn | 1¾ per lb. |
| " | 11 per doz. med-sized ears. |
| Cowpeas, sh'led | 6 per lb. |
| Cucumbers | ¾ per lb. |
| " | ¼ per med.-sized cucumber. |
| Lettuce | ¾ per lb. |
| " | ¼ per medium-sized head. |
| Mushrooms | 2 per lb. |
| Okra | 1½ per lb. |
| Onions | 2 per lb. |
| Parsnips | 2½ per lb. |
| Peas | 2½ per lb. |
| " | 20 per peck. |
| Potatoes, Irish | 3 per lb. |
| " " | 45 per peck. |
| " sweet | 4½ per lb. |
| " " | 63 per peck. |
| Pumpkin | ½ per lb. |
| VEGETABLES, FRESH—*Cont'd.* | |
| Radishes | 1per lb. |
| Rhubarb | ¾ per lb. |
| Spinach | 1 per lb. |
| " | 5 per peck. |
| Squash | 1 per lb. |
| Tomatoes | 1 per lb. |
| Turnips | 1¼ per lb. |
| Turnip tops | 2 per lb. |
| VEGETABLES, CANNED. | |
| Beans, string | 1 per lb. |
| " " | 1¼ per No. 2 can. |
| " baked | 6 per lb. |
| " " | 7 per No. 2 can. |
| Corn | 4½ per lb. |
| " | 6 per No. 2 can. |
| Tomatoes | 1 per lb. |
| " | 1¼ per No. 2 can. |
| Peas | 2½ per lb. |
| " | 3 per No. 2 can. |
| VEGETABLES, DRIED. | |
| Beans | 15½ per lb. |
| Cowpeas | 15½ per lb. |
| Peas | 16 per lb. |
| FRUITS, FRESH. | |
| Apples | 2 per lb. |
| " | 24 per peck. |
| Bananas | 3 per lb. |
| " | 11 per doz. medium sized. |
| Cherries | 3½ per lb. or qt. |
| Cranberries | 2 per lb. or qt. |
| Currants | 2½ per lb. or qt. |
| Grapes | 3½ per lb. or qt. |
| FRUITS, FRESH—*Cont'd.* | |
| Huckleberries | 3½ per lb. or qt. |
| Lemons | 1½ per lb. |
| " | 4½ per dozen medium sized. |
| Muskmelon | 1 per lb. or 1 per medium-sized. |
| Oranges | 1¾ per lb. or 10 per dozen medium sized. |
| Peaches | 1½ per lb.; 6 per dozen. |
| Pears | 2½ per lb. |
| Plums | 3¾ per lb. |
| Raspberries | 3 per lb. or qt. |
| Strawberries | 1¾ per lb. or qt. |
| Watermelon | ½ per lb. |
| FRUITS, CANNED. | |
| Cherries | 4 per lb. |
| " | 5 per No. 2 can. |
| Peaches | 2 per lb. |
| " | 2½ per No. 2 can. |
| Pears | 3½ per lb. |
| " | 4½ per No. 2 can. |
| Pineapples | 7 per lb. |
| " | 4½ per No. 2 can. |
| FRUITS, DRIED. | |
| Apples | 13 per lb. |
| Dates | 14 per lb. |
| Figs | 14½ per lb. |
| Prunes | 11½ per lb. |
| Raisins | 14 per lb. |
| FRUITS, MISCELLANEOUS | |
| Olives, green or ripe | 10 per lb. or pint. |

### GROUP II.—FOODS DEPENDED UPON FOR EFFICIENT PROTEIN.

| MATERIALS. | No. of Hundred-Calorie Portions. |
|---|---|
| DAIRY PROD'CTS | |
| Milk, whole | 3 per lb.; 6 per qt. |
| Milk, skim | 3 per quart. |
| Buttermilk | 3 per quart. |
| Milk, cond'nsed unsweetened | 8 per lb. or qt. |
| Milk, cond'nsed sweetened | 15 per lb. |
| Milk, dried, whl | 23 per lb. |
| Milk, dried, skm | 16 per lb. |
| Cheese, ordinary | 19½ per lb. |
| Cheese, cottage. | 5 per lb. |
| Eggs | 9 per dozen. |
| MEATS | 9 per lb. |
| Beef, average | 10 per lb. |
| Beef, chuck | 7½ per lb. |
| Beef, corned | 12½ per lb. |
| Beef liver | 5½ per lb. |
| Beef ribs | 11 per lb. |
| Beef, round | 7¼ per lb. |
| Beef, sirloin | 9½ per lb. |
| Beef tongue | 5½ per lb. |
| Lamb, average | 10 per lb. |
| Lamb, leg | 11 per lb. |
| Lamb, loin | 13 per lb. |
| MEATS—*Cont'd* | |
| Mutton, av'rge. | 12 per lb. |
| Pork, average | 22 per lb. |
| Pork, exc. items in V, average | 13 per lb. |
| Veal, average | 5½ per lb. |
| POULTRY. | |
| Chicken, br'lers | 3 per lb. |
| Fowl | 7½ per lb. |
| FISH, FRESH. | |
| Bass | 2 per lb. |
| Codfish | 2½ per lb. |
| Halibut, steak | 4½ per lb. |
| Mackerel, Span. | 3½ per lb. |
| Perch | 2 per lb. |
| Salmon | 6 per lb. |
| Shad | 3½ per lb. |
| Shad roe | 6 per lb. |
| Smelts | 2¼ per lb. |
| Trout, brook | 2¼ per lb. |
| FISH, SMOKED, SALT. | |
| Cod, salt (boneless) | 5 per lb. |
| Halibut, smoke. | 9 per lb. |
| FISH, SMOKED, SALT—*Cont'd.* | |
| Herring, smoke. | 7½ per lb. |
| Mackerel, salt | 10 per lb. |
| FISH, CANNED. | |
| Salmon | 6½ per lb. |
| Sardines | 9 per lb. |
| Tuna fish | 9½ per lb. |
| SHELLFISH, FRESH. | |
| Lobster | 1½ per lb. |
| Oysters | 2 per lb. |
| " | 4 per quart. |
| Scallops | 3½ per lb. |
| SHELLFISH, CANNED. | |
| Lobster | 4 per lb. |
| Shrimps | 5 per lb. |
| LEGUMES. | |
| Peanuts, unshd. | 19 per lb. |
| Peanuts, shelled | 11 per quart. |
| " " | 25 per lb. |
| Peanut butter | 27½ per lb. |
| Soy beans, dri'd | 20 per lb. |

GROUP III.—CEREAL FOODS.

| MATERIALS. | No. of Hundred-Calorie Portions. | MATERIALS. | No. of Hundred-Calorie Portions. | MATERIALS. | No. of Hundred-Calorie Portions. |
|---|---|---|---|---|---|
| Bread | 12 per lb. | Crackers | 19 per lb. | Rice | 16 per lb. |
| " | 9 per loaf, 16 oz. dough, 12-14 oz. baked. | Flour, wheat | 16 per lb. | Rolls | 12 per lb. |
| | | Flour, buckwh't | 16 per lb. | Rolls, 2-oz. size | 18 per dozen. |
| Cereals, flaked | 15 per lb. | Macaroni | 16 per lb. | Tapioca | 16 per lb. |
| Corn meal | 16 per lb. | Oatmeal | 18 per lb. | Wheat, shred'd | 16⅔ per lb. |

GROUP IV.—SUGARS AND SUGARY FOODS.

| MATERIALS. | No. of Hundred-Calorie Portions. | MATERIALS. | No. of Hundred-Calorie Portions. | MATERIALS. | No. of Hundred-Calorie Portions. |
|---|---|---|---|---|---|
| Candy, aver'ge | 17 per lb. | Molasses | 50 per quart. | Sugar, granul'd | 18 per lb. |
| Honey | 15 per lb. | Syrup, corn | 14½ per lb. | " maple | 15 per lb. |
| " | 55 per quart. | " " | 54 per quart. | Chocolate, milk | 22½ per lb. |
| Molasses | 13 per lb. | " maple | 49 per quart. | " sweet | 22 per lb. |

GROUP V.—FATS AND FAT FOODS.

| MATERIALS. | No. of Hundred-Calorie Portions. | MATERIALS. | No. of Hundred-Calorie Portions. | MATERIALS. | No. of Hundred-Calorie Portions. |
|---|---|---|---|---|---|
| FATS, TABLE AND COOKING. | | NUTS. | | NUTS—*Cont'd.* | |
| Butter | 34 per lb. | Almonds, unsh'd | 16 per lb. | Hickory nuts, | |
| Lard | 41 per lb. | " shelled | 29 per lb. | unshelled | 12 per lb. |
| Oil | 41 per lb. | Brazil nuts, unshelled | 16 per lb. | Hickory nuts, shelled | 33 per lb. |
| Suet | 34 per lb. | Brazil nuts, sh'd | 32 per lb. | Pecans, unsh'd | 17 per lb. |
| Cream, 18 p. c. | 9 per lb. or pint. | Butternuts, unshelled | 4 per lb. | Pecans, shelled | 33 per lb. |
| Cream, 40 p. c. | 17 per lb. or pt. | Butternuts, s'd | 32 per lb. | Walnuts, Calif., unshelled | 8½ per lb. |
| FAT MEATS. | | Cocoanut in shl. | | Walnuts, Calif., shelled | 32 per lb. |
| Bacon | 26 per lb. | without milk | 14 per lb. | Chocolate | 28 per lb. |
| Pork, salt | 28½ per lb. | | | | |
| Pork sausage | 21 per lb. | | | | |

## WEEKLY NEEDS OF A FAMILY.

The number of hundred-calorie portions needed by any family can be estimated by reference to the table given below. For illustration, if a family consists of one man who does little muscular work; two women, one of whom does little muscular work, the other hard muscular work, an active boy 16 years of age, and three children, 11, 8, and 4 years of age, they would require, respectively, about 200, 150, 200, 280, 140, 120, and 100 hundred-calorie portions a week, which make a total of about 1,200 hundred-calorie portions per week.

## ENERGY NEEDS OF DIFFERENT INDIVIDUALS.

(Hundred-Calorie Portions.)

| INDIVIDUAL. | Per Day | Per Wk. | INDIVIDUAL. | Per Day | Per Wk. |
|---|---|---|---|---|---|
| A man or boy using much muscular energy in work or play up to | 40 | 280 | A boy or girl between 10 and 12 years of age, at least | 20 | 140 |
| A man or boy using little or no muscular energy in work or play | 27 | 200 | A boy or girl between 6 and 9 years of age, at least | 17 | 120 |
| A woman or girl using much muscular energy in work or play | 27 | 200 | A boy or girl between 2 and 5 years of age, at least | 14 | 100 |
| A woman or girl using little or no muscular energy in work or play | 22 | 150 | | | |

The diet will usually prove adequate and appetizing if the necessary calories of energy are supplied somewhat as follows:

About one-fifth by fruits and vegetables.
About one-fifth by meat, milk, and similar foods.
About three-tenths by cereal foods.
About one-tenth by sugar and other sweets.
About one-fifth by fats and fat foods.

## COAL RESERVES OF THE WORLD UNMINED.

UNITED STATES and Alaska, 3,538,506,328,300 tons, of which 16,153,000,000 tons is anthracite. 2,155,000,000,000 tons is bituminous, and 2,054,000,000,000 tons is sub-bituminous and lignite; Canada, 1,361,000,000,000 tons, of which 2,000,000,000 is anthracite and 313,000,000,000 is bituminous; China, 1,097,000,000,000 tons, of which 427,000,000,000 in anthracite; Germany, 467,000,000,000 tons, of which 452,000,000,000 tons is bituminous and the rest sub-bituminous; Great Britain, 209,000,000,000 tons, of which 12,000,000,000 is anthracite; Siberia, 192,000,000,000 tons, no anthracite; Australia, 183,000,000,000 tons, all bituminous or sub-bituminous; India, 87,000,000,000 tons, no anthracite; Russia in Europe, 66,000,000,000 tons, of which 41,000,000 is anthracite; Union of South Africa, 62,000,000,000 tons, of which 13,000,000,000 is anthracite; Austria, 59,000,000,000 tons, ne anthracite; Colombia, 30,000,000,000 tons, no anthracite; Indo-China, 22,000,000,000 tons, all anthracite; France, 19,000,000,000 tons, of which 4,000,000,000 is anthracite; Belgium, 12,000,000,000 tons, no anthracite; Spain, 10,000,000,000 tons, of which 2,000,000,000 is anthracite; Spitzbergen, 9,000,000,000 tons, no anthracite; Japan, 9,000,000,000 tons, no anthracite; Holland, 5,000,000,000 tons, no anthracite; other countries, 24,009,000,000 tons, of which 3,000,000,000 is anthracite.

Total coal reserves, 7,460,506,000,000 tons, of which 542,103,000,000 is anthracite.

Coal unmined in Pennsylvania is estimated at 16,000,000,000 tons anthracite and 108,474,000,000 tons bituminous; in West Virginia, 150,363,600,000 tons, bituminous.

### COAL OUTPUT OF THE WORLD.

The yearly coal production of the world is estimated at slightly under 1,500,000,000 short tons, of which from 550,000,000 to 650,000,000 tons is mined in the United States; 325,000,000 in Great Britain; 300,000,000 in old Germany; 66,000,000 in old Austria-Hungary; 50,000,000 in old France; 40,000,000 in old Russia; 25,000,000 in Belgium; 30,000,000 in Japan; 20,000,000 in China; 20,000,000 in India; 15,000,000 in Canada; 12,000,000 in New South Wales; 7,000,000 in Spain; 10,000,000 in Union of South Africa; 2,500,000 in New Zealand; and smaller amounts in Holland, Chile, Mexico, Turkey, Italy, Sweden, Serbia, Bulgaria, Peru and other countries.

### COAL MINERS—THEIR AVERAGE NUMBER.

The number of men employed in the Pennsylvania anthracite mines ranged as high as 180,000 in 1914, and as low as 154,000 in 1917. They average 200 (1908) to 293 (1918) days' work a year, and they dig 2.02 (1913) to 2.39 (1908) tons per man per day.

In the bituminous mines the number of employees ranged up to 615,305 in 1918, with 243 days' work per year, and an average digging of 3.91 (1915) tons per man per day.

## IRON AND STEEL OUTPUT OF CHIEF COUNTRIES.

| Year. | United Kingdom. | United States. | Germany. | France. | Year. | United Kingdom. | United States. | Germany. | France. |
|---|---|---|---|---|---|---|---|---|---|
| PIG IRON. | *Long tons.* | *Long tons.* | *Met. tons.* | *Met. tons.* | STEEL. | *Long tons.* | *Long tons.* | *Met. tons.* | *Met. tons.* |
| 1900..... | 8,960,000 | 13,789,000 | 8,521,000 | 2,714,000 | 1900..... | 4,901,000 | 10,188,000 | 6,646,000 | 1,565,000 |
| 1905..... | 9,608,000 | 22,992,000 | 10,988,000 | 3,077,000 | 1905..... | 5,812,000 | 20,024,000 | 10,067,000 | 2,240,000 |
| 1910..... | 10,012,000 | 27,304,000 | 14,793,000 | 4,032,000 | 1910..... | 6,374,000 | 26,095,000 | 13,699,000 | 3,390,000 |
| 1911..... | 9,526,000 | 23,650,000 | 15,534,000 | 4,426,000 | 1911..... | 6,462,000 | 23,676,000 | 15,019,000 | 3,681,000 |
| 1912..... | 8,751,000 | 29,727,000 | 17,753,000 | 4,939,000 | 1912..... | 6,796,000 | 31,251,000 | 17,302,000 | 4,428,000 |
| 1913..... | 10,260,000 | 30,972,000 | 16,765,000 | 5,124,000 | 1913..... | 7,668,000 | 31,301,000 | 18,959,000 | 4,620,000 |
| 1914..... | 8,924,000 | 23,332,000 | 14,392,000 | ..... | 1914..... | 7,885,000 | 23,513,000 | 14,973,000 | ..... |
| 1915..... | 8,794,000 | 29,916,000 | 11,790,000 | ..... | 1915..... | 8,550,000 | 32,151,000 | 13,258,000 | ..... |
| 1916..... | 9,048,000 | 39,435,000 | 13,285,000 | 1,447,000 | 1916..... | 9,196,000 | 42,774,000 | 16,183,000 | 1,952,000 |
| 1917..... | 9,420,000 | 38,621,000 | 13,142,000 | 1,684,000 | 1917..... | 9,804,000 | 45,061,000 | 16,587,000 | 2,232,000 |
| 1918..... | 9,066,000 | 39,052,000 | 11,590,000 | 1,297,000 | 1918..... | 9,591,000 | 45,073,000 | 14,874,000 | 1,912,000 |
| 1919..... | 7,398,000 | 31,015,364 | 5,654,000 | 2,376,000 | 1919..... | 7,894,000 | 34,671,232 | 6,732,000 | 2,148,000 |
| 1920..... | 8,007,000 | 36,925,987 | 5,550,000 | 3,380,000 | 1920..... | 9,056,000 | 42,132,934 | 7,710,000 | 3,002,000 |
| 1921..... | 2,611,000 | 16,750,000 | 5,750,000 | 3,294,000 | 1921..... | 3.624.000 | 20,250,000 | 7,750,000 | 2,913,000 |

### WORLD'S IRON AND STEEL PRODUCTION.

(Long or metric tons of 2,240 lbs.)

Pig iron (1913) 65,566,000; (1919) 46,690,000; (1920) 54,976,000; (1921) 29,281,000.

Steel (1913) 63,356,000; (1919) 51,774,000; (1920) 63,117,000; (1921) 35,342,000.

The "minette' ore field, which extends over a portion of Alsace-Lorraine, Luxemburg, and Belgium, is the most important as regards quantity in Europe. This field in 1912 produced 44,000,000 tons, or 28 per cent. of the world's output. The ore—geologically a bedded oolitic ironstone of Jurassic age—is a carbonate partly oxidized to brown ore,

### IRON ORE RESOURCES OF THE WORLD.

The unmined iron ores of the world are officially estimated as follows, in metric or long tons:

| Countries. | Iron Ore. | Iron. | Countries. | Iron Ore. | Iron. |
|---|---|---|---|---|---|
| Europe: | *Metric tons.* | *Metric tons.* | Europe—*Continued.* | *Metric tons.* | *Metric tons.* |
| Germany..... | 1,270,000,000 | 600,000,000 | Greece..... | 100,000,000 | 45,000,000 |
| France..... | 5,630,000 | 3,000,000,000 | Other European countries..... | 77,000,000 | 30,000,000 |
| England..... | 1,300,000,000 | 455,000,000 | | | |
| Sweden..... | 1,158,000,000 | 740,000,000 | | | |
| Russia..... | 865,000,000 | 387,000,000 | Total Europe..... | 12,000,000,000 | 6,528,000,000 |
| Spain..... | 711,000,000 | 349,000,000 | America..... | 9,855,000,000 | 5,154,000,000 |
| Norway..... | 367,000,000 | 124,000,000 | Africa..... | 125,000,000 | 75,000,000 |
| Austria-Hungary.... | 284,000,000 | 103,000,000 | Asia..... | 260,000,000 | 156,000,000 |
| Luxemburg..... | 270,000,000 | 90,000,000 | Australia..... | 136,000,000 | 74,000,000 |

The French figures for ore include 150,000,000 tons in Algeria and Tunis.

### WORLD'S PRODUCTION OF TIN (METRIC TONS).

| Country. | 1917. | 1918. | 1919. | Country. | 1917. | 1918. | 1919. |
|---|---|---|---|---|---|---|---|
| Federated Malay States... | 40,470 | 37,970 | 37,460 | Nigeria..... | 7,070 | 6,000 | 6,000 |
| Brit. Prot'd Malay States. | 4,500 | 4,500 | 4,000 | Australia..... | 4,970 | 4,740 | 4,000 |
| Bolivia..... | 28,320 | 30,550 | 30,000 | Cornwall..... | 4,000 | 4,000 | 4,000 |
| Banca..... | 13,940 | 11,000 | 11,000 | Union of South Africa.... | 1,540 | 1,370 | 1,300 |
| Billiton and Singkep..... | 7,740 | 9,000 | 9,000 | Other countries..... | 1,800 | 2,000 | 2,000 |
| China..... | 11,800 | 8,500 | 9,000 | | | | |
| Siam..... | 8,600 | 8,600 | 8,000 | Total..... | 134,750 | 128,230 | 125,760 |

### WORLD'S PRODUCTION OF PLATINUM (IN TROY OUNCES).

| Country. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. |
|---|---|---|---|---|---|---|---|---|---|
| Borneo, Sumatra.. | ..... | ..... | 200 | ..... | India 18 | India 9 | Indies 52 | ..... | ..... |
| Canada..... | 30 | 30 | 50 | 30 | 100 | 60 | 80 | 30 | 30 |
| Colombia..... | 12,000 | 12,000 | 15,000 | 17,500 | 18,000 | 25,000 | 32,000 | 35,000 | 35,000 |
| N. S. Wales, Tas'a. | 470 | 778 | 1,500 | 1,248 | 303 | 222 | 330 | 1,606 | 1,326 |
| Russia..... | 300,000 | 300,000 | 250,000 | 241,200 | 124,000 | 63,900 | 50,000 | 25,000 | 30,000 |
| United States..... | 628 | 721 | 483 | 570 | 742 | 750 | 605 | 647 | 824 |
| Total..... | 313,128 | 313,529 | 267,233 | 260,548 | 143,163 | 89,941 | 83,067 | 36,533 | 67,180 |

### WORLD'S PRODUCTION OF OTHER MINERALS.

Lead (1918) 1,250,000 metric tons; quicksilver (1918) 89 157 flasks of 75 lbs. each; aluminum (1919) 147,000 long tons; chromite ore (1918) 232,400 long tons; antimony (1913) 26,000 metric tons; zinc (1915) 655,000 metric tons; natural graphite (1918) 205,000 metric tons; tungsten ore (1918) 31,865 metric tons; bauxite (1919) 721,000 metric tons; coal (1920) 1,360,000,000 metric tons; magnesite (1917) 675,000 metric tons; petroleum (1920) 544,885,000 bbls. of 42 gallons each; phosphate rock (1913) 7,140,015 metric tons.

## WORLD'S PRODUCTION OF CRUDE RUBBER.

(Figures represent long tons, 2,240 lbs.)

| Year. | Plantation. | Brazil. | Other Kinds. | Total. | Year. | Plantation. | Brazil. | Other Kinds. | Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1900..... | 4 | 26,750 | 27,136 | 53,890 | 1911..... | 14,419 | 37,730 | 23,000 | 75,149 |
| 1901..... | 5 | 30,300 | 24,545 | 54,850 | 1912..... | 28,518 | 42,410 | 28,000 | 98,928 |
| 1902..... | 8 | 28,700 | 23,632 | 52,340 | 1913..... | 47,618 | 39,370 | 21,452 | 108,440 |
| 1903..... | 21 | 31,100 | 24,829 | 55,950 | 1914..... | 71,380 | 37,000 | 12,000 | 120,380 |
| 1904..... | 43 | 30,000 | 32,077 | 62,120 | 1915..... | 107,867 | 37,220 | 13,615 | 158,702 |
| 1905..... | 145 | 35,000 | 27,000 | 62,145 | 1916..... | 152,650 | 36,500 | 12,448 | 201,598 |
| 1906..... | 510 | 36,000 | 29,700 | 66,210 | 1917..... | 204,251 | 39,370 | 13,258 | 256,879 |
| 1907..... | 1,000 | 38,000 | 30,000 | 69,000 | 1918..... | 210,000 | 38,000 | 12,000 | 260,000 |
| 1908..... | 1,800 | 39,000 | 24,600 | 65,400 | 1919..... | 240,000 | 38,000 | 12,000 | 290,000 |
| 1909..... | 3,600 | 42,000 | 24,000 | 69,600 | 1920..... | 304,816 | 30,790 | 8,125 | 343,731 |
| 1910..... | 8,200 | 40,800 | 21,500 | 70,500 | 1921..... | 272,915 | 19,837 | 2,890 | 205,642 |

Nearly 76 per cent. of planted acreage plantation rubber is owned by British capital, and 5.6 per cent. by American capital, according to best available authorities.

The 55,000 acres planted and controlled by American capital comprise the estate of the General Rubber Co., in Sumatra. American interests have also acquired 40,000 acres of undeveloped land in Sumatra. A very limited area is also planted to rubber in Mindanao Philippines.

## METALS AND THEIR DISCOVERERS.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Antimony | B. Valentine | 1490 | Palladium | Wollaston | 1803 | Aluminum | Wohler | 1828 |
| Bismuth | Agricola | 1530 | Rhodium | | | Glucinum | | |
| Zinc | Paracelsus | 1530 | Iridium | Tennant | 1803 | Yttrium | | |
| Arsenic | Brandt | 1733 | Osmium | | | Thorium | Berzelius | 1829 |
| Cobalt | | | Cerium | Hisinger | 1804 | Magnesium | Bussy | 1829 |
| Platinum | Wood | 1741 | Potassium | | | Vanadium | Sefstrom | 1830 |
| Nickel | Cronstedt | 1751 | Sodium | | | Didymium | | |
| Manganese | Gahn | 1774 | Barium | Davy | 1807 | Lanthanium | Mosander | 1842 |
| Tungsten | D'Elhugart | 1781 | Strontium | | | Eribium | | |
| Tellurium | Muller | 1782 | Calcium | | | Terbium | | |
| Molybdenum | Hjelm | 1782 | Cadmium | Stromeyer | 1818 | Pelopium | H. Rose | 1845 |
| Uranium | Klaproth | 1789 | Lithium | Arfwedson | 1818 | Niobium | | |
| Titanium | Gregor | 1791 | Silisium | Berzelius | 1824 | Ruthenium | Claus | 1845 |
| Chromium | Vauquelin | 1797 | Zirconium | | | Norium | Svanberg | 1845 |
| Columbium | Hatchett | 1802 | | | | | | |

## DEATHS, BIRTHS, AND RATES, IN GREAT CITIES.

Note—The general death and birth rates, and death rate under 1 year, are per 1,000 population; all other rates are per 100,000.

| | Total D'ths, All Causes. | Gen. Death Rate. | Tuber-culosis. | Other Forms Tuber. | Cancer & Sar-coma. | Bronch. & Lob. Pneu-monia. | Total Births Re-ported. | Gen. Birth Rate. | Death Rate Under 1 Yr. |
|---|---|---|---|---|---|---|---|---|---|
| Amsterdam, Holland | 7,039 | 10.34 | 99 | 27 | 137 | 99 | 15,009 | 22.03 | 54 |
| Birmingham, England | 10,361 | 11.27 | 97 | 16 | 111 | 103 | 22,134 | 24.07 | 83 |
| Bradford, England | 3,994 | 13.72 | 92 | 24 | 136 | 80 | 5,696 | 19.57 | 109 |
| Bremen, Germany | 3,273 | 11.71 | 141 | 38 | 112 | 120 | 6,056 | 21.67 | 98 |
| Brussels, Belgium | 2,570 | 12.29 | 121 | 19 | 93 | 109 | 3,398 | 16.26 | 104 |
| Budapest, Hungary | 18,996 | 20.35 | 312 | 57 | 145 | 40 | 19,592 | 20.99 | 161 |
| Dresden, Germany | 7,472 | 12.45 | 131 | 18 | 142 | 91 | 11,006 | 18.35 | 116 |
| Glas ow, Scotland | 15,625 | 15.11 | 105 | 40 | 122 | 143 | 29,710 | 28.73 | 105 |
| Hamburg, Germany | 12,516 | 12.13 | 111 | 21 | 130 | 118 | 18,118 | 17.57 | 97 |
| Cologne, Germany | 8,805 | 13.16 | 147 | 32 | 111 | 141 | 15,547 | 23.24 | 141 |
| London, England | 56,259 | 12.46 | 107 | 21 | 133 | 84 | 99,839 | 22.11 | 81 |
| Manchester, England | 10,093 | 13.81 | 132 | 34 | 128 | 112 | 17,601 | 24.09 | 97 |
| Milan, Italy | 10,338 | 14.39 | 138 | 49 | 120 | 155 | 12,126 | 16.88 | 104 |
| Munich, Germany | 8,906 | 13.31 | 131 | 22 | 151 | 62 | 11,791 | 17.52 | 128 |
| Liverpool, England | 11,666 | 14.27 | 128 | 36 | 109 | 165 | 21,904 | 26.85 | 107 |
| Paris, France | 41,955 | 14.43 | 243 | 42 | 129 | 116 | 52,011 | 17.90 | 95 |
| Rouen, France | 2,706 | 21.88 | 274 | 62 | 189 | 170 | 2,810 | 22.72 | 159 |
| Stockholm, Sweden | 4,661 | 11.07 | 138 | 28 | 134 | 81 | 6,260 | 14.87 | 60 |
| Vienna, Austria | 28,297 | 15.14 | 211 | 71 | 140 | 122 | 28,789 | 15.41 | 137 |
| N. Y. City | 64,257 | 11.17 | 89 | 13 | 97 | 113 | 131,241 | 23.34 | 71 |

The death rates for typhoid, measles, scarlet fever, whooping cough and diphtheria are, generally speaking, higher in foreign than in American cities.

## VITAL STATISTICS FOR ENGLAND AND WALES, 1920.

The important facts in the record of vital statistics for England and Wales for the year 1920, as presented in the Eighty-third Annual Report of the Registrar for England and Wales for that year, are stated to be the following: The highest marriage rate recorded to that date—20.2 per 1,000 of the population, a rate 4.8 above the average of the last 10-year period unaffected by the war (1905-1914); the highest birth rate (25.5 per 1,000 population) since 1909; and the lowest death rate recorded, namely 12.4 per 1,000 population, being 1.3 below the rate for 1919. The number of deaths was 466,130—the smallest number recorded in any year since 1862, when the population was little more than half that of 1920.

The proportion of males to females born in 1920 was 1,052 per 1,000, continuing much above pre-war experience. The loss of births attributable to the war was estimated at about 600,000.

## MARRIAGE, BIRTH AND DEATH RATES IN GERMANY.

The Statistische Reichsamt has recently published the marriage, birth and death rates in Germany for 1921, and comparisons are made with the figures for the years 1904-1920. The following table gives the data for the years 1904 to 1921, inclusive, and the difference between the birth rates and death rates for each year:

*Marriage, birth, and death rates per 1,000 population in Germany, 1904 to 1921, inclusive.*

| Year. | Marriage Rate. | Birth Rate. | Death Rate. | Differ-ence. | Year. | Marriage Rate. | Birth Rate. | Death Rate. | Differ-ence. |
|---|---|---|---|---|---|---|---|---|---|
| 1904 | 8.0 | 35.1 | 20.6 | +14.5 | 1913 | 7.7 | 28.3 | 15.8 | +12.5 |
| 1905 | 8.1 | 34.0 | 20.8 | +13.2 | 1914 | 6.8 | 27.6 | 19.9 | + 7.7 |
| 1906 | 8.2 | 34.1 | 19.2 | +14.9 | 1915 | 4.1 | 21.0 | 22.0 | — 1.0 |
| 1907 | 8.1 | 33.2 | 19.0 | +14.2 | 1916 | 4.1 | 15.7 | 19.7 | — 4.0 |
| 1908 | 8.0 | 33.0 | 19.0 | +14.0 | 1917 | 4.7 | 14.4 | 20.8 | — 6.4 |
| 1909 | 7.8 | 32.0 | 18.1 | +13.9 | 1918 | 5.4 | 14.7 | 18.8 | — 4.1 |
| 1910 | 7.7 | 30.7 | 17.1 | +13.6 | 1919 | 13.4 | 20.6 | 16.1 | + 4.5 |
| 1911 | 7.8 | 29.5 | 18.2 | +11.3 | 1920 | 14.8 | 27.1 | 16.3 | +10.8 |
| 1912 | 7.9 | 29.1 | 16.4 | +12.7 | 1921 | 11.9 | 26.1 | 14.8 | +11.3 |

Positive figures indicate excess of births over deaths; minus figures excess of deaths over births.

The figures in the following table represent the marriages, births, and deaths in 1920 and 1921 as compared with 1913, the figures for 1913 being taken as a base and represented as 100:

*Marriages, births, and deaths in Germany in 1920 and 1921 as compared with 1913.*

(The figures for 1920 and 1921 are in percentages of those for 1913, which are represented by 100.)

| | 1913. | 1920. | 1921. | | 1913. | 1920. | 1921. | | 1913. | 1920. | 1921. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Marriages | 100 | 190 | 155 | Births | 100 | 94 | 91.6 | Deaths | 100 | 101.3 | 93.7 |

## POISONS AND THEIR ANTIDOTES.

NOTE—When the poison is unknown, give stimulants and soothing liquids. The data below is from an American National Red Cross textbook on first aid.

*Table I.—Poisons for which an emetic is always given first.*

The treatment is in addition to an emetic.

ALCOHOL—In any form—rum, gin, whiskey, proof spirits, etc., also methyl alcohol.

*Symptoms*—Giddiness, swaying of body, inability to stand. Face flushed, eyes red, skin clammy, weak pulse, may be convulsions and unconsciousness.

*Treatment*—Hot coffee or aromatic spirits of ammonia. Try to arouse, but if weak do not exhaust by making walk. Dash cold water on face and chest. When somewhat recovered, wrap warmly and put to bed.

ARSENIC—Found in rat poisons, vermin killer, Paris green, Fowler's solution. Sometimes in tinned fruits and beer.

*Symptoms*—Severe pain in stomach; purging; severe cramps in legs, vomiting, dryness of throat, cold sweats, profound shock.

*Treatment*—Much lukewarm water. Magnesia in large quantity or dialyzed iron in ½-ounce doses, repeated. Beaten-up eggs or castor oil and stimulants. Warmth and rubbing. If rat poison has been taken, treat as for poisoning by arsenic.

CARBON MONOXIDE—It is in blast and coke furnaces and foundries; in leaky furnaces or chimneys; about gas stoves without flue connections, such as tenements, tailor shops or boarding houses. The exhaust gases of gasoline automobiles contain from 4 to 12 per cent. of carbon monoxide, and in closed garages men are not infrequently found dead beside a running motor. A similar danger may arise from gasoline engines in launches. The gas is formed also in stoke-rooms, in gun turrets on battleships, in petroleum refineries, and in the Leblanc soda process in cement and brick plants. In underground work it may appear as the result of shot firing, mine explosions, or mine fires, or in tunnels from automobile exhausts or from coal or oil burning locomotives.

*Symptoms*—Carbon monoxide exerts its extremely dangerous action on the body by displacing oxygen from its combination with hemoglobin, the coloring matter of the blood which normally absorbs oxygen from the air in the lungs and delivers it to the different tissues of the body.

*Treatment*—1. Administer oxygen as quickly as possible and in as pure form as is obtainable, preferably from a cylinder of oxygen through an inhaler mask. 2. Remove patient from atmosphere containing carbon monoxide. 3. If breathing is feeble, at once start artificial respiration by the prone posture method. 4. Keep the victim flat, quiet, and warm. 5. Afterward, give plenty of rest.

LEAD—Sugar of lead, lead paint, white lead.

*Symptoms*—Throat dry; metallic taste with much thirst, colic in abdomen, cramps in legs, cold sweat; sometimes paralysis of legs and convulsions.

*Treatment*—½-ounce Epsom salts in tumbler of water. Stimulants and soothing liquids.

OPIUM—Laudanum, morphine, paregoric, some soothing syrups and cough mixtures.

*Symptoms*—Drowsiness, finally unconsciousness; pulse full at first, then weak; breathing full and slow at first, gradually slower and shallow; pinhead pupils; face flushed, then purple.

*Treatment*—May have difficulty in getting emetic to work; plenty of strong coffee. Try to arouse by speaking loudly and threatening, but do not exhaust by compelling to walk, etc. Stimulants and artificial respiration.

PHOSPHORUS—In matches, phosphorous paste in many rat poisons and vermin killers, often with arsenic.

*Symptoms*—Severe pain in stomach, vomiting. Skin is dark and may have odor of phosphorus. Bleeding from nose; bloody purging. Convulsions.

*Treatment*—Epsom salts, ½-ounce in tumbler of water, or magnesia. Stimulants. Soothing liquid best. Milk. Avoid fats and oils.

PTOMAINE—Poisoning by decayed meat, fish, milk, or ice cream.

*Symptoms*—Nausea, vomiting, purging. Skin cold and clammy. Pulse weak. Severe pain in abdomen, cramps, great prostration and weakness. Often eruption on skin.

*Treatment*—Purgative, castor oil or Epsom salts. Teaspoonful of powdered charcoal, and repeat

STRYCHNINE—NUX VOMICA—Strychnine is frequently used on meat to poison animals, and in some vermin killers.

*Symptoms*—Convulsions, very severe, alternating with cramps, affecting all muscles of body. Back is bowed up by spasms of muscles. Jaws are locked. Spasm of muscles is so great that it prevents breathing, so face becomes dusky.

*Treatment*—Powdered charcoal, if possible, in large quantity. Follow with another emetic. Absolute quiet so as not to bring on convulsions.

*Table II.—Poisons for which an emetic should not be given first.*

MERCURY—Corrosive sublimate, antiseptic tablets. Other salts of mercury much less commonly used.

*Symptoms*—Corrosive sublimate is very irritating, so when taken turns mouth, lips and tongue white. Mouth is swollen and tongue is shrivelled; always metallic taste in mouth. Pain in abdomen. Nausea and vomiting mucus and blood, bloody purging, cold, clammy skin, great prostration, and convulsions.

*Treatment*—First, give white of egg or whole egg beaten up; flour and water, but not so good. Emetics, soothing liquids, and stimulants.

NITRATE OF SILVER—Lunar caustic.

*Symptoms*—Pain in mouth and stomach; mouth first colored white, then black; vomit first white, then turns black.

*Treatment*—Common salt dissolved in water, or milk very frequently. Then emetic. Afterward soothing liquids and stimulants.

*Table III.—Poisons for which an emetic should never be given.*

STRONG CORROSIVE ACIDS—1. Acetic; 2, Hydrochloric (spirits of salt); 3, Nitric (aqua fortis); 4, Sulphuric (vitriol.)

*Symptoms*—Very severe burning pain in mouth, throat, and stomach. Wherever acid touches skin or mucous membrane they are destroyed. Frequently vomiting and purging. More or less suffocation from swelling of throat, great prostration and shock.

*Treatment*—An alkali to neutralize acid. Best, magnesia or chalk in water, given frequently and freely. Lime, whiting, baking soda, plaster, tooth powder, or even wood ashes may all be used for alkali, or ammonia, a tablespoonful to 2 cups of water, but those mentioned above are better as they are less irritating. Afterward, soothing liquids, milk, milk and egg, olive oil. Stimulants are practically always required. If acid has entered air passage, may inhale fumes of ammonia.

OXALIC ACID (salts of lemon or sorrel)

*Symptoms*—Much like corrosive acids just named, but not so much burning of lips, etc.

*Treatment*.—Magnesia, chalk, and water or lime water to neutralize acid. Then one ounce of castor oil and stimulants freely.

CARBOLIC ACID (Phenol)—(Very commonly used in attempts at suicide.)

*Symptoms*—It is also a powerful corrosive poison, which causes great pain and vomiting. Severe case: Unconsciousness very soon and early death. Usually easy to tell by odor of acid and burn, which with pure acid is white and with impure, black.

*Treatment*—Rinse mouth with pure alcohol. If grown person, should swallow three or four tablespoonfuls of alcohol mixed with an equal quantity of water. Follow this in five minutes with two tablespoonfuls of Epsom salts dissolved in a little water. Though not so good, limewater may be used to rinse mouth, several glasses of it being swallowed; three or four raw eggs may be given or castor or sweet oil. Stimulants always, and keep warm.

STRONG CAUSTIC ALKALIES: 1, Ammonia: Strong ammonia, ammonia liniment, camphor liniment; 2, Lime: Quicklime; 3, Potash: Caustic potash; 4, Soda: Caustic soda.

*Symptoms*—Much like corrosive acids. Immediate severe burning, pain in mouth, throat, and stomach. Vomiting and purging. Alkali destroys tissues of mouth it has touched. Severe shock and suffocation from swelling.

*Treatment*—An acid to neutralize alkali. Vinegar, lemon or orange juice. Tartaric or citric acid in plenty of water. Soothing liquids. stimulants. If cannot swallow, may inhale acetic acid or vinegar from a pocket handkerchief.

*CAUTION. In giving any antidote do not wait for it to dissolve but stir it up in any fluid which can be obtained, except oil, and give it at once.*

## HELP IN CASE OF ACCIDENTS.

**Drowning.** There are several methods of artificial respiration, but the Schaefer prone-pressure one-man method is considered the best, being widely used throughout the United States as well as in many foreign countries. By the plan many human lives are saved each year by members of the U. S. Vol. Life Sav. Corps, who use it to the exclusion of all others. The directions are as follows;

Send some one immediately for a doctor. DO NOT AWAIT HIS ARRIVAL, but proceed as follows: After the patient has been taken from the water locate an even flat surface, laying the patient face downward. Loosen all clothing, collars, belts, garters, etc. Clear the mouth of all mucus and foreign matter, pull the tongue out and see that it remains out; then straddle the patient, placing your hands under his stomach, clasping them together. In this manner gradually lift the patient a few inches, squeezing as you do so, dropping him suddenly. Sometimes a sharp slap between the shoulders is helpful. Lifting the patient as above mentioned should only be done once or twice, taking a few seconds, as it is merely to start anything that might be blocking the air passages.

Remind some one in the crowd about the doctor. Keep the patient lying face downward on an even flat surface, arms extended, the forehead resting on the leeward forearm, tongue out, facing the wind, the windward arm to be crooked, acting as a protector to the face. Straddle the patient as before, facing his head place your hands, open spread, upon the patient's lower or short ribs, commencing with a downward and inward pressure to the count of three, relaxing to the same count. This motion is continuous, first down, then up, swinging the body to and fro to the count of three. After the downward pressure to the count of three the hands are relaxed from the ribs to the same count each time, and should be maintained until signs of life show—namely, when the patient breathes unaided.

For warmth and circulation, rub the arms and legs upward (toward the heart), no back strokes. Circulation should not be started until after breathing has been fully restored. During the period of operation the subject should be kept warm by the application of hot water bottles, heated bricks, etc. applied to the pit of the stomach, the armpits, between the thighs or to the soles of the feet. Should you not be able to resort to these suggestions as to warmth, a fire built on the lee side of the patient at a distance not to set fire to him would help serve the purpose. Stimulants should not be given by the mouth until after the patient is able to swallow—that is, when the patient is fully conscious, then give plain black coffee, or half teaspoonful of aromatic spirits of ammonia in half a glass of water.

The patient should be kept in bed as quiet as possible in a well ventilated room. To be feared: Pneumonia or possible collapse of the heart.

This treatment should be continued at least an hour. As a general rule signs of life begin to show after 8 or 10 minutes' work. One should not be discouraged if it takes longer, as life has been restored after working as long as 30 minutes, although this is not common.

We read of persons having been revived after being under water as long as 15 minutes. This is very rare. If the person has been under water 3 or 4 minutes there is everything in his favor, but should the submersion be much longer the odds are apt to be against it. In any case never give up, but commence work at once.

Signs of death are: Breathing and the heart's action entirely cease, eyelids generally are half closed, the pupils dilated, the tongue approaches the under edges of the lips, and these, as well as the nostrils, are covered with a frothy mucus. Coldness and pallor of surface increase.

Remember that mechanical devices are dangerous in the hands of the inexperienced.

Do not await the arrival of the doctor before starting the artificial respiration. Start immediately.

Do not lay the patient on the back when applying artificial respiration. Always face downward.

Do not hold the body up by the feet.

Do not dash water in the patient's face.

Do not place the body in a bath unless ordered to do so by the doctor.

Do not tie strings on the tongue or run pins or nails through it.

Do not roll the patient over barrels, boxes, or a fence.

**Burns and Scalds.** Cover with cooking soda and lay wet cloths over it. Whites of eggs and olive oil. Olive oil or linseed oil, plain or mixed with chalk or whiting. Sweet or olive oil and lime water.

**Lightning.** Dash cold water over a person struck.

**Sunstroke.** Loosen clothing. Get patient into shade and apply ice-cold water to head. Keep head in elevated position.

**Mad Dog or Snake Bite.** Tie cord tight above wound. Suck the wound and cauterize with caustic or white-hot iron at once, or cut out adjoining parts with a sharp knife. Give stimulants, as whiskey, brandy, etc.

**Stings of Venomous Insects, etc.** Apply weak ammonia, oil, salt water, or iodine.

**Fainting.** Place flat on back; allow fresh air and sprinkle with water. Place head lower than rest of body.

## COMMON STAINS AND HOW TO REMOVE THEM.

(By the U. S. Department of Agriculture.)

Blood and meat juice. Use cold water; soap and cold water; or starch paste.

Bluing. Use boiling water.

Chocolate and cocoa. Use borax and cold water; bleach if necessary.

Coffee and tea. (Clear.) Use boiling water; bleach if necessary. (With cream.) Use cold water, then boiling water, bleach if necessary.

Coffee and tea. (Clear.) Use boiling water; bleach if necessary. (With cream.) Use cold water, then boiling water; bleach if necessary.

Cream and milk. Use cold water, then soap and cold water.

Egg. Use cold water.

Fruit and fruit juices. Use boiling water; bleach if necessary.

Grass. Use cold water; soap and cold water; alcohol; or a bleaching agent.

Grease and oils. Use French chalk, blotting paper or other absorbent; or warm water and soap; or gasoline, benzine, or carbon tetrachloride.

Iodine. Use warm water and soap; alcohol; or ammonia.

Ink. Try cold water; then use an acid or bleach if necessary.

Iron. Use oxalic acid; hydrochloric acid; salts of lemon; or lemon juice and salt.

Kerosene. Use warm water and soap.

Lampblack and soot. Use kerosene, benzine, chloroform, ether, gasoline, or carbon tetrachloride.

Medicine. Use alcohol.

Mildew. If fresh, use cold water; otherwise try to bleach with Javelle water or potassium permanganate.

Paint and varnish. Use alcohol, carbon tetrachloride, chloroform, or turpentine.

Perspiration. Use soap and warm water; bleach in the sun or with Javelle water or potassium permanganate

Pitch, tar, and wheel grease. Rub with fat; then use soap and warm water; or benzine, gasoline, or carbon tetrachloride.

Scorch. Bleach in the sunshine or with Javelle water.

Shoe polish. (Black.) Use soap and water; or turpentine. (Tan.) Use alcohol.

Syrup. Use water.

Stove polish. Use cold water and soap; or kerosene, benzine, or gasoline.

Vaseline. Use kerosene or turpentine.

Water. Steam or sponge the entire surface of water-spotted materials.

Wax. Scrape off as much as possible. Use French chalk, blotting paper or other absorbent with a warm iron; or use benzine or gasoline. If color remains, use alcohol or bleach.

Send to the U. S. Department of Agriculture for Farmers' Bulletin 861, "Removal of Stains from Clothing and Other Textiles."

## WEDDING ANNIVERSARIES.

First—Cotton.
Second—Paper.
Third—Leather.
Fifth—Wooden.
Seventh—Woolen.
Tenth—Tin.
Twelfth—Silk and fine linen.
Fifteenth—Crystal.
Twentieth—China.
Twenty-fifth—Silver.
Thirtieth—Pearl.
Fortieth—Ruby.
Fiftieth—Golden.
Seventy-fifth—Diamond.

# Sporting Events and Records.

Amateur and professional sports throughout the United States continued to grow in interest both from the spectator's and competitor's basis during the season of 1922. Reports from every section of the country showed a steady development and spread in all forms of games and sport and attendant enthusiasm therein. New gate receipt records were made in the World's Baseball Series and major and minor leagues reported unusually large gate receipts during the pennant seasons.

National golf and tennis tournaments drew record-breaking galleries, and football games in all portions of the country, especially those with intersectional interest, filled huge stadiums to overflowing. Classic races of the turf season brought thousands of racing enthusiasts to the scene of various derbies and stake events. Boxing bouts of titular calibre proved remarkably profitable to both contestants and promoters.

Competition was both brilliant and sensational in almost every branch of sport. A host of new records was made by American swimmers, male and female. A number of international track and field records were broken by college and club athletes.

While the Davis Cup, emblematic of the world's team tennis championship, was the only famous international trophy in competition, there was no lack of international competition. American golfers took part in Great Britain's championships and the British players competed in the United States title play later in the year. British yachtsmen entered a team in the international six-metre races on Long Island Sound and English, Irish and Argentine polo fours played in the national polo tournament.

## BASEBALL.

Ball playing was popular in Egypt 4,000 years ago, and a leather ball has been used ever since in almost every country, including China, but batting the ball is a modern innovation. According to the commission, appointed at A. G. Spalding's suggestion in 1907, baseball originated in the United States, and the first scheme for playing it was devised by Major Gen. Abner Doubleday, in 1839, at Cooperstown, N. Y. The game was developed from Town Ball into a diamond-shaped field, and a code of playing rules was adopted by the Knickerbocker Base Ball Club of New York, in 1845. In 1858 the National Association of Base Ball Players was formed, and the first game with an admission fee was played July 20, at the Fashion Race Course, near Jamaica, L. I., between the New York and Brooklyn clubs. The first tour of an organized club was made through New York State, in 1860, by the Excelsiors of Brooklyn. The first Eastern club to tour the West was the National, of Washington, D. C. The first professional baseball club (1869) was the Cincinnati (Red Stockings), formed in 1866 as an amateur organization. The National Association of Professional Base Ball Players was formed in 1871 (with 10 clubs); the National League of Professional Base Ball Clubs, in 1876; the American Association, in 1882; the American League, in 1902.

The World's Series of 1922 was played between the New York National League and the New York American League Clubs, respective pennant winners in their leagues. All games were played at the Polo Grounds, New York City, the National League Club (Giants) won in four games to none, with the second contest ending in a 3-3 tie due to darkness. Prominent betting Commissioners ruled that where a wager was made that one team would win four straight games, those who bet on Giants won, the tie game not counting against the sequence of victories. The record by games:

FIRST GAME.

| | | | | | | | | | | R. | H. | E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Giants | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | x— | 3 | 11 | 3 |
| Yankees | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0— | 2 | 7 | 0 |

Batteries—Nehf, Ryan and Snyder; Bush, Hoyt and Schang.

SECOND GAME.

| | | | | | | | | | | | R. | H. | E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Giants | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0— | 3 | 8 | 1 |
| Yankees | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0— | 3 | 8 | 0 |

Ten innings—called account darkness. Batteries—Barnes and Snyder; Shawkey and Schang.

THIRD GAME.

| | | | | | | | | | | R. | H. | E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Giants | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | x— | 3 | 12 | 1 |
| Yankees | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0— | 0 | 4 | 1 |

Batteries—Scott and Smith; Hoyt, Jones and Schang.

FOURTH GAME.

| | | | | | | | | | | R. | H. | E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Giants | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0— | 4 | 9 | 1 |
| Yankees | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0— | 3 | 8 | 0 |

Batteries—McQuillan and Snyder; Mays, Jones and Schang.

FIFTH GAME.

| | | | | | | | | | | R. | H. | E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Giants | 0 | 2 | 0 | 0 | 0 | 0 | 3 | x— | 5 | 10 | 0 | |
| Yankees | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0— | 3 | 5 | 0 |

ATTENDANCE, RECEIPTS, AND DIVISION OF RECEIPTS.

| | First Game. | Second Game. | Third Game. | Fourth Game. | Fifth Game. |
|---|---|---|---|---|---|
| Attendance | 36,514 | 37,020 | 37,620 | 36,242 | 38,551 |
| Receipts | $119,036.00 | $120,554.00 | $122,354.00 | $118,384.00 | $125,147.00 |
| Players | 60,708.36 | Receipts | 62,400.54 | 60,375.84 | 63,824.97 |
| Clubs | 40,472.24 | awarded | 41,600.56 | 40,250.56 | 42,549.98 |
| Advisory Board | 17,855.40 | to charity. | 18,353.10 | 17,757.60 | 18,772.05 |

DIVISION OF RECEIPTS IN PAST WORLD'S SERIES.

| Year. | Gross Receipts. | Players' Share. | Clubs' Share. | Nat. Com. Share. |
|---|---|---|---|---|
| ‡1903 | $50,000.00 | ..... | ..... | ..... |
| 1904 (No series.) | ..... | ..... | ..... | ..... |
| 1905 | 68,435.00 | $27,394.20 | $34,170.03 | $6,840.77 |
| 1906 | 106,550.00 | 33,401.70 | 62,493.50 | 10,655.00 |
| 1907 | 101,728.50 | 54,933.39 | 36,622.26 | 10,172.85 |
| 1908 | 94,975.50 | 46,114.92 | 39,363.03 | 9,497.55 |
| 1909 | 188,302.50 | 66,924.90 | 102,547.35 | 18,830.25 |
| 1910 | 173,980.00 | 79,071.93 | 77,510.07 | 17,398.00 |
| 1911 | 342,164.50 | 127,910.61 | 180,217.44 | 34,036.45 |
| 1912 | 490,449.00 | 147,572.28 | 293,831.82 | 49,044.90 |
| 1913 | 325,980.50 | 135,164.16 | 158,218.29 | 32,598.05 |
| 1914 | 225,739.00 | 121,858.94 | 81,266.16 | 22,573.90 |
| 1915 | 320,361.50 | 144,899.55 | 143,425.80 | 32,036.15 |
| 1916 | 385,590.50 | 162,927.45 | 184,104.00 | 38,559.05 |
| 1917 | 425,878.00 | 152,888.58 | 230,401.62 | 42,587.80 |
| 1918 | 179,619.00 | 69,527.70 | 92,129.40 | 17,961.90 |
| 1919 | 722,414.00 | 260,349.66 | 389,822.94 | 72,241.40 |
| 1920 | 564,800.00 | 161,162.06 | 347,157.94 | 56,480.00 |
| 1921 | 900,233 00 | 292,522.23 | 472,075.82 | †135,034.95 |
| 1922 | *605,475.00 | 247,309.71 | 164,873.14 | †72,591.11 |
| Totals | $6,282,675.50 | $2,331,953.97 | $3,090,230.41 | $679,133.08 |

*The receipts of the second game, a 3-3 tie, were distributed to charity funds.
†Advisory council share.
‡Official figures not available.

HOW PLAYERS DIVIDED WORLD'S SERIES MONEY.

| Year. | Games | Winning Players' Share. | Losing Players' Share. | Year. | Games | Winning Players' Share. | Losing Players' Share. |
|---|---|---|---|---|---|---|---|
| 1903... | 8 | Boston§ ... $1,182 | Pittsburgh . $1,316 | 1914... | 4 | Boston.... $2,812 | Phila..... $2,031 |
| 1905... | 5 | New York.. 1,142 | Phila..... 832 | 1915... | 5 | Boston.... 3,780 | Phila..... 2,520 |
| 1906... | 6 | White Sox.. 1,874 | Cubs..... 439 | 1916... | 5 | Boston.... 3,910 | Brooklyn... 2,834 |
| 1907... | *5 | Chicago.... 2,142 | Detroit.... 1,945 | 1917... | 6 | Chicago.... 3,669 | New York.. 2,442 |
| 1908... | 5 | Chicago.... 1,317 | Detroit.... 870 | 1918... | 6 | Boston.... 1,102 | Chicago.... 671 |
| 1909... | 7 | Pittsburgh. 1,825 | Detroit.... 1,274 | 1919... | 8 | Cincinnati.. 5,225 | Chicago.... 3,254 |
| 1910... | 5 | Phila..... 2,062 | Chicago.... 1,375 | 1920... | 7 | Cleveland.. 4,204 | Brooklyn... 2,387 |
| 1911... | 6 | Phila..... 3,564 | New York.. 2,436 | 1921... | 8 | Giants..... 5,265 | Yankees... 3,510 |
| 1912... | †8 | Boston.... 4,022 | New York.. 2,566 | 1922... | ‡5 | Giants..... 4,545 | Yankees... 2,842 |
| 1913... | 5 | Phila..... 3,246 | New York.. 2,164 | | | | |

*First game tie, 3-3, 12 innings.
†Second game tie, 6-6, 11 innings.
‡Second game a tie, 3-3, 10 innings; receipts given to charity.

§In 1903 the losers fared better than the winners, as President Dreyfuss of the Pittsburgh club gave his share of the receipts to the players.
No series in 1904.

COMPOSITE BOX SCORE OF 1922 WORLD'S SERIES.

NEW YORK GIANTS (NATIONALS).

| Players. | G. | A. B. | R. | H. | 2 B. | 3 B. | H. R. | S. H. | S. B. | B. B. | S. O. | Bat. Ave. | P. O. | A. | E. | Field. Ave. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bancroft, ss..... | 5 | 19 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | .211 | 9 | 17 | 1 | .963 |
| Groh, 3b..... | 5 | 19 | 4 | 9 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | .474 | 6 | 15 | 0 | 1.000 |
| Frisch, 2b..... | 5 | 17 | 3 | 8 | 1 | 0 | 0 | 2 | 1 | 1 | 0 | .471 | 10 | 20 | 1 | .968 |
| E. Meusel, lf..... | 5 | 20 | 3 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | .250 | 3 | 0 | 0 | 1.000 |
| Young, rf..... | 5 | 16 | 2 | 6 | 0 | 0 | 0 | 1 | 0 | 3 | 1 | .375 | 10 | 2 | 2 | .857 |
| Kelly, 1b..... | 5 | 18 | 0 | 5 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | .278 | 61 | 1 | 0 | 1.000 |
| Stengel, cf..... | 2 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | .400 | 4 | 0 | 0 | 1.000 |
| Cunningham, cf.... | 4 | 10 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | .200 | 9 | 2 | 0 | 1.000 |
| King, cf..... | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.000 | 3 | 0 | 0 | .000 |
| Snyder, c..... | 4 | 15 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | .333 | 23 | 6 | 1 | .967 |
| Earl Smith, c..... | 4 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | .143 | 2 | 1 | 0 | 1.000 |
| Nehf, p..... | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | .000 | 0 | 3 | 1 | .750 |
| Ryan, p..... | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .000 | 0 | 0 | 0 | .000 |
| J. Barnes, p..... | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | .000 | 0 | 4 | 0 | 1.000 |
| J. Scott, p..... | 1 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | .250 | 1 | 1 | 0 | 1.000 |
| McQuillan, p..... | 1 | 4 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | .250 | 0 | 0 | 0 | .000 |
| Totals..... | .. | 162 | 18 | 50 | 2 | 1 | 1 | 5 | 1 | 12 | 15 | .309 | 138 | 72 | 6 | .972 |

NEW YORK YANKEES (AMERICANS).

| Players. | G. | A. B. | R. | H. | 2 B. | 3 B. | H. R. | S. H. | S. B. | B. B. | S. O. | Bat. Ave. | P. O. | A. | E. | Field. Ave. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Witt, cf..... | 5 | 18 | 1 | 4 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | .222 | 7 | 1 | 0 | 1.000 |
| McMillan, cf..... | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .000 | 1 | 0 | 0 | 1.000 |
| Dugan, 3b..... | 5 | 20 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | .250 | 5 | 8 | 0 | 1.000 |
| Ruth, rf..... | 5 | 17 | 1 | 2 | 1 | 0 | 0 | 1 | 0 | 2 | 3 | .118 | 9 | 0 | 0 | 1.000 |
| Pipp, 1b..... | 5 | 21 | 0 | 6 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | .286 | 51 | 3 | 0 | 1.000 |
| R. Meusel, lf..... | 5 | 20 | 2 | 6 | 1 | 0 | 0 | 0 | 1 | 1 | 3 | .300 | 7 | 1 | 0 | 1.000 |
| Schang, c..... | 5 | 16 | 0 | 3 | 1 | 0 | 0 | 3 | 0 | 0 | 3 | .187 | 19 | 4 | 0 | 1.000 |
| Ward, 2b..... | 5 | 13 | 3 | 2 | 0 | 0 | 2 | 1 | 0 | 3 | 3 | .154 | 13 | 16 | 1 | .967 |
| McNally, 2b..... | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .000 | 1 | 1 | 0 | 1.000 |
| E. Scott, ss..... | 5 | 14 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | .143 | 14 | 15 | 0 | 1.000 |
| Bush, p..... | 2 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .167 | 1 | 3 | 0 | 1.000 |
| Hoyt, p..... | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .500 | 1 | 2 | 0 | 1.000 |
| Shawkey, p..... | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | .000 | 0 | 2 | 0 | 1.000 |
| Jones, p..... | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .000 | 0 | 1 | 0 | 1.000 |
| Mays, p..... | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .000 | 0 | 4 | 0 | 1.000 |
| *Baker..... | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .000 | 0 | 0 | 0 | .000 |
| *Elmer Smith..... | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | .000 | 0 | 0 | 0 | .000 |
| Totals..... | .. | 158 | 11 | 32 | 6 | 1 | 2 | 6 | 2 | 8 | 20 | .203 | 129 | 61 | 1 | .995 |

*Pinch hitter.

Scores by innings:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Giants (Nationals) | 3 | 2 | 2 | 0 | 4 | 0 | 1 | 6 | 0 | 0 | —18 |
| Yankees (Americans) | 4 | 0 | 0 | 1 | 1 | 1 | 3 | 1 | 0 | 0 | —11 |

Runs batted in—by E. Meusel, 7; by Frisch, 2; by Young, 2; by Ruth, 2; by Pipp, 3; by R. Meusel, 2; by Ward, 2; by Bancroft, 2; by Cunningham, 2; by Kelly, 2; by King, 1; by Bush, 1; by Scott, 1.

Double plays—Giants 4 (Snyder and Bancroft; Young and Frisch; Frisch and Kelly; Frisch, Bancroft and Kelly); Yankees, 7 (Scott, Ward and Pipp, 2; Ward and Pipp, Pipp and Scott; Bush, Scott and Pipp, 2; Ward, Scott and Pipp).

Left on bases—Giants, 25; Yankees, 24.

Bases on balls—Off Nehf, 3 (Ward, 3); off J. Barnes, 2 (Ruth, R. Meusel); off J. Scott, 1 (Witt); off Bush, 5 (Young, 2; Nehf, 2; Groh); off Shawkey, 2 (Groh, Young); off Hoyt, 2 (Frisch, Bancroft); off Jones, 1 (Cunningham); off McQuillan, 2 (Ruth, Scott); off Mays, 2 (Cunningham, Bancroft).

Struck out—By Nehf, 6 (Ruth, 2; R. Meusel, 2; Pipp, Schang); by Ryan, 2 (Ruth, Witt); by J. Barnes, 6 (Ward, 2; Schang, Shawkey, Witt, Dugan); by J. Scott, 2 (Pipp, Elmer Smith); by Bush, 6 (Kelly, Young, E. Meusel, Groh, Earl Smith, Snyder); by Hoyt, 4 (Kelly, Stengel, J. Scott, Bancroft); by Shawkey, 4 (Kelly, Cunningham, J. Barnes, Earl Smith); by McQuillan, 4 (Schang, R. Meusel, Ward, Elmer Smith); by Mays, 1 (McQuillan).

Hits and runs—Off Nehf, 11 and 5 in 16 innings; off Ryan, 1 and 0 in 2; off J. Barnes, 8 and 3 in 10; off Scott, 4 and 0 in 9; off Bush, 21 and 8 in 15; off Hoyt, 11 and 3 in 8; off Shawkey, 8 and 3 in 10; off Jones, 1 and 0 in 2; off Mays, 9 and 4 in 8; off McQuillan, 8 and 3 in 9.

Wild pitches—Shawkey, 2; Nehf, 1.

Passed ball—Schang.

Hit by pitcher—By J. Scott, 1 (Ruth); by Nehf, 1 (Dugan).

Winning pitchers—Ryan, first game; second game, tied; Scott, third game; McQuillan, fourth game; Nehf, fifth game.

Losing pitcher —Bush, first game; second game, tied; Hoyt, third game; Mays, fourth game; Bush, fifth game.

Umpires — Klem and McCormick, National League; Hildebrand and Owens, American League.

## OFFICIAL PITCHING RECORDS OF 1922 WORLD'S SERIES.

### NEW YORK NATIONALS.

| PLAYERS. | G. | W. | L. | Pct. | S. O. | Tie. | In P. | Tot. A.B. | H. | R. | S. H. | B. B. | H. B. | S. O. | W. P. | E. R. | Av. R'ns |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nehf | 2 | 1 | 0 | 1.000 | 0 | 0 | 16 | 61 | 11 | 5 | 6 | 3 | 1 | 6 | 1 | 4 | 2.25 |
| Scott | 1 | 1 | 0 | 1.000 | 1 | 0 | 9 | 32 | 4 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0.00 |
| McQuillan | 1 | 1 | 0 | 1.000 | 0 | 0 | 9 | 34 | 8 | 3 | 0 | 2 | 0 | 4 | 0 | 3 | 3.00 |
| *Ryan | 1 | 1 | 0 | 1.000 | 0 | 0 | 2 | 6 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0.00 |
| J. Barnes | 1 | 0 | 0 | .000 | 0 | 1 | 10 | 41 | 8 | 3 | 0 | 2 | 0 | 6 | 0 | 2 | 1.80 |
| Totals | .. | 4 | 0 | 1.000 | 1 | 1 | 46 | 174 | 32 | 11 | 6 | 8 | 2 | 20 | 1 | 9 | 1.76 |

*Ryan relieved Nehf in eighth after Earl Smith batted for Nehf in seventh inning.

### NEW YORK AMERICANS.

| PLAYERS. | G. | W. | L. | Pct. | S. O. | Tie. | In P. | Tot. A.B. | H. | R. | S. H. | B. B. | H. B. | S. O. | W. P. | E. R. | AvE R'ns |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *†Jones | 2 | 0 | 0 | .000 | 0 | 0 | 2 | 8 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.00 |
| ‡Hoyt | 2 | 0 | 1 | .000 | 0 | 0 | 8 | 34 | 11 | 3 | 2 | 2 | 0 | 4 | 0 | 1 | 1.12 |
| Shawkey | 1 | 0 | 0 | .000 | 0 | 1 | 10 | 38 | 8 | 3 | 0 | 2 | 0 | 4 | 2 | 3 | 2.70 |
| Mays | 1 | 0 | 1 | .000 | 0 | 0 | 8 | 33 | 9 | 4 | 1 | 2 | 0 | 1 | 0 | 4 | 4.50 |
| Bush | 2 | 0 | 2 | .000 | 0 | 0 | 15 | 66 | 21 | 8 | 1 | 5 | 0 | 6 | 0 | 8 | 4.80 |
| Totals | .... | 0 | 4 | .000 | 0 | 1 | 43 | 179 | 50 | 18 | 5 | 12 | 0 | 15 | 2 | 16 | 3.35 |

*Relieved Hoyt in eighth after Baker batted for Hoyt in eighth inning.
†Relieved Mays in ninth after Elmer Smith batted for Mays in eighth inning.
‡Hoyt relieved Bush in eighth inning, with runners on first and third; none out.

## RECEIPTS AND ATTENDANCE SINCE 1903.

| YR. | Clubs. | G. | Attendance. | Receipts. | YR. | Clubs. | G. | Attendance. | Receipts. |
|---|---|---|---|---|---|---|---|---|---|
| 1903 | Bost., A. L.-Pitts., N. L. | 8 | 100,429 | $50,000 | 1914 | Boston, N. L.-Phila., A.L. | 4 | 111,009 | 226,739 |
| 1905 | N.Y., N. L.-Athletics, A.L. | 5 | 91,723 | 68,436 | 1915 | Boston, A.L.-Phila., N. L. | 5 | 143,351 | 320,361 |
| 1906 | White Sox, A.L.-CubsN.L. | 6 | 99,845 | 106,550 | 1916 | Boston, A.L.-B'klyn, N. L. | 5 | 162,859 | 385,590 |
| 1907 | Chicago, N.L.-Detroit, A.L. | 5 | 78,068 | 101,728 | 1917 | Chicago, A.L.-N. Y., N.L. | 6 | 186,654 | 425,878 |
| 1908 | Chicago, N.L.-Detroit, A.L. | 5 | 62,223 | 94,975 | 1918 | Boston, A.L.-Chicago, N.L. | 6 | 128,483 | 179,619 |
| 1909 | Pitts., N. L.-Detroit, A. L. | 7 | 145,295 | 188,302 | 1919 | Cincin'ti, N.L.-Chi'go, A.L. | 8 | 236,928 | 722,414 |
| 1910 | Athletics, A. L.-Chi'go, N.L. | 5 | 125,222 | 173,980 | 1920 | Cleve., A.L.-B'klyn, N.L... | 7 | 174,349 | 564,800 |
| 1911 | Athletics, A.L.-Giants, N.L. | 6 | 179,851 | 342,364 | 1921 | N. Y., N. L.-N. Y., A. L... | 8 | 269,976 | 900,233 |
| 1912 | Red Sox, A.L.-Giants, N.L.. | 8 | 252,037 | 490,833 | 1922 | N. Y., N. L.-N. Y., A. L... | 5 | 185,947 | 605,475 |
| 1913 | Athletics, A.L.-Giants, N.L. | 5 | 150,992 | 325,980 | | | | | |

## PREVIOUS WORLD'S CHAMPIONSHIPS.

| YEAR. | Winners. | G'm's Won. | Losers. | G'm's Won. | YEAR. | Winners. | G'm's Won. | Losers. | G'm's Won. |
|---|---|---|---|---|---|---|---|---|---|
| 1884.. | Provid'ce, N.L. | 3 | Met'p't'ns, A.A. | 0 | 1908.. | Chicago, N. L.. | 4 | Detroit, A. L.... | 1 |
| 1885.. | Chicago, N. L.. | 3 | St. Louis, A. A. | 3 tie | 1909.. | Pittsb'gh, N.L.. | 4 | Detroit, A. L.... | 3 |
| 1886.. | St. Louis, A. A. | 4 | Chicago, N. L.. | 2 | 1910.. | Phila., A. L.... | 4 | Chicago, N. L.. | 1 |
| 1887.. | Detroit, N. L.. | 10 | St. Louis, A. A. | 4 | 1911.. | Phila., A. L.... | 4 | N. Y., N. L.... | 2 |
| 1888.. | N. Y., N. L.... | 10 | St. Louis, A. A. | 4 | 1912.. | Boston, A. L.... | 4 | N. Y., N. L.... | 3 tie |
| 1889.. | N. Y., N. L.... | 6 | B'klyn, A. A... | 3 | 1913.. | Phila., A. L.... | 4 | N. Y., N. L.... | 1 |
| 1890.. | Louisville, N.L. | 3, | B'klyn, A. A... | 3 tie | 1914.. | Boston, N. L... | 4 | Phila., A. L.... | 0 |
| 1892.. | Boston, N. L... | 5 | Clevel'd, N. L.. | 0 | 1915.. | Boston, A. L... | 4 | Phila., N. L.... | 1 |
| 1894.. | N. Y., N. L.... | 4 | Balto., N. L.... | 0 | 1916.. | Boston, A. L... | 4 | B'klyn, N. L... | 1 |
| 1895.. | Clevel'd, N. L.. | 4 | Balto., N. L.... | 1 | 1917.. | Chicago, A. L.. | 4 | N. Y., N. L.... | 2 |
| 1896.. | Balto, N. L.... | 4 | Clevel'd, N. L.. | 0 | 1918.. | Boston, A. L... | 4 | Chicago, N. L.. | 2 |
| 1897.. | Balto, N. L.... | 4 | Boston, N. L.. | 1 | 1919.. | Cincinnati, N.L. | 5 | Chicago, A. L.. | 3 |
| 1903.. | Boston, A. L... | 5 | Pittsb'gh, N.L.. | 3 | 1920.. | Clevel'd, A. L.. | 5 | B'klyn, N. L.... | 2 |
| 1905.. | N. Y., N. L.... | 4 | Phila,. A. L... | 1 | 1921.. | N. Y., N. L.... | 5 | N. Y., A. L.... | 3 |
| 1906.. | Chicago, A. L.. | 4 | Chicago, N. L.. | 2 | 1922.. | N. Y., N. L.... | 4 | N. Y., A. L.... | 0 tie |
| 1907.. | Chicago, N. L.. | 4 | Detroit, A. L... | 0 | | | | | |

## RESULTS OF WORLD'S SERIES OF PREVIOUS YEARS.

| YEAR. | Winners. | G'm's Won. | Losers. | G'm's Won. | YEAR. | Winners. | G'm's Won. | Losers. | G'm's Won. |
|---|---|---|---|---|---|---|---|---|---|
| 1903.. | Boston, A. L... | 5 | Pittsb'gh, N. L. | 3 | 1913.. | Phila., A. L.... | 4 | New York, N.L | 1 |
| 1904.. | No series played | | | | 1914.. | Boston, N. L... | 4 | Phila., A. L.... | 0 |
| 1905.. | New York, N.L | 4 | Phila., A. L.... | 1 | 1915.. | Boston, A. L... | 4 | Phila., N.L.... | 1 |
| 1906.. | Chicago, A. L.. | 4 | Chicago, N. L.. | 2 | 1916.. | Boston, A. L... | 4 | Brooklyn, N. L. | 1 |
| 1907.. | Chicago, N. L.. | *4 | Detroit, A. L... | 0 | 1917.. | Chicago, A. L.. | 4 | New York, N.L | 2 |
| 1908.. | Chicago, N. L.. | 4 | Detroit, A. L... | 1 | 1918.. | Boston, A. L... | 4 | Chicago, N. L.. | 2 |
| 1909.. | Pittsb'gh, N. L. | 4 | Detroit, A. L... | 3 | 1919.. | Cincinnati, N.L. | 5 | Chicago, A. L.. | 3 |
| 1910.. | Phila., A. L.... | 4 | Chicago, N. L.. | 1 | 1920.. | Cleveland, A. L. | 5 | Brooklyn, N. L. | 2 |
| 1911.. | Phila., A. L.... | 4 | New York, N.L | 2 | 1921.. | New York, N.L | 5 | New York, A.L. | 3 |
| 1912.. | Boston, A. L... | *4 | New York, N.L | 3 | 1922.. | New York, N.L | *4 | New York, A.L. | 0 |

*One tie game.

## CLUB RECORDS FOR SERIES.

| CLUB. | Won. | Lost. | Pct. | CLUB. | Won. | Lost. | Pct. |
|---|---|---|---|---|---|---|---|
| Boston, A. L. | 5 | 0 | 1.000 | Chicago N. L. | 2 | 3 | .400 |
| Boston, N. L. | 1 | 0 | 1.000 | New York, N. L. | 3 | 4 | .429 |
| Cleveland, A. L. | 1 | 0 | 1.000 | New York, A. L. | 0 | 2 | .000 |
| Cincinnati, N. L. | 1 | 0 | 1.000 | Philadelphia, N. L. | 0 | 1 | .000 |
| Chicago, A. L. | 2 | 1 | .667 | Brooklyn, N. L. | 0 | 2 | .000 |
| Philadelphia, A. L. | 3 | 2 | .600 | Detroit, A. L. | 0 | 3 | .000 |
| Pittsburgh, N. L. | 1 | 1 | .500 | | | | |

## LEAGUE RECORD FOR SERIES.

| | Series. | | | Games. | | |
|---|---|---|---|---|---|---|
| | Won. | Lost. | Pct. | Won. | Lost. | Pct. |
| American League | 11 | 8 | .569 | 57 | 54 | .515 |
| National League | 8 | 11 | .421 | 54 | 57 | .487 |

## PENNANT-WINNING MANAGERS.

John McGraw, of the New York National League Club, leads all managers in both major leagues in the number of league championships won. The leader of the Giants has won eight pennants. Connie Mack, manager of the Philadelphia American League Club, ranks second, with six league championships. The following are the managers, the clubs they handled and the number of pennants they won in the National and American Leagues from 1900 to 1922, inclusive:

### NATIONAL LEAGUE.

| Manager. | Club. | Pennants. | Manager. | Club. | Pennants. |
|---|---|---|---|---|---|
| John McGraw | New York | 8 | Pat Moran | Phila. and Cin'ti | 2 |
| Frank Chance | Chicago | 4 | George Stallings | Boston | 1 |
| Fred Clarke | Pittsburgh | 4 | Fred Mitchell | Chicago | 1 |
| Wilbert Robinson | Brooklyn | 2 | Ned Hanlon | Brooklyn | 1 |

### AMERICAN LEAGUE.

| Manager. | Club. | Pennants. | Manager. | Club. | Pennants. |
|---|---|---|---|---|---|
| Connie Mack | Philadelphia | 6 | Jake Stahl | Boston | 1 |
| Hugh Jennings | Detroit | 3 | Ed Barrow | Boston | 1 |
| Miller Huggins | New York | 2 | Fielder Jones | Chicago | 1 |
| Clarke Griffith | Chicago | 2 | Clarence Rowland | Chicago | 1 |
| Bill Carrigan | Boston | 2 | Kid Gleason | Chicago | 1 |
| Jimmy Collins | Boston | 2 | Tris Speaker | Cleveland | 1 |

## PENNANT WINNERS.

### NATIONAL LEAGUE.

| Year. | Winner. | Won. | Lost. | Per Cent. | Manager. | Clubs. | Year. | Winner. | Won. | Lost. | Per Cent. | Manager. | Clubs. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1876 | Chicago | 52 | 14 | .788 | Spalding | 8 | 1900 | Brooklyn | 82 | 54 | .603 | Hanlon | 8 |
| 1877 | Boston | 31 | 17 | .646 | H. Wright | 6 | 1901 | Pittsburgh | 90 | 49 | .647 | Clarke | 8 |
| 1878 | Boston | 41 | 19 | .683 | H. Wright | 6 | 1902 | Pittsburgh | 103 | 36 | .741 | Clarke | 8 |
| 1879 | Providence | 55 | 23 | .705 | G. Wright | 8 | 1903 | Pittsburgh | 91 | 49 | .650 | Clarke | 8 |
| 1880 | Chicago | 67 | 17 | .798 | Anson | 8 | 1904 | New York | 106 | 47 | .693 | McGraw | 8 |
| 1881 | Chicago | 56 | 28 | .667 | Anson | 8 | 1905 | New York | 105 | 48 | .686 | McGraw | 8 |
| 1882 | Chicago | 55 | 29 | .655 | Anson | 8 | 1906 | Chicago | 116 | 36 | .763 | Chance | 8 |
| 1883 | Boston | 63 | 35 | .643 | Morrell | 8 | 1907 | Chicago | 107 | 45 | .704 | Chance | 8 |
| 1884 | Providence | 84 | 28 | .750 | Bancroft | 8 | 1908 | Chicago | 95 | 55 | .643 | Chance | 8 |
| 1885 | Chicago | 87 | 25 | .776 | Anson | 8 | 1909 | Pittsburgh | 110 | 42 | .724 | Clarke | 8 |
| 1886 | Chicago | 90 | 34 | .725 | Anson | 8 | 1910 | Chicago | 104 | 50 | .676 | Chance | 8 |
| 1887 | Detroit | 79 | 45 | .637 | Watkins | 8 | 1911 | New York | 99 | 54 | .647 | McGraw | 8 |
| 1888 | New York | 84 | 47 | .641 | Mutrie | 8 | 1912 | New York | 103 | 48 | .682 | McGraw | 8 |
| 1889 | New York | 83 | 43 | .659 | Mutrie | 8 | 1913 | New York | 101 | 51 | .664 | McGraw | 8 |
| 1890 | Brooklyn | 86 | 43 | .667 | McGunnigle | 8 | 1914 | Boston | 94 | 59 | .615 | Stallings | 8 |
| 1891 | Boston | 87 | 51 | .630 | Selee | 8 | 1915 | Philadelphia | 90 | 62 | .592 | Moran | 8 |
| 1892 | Boston | 102 | 48 | .680 | Selee | 12 | 1916 | Brooklyn | 94 | 60 | .610 | Robinson | 8 |
| 1893 | Boston | 86 | 44 | .662 | Selee | 12 | 1917 | New York | 98 | 56 | .636 | McGraw | 8 |
| 1894 | Baltimore | 89 | 39 | .695 | Hanlon | 12 | 1918 | Chicago | 84 | 45 | .651 | Mitchell | 8 |
| 1895 | Baltimore | 87 | 43 | .669 | Hanlon | 12 | 1919 | Cincinnati | 96 | 44 | .686 | Moran | 8 |
| 1896 | Baltimore | 90 | 39 | .698 | Hanlon | 12 | 1920 | Brooklyn | 93 | 61 | .604 | Robinson | 8 |
| 1897 | Boston | 93 | 39 | .705 | Selee | 12 | 1921 | New York | 94 | 56 | .614 | McGraw | 8 |
| 1898 | Boston | 102 | 47 | .685 | Selee | 12 | 1922 | New York | 93 | 61 | .604 | McGraw | 8 |
| 1899 | Brooklyn | 101 | 47 | .682 | Hanlon | 12 | | | | | | | |

### AMERICAN LEAGUE.

| Year. | Winner. | Won. | Lost | Per Cent. | Manager. | Clubs. | Year. | Winner. | Won. | Lost. | Per Cent. | Manager. | Clubs. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900 | Chicago | 82 | 52 | .607 | Comiskey | 8 | 1912 | Boston | 105 | 47 | .691 | Stahl | 8 |
| 1901 | Chicago | 83 | 53 | .610 | Griffith | 8 | 1913 | Philadelphia | 96 | 57 | .627 | Mack | 8 |
| 1902 | Philadelphia | 83 | 53 | .610 | Mack | 8 | 1914 | Philadelphia | 99 | 53 | .651 | Mack | 8 |
| 1903 | Boston | 91 | 47 | .659 | Collins | 8 | 1915 | Boston | 101 | 50 | .669 | Carrigan | 8 |
| 1904 | Boston | 95 | 59 | .617 | Collins | 8 | 1916 | Boston | 91 | 63 | .591 | Carrigan | 8 |
| 1905 | Philadelphia | 92 | 56 | .622 | Mack | 8 | 1917 | Chicago | 100 | 54 | .649 | Rowland | 8 |
| 1906 | Chicago | 93 | 58 | .616 | Jones | 8 | 1918 | Boston | 75 | 51 | .595 | Barrow | 8 |
| 1907 | Detroit | 92 | 58 | .613 | Jennings | 8 | 1919 | Chicago | 88 | 52 | .629 | Gleason | 8 |
| 1908 | Detroit | 90 | 63 | .588 | Jennings | 8 | 1920 | Cleveland | 98 | 56 | .636 | Speaker | 8 |
| 1909 | Detroit | 98 | 54 | .645 | Jennings | 8 | 1921 | New York | 98 | 55 | .641 | Huggins | 8 |
| 1910 | Philadelphia | 102 | 48 | .680 | Mack | 8 | 1922 | New York | 94 | 60 | .610 | Huggins | 8 |
| 1911 | Philadelphia | 101 | 50 | .669 | Mack | 8 | | | | | | | |

## MAJOR LEAGUE CLUB NICKNAMES.

| National League. | | | | American League. | | | |
|---|---|---|---|---|---|---|---|
| Club. | Nickname. | Club. | Nickname. | Club. | Nickname. | Club. | Nickname. |
| New York | Giants. | Chicago | Cubs. | Chicago | White Sox. | Washington | Nationals. |
| Philadelphia | Phillies. | Boston | Braves. | Boston | Red Sox. | New York | Yankees. |
| St. Louis | Cardinals. | Brooklyn | Superbas. | Cleveland | Indians. | St. Louis | Browns. |
| Cincinnati | Reds. | Pittsburgh | Pirates. | Detroit | Tigers. | Philadelphia | Athletics. |

Some of the club nicknames still popular among baseball "fans" have descended from the earliest days of the game in this country.

## STANDING OF LEAGUES AT CLOSE OF SEASON.

### NATIONAL LEAGUE.

| Clubs. | New York. | Cincinnati. | St. Louis. | Pittsburgh. | Chicago. | Brooklyn. | Philadelphia. | Boston. | Won. | Pct. |
|---|---|---|---|---|---|---|---|---|---|---|
| New York.... | | 12 | 13 | 11 | 14 | 14 | 15 | 14 | 93 | .604 |
| Cincinnati.... | 10 | | 8 | 11 | 11 | 14 | 15 | 17 | 86 | .558 |
| St. Louis..... | 9 | 14 | | 13 | 9 | 14 | 15 | 11 | 85 | .552 |
| Pittsburgh... | 11 | 11 | 9 | | 12 | 11 | 19 | 12 | 85 | .552 |
| Chicago..... | 8 | 11 | 13 | 10 | | 11 | 9 | 18 | 80 | .520 |
| Brooklyn..... | 8 | 8 | 8 | 11 | 11 | | 15 | 15 | 76 | .494 |
| Philadelphia.. | 7 | 7 | 7 | 3 | 13 | 7 | | 13 | 57 | .393 |
| Boston..... | 8 | 5 | 11 | 10 | 4 | 7 | 8 | | 53 | .346 |
| Lost..... | 61 | 68 | 69 | 69 | 74 | 78 | 96 | 100 | | |

### AMERICAN LEAGUE.

| Clubs. | New York. | St. Louis. | Detroit. | Cleveland. | Chicago. | Washington. | Philadelphia. | Boston. | Won. | Pct. |
|---|---|---|---|---|---|---|---|---|---|---|
| New York.... | | 14 | 11 | 15 | 13 | 15 | 17 | 9 | 94 | .610 |
| St. Louis..... | 8 | | 13 | 16 | 14 | 14 | 13 | 15 | 93 | .604 |
| Detroit..... | 11 | 9 | | 7 | 5 | 14 | 16 | 17 | 79 | .513 |
| Cleveland.... | 7 | 6 | 15 | | 10 | 13 | 11 | 16 | 78 | .507 |
| Chicago..... | 9 | 8 | 17 | 12 | | 7 | 12 | 12 | 77 | .500 |
| Washington.. | 7 | 8 | 8 | 9 | 15 | | 10 | 12 | 69 | .448 |
| Philadelphia.. | 5 | 9 | 6 | 11 | 10 | 12 | | 12 | 65 | .422 |
| Boston..... | 13 | 7 | 5 | 6 | 10 | 10 | 10 | | 61 | .396 |
| Lost..... | 60 | 61 | 75 | 76 | 77 | 85 | 89 | 93 | | |

### INTERNATIONAL LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Baltimore.. | 116 | 51 | .694 | Toronto.... | 76 | 88 | .463 |
| Rochester.. | 105 | 62 | .628 | Reading.... | 70 | 94 | .426 |
| Buffalo.... | 95 | 71 | .572 | Syracuse... | 64 | 102 | .385 |
| Jersey City. | 83 | 82 | .503 | Newark.... | 54 | 111 | .327 |

### PACIFIC COAST LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| S. Francisco | 126 | 72 | .636 | Seattle.... | 90 | 107 | .457 |
| Vernon..... | 123 | 76 | .618 | Oakland.... | 88 | 111 | .442 |
| Los Angeles | 111 | 88 | .558 | Portland... | 87 | 112 | .438 |
| Salt Lake.. | 95 | 106 | .473 | Sacramento. | 76 | 124 | .380 |

### AMERICAN ASSOCIATION.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| St. Paul.... | 107 | 60 | .641 | Milwaukee. | 85 | 83 | .506 |
| Minneapolis | 92 | 75 | .551 | Louisville.. | 77 | 91 | .458 |
| Kansas City | 92 | 76 | .548 | Toledo..... | 65 | 101 | .392 |
| Indianapolis | 87 | 80 | .521 | Columbus.. | 63 | 102 | .382 |

### SOUTHERN LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Mobile..... | 97 | 55 | .638 | Birmingham | 74 | 80 | .481 |
| Memphis... | 94 | 58 | .618 | Chattanooga | 59 | 93 | .388 |
| New Orl'ns. | 89 | 64 | .582 | Nashville... | 56 | 96 | .368 |
| Little Rock. | 86 | 67 | .562 | Atlanta.... | 55 | 97 | .362 |

### WESTERN LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Tulsa..... | 103 | 64 | .617 | Sioux City.. | 86 | 79 | .518 |
| St. Joseph.. | 98 | 70 | .584 | Okla. City.. | 73 | 94 | .435 |
| Wichita.... | 94 | 73 | .563 | Denver.... | 63 | 105 | .374 |
| Omaha..... | 91 | 77 | .549 | Des Moines | 61 | 107 | .363 |

### THREE-I LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Terre Haute | 85 | 51 | .625 | Rockford.. | 74 | 65 | .532 |
| Decatur.... | 78 | 58 | .574 | Bloomington | 63 | 75 | .457 |
| Peoria..... | 76 | 60 | .559 | Danville... | 50 | 87 | .365 |
| Evansville.. | 75 | 64 | .536 | Moline.... | 49 | 89 | .355 |

### SOUTH ATLANTIC LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Charleston.. | 79 | 48 | .622 | Spartanburg | 62 | 69 | .473 |
| Charlotte... | 73 | 59 | .553 | Augusta.... | 54 | 76 | .415 |
| Columbia.. | 72 | 59 | .549 | Greenville.. | 52 | 82 | .388 |

### WESTERN ASSOCIATION.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Enid..... | 56 | 11 | .836 | Okmulgee.. | 29 | 37 | .439 |
| Henryetta.. | 44 | 23 | .658 | Springfield.. | 29 | 39 | .426 |
| Joplin..... | 40 | 28 | .588 | Fort Smith. | 24 | 42 | .363 |
| McAlester.. | 32 | 34 | .485 | *Pawhuska. | | | |

*Pawhuska did not finish season.

### TEXAS LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Fort Worth. | 109 | 46 | .703 | San Antonio | 76 | 79 | .491 |
| WichitaF'lls | 94 | 61 | .606 | Beaumont.. | 65 | 88 | .425 |
| Dallas..... | 82 | 74 | .525 | Houston... | 57 | 95 | .375 |
| Galveston.. | 79 | 79 | .510 | Shreveport. | 56 | 99 | .361 |

### DAKOTA LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Mitchell... | 60 | 37 | .619 | Jamestown. | 46 | 50 | .479 |
| Aberdeen... | 56 | 42 | .571 | Watertown. | 42 | 54 | .438 |
| Fargo..... | 56 | 42 | .571 | Wah-Breck. | 42 | 55 | .433 |
| Sioux Falls. | 55 | 42 | .567 | Valley City. | 30 | 64 | .319 |

### BLUE RIDGE LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Martinsburg | 58 | 41 | .586 | Hanover... | 56 | 49 | .533 |
| Waynesboro | 56 | 42 | .571 | Chambersbg | 47 | 49 | .490 |
| Frederick... | 54 | 44 | .551 | Hagerstown | 31 | 66 | .320 |

### EASTERN LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| New Haven | 100 | 51 | .662 | Springfield.. | 77 | 76 | .503 |
| Waterbury. | 86 | 64 | .573 | Hartford... | 73 | 75 | .493 |
| Bridgeport.. | 78 | 75 | .503 | Albany.... | 68 | 84 | .462 |
| Pittsfield... | 76 | 75 | .503 | Worcester.. | 47 | 105 | .306 |

### VIRGINIA LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Wilson..... | 68 | 52 | .567 | Rocky M'nt | 60 | 61 | .496 |
| Newp't News | 63 | 56 | .529 | Portsmouth | 57 | 61 | .483 |
| Norfolk.... | 58 | 57 | .504 | Richmond.. | 49 | 68 | .419 |

### MISSISSIPPI VALLEY LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| CedarR'pids | 45 | 16 | .738 | Waterloo... | 30 | 35 | .462 |
| Marshallt'n | 36 | 26 | .581 | Dubuque... | 25 | 40 | .385 |
| Rock Island | 32 | 32 | .500 | Ottumwa... | 21 | 40 | .344 |

### EASTERN SHORE LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Parksley... | 42 | 25 | .627 | Laurel..... | 34 | 35 | .493 |
| Crisfield... | 36 | 32 | .529 | Pocomoke.. | 29 | 41 | .414 |
| Cambridge. | 37 | 32 | .536 | Salisbury... | 27 | 41 | .397 |

### COTTON STATES LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Greenwood. | 38 | 18 | .679 | Greenville.. | 29 | 36 | .483 |
| Vicksburg.. | 38 | 21 | .644 | Clarksdale.. | 24 | 36 | .400 |
| Meridian... | 30 | 27 | .526 | Jackson.... | 16 | 42 | .276 |

### APPALACHIAN LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Bristol.... | 68 | 54 | .557 | Johnson City | 60 | 61 | .496 |
| Kingsport.. | 65 | 58 | .528 | Knoxville.. | 59 | 61 | .492 |
| Cleveland.. | 61 | 59 | .508 | Greenville.. | 50 | 70 | .417 |

### KITTY LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Madisonville | 41 | 17 | .707 | Trenton.... | 30 | 28 | .517 |
| *Cairo..... | 36 | 22 | .621 | Mayfield... | 27 | 30 | .474 |
| Paris..... | 33 | 25 | .569 | Fulton..... | 24 | 33 | .421 |
| Hopkinsville | 32 | 26 | .552 | Paducah.... | 8 | 50 | .168 |

*Cairo declared winner account Madisonville using ineligible players and going over salary limit of $1,000 per month.

### SOUTHWESTERN LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Muskogee.. | 41 | 26 | .612 | Hutchinson. | 32 | 35 | .478 |
| Independ'ce | 40 | 28 | .588 | Salina..... | 29 | 30 | .426 |
| Coffeyville.. | 39 | 28 | .582 | Topeka.... | 28 | 40 | .412 |
| Sapulpa.... | 37 | 30 | .522 | Bartlesville. | 23 | 43 | .348 |

### PIEDMONT LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Durham... | 42 | 26 | .618 | High Point. | 34 | 32 | .515 |
| Greensboro. | 35 | 31 | .530 | Danville... | 28 | 39 | .418 |
| Win.-Salem. | 34 | 32 | .515 | Raleigh.... | 26 | 41 | .388 |

### CENTRAL LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Ludington.. | 39 | 26 | .600 | Lansing.... | 30 | 34 | .459 |
| Muskegon.. | 37 | 27 | .578 | Ionia..... | 28 | 37 | .431 |
| Gr'd Rapids | 33 | 32 | .508 | Kalamazoo. | 27 | 42 | .391 |

### MICHIGAN-ONTARIO LEAGUE.

| | W. | L. | Pct. | | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|
| Hamilton... | 44 | 19 | .698 | Saginaw.... | 31 | 31 | .500 |
| London.... | 39 | 22 | .639 | Brantford.. | 26 | 35 | .426 |
| Port Huron | 32 | 29 | .525 | Kitchener.. | 23 | 39 | .371 |
| Bay City... | 30 | 30 | .500 | Flint..... | 22 | 41 | .349 |

## AMATEUR BASEBALL FEDERATION WINNERS.

Winners of the championships for 1922 of the National Baseball Federation, as announced by Secretary F. W. Thomas:

The Grennan Cakes, of Detroit, were declared the winners of the Class A (amateur) division: the Tellings Ice Creams, oi Cleveland, winners of Class AA (industrial), and the Elks, of Beaver Falls, Pa., last year's champions, the winners of Class AAA (semi-professional).

WINNERS IN OTHER LEAGUES, SINCE 1900.

| Year. | Western. | Pacific. | Southern. | Indiana-Illinois-Iowa. | New International. | American Association. |
|---|---|---|---|---|---|---|
| 1900 | Denver. | ..... | ..... | ..... | Providence. | ..... |
| 1901 | Kansas City. | ..... | Nashville. | Terre Haute. | Rochester. | ..... |
| 1902 | Kansas City. | ..... | Nashville. | Rockford. | Toronto. | Indianapolis. |
| 1903 | Milwaukee. | Los Angeles. | Memphis. | Bloomington. | Jersey City. | St. Paul. |
| 1904 | Omaha. | Tacoma. | Memphis. | Springfield. | Buffalo. | St. Paul. |
| 1905 | Des Moines. | Los Angeles. | New Orleans. | Dubuque. | Providence. | Columbus. |
| 1906 | Des Moines. | Portland. | Birmingham. | Cedar Rapids. | Buffalo. | Columbus. |
| 1907 | Omaha. | Los Angeles. | Atlanta. | Rock Island. | Toronto. | Columbus. |
| 1908 | Sioux City. | Los Angeles. | Nashville. | Springfield. | Baltimore. | Indianapolis. |
| 1909 | Des Moines. | San Francisco. | Atlanta. | Rock Island. | Rochester. | Louisville. |
| 1910 | Sioux City. | Portland. | New Orleans. | Springfield. | Rochester. | Minneapolis. |
| 1911 | Denver. | Portland. | New Orleans. | Peoria. | Rochester. | Minneapolis. |
| 1912 | Denver. | Oakland. | Birmingham. | Springfield. | Toronto. | Minneapolis. |
| 1913 | Denver. | Portland. | Atlanta. | Quincy. | Newark. | Milwaukee. |
| 1914 | Sioux City. | Portland. | Birmingham. | Davenport. | Providence. | Milwaukee. |
| 1915 | Des Moines. | San Francisco. | New Orleans. | Moline. | Buffalo. | Minneapolis. |
| 1916 | Omaha. | Los Angeles. | Nashville. | Peoria. | Buffalo. | Louisville. |
| 1917 | Des Moines. | San Francisco. | Atlanta. | Peoria. | Toronto. | Indianapolis. |
| 1918 | Wichita. | Vernon. | New Orleans. | ..... | Toronto. | Kansas City. |
| 1919 | St. Joseph. | Vernon. | Atlanta. | Bloomington. | Baltimore. | St. Paul. |
| 1920 | Tulsa. | Vernon. | Little Rock. | Bloomington. | Baltimore. | St. Paul. |
| 1921 | Wichita. | Los Angeles. | Memphis. | Moline. | Baltimore. | Louisville. |
| 1922 | Tulsa. | San Francisco. | Mobile. | Terre Haute. | Baltimore | St. Paul. |

New International previous winners—(1892) Binghamton; (1893) Erie; (1894) Providence; (1895) Springfield; (1896) Providence; (1897) Syracuse; (1898) Montreal; (1899) Rochester.

Texas League—(1907) Austin; (1908) San Antonio; (1909) Houston; (1910) Dallas; (1911) Austin; (1912) Houston; (1913) Houston; (1914) Houston-Waco; (1915) Waco; (1916) Waco; (1917) Dallas; (1918) Dallas; (1919) Ft. Worth; (1920) Ft. Worth; (1921) Ft. Worth; (1922) Fort Worth.

South Atlantic—(1904) Macon; (1905) Macon; (1906) Savannah; (1907) Charleston; (1908) Jacksonville; (1909) Chattanooga; (1910) Columbus; (1911) Columbus; (1912) Jacksonville; (1913) Savannah; (1914) Savannah; (1915) Columbus; (1916) Augusta; (1917) war period; (1918) war period; (1919) Columbia; (1920) Columbia; (1921) Columbia; (1922) Charleston.

IMPORTANT POST-SEASON SERIES RESULTS.

| Club. | P. | W. | L. | Pct. | Club. | P. | W. | L. | Pct. |
|---|---|---|---|---|---|---|---|---|---|
| Chicago (N. L.) | 7 | 4 | 3 | .571 | Baltimore (I. L.) | 7 | 5 | 2 | .714 |
| Chicago (A. L.) | 7 | 3 | 4 | .429 | St. Paul (A. A.) | 7 | 2 | 5 | .286 |

## CHAMPION BATTERS AND THEIR AVERAGES.

NATIONAL LEAGUE.

| Year. | Player. | Club. | Average. | Year. | Player. | Club. | Average. |
|---|---|---|---|---|---|---|---|
| 1876 | Barnes | Chicago | .403 | 1900 | Wagner | Pittsburgh | .384 |
| 1877 | White | Boston | .385 | 1901 | Burkett | St. Louis | .382 |
| 1878 | Dalrymple | Milwaukee | .380 | 1902 | Beaumont | Pittsburgh | .367 |
| 1879 | Anson | Chicago | .407 | 1903 | Wagner | Pittsburgh | .355 |
| 1880 | Gore | Chicago | .365 | 1904 | Wagner | Pittsburgh | .349 |
| 1881 | Anson | Chicago | .393 | 1905 | Seymour | Cincinnati | .377 |
| 1882 | Brouthers | Buffalo | .367 | 1906 | Wagner | Pittsburgh | .339 |
| 1883 | Brouthers | Buffalo | .371 | 1907 | Wagner | Pittsburgh | .350 |
| 1884 | O'Rourke | Buffalo | .350 | 1908 | Wagner | Pittsburgh | .354 |
| 1885 | Connor | New York | .371 | 1909 | Wagner | Pittsburgh | .341 |
| 1886 | Kelly | Chicago | .388 | 1910 | Magee | Philadelphia | .331 |
| 1887 | Maul | Philadelphia | .343 | 1911 | Wagner | Pittsburgh | .334 |
| 1888 | Anson | Chicago | .343 | 1912 | Zimmerman | Chicago | .372 |
| 1889 | Brouthers | Boston | .313 | 1913 | Daubert | Brooklyn | .350 |
| 1890 | Luby | Chicago | .342 | 1914 | Daubert | Brooklyn | .329 |
| 1891 | Hamilton | Boston | .338 | 1915 | Doyle | New York | .320 |
| 1892 | Brouthers | Boston | .335 | 1916 | Chase | Cincinnati | .339 |
| 1893 | Stenzel | Pittsburgh | .409 | 1917 | Roush | Cincinnati | .341 |
| 1894 | Duffy | Boston | .438 | 1918 | Wheat | Brooklyn | .335 |
| 1895 | Burkett | Cleveland | .438 | 1919 | Cravath | Philadelphia | .340 |
| 1896 | Burkett | Cleveland | .419 | 1920 | Hornsby | St. Louis | .370 |
| 1897 | Keeler | Baltimore | .417 | 1921 | Hornsby | St. Louis | .397 |
| 1898 | Keeler | Baltimore | .387 | 1922 | *Hornsby | St. Louis | .401 |
| 1899 | Delehanty | Philadelphia | .408 | | | | |

*Hornsby's average (1922) is unofficial.

AMERICAN LEAGUE.

| Year. | Player. | Club. | Average. | Year. | Player. | Club. | Average. |
|---|---|---|---|---|---|---|---|
| 1900 | Dungan | Kansas City | .337 | 1912 | Cobb | Detroit | .410 |
| 1901 | Lajoie | Philadelphia | .422 | 1913 | Cobb | Detroit | .390 |
| 1902 | Delehanty | Washington | .376 | 1914 | Cobb | Detroit | .368 |
| 1903 | Lajoie | Cleveland | .355 | 1915 | Cobb | Detroit | .370 |
| 1904 | Lajoie | Cleveland | .381 | 1916 | Speaker | Boston | .386 |
| 1905 | Lajoie | Cleveland | .329 | 1917 | Cobb | Detroit | .383 |
| 1906 | Stone | St. Louis | .358 | 1918 | Cobb | Detroit | .382 |
| 1907 | Cobb | Detroit | .350 | 1919 | Cobb | Detroit | .381 |
| 1908 | Criss | St. Louis | .354 | 1920 | Sisler | St. Louis | .407 |
| 1909 | Cobb | Detroit | .375 | 1921 | Heilmann | Detroit | .394 |
| 1910 | Cobb | Detroit | .385 | 1922 | *Sisler | St. Louis | .415 |
| 1911 | Cobb | Detroit | .420 | | | | |

*Sisler's average for 1922 is unofficial.

## RUTH'S HOME RUN RECORD (1921).

"Babe" Ruth established a new home run record in 1921. He made fifty-nine home runs during that pennant season. His great record for 1921, showing date, pitcher, club, place, and runners on base when hit was made, follows:

| Date | Opposing Pitcher. | Place. | Men on Base. | Date. | Opposing Pitcher. | Place. | Men on Base. |
|---|---|---|---|---|---|---|---|
| April 16. | Harris | New York | 0 | July 5. | Hasty | New York | 0 |
| April 20. | Russell | New York | 1 | July 11. | Kerr | Chicago | 1 |
| April 21. | Moore | Philadelphia | 1 | July 12. | Davis | St. Louis | 2 |
| April 22. | Rommel | Philadelphia | 1 | July 12. | Davis | St. Louis | 1 |
| April 25. | Johnson | New York | 0 | July 15. | Van Gilder | St. Louis | 1 |
| May 2. | Jones | Boston | 0 | July 18. | Cole | Detroit | 1 |
| May 6. | Erickson | Washington | 0 | July 30. | Covelskie | New York | 0 |
| May 7. | Johnson | Washington | 0 | July 31. | Caldwell | New York | 2 |
| May 10. | Middleton | Detroit | 1 | Aug. 6. | Oldham | New York | 2 |
| May 12. | Dauss | Detroit | 1 | Aug. 8. | Wienecke | New York | 1 |
| May 14. | Bagby | Cleveland | 2 | Aug. 8. | Kerr | New York | 0 |
| May 17 | Uhle | Cleveland | 0 | Aug. 10. | Hodge | New York | 1 |
| May 25. | Shocker | St. Louis | 2 | Aug. 11. | Keefe | Philadelphia | 2 |
| May 29. | Keefe | New York | 0 | Aug. 12. | Hasty | Philadelphia | 0 |
| May 31. | Zachary | Washington | 2 | Aug. 17. | McWeeney | Chicago | 1 |
| June 3. | Davis | New York | 0 | Aug. 18. | Faber | Chicago | 2 |
| June 10. | Bagby | New York | 0 | Aug. 23. | Caldwell | Cleveland | 1 |
| June 11. | Middleton | New York | 2 | Aug. 23. | Caldwell | Cleveland | 1 |
| June 12. | Sutherland | New York | 1 | Sept. 2. | Erickson | New York | 1 |
| June 13. | Ehmke | New York | 0 | Sept. 3. | Courtney | New York | 2 |
| June 13. | Ehmke | New York | 1 | Sept. 5. | Karr | Boston | 0 |
| June 14. | Dauss | New York | 1 | Sept. 7. | Pennock | New York | 1 |
| June 14. | Dauss | New York | 1 | Sept. 8. | Rommel | Philadelphia | 0 |
| June 20. | Myers | Boston | 0 | Sept. 9. | Naylor | Philadelphia | 1 |
| June 23. | Thormahlen | Boston | 1 | Sept. 15. | Bane | New York | 1 |
| June 25. | Johnson | New York | 1 | Sept. 16. | Shocker | New York | 0 |
| June 26. | Mogridge | New York | 1 | Sept. 26. | Coveleskie | New York | 0 |
| June 29. | Bush | New York | 0 | Sept. 26. | Uhle | New York | 1 |
| July 2. | Russell | New York | 0 | Oct. 2. | Fullerton | New York | 2 |
| July 2. | Myers | New York | 1 | | | | |

## HOME RUN RECORDS.

Although "Babe" Ruth, of the New York Americans did not approach his 1921 record of 59 home runs, due in part to suspensions and other causes, the 1922 season was notable for the number of home runs made in the major leagues. The records of some of the leading hitters in this department of the game follow:

### AMERICAN LEAGUE.

| Player. | Club. | 1922. | 1921. | Player. | Club. | 1922. | 1921. |
|---|---|---|---|---|---|---|---|
| Williams | Browns | 39 | 24 | Hooper | White Sox | 11 | 8 |
| Walker | Athletics | 37 | 23 | McManus | Browns | 11 | 3 |
| Ruth | Yankees | 35 | 59 | Judge | Senators | 10 | 7 |
| Heilmann | Tigers | 21 | 19 | Hauser | Athletics | 9 | *20 |
| Miller | Athletics | 21 | 9 | Veach | Tigers | 9 | 16 |
| Meusel | Yankees | 16 | 24 | Pipp | Yankees | 9 | 8 |
| Tobin | Browns | 13 | 8 | Jacobson | Browns | 9 | 5 |
| Dykes | Athletics | 12 | 17 | Brower | Senators | 9 | 1 |
| Falk | White Sox | 12 | 5 | Sisler | Browns | 8 | 11 |
| Burns | Red Sox | 12 | 0 | Wood | Indians | 8 | 4 |
| Welch | Athletics | 11 | 7 | Collins | Browns | 8 | 1 |
| Speaker | Indians | 11 | 8 | | | | |

*Milwaukee, American Association.

### NATIONAL LEAGUE.

| Player. | Club. | 1922. | 1921. | Player. | Club. | 1922. | 1921. |
|---|---|---|---|---|---|---|---|
| Hornsby | Cardinals | 42 | 21 | Russell | Pirates | 12 | *33 |
| Williams | Phillies | 26 | 18 | Miller | Cubs | 12 | †11 |
| Kelly | Giants | 17 | 23 | Walker | Phillies | 12 | 3 |
| Lee | Phillies | 17 | 4 | Daubert | Reds | 12 | 2 |
| Meusel | Giants | 16 | 14 | Fournier | Cardinals | 10 | 16 |
| Wheat | Robins | 16 | 14 | Carey | Pirates | 10 | 7 |
| Parkinson | Phillies | 15 | 5 | Smith | Giants | 9 | 10 |
| Grimes | Cubs | 14 | 6 | Duncan | Reds | 8 | 2 |
| Henline | Phillies | 14 | 0 | Smith | Cardinals | 8 | 7 |
| Ainsmith | Cardinals | 13 | 0 | | | | |

*Minneapolis, American Association.
†Oakland, Pacific Coast League.

## THREE HOMERS IN SINGLE GAME.

Kenneth Williams, St. Louis Americans. | Walter Henline, Philadelphia Nationals.

## TWO HOMERS IN SINGLE GAME.

### AMERICAN LEAGUE.

| Player. | Club. | Times. | Player. | Club. | Times. |
|---|---|---|---|---|---|
| Walker | Athletics | 5 | Miller | Red Sox | 1 |
| Ruth | Yankees | 4 | Meusel | Yankees | 1 |
| Miller | Athletics | 2 | Falk | White Sox | 1 |
| Burns | Red Sox | 2 | Jacobson | Browns | 1 |
| Heilmann | Tigers | 2 | Sheely | White Sox | 1 |
| Williams | Browns | 2 | Brower | Senators | 1 |
| Speaker | Indians | 2 | Veach | Tigers | 1 |
| Tobin | Browns | 2 | | | |

TWO HOMERS IN SINGLE GAME.
NATIONAL LEAGUE.

| Player. | Club. | Times. | Player. | Club. | Times. |
|---|---|---|---|---|---|
| Hornsby | Cardinals | 5 | McHenry | Cardinals | 1 |
| Kelly | Giants | 3 | Parkinson | Phillies | 1 |
| Lee | Phillies | 3 | Fletcher | Phillies | 1 |
| Carey | Pirates | 2 | Nicholson | Braves | 1 |
| Miller | Cubs | 2 | Stock | Cardinals | 1 |
| Russell | Pirates | 2 | Tierney | Pirates | 1 |
| Williams | Phillies | 2 | Duncan | Reds | 1 |
| Meusel | Giants | 1 | Peters | Phillies | 1 |
| Snyder | Giants | 1 | Wheat | Robins | 1 |

HOME RUNS BY TEAMS.

AMERICAN LEAGUE.

| Team. | 1922. | 1921. |
|---|---|---|
| Philadelphia | 111 | 83 |
| St. Louis | 98 | 66 |
| New York | 95 | 134 |
| Detroit | 54 | 58 |
| Washington | 45 | 42 |
| Chicago | 45 | 35 |
| Boston | 45 | 17 |
| Cleveland | 32 | 42 |
| Totals | 525 | 477 |

Total (both leagues 1921) ..... 937

NATIONAL LEAGUE.

| Team. | 1922. | 1921. |
|---|---|---|
| Philadelphia | 115 | 88 |
| St. Louis | 107 | 83 |
| New York | 80 | 75 |
| Brooklyn | 56 | 59 |
| Pittsburgh | 52 | 37 |
| Cincinnati | 45 | 20 |
| Chicago | 42 | 37 |
| Boston | 32 | 61 |
| Totals | 529 | 460 |

Total (both leagues 1922) ..... 1054

## BOWLING.

The Twenty-Second Annual Championship Tournament of the American Bowling Congress was rolled at Toledo, O., ending April 1. During the 34 days of the tournament, 1,126 five-man teams, 2,411 two-man and 4,838 individuals competed. Results, five fives in each event:

*Five Men:* ($1,000 to highest team)—Lincoln Life Ins. Co., Ft. Wayne, 2,998; West Side Alleys, Watertown, 2,957; St. Francis Hotel, St. Paul, 2,942; Paragon Refining Co., Toledo, 2,935; Koors 29, Dayton, 2,916.

*Two Men:* ($500 to highest team)—C. Spinella-B. Spinella, New York, 1,336; I. Eberhardt-W. Coffin, Des Moines, 1,321; A. Pilcher-K. Spellman, Tulsa, 1,307; C. Degan-F. Degen, Buffalo, 1,297; W. Baker-J. Tish, Erie, Pa., 1,285.

*Individual:* ($300 to individual with highest score)—W. Lundgren, Chicago, 729; J. Sublowsky, Chicago, 691; A. Lea, Chicago, 690; W. Minch, Rochester, 689; N. Grauss, Rochester, 688.

*All Events:* ($130 to individual with highest score)—B. Spinella, New York, 1,999; H. Stewart, Cincinnati, 1,962; H. Lange, Madison, 1,943; W. Driver, Louisville, 1,936; M. Schmidt, Louisville, 1,930.

Women's National Bowling Association Championships at Toledo, O., ending May 7. Final standings, scores and prizes in each event:

*Five Woman Teams:* Birk Cola, Chicago, 2,531, $75; Ohio Dairy, Toledo, 2,502, $75; Woodward No. 1, Detroit, 2,444, $65; Brucks, Chicago, 2,443, $60; Samuelsons, Chicago, 2,406, $55.

*Two Women Teams*—Sneider-Sneider, Detroit, 1,094, $40; Garwood-Greenwald, Cleveland, 1,075, $40; Hughes-Lyons, Schenectady, 1,074, $35; Reilly-Dornblasser, Chicago, 1,067, $30; Gazzolo-Kay, Toledo, 1,063, $28.

*Individuals:* E. Jaeger, Toledo, 603, $30; M. Schroeder, Chicago, 579, $30; M. Blau, Milwaukee, 576, $25; A. Schroeder, Milwaukee, 570, $22; M. Randolph, Detroit, 560, $20.

*All Events:* R. Abraham, Milwaukee, 1,659, $20; G. Greenwald, Cleveland, 1,657, $20; E. Jaeger, Toledo, 1,655, $15; M. Schroeder, Chicago, 1,648, $10; M. Blau, Milwaukee, 1,620, $5.

WORLD'S RECORDS.

*Individual, Open, Three Games*—Roy Flagg, Aberdeen, S. Dak., 270, 300, 300; total, 870; average, 290. William E. Roach, Academy Alleys, Wilmington, Del., 300, 300, 269; total, 869; average, 289 2-3, 1906. *Six Games*—Lee H. Johns, Oxford Alleys, Newark, N. J., 279, 268, 248, 277, 277, 279; total, 1,628; average, 271 1-3, 1909. *All Events*—Mortimer Lindsey, New Haven, Conn., 2,031 for 9 games, averaging 225 6-9, in N. B. A. tournament at Paterson, N. J., 1912; James Smith, Buffalo, N. Y., 2,060 for 9 games, averaging 228 8-9, in Canadian Bowling Association tournament at Toronto, Ont., 1912.

*Head Pin*—Oscar Steinquest, Riverside Alleys, New York, 118, 1909. *Tournament, Three Games*—Charles Schaeder, Amphion Alleys, Brooklyn, 267, 279, 278; average, 271 1-3, 1907. *Six Games*—Charles Schaeder, Amphion Alleys, Brooklyn, 236, 255, 267, 279, 263, 232; total 1,537; average 256 1-6, 1907. *Seventy-Five Games*—Fred B. Egelhoff, Palace Alleys, Brooklyn, average, 230.29, 1906. *Greatest Number of 300 Scores*—John Koster of New York, 12.

*Highest Woman's Score*—Mrs. Nellie Lester, Lenox Alleys, New York, 277, 1909. *Five Woman Team*—3 games, 2,541, Birk Cola, Toledo, O., May 3, 1922. *Two Men, Open*—Knox-Satterthwaite, Philadelphia, Pa., 537, Feb. 18, 1912. *Three Games*—Knox-Satterthwaite, Philadelphia, Pa., 1,445, Feb. 18, 1912. *Tournament*—McGuirk-Grady, of Paterson, N. J., in N. B. A. tournament, Rochester, N. Y., 523, 1908. *Three Games*—McGuirk-Grady, same place and time, 1,318. *Three-Men, Open*—Mortimer Lindsey, Glenn Riddell, Alex Dunbar, Columbia Alleys, New York, 757, 1908. *Tournament*—Imperial team, Brooklyn Palace Tournament, 748, in 1910. *Five Men, Open*—All Wooden Balls—Algonquins, New York, Columbia Alleys, New York, 1,175, 1906; Vermonts, Chicago, 1,290, 1917. *Three Games*—Brooklyn Inter-State Team, Grand Central Alleys, Brooklyn, average, 1,126, 1905. Rochester State League team at Rochester, Jan. 21, 1913, against Syracuse, 3,497 pins; average, 1,165.2. *Four Games*—same team and place; average, 1,124. *Tournament*—Howard Majors, Chicago, 1,207, 1907; Koenig and Kaiser team, St. Louis, Mo., 1,207, 1908; Burkes, St. Louis, Mo., 1,207, 1909. *Three Games*—Howard Majors, Chicago, Ill., average, 1,124, 1906. *Head Pin*—Roseville A. A., Iroquois Alleys, Newark, N. J., 545, 1909.

## CHECKERS.

The feature of the year in Checker (Draughts) play was the international match held at Glasgow, Jan. 28 to Feb. 11, for the World's Championship, between Robert Stewart, Blairadam, Fife, and Newall W. Banks of Detroit, Mich. The conditions called for forty games for a purse of £500, to be divided £300 to the winner and £200 to the loser. Result: Stewart won 2; Banks won 1 and 37 games drawn.

The United States national championship tournament held at Boston, Oct. 12 to 20, was won by Asa A. Long, 18-year-old champion of Ohio; Alfred Jordan, ex-English champion, was runner-up and Louis C. Ginsberg, of Brooklyn, third. Ginsberg was the only one to defeat Long during the tourney. Victor Townsend of Boston tied with him, playing twenty-two drawn games.

The next tourney will be held at Cleveland, Ohio, in the spring of 1924.

The following officers were elected: President, E. H. Greene, Hannibal, Mo.; First Vice-President, Willis G. Hill, Lawrence, Mass.; Second Vice-President, John Dougherty, Los Angeles, Cal.; Third Vice-President, Charles J. Messer, Syracuse, N. Y.; Fourth Vice-President, Morris Steinberg, Detroit Mich.; Fifth Vice-President, Frank G. Farmer, Wichita, Kan.; Sixth Vice-President, Preston Ketchum, Milwaukee, Wis.; Secretary, J. G. Finley, Newark, N. J.; Treasurer, E. J. Phelan, Lynn, Mass.

## TENNIS.

For the second season in succession the United States retained the Davis Cup.

FIRST ROUND—*France* defeated *Canada*, by default. *Australasia, 4; Belgium, 0. SINGLES*—J. O. Anderson (A.) defeated J. Washer (B.), 6—4, 6—3, 6—2. G. L. Patterson (A.) defeated J. Washer (B.), 6—3, 6—4, 6—4. J. O. Anderson (A.) defeated A. G. Watson (B.), 6—2, 6—1, 6—2. *DOUBLES*—J. O. Anderson-P. O'Hara-Wood (A.) defeated J. Washer-A. G. Watson (B.), 6—1, 6—2, 4—6, 7—9, 7—5. *Czecho-Slovakia* defeated *Hawaii* by default. *Spain* defeated *Philippines* by default. *India, 5, Roumania, 0. SINGLES*—A. A. Fyzee (I.) defeated Nicholas Mishu (R.), 3—6, 5—7, 6—4, 6—4, 6—0. A. H. Fyzee (I.) defeated M. Stern (R.), 6—0, 6—1, 6—1. A. A. Fyzee (I.) defeated M. Stern (R.), 6—2, 6—2, 6—1. A. H. Fyzee (I.) defeated Nicholas Mishu (R.), 4—6, 6—1, 6—1, 7—5. *DOUBLES*—A. H. Fyzee-C. Ramaswami (I.) defeated Nicholas Mishu-M. Stern (R.), 6—2, 6—4, 6—0. *Italy* defeated *Japan* by default.

SECOND ROUND—*France, 4, Denmark, 1. SINGLES*—Jean Borotra (F.) defeated Eric Tegner (D.), 6—0, 3—6, 6—4, 1—6, 6—4. Vagn Ingerslev (D) defeated Jean Couiteas (F.), 8—6, 6—3, 6—1. Henri Cochet (F.) defeated Eric Tegner (D.), 7—5, 6—2, 9—7. Jean Borotra (F.) defeated Vagn Ingerslev (D.), 6—3, 6—2, 6—4. *DOUBLES*—Henri Cochet-Jean Borotra (F.) defeated Eric Tegner-M. Worm (D.), 3—6, 6—2, 2—6, 10—8, 6—2. *Australasia, 5; Czecho-Slovakia, 0. SINGLES*—G. L. Patterson (A.) defeated F. Rohrer (Cz.), 6—1, 6—3, 3—6, 6—2. J. O. Anderson (A.) defeated K. Ardelt (Cz.), 7—5, 6—4, 6—4. G. L. Patterson (A.) defeated K. Ardelt (Cz.), 6—3, 6—2, 2—6, 6—2. J. O. Anderson (A.) defeated F. Rohrer (Cz.), 4—6, *DOUBLES*—G. L. Patterson-R. C. Wertheim (A.) defeated F. Rohrer-K. Ardelt (Cz.), 9—7, 6—0, 6—3. *Spain, 4, India, 1. SINGLES*—Manuel Alonso (S.) defeated A. A. Fyzee (I.), 6—1, 6—2, 6—2. Count de Gomar (S.) defeated A. H. Fyzee (I.), 1—6, 6—2, 6—3, 3—6, 6—1. Manuel Alonso (S.) defeated A. H. Fyzee (I.), 6—3, 6—4, 0—6, 6—4. Count de Gomar defeated A. A. Fyzee (I.) 6—1, 6—3, 3—6, 6—3. *DOUBLES*—A. H. Fyzee-C. Ramaswami (I.) defeated Count de Gomar-E. Flaquer (S.), 3—6, 7—5, 9—11, 10—8, 6—4. *British Isles, 5, Italy, 0. SINGLES*—A. R. F. Kingscote (B. I.) defeated C. Colombo (It.), 7—5, 6—4, 6—1. F. G. Lowe (B. I.) defeated Balbi di Robecco (It.). 6—1, 6—3, 6—1. A. R. F. Kingscote (B. I.) defeated Balbi di Robecco (It.), by default. F. G. Lowe (B. I.) defeated C. Colombo (It.), 6—1, 6—2, 6—0. *DOUBLES*—A. R. F Kingscote-F. L. Risely (B. I.) defeated Balbi di Robecco-C. Colombo (It.), 6—1, 6—4, 6—0.

SEMI-FINAL ROUND—*Spain* defeated *British Isles* by default. *Australasia, 4, France, 1. SINGLES*—G. L. Patterson (A.) defeated A. H. Gobert (F.), 4—6, 3—6, 6—3, 6—4, 6—3. Henri Cochet (F.) defeated Pat O'Hara-Wood (A.), 6—4, 3—6, 6—0, 7—9, 6—4. Pat O'Hara-Wood (A.) defeated A. H. Gobert (F.), 2—6, 6—2, 6—1, 6—4. G. L. Patterson (A.) defeated Henri Cochet (F.), 6—2, 2—6, 6—4, 6—2. *DOUBLES*—G. L. Patterson-Pat O'Hara-Wood (A.) defeated A. H. Gobert-Henri Cochet (F.), 6—0, 6—8, 4—6, 6—3, 10—8.

FINAL ROUND—*Australia, 4, Spain, 1. SINGLES*—Pat. O'Hara-Wood (A.) defeated Count de Gomar (S.), 6—8, 6—3, 6—0, 6—4, 6—1. M. Alonso (S.) defeated Pat. O'Hara-Wood (A.), 2—6, 3—6, 6—2, 8—6, 6—1. G. L. Patterson (A.) defeated Count de Gomar (S.), 6—3, 8—6, 6—4. G. L. Patterson (A.) defeated M. Alonso (S.), 8—6, 6—2, 6—2. *DOUBLES*—G. L. Patterson-Pat. O'Hara-Wood (A.) defeated M. Alonso-Count de Gomar (S.), 6—3, 6—3, 6—4.

CHALLENGE ROUND—*United States, 4, Australia, 1. SINGLES*—W. M. Johnston (U. S.) defeated G. L. Patterson (A.), 6—2, 6—2, 6—1. W. T. Tilden 2d (U. S.) defeated J. O. Anderson (A.), 6—4, 5—7, 3—6, 6—4, 6—2. W. M. Johnston (U. S) defeated J. O. Anderson (A.), 6—1, 6—2, 6—3. W. T. Tilden 2d (U. S.) defeated G. L. Patterson (A.), 7—5, 10—8, 6—0. *DOUBLES*—Pat. O'Hara-Wood-G. L. Patterson (A.) defeated W. T. Tilden 2d-V. Richards (U. S.), 6—4, 6—0, 6—3.

DAVIS CUP INTERNATIONAL MATCHES—CHALLENGE ROUND.

| Year. | Winner. | Loser. | Score. | Year. | Winner. | Loser. | Score. |
|---|---|---|---|---|---|---|---|
| 1900.. | United States.... | British Isles..... | 3—0 | 1911.. | Australasia..... | United States.... | 5—0 |
| 1902.. | United States.... | British Isles..... | 3—2 | 1912.. | British Isles..... | Australasia..... | 3—2 |
| 1903.. | British Isles..... | United States.... | 4—1 | 1913.. | United States.... | British Isles..... | 3—2 |
| 1904.. | British Isles..... | Belgium..... | 5—0 | 1914.. | Australasia..... | United States.... | 3—2 |
| 1905.. | British Isles..... | United States.... | 5—0 | 1919.. | Australasia..... | British Isles..... | 4—1 |
| 1906.. | British Isles..... | United States.... | 5—0 | 1920.. | United States.... | Australasia..... | 5—0 |
| 1907.. | Australia..... | British Isles..... | 3—2 | 1921.. | United States.... | Japan..... | 5—0 |
| 1908.. | Australia..... | United States.... | 3—2 | 1922.. | United States.... | Australia..... | 4—1 |
| 1909.. | Australasia..... | United States.... | 5—0 | | | | |

NATIONAL (U. S.) TENNIS CHAMPIONS IN SINGLES (OUTDOOR)

| Year. | Winner. | Year. | Winner. | Year. | Winner. | Year. | Winner. |
|---|---|---|---|---|---|---|---|
| 1881.. | R. D. Sears. | 1892.. | O. S. Campbell. | 1903.. | H. L. Doherty. | 1913.. | M. E. McLoughlin |
| 1882.. | R. D. Sears. | 1893.. | R. D. Wrenn. | 1904.. | H. Ward. | 1914.. | R. N. Williams. |
| 1883.. | R. D. Sears. | 1894.. | R. D. Wrenn. | 1905.. | B. C. Wright. | 1915.. | W. M. Johnston. |
| 1884.. | R. D. Sears. | 1895.. | F. H. Hovey. | 1906.. | W. J. Clothier. | 1916.. | R. N. Williams. |
| 1885.. | R. D. Sears. | 1896.. | R. D. Wrenn. | 1907.. | W. A. Larned. | 1917.. | R. L. Murray. |
| 1886.. | R. D. Sears. | 1897.. | R. D. Wrenn. | 1908.. | W. A. Larned. | 1918.. | R. L. Murray. |
| 1887.. | H. W. Slocum. | 1898.. | M. D. Whitman. | 1909.. | W. A. Larned. | 1919.. | W. M. Johnston. |
| 1888.. | H. W. Slocum. | 1899.. | M. D. Whitman. | 1910.. | W. A. Larned. | 1921.. | W. T. Tilden 2d. |
| 1889.. | H. W. Slocum. | 1900.. | M. D. Whitman. | 1911.. | W. A. Larned. | 1921.. | W. T. Tilden 2d. |
| 1890.. | O. S. Campbell. | 1901.. | W. A. Larned. | 1912.. | M. E. McLoughlin | 1922*. | W. T. Tilden 2d. |
| 1891.. | O. S. Campbell. | 1902.. | W. A. Larned. | | | | |

*Tilden defeated William M. Johnston, 4—6, 3—6, 6—2, 6—3, 6—4.

NATIONAL CHAMPIONS—DOUBLES (TURF).

| Year | Doubles Champions. | Year | Doubles Champions. |
|---|---|---|---|
| 1881 | C. M. Clark and F. W. Taylor. | 1902 | R. F. Doherty and H. L. Doherty. |
| 1882 | R. D. Sears and J. Dwight. | 1903 | R. F. Doherty and H. L. Doherty. |
| 1883 | R. D. Sears and J. Dwight. | 1904 | H. Ward and B. C. Wright. |
| 1884 | R. D. Sears and J. Dwight. | 1905 | H. Ward and B. C. Wright. |
| 1885 | R. D. Sears and J. S. Clark. | 1906 | H. Ward and B. C. Wright. |
| 1886 | R. D. Sears and J. Dwight. | 1907 | F. B. Alexander and H. H. Hackett. |
| 1887 | R. D. Sears and J. Dwight. | 1908 | F. B. Alexander and H. H. Hackett. |
| 1888 | O. S. Campbell and V. G. Hall. | 1909 | F. B. Alexander and H. H. Hackett. |
| 1889 | H. W. Slocum, Jr., and H. A. Taylor. | 1910 | F. B. Alexander and H. H. Hackett. |
| 1890 | V. G. Hall and C. Hobart. | 1911 | R. D. Little and G. F. Touchard. |
| 1891 | O. S. Campbell and R. P. Huntington, Jr. | 1912 | M. E. McLoughlin and T. C. Bundy. |
| 1892 | O. S. Campbell and R. P. Huntington, Jr. | 1913 | M. E. McLoughlin and T. C. Bundy. |
| 1893 | C. Hobart and F. H. Hovey. | 1914 | M. E. McLoughlin and T. C. Bundy. |
| 1894 | C. Hobart and F. H. Hovey. | 1915 | W. M. Johnston and C. J. Griffin. |
| 1895 | M. G. Chace and R. D. Wrenn. | 1916 | W. M. Johnston and C. J. Griffin. |
| 1896 | C. B. Neel and S. R. Neel. | 1917 | *F. B. Alexander and H. A. Throckmorton. |
| 1897 | L. E. Ware and G. P. Sheldon, Jr. | 1918 | Vincent Richards and W. T. Tilden, 2d. |
| 1898 | L. E. Ware and G. P. Sheldon, Jr. | 1919 | N. E. Brookes and G. R. Patterson. |
| 1899 | D. F. Davis and H. Ward. | 1920 | W. M. Johnston and C. J. Griffin. |
| 1900 | D. F. Davis and H. Ward. | 1921 | W. T. Tilden, 2d and Vincent Richards. |
| 1901 | D. F. Davis and H. Ward. | 1922 | † W. T. Tilden, 2d and Vincent Richards. |

* Patriotic tournament without championships.
†Defeated G. Patterson and Pat. O'Hara-Wood, 4—6, 6—1, 6—3, 6—4.

## NATIONAL WOMEN CHAMPIONS.

| Year | Singles Champions. | Doubles Champions. | Mixed Doubles Champions. |
|---|---|---|---|
| 1887 | Miss Ellen F. Hansell..... | | |
| 1888 | Miss B. L. Townsend..... | | |
| 1889 | Miss B. L. Townsend..... | | |
| 1890 | Miss E. C. Roosevelt..... | Misses E. C. & G. W. Roosevelt.. | |
| 1891 | Miss Mabel E. Cahill..... | Miss M. E. Cahill & Mrs. F. Morgan. | |
| 1892 | Miss Mabel E. Cahill..... | Misses M.E.Cahill&A.M.McKinley. | Miss M. E. Cahill & Clar. Hobart. |
| 1893 | Miss Aline M. Terry..... | Misses A. M. Terry & H. Butler.... | Miss E.C.Roosevelt & Clar.Hobart. |
| 1894 | Miss Helen R. Helwig..... | Misses H.R.Helwig & J.P.Atkinson.. | Miss J. P. Atkinson & E. P. Fischer. |
| 1895 | Miss J. P. Atkinson..... | Misses J.P.Atkinson & H.R.Helwig.. | Miss J. P. Atkinson & E. P. Fischer. |
| 1896 | Miss Elizabeth H. Moore.. | Misses E. H. Moore & J. P. Atkinson | Miss J. P. Atkinson & E. P. Fischer. |
| 1897 | Miss J. P. Atkinson..... | Misses J. P. Atkinson & K. Atkinson | Miss Laura Henson & D. L. Magruder |
| 1898 | Miss J. P. Atkinson..... | Misses J. P. Atkinson & K. Atkinson | Miss Carrie Neely & E. P. Fischer. |
| 1899 | Miss Marion Jones..... | Misses M. McAteer and J. Craven... | Miss Edith Rastall & A. L. Hoskins. |
| 1900 | Miss Murtle McAteer..... | Misses E. Parker & H. Champlin.... | Miss M. Hunnewell & Alf. Codman. |
| 1901 | Miss Elizabeth H. Moore.. | Misses M. McAteer & J. P.Atkinson | Miss Marion Jones & R. D. Little. |
| 1902 | Miss Marion Jones..... | Misses M. Jones & J. P. Atkinson.... | Miss E. H. Moore & W. C. Grant. |
| 1903 | Miss Elizabeth H. Moore.. | Misses E. H. Moore & C. B. Neely... | Miss Chapman & Harry Allen. |
| 1904 | Miss May Sutton..... | Misses M. Sutton & M. Hall..... | Miss E. H. Moore & W. C. Grant. |
| 1905 | Miss Elizabeth H. Moore.. | Misses H. H. Homans & C. B. Neely. | Mr. and Mrs. Clarence Hobart. |
| 1906 | Miss Helen H. Homans.... | Mrs. L. F. Coe & Mrs. D. F. Platt... | Miss Coffin & E. B. Dewhurst. |
| 1907 | Miss Evelyn Sears..... | Misses Neely & Weimer..... | Miss Sayres & W. F. Johnson. |
| 1908 | Mrs. Barger Wallach..... | Misses E. Sears & M. Curtis..... | Miss E. Rotch & N. W. Niles. |
| 1909 | Miss Hazel Hotchkiss..... | Misses H. Hotchkiss & E. Rotch.... | Miss H. Hotchkiss & W.F.Johnson. |
| 1910 | Miss Hazel Hotchkiss..... | Misses E. Rotch & H. Hotchkiss.... | Miss Hotchkiss&J.R.Carpenter,Jr. |
| 1911 | Miss Hazel Hotchkiss..... | Misses E. Sears and H. Hotchkiss... | Miss Hotchkiss & W. F. Johnson. |
| 1912 | Miss Mary Browne..... | Misses M. Browne & D. Green..... | Miss M. Browne & R. N. Williams, 2d. |
| 1913 | Miss Mary Browne..... | Miss M.Browne&Mrs.R.H.Williams | Miss M. Browne & W. T. Tilden, 2d. |
| 1914 | Miss Mary Browne..... | Miss M.Browne&Mrs.R.H.Williams | Miss M. Browne & W. T. Tilden, 2d. |
| 1915 | Miss Molla Bjurstedt..... | Mrs.G.W.Wightman&Miss El.Sears | Mrs.G.W.Wightman&H.C.Johns'n. |
| 1916 | Miss Molla Bjurstedt..... | Misses M. Bjurstedt & E. Sears..... | Miss E. Sears & W. E. Davis. |
| 1917* | Miss Molla Bjurstedt..... | Misses M. Bjurstedt & E. Sears.... | Miss M. Bjurstedt & I. C. Wright. |
| 1918 | Miss Molla Bjurstedt..... | Misses E. Goss & M. Zinderstein.... | Mrs. G. W. Wightman & I.C.Wright |
| 1919 | Mrs. Geo. W. Wightman... | Misses E. Goss & M. Zinderstein.... | Miss M. Zinderstein & V. Richards. |
| 1920 | Mrs. F. I. Mallory..... | Misses E. Goss & M. Zinderstein.... | Mrs.G.W.Wightm'n&W.F.Johns'n. |
| 1921 | Mrs. F. I. Mallory..... | Mrs. M. Z. Jessup & Miss H. Wills. | Mrs. F. Mallory & W. T. Tilden, 2d. |
| 1922† | Mrs. F. I. Mallory..... | Mrs. M. Z. Jessup & Miss H. Wills. | Mrs. F. Mallory & W. T. Tilden, 2d. |

* Patriotic tournament without championships.
†Defeated Helen Wills, 6—3, 6—1. Miss Molla Bjurstedt by marriage became Mrs. F. I. Mallory.

## NATIONAL INDOOR CHAMPIONS.

| Year | Champion. | Doubles Champions. | Year | Champion. | Doubles Champions. |
|---|---|---|---|---|---|
| 1900 | J. A. Allen..... | C. Cragin-J. P. Paret. | 1912 | W. C. Grant.... | F. Alexander-T. R. Pell. |
| 1901 | H. Ward..... | C. Cragin-O. M. Bostwick. | 1913 | G. F. Touchard.. | F. Alexander-T. R. Pell. |
| 1902 | J. P. Paret..... | W. C. Grant-R. LeRoy. | 1914 | G. F. Touchard.. | W. C. Grant-G. C. Shafer. |
| 1903 | W. C. Grant..... | W. C. Grant-R. LeRoy. | 1915 | G. F. Touchard.. | W. C. Grant-G. C. Shafer. |
| 1904 | W. C. Grant..... | W. C. Grant-R. LeRoy. | 1916 | R. L. Murray.... | G. Touchard-M. Washburn. |
| 1905 | E. B. Dewhurst.. | T. R. Pell-H. F. Allen. | 1917 | S. H. Vosnell.... | A.Lovibond-Dr.Rosenbaum. |
| 1906 | W. C. Grant..... | F. Alexander-H. Hackett. | 1918 | S. H. Voshell.... | F.Alexander-Dr.Rosenbaum. |
| 1907 | T. R. Pell..... | F. Alexander-H. Hackett. | 1919 | V. Richards..... | G. C. Shafer-Lieut. K. Smith. |
| 1908 | W. C. Grant..... | F. Alexander-H. Hackett. | 1920 | W. T. Tilden, 2d. | W. T. Tilden, 2d-V. Richards. |
| 1909 | T. R. Pell..... | W. C. Grant-T. R. Pell. | 1921 | Frank Anderson. | V. Richards-S. H. Voshell. |
| 1910 | G. F. Touchard.. | G. Touchard-C. Gardner. | 1922 | F. T. Hunter.... | F. T. Anderson-S. H. Voshell. |
| 1911 | T. R. Pell..... | V. Richards-S. H. Voshell. | | | |

## NATIONAL CLAY COURT CHAMPIONS.

| Year | Champion. | Doubles Champions. | Year | Champion. | Doubles Champions. |
|---|---|---|---|---|---|
| 1910 | M. H. Long..... | F. G. Anderson-W. T. Hayes. | 1917* | ..... | C. S. Garland-S. Hardy. |
| 1911 | W. T. Hayes.... | J. Winston-H. Whitehead. | 1918 | W. T. Tilden, 2d. | C. S. Garland-S. Hardy. |
| 1912 | R. N. Williams, 2d | H. H. Hackett-W. M. Hall. | 1919 | W. M. Johnston. | W. Johnston-S. Hardy. |
| 1913 | J. R. Strachan... | J. R. Strachan-C. J. Griffin. | 1920 | Roland Roberts.. | R. Roberts-V. Richards. |
| 1914 | C. J. Griffin..... | N. Browne-C. Wayne. | 1921 | W. T. Hayes.... | W. T. Hayes-C. B. Herd. |
| 1915 | R. N. Williams, 2d | G. M. Church-D. Mathey. | 1922† | W. T. Tilden, 2d. | R. Burdick-F. Bastian. |
| 1916 | W. E. Davis.... | G. M. Church-D. Mathey. | | | |

* Patriotic tournament without championships.
†Tilden defeated Z. Shimizu, 7—5, 6—3, 6—1. Mrs. H. Bickle won Women's championship, defeating Miss L. Bancroft, 3—6, 6—1, 7—5.

## NATIONAL INDOOR WOMEN CHAMPIONS.

| Year | Champion. | Doubles Champions. | Year | Champion. | Doubles Champions. |
|---|---|---|---|---|---|
| 1907 | Miss E. Moore.. | | 1915 | Miss M. Bjurstedt | Mrs. McLean-Mrs. Weaver. |
| 1908 | Miss M. Wagner. | Mrs. Pouch-Miss Moore. | 1916 | Miss M. Bjurstedt | Miss Wagner-Miss Bjurstedt. |
| 1909 | Miss M. Wagner. | Miss Moore-Miss Marcus. | 1917 | Miss M. Wagner. | Miss Wagner-Miss Taylor. |
| 1910 | Mrs. F. Schmitz. | Miss Wagner-Miss Kutroff. | 1918 | Miss M. Bjurstedt | Mrs. Weaver-Miss Goss. |
| 1911 | Miss M. Wagner. | Miss Bunce-Miss Fleming. | 1919 | Mrs. Wightman.. | Mrs. W'tman-Miss Z'derstein. |
| 1912 | No tournament.. | | 1920 | Miss H. Pollak.. | Miss Pollak-Mrs. Morris. |
| 1913 | Miss M. Wagner. | Miss Wagner-Miss Kutroff. | 1921 | Mrs. F. I. Mallory. | Mrs. W'tman-Miss Z'derstein. |
| 1914 | Miss M. Wagner. | Mrs. Weaver-Miss C. Cassel. | 1922 | Mrs. F. I. Mallory. | Mrs. Jessup-Mrs. Godfrey. |

## NATIONAL INDOOR JUNIOR CHAMPIONS.

1916, H. A. Throckmorton; 1917, Charles S. Garland; 1918, Harold L. Taylor; 1919, Vincent Richards; 1920, Vincent Richards; 1921, Vincent Richards; 1922, A. W. Jones.

**National Boy Champions** (Runners-up are in parentheses)—1916, Benjamin Letson; (D. W. Johnson); 1917, Vincent Richards; (J. D. E. Jones); 1918, Vincent Richards; (A. Bassford, 3d); 1919, A. W. Jones; (Weller Evans); 1920, James L. Farquhar; (William Einsmann); 1921, Julius Saglowsky; (Thos. McGilton); 1922, D. O'Loughlin.

**National Girl Champions**—1918, Katherine Porter; 1919, Katherine Gardner; 1920, Louise Dixon; 1921, Helen Wills; 1922, Helen Wills.

**National Indoor Junior Champions** (doubles champions are in parentheses)—1916, Elliott H. Binzen; (W. Botsford and R. B. Haines); 1917, E. H. Hendrickson; (G. B. Emerson and H. F. Dornheim); 1918, Vincent Richards; (F. T. Anderson and H. B. Kaltenbach); 1919, Vincent Richards; (Vincent Richards and F. T. Anderson); 1920, Vincent Richards; (Vincent Richards and P. S. McHugh); 1921, Edgar F. Dawson; (Jerry Lang and E. F. Dawson).

## INTERCOLLEGIATE CHAMPIONS.

| Yr. | Champion. | College. | Doubles Champions. | College. |
|---|---|---|---|---|
| 1883 | J. S. Clark (spring) | Harvard. | J. S. Clark and H. A. Taylor (spring) | Harvard. |
| | H. A. Taylor (fall) | Harvard. | H. A. Taylor and P. E. Presbrey (fall) | Harvard. |
| 1884 | W. P. Knapp | Yale. | W. P. Knapp and W. B. S. Thorne | Yale. |
| 1885 | W. P. Knapp | Yale. | W. P. Knapp and A. L. Shipman | Yale. |
| 1886 | G. M. Brinley | Trinity. | W. P. Knapp and W. L. Thatcher | Yale. |
| 1887 | P. S. Sears | Harvard. | P. S. Sears and Q. A. Shaw, Jr. | Harvard. |
| 1888 | P. S. Sears | Harvard. | V. G. Hall and O. S. Campbell | Columbia. |
| 1889 | R. P. Huntington, Jr. | Yale. | O. S. Campbell and A. E. Wright | Columbia. |
| 1890 | F. H. Hovey | Harvard. | Q. A. Shaw, Jr., and S. T. Chase | Harvard. |
| 1891 | F. H. Hovey | Harvard. | F. H. Hovey and R. D. Wrenn | Harvard. |
| 1892 | W. A. Larned | Cornell. | R. D. Wrenn and F. B. Winslow | Harvard. |
| 1893 | M. G. Chace | Brown. | M. G. Chace and C. R. Budlong | Brown. |
| 1894 | M. G. Chace | Yale. | M. G. Chace and A. E. Foote | Yale. |
| 1895 | M. G. Chace | Yale. | M. G. Chace and A. E. Foote | Yale. |
| 1896 | M. D. Whitman | Harvard. | L. E. Ware and W. M. Scudder | Harvard. |
| 1897 | S. G. Thomson | Princeton. | L. E. Ware and M. D. Whitman | Harvard. |
| 1898 | L. E. Ware | Harvard. | L. E. Ware and M. D. Whitman | Harvard. |
| 1899 | D. F. Davis | Harvard. | Holcombe Ward and D. F. Davis | Harvard. |
| 1900 | R. D. Little | Princeton. | F. B. Alexander and R. D. Little | Princeton. |
| 1901 | F. B. Alexander | Princeton. | H. A. Plummer and S. L. Russell | Yale. |
| 1902 | W. J. Clothier | Harvard. | W. J. Clothier and E. W. Leonard | Harvard. |
| 1903 | E. B. Dewhurst | U. of Penn. | B. Colston and E. Clapp | Yale. |
| 1904 | R. LeRoy | Columbia. | Behr and Bodman | Yale. |
| 1905 | E. B. Dewhurst | U. of Penn. | Dewhurst and Register | Pennsylvania. |
| 1906 | R. LeRoy | Columbia. | Wells and Spaulding | Yale. |
| 1907 | G. P. Gardner | Harvard. | N. W. Niles and A. S. Dabney | Harvard. |
| 1908 | N. W. Niles | Harvard. | H. M. Tilden and A. Thayer | Pennsylvania. |
| 1909 | W. F. Johnson | U. of Penn. | W. F. Johnson and A. Thayer | Pennsylvania. |
| 1910 | R. A. Holden, Jr. | Yale. | D. Mathey and B. N. Dell | Princeton. |
| 1911 | E. H. Whitney | Harvard. | D. Mathey and Butler | Princeton. |
| 1912 | G. M. Church | Princeton. | G. M. Church and W. H. Mace | Princeton. |
| 1913 | R. N. Williams, 2d | Harvard. | W. M. Washburn and J. J. Armstrong | Harvard. |
| 1914 | G. M. Church | Princeton. | R. N. Williams, 2d, and Richard Harte | Harvard. |
| 1915 | R. N. Williams, 2d | Harvard. | R. N. Williams, 2d, and Richard Harte | Harvard. |
| 1916 | G. C. Caner | Harvard. | G. C. Caner and Richard Harte | Harvard. |
| 1917–1918—No tournaments. | | | | |
| 1919 | C. S. Garland | Yale. | C. S. Garland and K. N. Hawkes | Yale. |
| 1920 | L. M. Banks | Yale. | A. Wilder and L. Wiley | Yale. |
| 1921 | Philip Neer | Stanford. | J. B. Fenno, Jr., and E. W. Feibleman | Harvard. |
| 1922 | L. E. Williams | Yale. | P. Neer and J. Davies | Stanford. |

## 1922 EUROPEAN CHAMPIONSHIPS.

*World's Turf Championships* played at Wimbledon, England—Winners—*Men's Singles*, G. L. Patterson: *Doubles*, Anderson-Lycett; *Mixed Doubles*, Pat. O'Hara-Wood-Mlle. Lenglen; *Women's Doubles*. Mlle. Lenglen-Miss. E. Ryan; *Women's Singles*, Mlle. Lenglen. *The Final Match in the Women's Singles*, played at Wimbledon, brought together Mlle. Lenglen of France and Mrs. F. I. Mallory, (Molla Bjurstedt) United States champion. Mlle. Lenglen defeated Mrs. Mallory, 6—2, 6—0.

*World's Hard Court Championships*, played at St. Moritz—Winners—*Men's Singles*, H. Cochet; *Doubles*, H. Cochet-J. Borotra; *Women's Singles*, Mme. Golding; *Women's Doubles*, Mme. Golding-Mme. Vaussard; *Mixed Doubles*, J. Borotra-Mme. Golding.

## HOCKEY.

Stanley Cup matches, emblematic of world's professional championship, played at Toronto, Ont., March 17-29. Won by St. Patricks, Toronto 3 games to Vancouvers B. C. 2.

SCORE BY GAMES

| Games. | Winner. | Score. | Loser. | Score. |
|---|---|---|---|---|
| First | Vancouver | 4 | St. Patricks | 3 |
| Second | St. Patricks | 2 | Vancouver | 1 |
| Third | Vancouver | 3 | St. Patricks | 0 |
| Fourth | St. Patricks | 6 | Vancouver | 0 |
| Fifth | S. Patricks | 5 | Vancouver | 1 |

FINAL STANDING.

| | W. | L. | Pts. | Op.Pts. |
|---|---|---|---|---|
| St. Patricks | 3 | 2 | 16 | 9 |
| Vancouver | 2 | 3 | 9 | 16 |

Allen Cup, emblematic of world's amateur championship, played at Toronto, March 20-23, won by Granites, O. H. A., champions defeating Victorias of Regina, 13 to 2 goals in a two game series. Scores: first game, Granites 6, Victorias 2; second game Granites 7, Victorias 0.

United States Amateur Hockey Association championship played at St. Paul, Minn. and Boston, Mass., March 11-17. Won by Westminster H. C., Boston, defeating St. Paul Club 3½ games to ½ game.

SCORE BY GAMES.

| Games. | Winner. | Score. | Loser. | Score. |
|---|---|---|---|---|
| First | Westminster | 3 | St. Paul | 0 |
| Second | Westminster | 2 | St. Paul | 1 |
| Third | Westminster | 0 | St. Paul | 0 |
| Fourth | Westminster | 2 | St. Paul | 0 |

FINAL STANDING

| | W. | L. | Pts. | Op.Pts. |
|---|---|---|---|---|
| Westminster | 3½ | ½ | 7 | 1 |
| St. Paul | ½ | 3½ | 1 | 7 |

### COLLEGE HOCKEY.

December—Oxford University 27; Cambridge University 0. Played Murren.

January—Cornell 3, Colgate 2; Army 3, Hamilton 0; Springfield 1, Rensselaer 0; Yale 8, Pennsylvania 3; M. I. T. 1, Yale 0: Dartmouth 2, Amherst 0; Williams 9, R. P. I. 1; Army 2, Albany Country Club 0; Springfield Hockey Club 3, Massachusetts Aggies 2; Yale 4, New Haven Amateur Hockey Club 2; Yale 8, Pennsylvania 3; Princeton 4, Pennsylvania 0; Toronto Hockey Club 6, Harvard 1; Princeton 4, Pennsylvania 0; Columbia 4, Princeton 3; Yale 3, Massachusetts Aggies 2; St. Nicholas Club 4, Army 1; Victorias of Montreal 4, Princeton 0; Cornell 4, Amherst 0; Army 3, Colgate 0; Williams 8, Springfield 1; Columbia 4, Princeton 3; Amherst 5, Springfield 0; St. Nicholas Club 4, Army 1; Massachusetts Aggies 1, Amherst 0; Harvard 4, Dalhousie University 1; Amherst 3, Bates 1; Army 4, Bates 1; Massachusetts Aggies 2, Bates 0; Army 7, Springfield 0; Harvard 3, Boston Athletic Association 3; Princeton 2, Pennsylvania 0; Cornell 4, Massachusetts Aggies 0.

February—Bowdoin 1, Colby 1; St. Nicholas Club 3, Yale 1; M. I. T. 2, Williams 0, Harvard 9, Princeton 0; Army 3, Williams 3; Yale 6, Cornell 2; Quaker City 5, Massachusetts Aggies 1; Cornell 4, Pennsylvania 2; Harvard 3, Dartmouth 0; Yale 4, Williams 0; Amherst 3, Williams 2; Yale Freshmen 8, Princeton Freshmen 3; Massachusetts Aggies 1, Amherst 0; Pennsylvania 8, Lafayette 0; Boston A. A. 7, M. I. T. 1; Dartmouth 2, Yale 1; Hamilton 2, Columbia 1; Harvard 1, Westminster 1; Yale 1, Princeton 0; Massachusetts Aggies 4, Army 3; Amherst 2, Springfield 0; Westminster 7, M. I. T. 0; Massachusetts Aggies 3, St. Nicholas 2; Hamilton 4, Pennsylvania 2; Williams 2, Amherst 0; Dartmouth 3, Army 0.

March—St. Patricks 3, Yale 1.

## SKATING

National Speed Skating Championships held at Plattsburg, N Y, Jan. 24-25-26. Results:

*Final 220-Yard Dash, National Championship*—Won by Charles Jewtraw, Lake Placid; Charles Gorman, Commercial Club, St John, N. B., second; Roy McWhirter, Alverno Athletic Club, Chicago, Ill., third. Time—0.20 *Final, Three-Quarter-Mile, National Championship*—Won by Roy McWhirter, Alverno Athletic Club, Chicago, Ill.; Fred Buendgen, Alverno Athletic Club, Chicago, Ill., second; Charles Jewtraw, Lake Placid, third. Time—2.07 4-5 *440-Yard Dash, for Juniors (16 years), National Championship, Final*—Won by Ollie Green, Saranac Lake; Edward Reed, Logan Square A. A., Chicago, Ill., second; O. R. Bloomfield, Montreal A. A. A., Montreal, Can., third. Time—0.41 4-5. *Senior, 440-Yard Dash*—Won by Charles Jewtraw, Lake Placid; William Murphy, New York second; Roy McWhirter, Chicago, third. Time—0.39. *Senior, One-Mile Race*—Won by Roy McWhirter, Chicago; Edward Donovan, St. Paul, second; Edward Gloster, Toronto, third. Time—2.49. *Junior (16 Years), Half-Mile Race*—Won by Edward Reed, Chicago; Lionel Norton, Lake Placid, second; W. Smith, Montreal, third. Time—1.29 2-5. *Senior, Half-Mile Race*—Won by Roy McWhirter, Chicago; Fred Buendgen, Chicago, second; Charles Jewtraw, Lake Placid, third. Time—1.25 2-5. *Senior, Three-Mile Race*—Won by Richard Donovan, St. Paul; Joe Moore, New York, second; Edward Gloster, Toronto, third. Time—9.01 2-5. *Junior (16 Years), One-Mile Race*—Won by Orlie Green, Saranac Lake; Edward Reed, Chicago, second; Harold Fortune, Lake Placid, third. Time—2.59 4-5. *Junior (16 Years), 220-Yard Dash*—Won by Harold Fortune, Lake Placid; Orlie Green, Saranac Lake, second; John Darrah, Lake Placid, third. Time 0.22. Total Points: *Senior*—Roy McWhirter, Chicago, 110; Charles Jewtraw, Lake Placid, 80; Richard Donovan, St. Paul, 50; Fred Buendgen, Chicago, 40; Charles Gordon, St. John, N. B., 20; William Murphy, New York, 20; Joe Moore, New York, 20; Edward Gloster, Toronto, 20. *Juniors (16-Year-Old Class)*—Orlie Green, Saranac Lake, 80; Edward Reed, Chicago, 70; Harold Fortune, Lake Placid, 40; Earl Norton, Saranac Lake, 20; John Darrah, Lake Placid, 10; Richard Bloomfield, Montreal, 10; William A. Smith, Montreal, 10.

International Speed Skating Championship, held at Saranac Lake, N. Y., Feb. 1-2. Results, finals only: *Senior, Three-Quarter-Mile Race*—Won by William Steinmetz, Chicago; Roy McWhirter, Chicago, second; Charles Jewtraw, Lake Placid, third. Time—2.06 1-5. *Senior, Half-Mile Race*—Won by Charles Gorman, St. John, N. B.; William Steinmetz, Chicago, second; Charles Jewtraw, Lake Placid, third. Time—1.25 3-5. *Senior, One-Mile Race*—Won by William Steinmetz, Chicago; Charles Jewtraw, Lake Placid, second; Richard Donovan, St. Paul, third. Time—3 15 2-5. *Junior (16 Years), 800-Yard Dash*—Won by Edward Reed, Chicago; Harold Fortune, Lake Placid, second; Lionel Norton, Lake Placid, third. Time—1.34 4-5. *Senior, 440-Yard Dash*—Won by Charles Gorman, St. John, N. B.; William Steinmetz, Chicago, second; Frank Garnett, St. John, N. B., third. Time—0.41 3-5. *Senior, Three-Mile Race*—Won by Joe Moore, New York; Valentine Bialis, Lake Placid, second; Richard Donovan, St. Paul, third. Time—10.03 3-5. *Junior, One-Mile Race (16 Years)*—Won by Edward Reed, Chicago; Lionel Norton, Lake Placid, second; Harold Fortune, Lake Placid, third. Time—3.33 4-5. *Junior, 200-Yard Dash (16 Years)*—Won by Edward Reed, Chicago; Lionel Norton, Lake Placid, second; Jack Darrah, Lake Placid, third. Time—0.23. Points won as follows: *Seniors*—William Steinmetz, Chicago, 100; Charles Jewtraw, Lake Placid, 70; Charles Gorman, St. John, N. B., 60; Joe Moore, New York, 30; Roy McWhirter, Chicago, 20; Russell Wheeler, Montreal, 20; Richard Donovan, St. Paul, 20; Valentine Bialis, Lake Placid, 20; Gus Fetz, Chicago, 10; Frank Garnett, Chicago, 10. *Boys of 16 Years*—Edward Reed, Chicago, 110; Lionel Norton, Lake Placid, 50; Harold Fortune, Lake Placid, 40; Ollie Green, Saranac Lake, 30; Jack Darrah, Lake Placid, 10.

Diamond Trophy Speed Skating for Amateur Championship of America, held at Lake Placid, N. Y., Feb. 9-10-11. Results, finals only: *Diamond Trophy Race*—Won by William Steinmetz, Chicago; Roy McWhirter, Chicago, second; Joe Moore, New York, third. Time 0.19 4-5. *One-Mile Diamond Trophy Race*—Won by William Steinmetz, Chicago; Joe Moore, New York, second; Roy McWhirter, Chicago, and Charles Jewtraw, Lake Placid, tied for third. Time—2.56. *440-Yard Diamond Trophy Race*—Won by William Steinmetz, Chicago; Charles Jewtraw, Lake Placid, second; Charles Gorman, St. John, N. B., third. Time—0.38 1-5. *Three-Quarter Mile Diamond Trophy Race*—Won by Charles Jewtraw, Lake Placid; William Steinmetz, Chicago, second; Joe Moore, New York, third. Time—2.22 2-5. *Half-Mile Diamond Trophy*—Won by Charles Jewtraw, Lake Placid; Charles Gorman, St. John, N. B., second; William Steinmetz, Chicago, third. Time—1.45 4-5. *Three-Mile Diamond Trophy*—Won by Charles Jewtraw, Lake Placid; Joe Moore, New York, second; Charles Gorman, St. John, N. B., third. Time—12.26 4-5. Points were won in the meet as follows: *Diamond Trophy*—Steinmetz, 120; Jewtraw, 115; Gorman, 40; McWhirter, 25.

American Professional Speed Skating Championships, held at Saranac Lake, N. Y., Feb. 14-15-16. Results, finals only: *Half-Mile Race*—Won by Edmund Lamy, Saranac Lake; Bobby McLean, Chicago, second; Everett McGowan, St. Paul, third. Time—1.19 4-5. *Two-Mile Race*—Won by Arthur Staff, Chicago; Everett McGowan, St. Paul, second; Edmund Lamy, Saranac Lake, third. Time—6.17 2-5. *440-Yard Dash*—Won by Everett McGowan, St. Paul; Arthur Staff, Chicago, second; Bobby McLean, St. Paul, third. Time—0.38. *One-Mile*—Won by Everett McGowan, St. Paul; Arthur Staff, Chicago, second; Edmund Lamy, Saranac Lake, third. Time—2.48 1-5. *Three-Mile*—Won by Arthur Staff, Chicago; Edmund Lamy, Saranac Lake, second; Everett McGowan, St. Paul, third. Time—9.46. *220-Yard Dash*—Won by Arthur Staff, Chicago; Everett McGowan, St. Paul, second; Edmund Lamy, Saranac Lake, third. Time—0.19 3-5. *Three-Quarter-Mile Race*—Won by Staff, Chicago; McGowan, St. Paul, second; Bobby McLean, Chicago, third. Time—2.02 1-5. *Five-Mile Race*—Wom by McGowan, St. Paul Edmund Lamy, Saranac Lake, second McLean, Chicago, third. Time—15.15. Points: McGowan, 170; Staff, 160; Lamy, 100; McLean, 50.

World's Distance Championships, held at Christiania, Feb. 18-19. Results, finals only: *500 Metres*—Raold Larsen, Norway, 0.43 3-5 (a new Norwegian record); Thunberg, Finland, 0.44 1-10; Oscar Olsen, Norway, 0.45 1-10; Harald Stroem, Norway, 0.45 1-5; Tverin, Finland, and Pedersen, Norway, 0.45 2-5. *5,000 Metres*—Harald Stroem, Norway, 8.21 1-2; Ole Olesen, Norway, 8.38 11-100; Thunberg, Finland, 8.41 4-5; Larsen, Norway, 8.43 4-5; Moen, Norway, 8.46 3-10. Stroem's time is a new world's record. *1,500 Metres*—Won by Thunberg, Finland, 2.22 4-5; Larsen, Norway, 2.24 1-5, second; Stroem, Norway, 2.25 3-10, third; Moen, Norway, 2.26 3-10, fourth; Skutnabb, Finland, 2.27 1-10, fifth. *10,000 Metres*—Won by Stroem, Norway, 17.37 1-5; Ole Olesen, Norway, 17.43 3-5, second; Bergstroem, Finland, 12.54 1-10, third; Skutnabb, Finland, 17.59 3-10, fourth; Erling Olsen, Norway, 18.01 3-10, fifth.

Other championship events: International Indoor Championship, Milwaukee, Wis., Mar. 22. Won by Joe Moore, New York, 180 points. Canadian Professional Championships, held at St. John, N. B., Feb. 25. Won by Arthur Staff, Chicago, 200 points. Professional Indoor Championships, held at Cleveland, Feb. 11: Won by Robert McLean, Chicago, 210 points. Intercity-Interscholastic Championships, held at Chicago, Feb. 25. Won by Chicago, 44 points; Cleveland 30 points, second; Milwaukee, 19 points, third; Detroit, 4 points, fourth; New York, 2 points, fifth. Results, individual events, finals only: *440 Yards, Elementary School, Finals*—Won by G. Mahoney, Chicago; Davies, Milwaukee, second; Edward Wettlauffer, Detroit, third. Time—0.45. *220 Yards, Elementary Schools*—Won by W. Robinson, Chicago; W. Taylor, Chicago, second; Ray McKenna, Milwaukee, third. Time—0.24 1-5. *440 Yards, Junior High, First Heat*—Won by S. Berggren, Chicago; Richard Kline, New York, second. *Second Heat*—Won by R. Fidler, Chicago; Tom Fitzgibbons, Milwaukee, second. *Third Heat*—Won by Maurice Togan, Cleveland; Bud Hayes, Milwaukee, second. *440 Yards, Junior High*—Won by Maurice Togan, Cleveland; S. Berggren, Chicago, second; R. Fidler, Chicago, third. Time—0.44 4-5. *440 Yards, Senior High*—Won by Charles Hunt, Cleveland; L. Emmert, second; D. Dinsdale, third; Leslie Nolan, Cleveland, fourth. Time—0.43. *880 Yards, Junior High*—Won by O'Neill Farrell, Chicago; Ray Whittaker, Cleveland, second; Howard Oster, Cleveland, third; W. Donough, Chicago, fourth. No time. *880 Yards, Senior High*—Won by John Hollander, Milwaukee; John Mackulin, Cleveland, second; Cornelius Ewert, Chicago, third; C. Brignall, Chicago, fourth. Time—1.34. *Junior One-Mile Relay*—Won by Cleveland; Chicago, second; Milwaukee, third; New York, fourth. Time—2.50 3-5. *Half-Mile Elementary Relay*—Won by Chicago; Detroit, second; Cleveland, third; Milwaukee, fourth. Time—1.36. *Senior Mile Relay*—Won by Milwaukee;

Chicago, second; Cleveland, third; New York, fourth. Time—2.56.

National Fancy and Figure Skating Championships, held at Boston, March 7. Results: *Women's Championship*—Won by Mrs. Teresa Weld Blanchard, Boston; Miss Beatrix Loughran, New York, second. *Men's Championship*—Won by Sherwin W. Badger, Cambridge; Nathaniel W. Niles, Boston, second. *Women's Junior*—Won by Miss Helen Stantial, Melrose; Miss Rosalie Knapp, New York, second; Miss Genevieve Knott, Newton, third. *Men's Junior*—Won by Louis Van N. Washburn, Boston; Charles B. Wyman, Boston, second; Charles M. Rotch, Boston, third. *Pair Skating*—Won by Mrs. Blanchard and Mr. Niles: Mr. and Mrs. Edward Howland, second; Miss Edith Rotch and Mr. Munroe, third. *Waltzing*—Won by Miss Beatrix Loughran, New York; and Edward Howland; Mrs. Blanchard and Sherwin Badger, second; Mr. and Mrs. Howe, third. *The 14 Step*—Won by Mrs. Blanchard and Niles; Mr. and Mrs. Howe, second; Miss Ella D. Snelling and Sherwin Badger, third.

RECORDS.

American Amateur Records: 50 yards—5s., Robert McLean, Lake Placid, N. Y., Feb. 4, 1914. 75 yards—8 1-5s., Morris Wood, Verona Lake, N. J., 1905. 100 yards—9 3-5s., Morris Wood, Verona Lake, N. J., 1903. 150 yards—15 7-8s , G. D. Phillips, Jan. 27, 1883. 150 yards (with wind)—14 1-5s., G. D. Phillips, Dec. 26, 1885. 200 yards—16 2-5s., J. C. Hemment, Jan. 24, 1895. 220 yards—18s., Fred J. Robson, Boston, Jan. 13, 1911. 220-yard hurdles—21 2-5s., Fred J. Robson, Toronto, Feb. 11, 1913. 300 yards—25 2-5s., Ray McWhirter, Chicago, Ill., March 5, 1916. 440 yards—35 1-5s., H. P. Mosher, Jan. 1, 1896. 660 yards—59 3-5s., Morris Wood, Pittsburgh, Pa., 1904. 880 yards—1m. 15 3-5s., Ben O'Sickey, Pittsburgh, Pa., March 1, 1916. 1,320 yards—2m. 4 1-5s., E. Lamy, Cleveland, O., Jan. 1, 1910. One-mile handicap—2m. 39 4-5s., Robert G. McLean, Cleveland, O., Jan. 25, 1913. One mile, open—2m. 36s., John Nilsson, Minneapolis, 1895. One and one-half miles—4m. 10s., L. Roe, Jan. 29, 1910. Three miles—8m. 45s., Roy McWhirter, Lake Placid, N. Y., Feb. 12, 1921. Four miles—12m. 1-2s., A. Shiebe, Feb. 13, 1894. Five miles—14m. 56s., E. Lamy, Pittsburgh, Pa., 1910. Best metre records—600 metres (656.17 yards)—59 3-5s., Morris Wood, Feb. 13, 1904. 1,000 metres (1,093.61 yards)—1m. 47s., J. K. McCulloch, Feb. 10, 1897. 1,500 metres (1,640.42 yards)—2m. 40 4-5s., J. K. McCulloch, Feb. 6, 1897. 5,000 metres (3 miles 188.06 yards)—9m. 25 2-5s., J. K. McCulloch, Feb. 10, 1897. Tandem skating: 440 yards—49 2-5s., Elsie Miller and William Taylor, Newburgh, N. Y., Jan. 1, 1920.

World's Amateur Records: 500 metres—43 7-10s. flat, O. Mathiesen, Norway, at Christiania, Norway, Jan. 11, 1914. 1,000 metres—1m. 31 4-5s., O. Mathiesen, Norway, at Davos, Switzerland, Jan. 29, 1910. 1,500 metres—2m. 19 1-2s., O. Mathiesen, Norway, at Christiania, Norway, Jan. 11, 1914. 5,000 metres—8m. 26⅕s. Harold Stroem, Christiania, Norway, Feb. 18, 1922. 10,000 metres—17m. 22 6-10s., O. Mathiesen, Norway, at Christiana, Norway, Feb. 1, 1913.

Professional Records: 50 yards—6s., S. D. See and C. B. Davidson, New York City, 1885. 100 yards—9 4-5s., John S. Johnson, Minneapolis, Minn., 1893. 120 yards—11 3-5s., John S. Johnson, Minneapolis, Minn., 1893. 150 yards (with wind)—14 1-5s., S. D. See, New York, Feb. 21, 1896. 200 yards—17 2-5s., John S. Johnson, Minneapolis, Minn., Feb. 26, 1893. 220 yards (with wind)—17 4-5s., J. F. Donohue, Red Bank, N. J., Dec. 29, 1894, and Harley Davidson, Red Bank, N. J., Jan. 24, 1895. 440 yards—31 3-4s., John S. Johnson, Minneapolis, Minn., Feb. 14, 1896. 600 yards—55 3-5s. O. Rudd, Minneapolis, Minn., May 5, 1893. 880 yards—1m. 15s., Bobby McLean, Lake Placid, N. Y., Feb. 16, 1918. Two-thirds of a mile—1m. 54 4-5s., O. Rudd, Minneapolis, Minn., Jan. 25, 1895. One mile—2m. 35s., Arthur Staff, Chicago, Ill., February 19, 1916. One and one-quarter miles 3m. 43s., John S. Johnson, Minneapolis, Minn., Feb. 26, 1894. One and one-third miles—3m. 48 1-5s., O. Rudd, Minneapolis, Minn., Jan. 25, 1895. One and one-half miles—4m. 28s., John Johnson, Montreal, Canada, Feb. 26, 1894. One and two-third miles—4m. 45 4-5s., O. Rudd, Minneapolis, Minn., Jan. 24, 1895. One and three-quarter miles—5m. 14s., John S. Johnson, Minneapolis, Minn., Feb. 26, 1895. Two miles—5m. 33 4-5s., John Nilsson, Montreal, Canada, Feb. 4, 1900. Two and one-half miles—7m. 32s., John S. Johnson, Montreal, Canada, Feb. 26, 1894. Three miles—8m. 41 1-5s., John Nilsson, Montreal, Canada, Feb. 4, 1900. Three and one-half miles—10m. 39s., John S. Johnson, Montreal, Canada, Feb. 26, 1894. Four miles—12m. 1-5s., John Nilsson, Montreal, Canada, Feb. 5, 1897. Four and one-half miles—13m. 51s., John S. Johnson, Montreal, Canada, Feb. 26, 1894. Five miles—14m. 15s. E. Lamy, Saranac Lake, N. Y., March 2 1922. Six miles (made in 10-mile race)—18m. 38s., John S. Johnson, Montreal, Canada, Feb 26, 1894. Seven miles (made in 10-mile race)—21m. 43s., John S. Johnson, Montreal, Canada, Feb. 26, 1894. Eight miles (made in 10-mile race)—24m. 55s., John S. Johnson, Montreal, Canada, Feb. 26, 1894. Nine miles (made in 10-mile race)—28m. 4s., John S. Johnson, Montreal, Canada, Feb. 26, 1894. Ten miles—31m. 7½s., V. Bergstroem, Stockholm, March 27, 1919. Eleven miles—35m. 43 4.5s., twelve miles—38m. 49 4-5s., thirteen miles—42m. 27 2-5s., fourteen miles—45m. 51 4-5s., fifteen miles—49m. 17 3-5s., sixteen miles—52m. 42 4-5s., seventeen miles—56m. 9 1-5s., eighteen miles—59m. 34 1-5s., nineteen miles—1h. 3m. 4 3-5s., twenty miles—1h. 6m. 36 2-5s. Twenty-five miles—1h. 30m. 15s., John Karlsen, Minneapolis, Minn., Feb. 6, 1916. Thirty miles (made in 100-mile race)—1h. 53m. 20s, J. F. Donohue, Stamford, Ct., Jan. 26, 1893. Forty miles (made in 100-mile race)—2h. 34m. 46s., J. F. Donohue, Stamford, Ct., Jan. 26, 1893. Fifty miles (made in 100-mile race)—3h. 15m. 59 2-5s., J. F. Donohue, Stamford, Ct., Jan. 26, 1893. Sixty miles (made in 100-mile race)—4h. 7m. 3-5s., J. F. Donohue, Stamford, Ct., Jan. 26, 1893. Seventy miles (made in 100-mile race)—4h. 55m. 3-5s., J. F. Donohue, Stamford, Ct., January 26, 1893. Eighty miles (made in 100-mile race)—5h. 41m. 55s., J. F. Donohue, Stamford, Ct., Jan. 26, 1893. Ninety miles (made in 100-mile race)—6h. 25m. 57 3-5s., J. F. Donohue, Stamford, Ct., Jan. 26, 1893. 100 miles, 7h. 11m. 38 1-5s., J. F. Donohue, Stamford, Ct., Jan. 26, 1893.

MIDDLE STATES CHAMPIONSHIPS.

Held at Newburgh, N. Y., Jan. 2. Results, finals only: *220 Yards*—Won by Paul Forsman, Tremont Skating Club; Joe Moore, 181st Street Ice Palace, second; Leslie Boyd, Lake Placid, third. Time—0.21 3-5. *440-Yard Dash*—Won by Joe Moore, 181st Street Ice Palace; Paul Forsman, Tremont Skating Club, second; James Hennessey, Lake Placid, third. Time—0.42 4-5. *Half-Mile*—Won by Joe Moore 181st Street Ice Palace; Alfred Neuhfur, Cleveland A. C., second; William Murphy, 181st Street Ice Palace, third. Time—1.35. *One Mile*—Won by Leslie Boyd, Lake Placid Club; Joe Moore, 181st Street Ice Palace, second; Alfred Neuhfur, Cleveland A. C., third. Time—3.04 1-5. *Donohue Memorial, Three Miles*—Won by Joe Moore, 181st Street Ice Palace; Leslie Boyd, Lake Placid Club, second; H. A. Perlberg, Cleveland A. C., third. Time—9.47 1-5. *Women's Championships—440 Yards*—Won by Gladys Robinson, Toronto; Elsie Muller, 181st Street Ice Palace, second; Mildred Truslow, Brooklyn Ice Palace, third. Time—0.52 2-5. *Half-Mile*—Won by Elsie Muller, 181st Street Ice Palace; Mildred Truslow, Brooklyn Ice Palace, second; Roslyn Sternberg, Tremont Skating Club, third. Time—1.55 4-5.

NEW YORK STATE CHAMPIONSHIPS.

Held at Binghamton, Jan. 8. Results, finals only: *220-Yard Dash*—Won by Charles Jewtraw, Lake Placid, N. Y.; Paul Forsman, Tremont Rink Club, New York, second; Bobby Hearn, Brooklyn S. C., third. Time—0.20 1-5. Moore finished second but was disqualified for fouling. *440-Yard Dash*—Won by Charles Jewtraw, Lake Placid; Paul Forsman, Tremont R. C., New York, second; William Murphy, 181st Street Ice Palace, New York, third. Time—0.39 1-5. *Half-Mile*—Won by Charles Jewtraw, Lake Placid, N. Y.; Joe Moore, 181st Street Ice Palace, New York, second; Paul Forsman, Tremont R. C., New York, third. Time—1.26 4-5. *One-Mile*—Won by Joe Moore, 181st Street Ice Palace, New York; Leslie Boyd, Lake Placid, N. Y., second; Don Robinson, 181st Street Ice Palace, New York, third. Time—2.57 2-5. *Three-Mile*—Won by Joe Moore, 181st Street Ice Palace, New York; Leslie Boyd, Lake Placid, N. Y., second; Valentine Biallas, Lake Placid, third. Time—3.39.

METROPOLITAN CHAMPIONSHIPS.

Held at New York, Jan. 13-15. Results, finals only: *Half-Mile Race*—Won by Al Leach, unattached; Paul Forsman, Tremont S. C., second; West Becker, Tremont S. C., third. Time—1.25. *Mile, Race*—Won by Al Leach, unattached; Paul Forsman, Tremont S. C., second; West Becker, Tremont S. C., third. Time—3.01 4-5. *220-Yard Race*—Won by Paul Forsman, Tremont Skating Club; Mike McLaughlin, Tremont Skating Club, second; George Pickering, Dyckman Skating Club, third. Time—0.17 2-5. *One-Mile Race*—Won by Wesley Becker, Tremont Skating Club; Sam Goldberg, Tremont Skating Club, second; Duncan McCool, Dyckman Skating Club, third. Time—2.53. Total Point Score for Championship—Paul Forsman, 90; George Pickering, 50; Wesley Becker, 40; Mike

McLaughlin and Samuel Goldberg, 20 each; George McCool and James Smith, 10 each.

Amateur Roller Skating Championship, held at Chicago, April 8—Won by Roland Cioni, Akron, O., with 60 points; Rodney Peters, St. Louis, 31 points, second; Joe Lawrey, Chicago, 23 points, third.

### NEW ENGLAND CHAMPIONSHIPS.

Held at Laconia, N. H., Feb. 19—Results: *N. E. Skating Championship*—Won by Walter Thorne of the Boston Arena, 90 points; Martin Brewster, second, 60 points; J. J. Hennessey, Dartmouth College, and H. T. McCarthy, South Boston, tied for third, 30 points each; Israel Davis, Mattapan, fifth, 20 points; Thomas Corcoran, Cambridge, sixth, 10 points. *Final, Quarter Mile*—Won by Walter Thorne; Martin Brewster, second; Israel Davis third. Time 40 4-5s. *Final, Half Mile*—Won by J. J. Hennessey; Walter Thorne, second; Martin Brewster, third. Time, 1m. 29 3-5s. *Mile Race*—Won by Walter Thorne; Martin Brewster, second; Israel Davis, third. Time 3m. 1 1-5s. *Three-Mile Race*—Won by H. T. McCarthy, South Boston; Walter Thorne, second; Thomas Corcoran, third. Time 9m. 49 3-5s.

## BASKETBALL.

### EASTERN INTERCOLLEGIATE LEAGUE.

Final Standing.

| Team. | Points. | Games Played. | Won. | Lost. | P. C. | Goals. Field. | Goals. Foul. | Foul Tries. | Fouls. Tech. | Fouls. Pers. | Goals Agst. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Princeton | 262 | 11 | 9 | 2 | .818 | 89 | 84 | 133 | 25 | 101 | 60 |
| Pennsylvania | 263 | 11 | 8 | 3 | .727 | 91 | 81 | 155 | 33 | 81 | 64 |
| Dartmouth | 248 | 10 | 6 | 4 | .600 | 80 | 88 | 108 | 36 | 102 | 63 |
| Cornell | 251 | 10 | 5 | 5 | .500 | 83 | 85 | 112 | 46 | 86 | 63 |
| Columbia | 213 | 10 | 2 | 8 | .200 | 66 | 81 | 137 | 30 | 80 | 105 |
| Yale | 178 | 10 | 1 | 9 | .100 | 62 | 54 | 125 | 28 | 91 | 117 |

### PAST WINNERS.

| Team. | W. | L. | Team. | W. | L. | Team. | W. | L. |
|---|---|---|---|---|---|---|---|---|
| 1910-11 Columbia | 7 | 1 | 1914-15 Yale | 8 | 2 | 1918-19 †Pennsylvania | 7 | 1 |
| 1911-12 Columbia | 8 | 2 | 1915-16 Pennsylvania | 9 | 2 | 1919-20 Pennsylvania | 10 | 0 |
| 1912-13 Cornell | 7 | 1 | 1916-17 Yale | 9 | 1 | 1920-21 Pennsylvania | 9 | 1 |
| 1913-14 *Cornell-Col'bia | 8 | 2 | 1917-18 Pennsylvania | 9 | 1 | 1921-22 P inceton | 9 | 2 |

* Tie. † Cup not in competition.

### WESTERN INTERCOLLEGIATE CONFERENCE.

Final Standing.

| Team. | Won. | Lost. | P. C. | Field Goals. | Free Throws Made. | Fouls. Piers. | Fouls. Tech. | Total Points. |
|---|---|---|---|---|---|---|---|---|
| Purdue | 8 | 1 | .889 | 103 | 55 | 55 | 12 | 265 |
| Michigan | 8 | 4 | .667 | 97 | 94 | 85 | 47 | 288 |
| Wisconsin | 8 | 4 | .667 | 108 | 59 | 74 | 33 | 275 |
| Illinois | 7 | 5 | .583 | 131 | 81 | 98 | 41 | 343 |
| Iowa | 5 | 6 | .455 | 103 | 57 | 75 | 40 | 268 |
| Ohio State | 5 | 7 | .417 | 103 | 78 | 78 | 36 | 284 |
| Minnesota | 5 | 7 | .417 | 91 | 61 | 74 | 25 | 243 |
| Chicago | 5 | 7 | .417 | 88 | 65 | 87 | 34 | 241 |
| Indiana | 2 | 7 | .300 | 59 | 51 | 54 | 28 | 169 |
| Northwestern | 3 | 9 | .250 | 80 | 53 | 104 | 22 | 218 |

### MISSOURI VALLEY CONFERENCE.

Final Standing.

| Team. | W. | L. | P.C. | Team. | W. | L. | P.C. |
|---|---|---|---|---|---|---|---|
| Missouri | 15 | 1 | .938 | Iowa State | 8 | 8 | .500 |
| Kansas | 15 | 1 | .938 | Kansas Aggies | 3 | 13 | .187 |
| Drake | 12 | 4 | .750 | Grinnell | 2 | 14 | .125 |
| Oklahoma | 8 | 8 | .500 | Washington | 1 | 15 | .063 |
| Nebraska | 8 | 8 | .500 | | | | |

### PACIFIC COAST CONFERENCE.

Final Standing.

| Team. | W. | L. | P.C. | Team. | W. | L. | P.C. |
|---|---|---|---|---|---|---|---|
| University of Idaho | 7 | 0 | 1000 | Stanford University | 4 | 6 | .400 |
| Oregon Agricultural College | 10 | 2 | .833 | Washington State College | 4 | 1 | .267 |
| University of California | 10 | 4 | .714 | University of Southern California | 1 | 3 | .250 |
| University of Washington | 11 | 5 | .688 | University of Oregon | 0 | 16 | .000 |

### OHIO COLLEGIATE CONFERENCE.

Final Standing.

| Team. | W. | L. | P.C. | Team. | W. | L. | P.C. |
|---|---|---|---|---|---|---|---|
| Wooster | 14 | 1 | .933 | Mount Union | 5 | 6 | .455 |
| Ohio University | 11 | 2 | .846 | Western Reserve | 5 | 7 | .417 |
| Wittenberg | 10 | 2 | .833 | Akron | 5 | 8 | .385 |
| Case School | 8 | 4 | .667 | St. Xavier | 1 | 3 | .250 |
| Cincinnati | 7 | 4 | .636 | Ohio Northern | 2 | 7 | .222 |
| Ohio Wesleyan | 7 | 4 | .636 | Otterbein | 2 | 8 | .200 |
| Oberlin | 5 | 3 | .625 | Hiram | 2 | 8 | .200 |
| Denison | 7 | 5 | .583 | Heidelberg | 1 | 9 | .100 |
| Miami | 6 | 6 | .500 | Kenyon | 1 | 12 | .077 |

### AMATEUR ATHLETIC UNION CHAMPIONSHIPS.

Held at Kansas City March 6-11. Teams from all portions of the country competed and the tournament was a success, more than 12,000 spectators paying $12,157 admission fees. In the final game the Lowe and Campbell team of Kansas City defeated the Kansas City A. C. five, the 1921 champions, by a score of 42-28. Third place was won by Southwestern College, which defeated the Indianapolis Y. M. C. A., 35-22.

## ROWING.

### YALE VS. HARVARD—VARSITY EIGHTS.

YALE and Harvard varsity eight-oared races began in 1852 on Lake Winnepesaukee, at two miles, when Harvard won. In 1855 the course was changed to Springfield and lengthened to three miles. Lake Quinsigamond was the scene for nine years, and Lake Saltonsall for 1869. After an interval of seven years the crews in 1876-77 went to Springfield, Mass., when the four-mile course was inaugurated. In 1878 the crews changed again to New London, Conn. The official records follow:

| DATE. | Won By. | TIME. | |
|---|---|---|---|
| | | Winner. | Loser. |
| July 21, 1855 | Harvard | ..... | ..... |
| July 26, 1859* | Harvard | 19.18 | 20.18 |
| July 27, 1859 | Yale | 19.14 | 19.16 |
| July 24, 1860 | Harvard | 18.53 | 19.05 |
| July 29, 1864 | Yale | 19.01 | 19.43 1-2 |
| July 28, 1865 | Yale | 18.42 1-2 | 19.09 |
| July 27, 1866 | Harvard | 18.43 1-2 | 19.10 |
| July 19, 1867 | Harvard | 18.13 | 19.25 1-2 |
| July 24, 1868 | Harvard | 17.48 1-2 | 18.38 1-2 |
| July 23, 1869 | Harvard | 18.02 | 18.11 |
| July 22, 1870 | Harvard | Foul | Disq. |
| June 30, 1876 | Yale | 22.02 | 22.33 |
| June 30, 1877 | Harvard | 24.36 | 24.44 |
| June 28, 1878 | Harvard | 20.44 3-5 | 21.29 |
| June 27, 1879 | Harvard | 24.15 | 24.58 |
| July 1, 1880 | Yale | 24.25 | 25.09 |
| July 1, 1881 | Yale | 22.13 | 22.19 |
| June 30, 1882 | Harvard | 20.47 1-2 | 20.50 1-2 |
| June 28, 1883 | Harvard | 25.46 | 25.59 |
| June 26, 1884 | Yale | 20.31 | 20.46 |
| July 26, 1885 | Harvard | 25.15 1-2 | 26.30 |
| July 2, 1886 | Yale | 20.41 1-4 | 21.05 |
| July 2, 1887 | Yale | 22.56 | 23.10 1-2 |
| June 29, 1888 | Yale | 20.10 | 21.24 1-2 |
| June 28, 1889 | Yale | 21.39 | 21.55 |
| June 27, 1890 | Yale | 21.29 | 21.40 |
| June 26, 1891 | Harvard | 21.23 | 21.57 |
| July 1, 1892 | Yale | 20.48 | 21.42 1-2 |
| June 30, 1893 | Yale | 25.01 1-2 | 25.15 |
| June 29, 1894 | Yale | 23.47 | 24.40 |
| June 28, 1895 | Yale | 21.45 | 22.15 |
| June 29, 1899 | Harvard | 20.52 1-2 | 21.13 |
| June 28, 1900 | Yale | 21.12 | 21.37 |
| June 27, 1901 | Yale | 23.37 | 23.45 |
| June 26, 1902 | Yale | 20.20 | 20.33 |
| June 25, 1903 | Yale | 20.19 4-5 | 20.29 3-5 |
| June 30, 1904 | Yale | 21.40 1-2 | 22.10 |
| June 29, 1905 | Yale | 22.33 1-2 | 22.36 |
| June 28, 1906 | Harvard | 23.02 | 23.11 |
| June 27, 1907 | Yale | 21.10 | 21.13 |
| June 25, 1908 | Harvard | 20.10 | 24.45 |
| July 1, 1909 | Harvard | 21.50 | 22.10 |
| June 30, 1910 | Harvard | 20.46 1-2 | 21.04 |
| June 30, 1911 | Harvard | 22.44 | 23.40 1-2 |
| June 21, 1912 | Harvard | 21.43 1-2 | 22.04 |
| June 20, 1913 | Harvard | 21.42 1-2 | 22.20 |
| June 19, 1914 | Yale | 21.16 | 21.16 1-5 |
| June 25, 1915 | Yale | 20.52 | 21.13 1-2 |
| June 23, 1916 | Harvard | †20.02 | 20.17 |
| ..... | 1917 | No race on account of war. | |
| June 1, 1918‡ | Harvard | 10.58 | 11.04 |
| June 20, 1919 | Yale | 21.42 1-5 | 21.47 2-5 |
| June 25, 1920 | Harvard | 23.11 | 23.46 |
| June 24, 1921 | Yale | 20.41 | 20.44 1-5 |
| June 23, 1922 | Yale | 21.53 | 22.06 |

* Citizens' Regatta. † Record for Thames River Course. ‡ 1918 race was a two-mile informal contest at Derby, Conn.

### OTHER YALE-HARVARD ROWING CONTESTS (TWO-MILE COURSES)

| YEAR. | Winners—Freshmen Eights. | Winner's Time. | Loser's Time. |
|---|---|---|---|
| 1901 | Yale | 10.27 4-5 | 10.38 |
| 1902 | Dead heat | 10.13 | 10.13 |
| 1903 | Yale | 9.48 3-5 | 9.49 1-5 |
| 1904 | Yale | 10.20 | 10.20 1-2 |
| 1905 | Harvard | 9.59 | 10.04 |
| 1906 | Yale | 10.39 2-5 | 10.41 |
| 1907 | Harvard | 11.11 | 11.14 |
| 1908 | Harvard | 9.38 1-2 | 9.47 1-2 |
| 1909 | Harvard | 11.22 | 12.09 |
| 1910 | Harvard | 11.54 1-2 | 12.02 |
| 1911 | Yale | 11.53 | 11.59 1-2 |
| 1912 | Harvard | 10.52 | 10.54 1-2 |
| 1913 | Harvard | 10.41 | 10.45 |
| 1914 | Harvard | 11.49 | 12.04 |
| 1915 | Yale (1 1-2 miles) | 8.06 | 8.10 |
| 1916 | Harvard | 10.25 | 10.27 |
| 1917 | No race | ..... | ..... |
| 1918 | No race | ..... | ..... |
| 1919 | Harvard | 10.36 3-5 | 10.37 1-5 |
| 1920 | Yale | 10.06 | 10.10 |
| 1921 | Yale | 12.14 | 12.32 |
| 1922 | Harvard | 11.19 | ..... |

| YEAR. | Winners—Four-Oar and Junior Eights. | Winner's Time. | Loser's Time. |
|---|---|---|---|
| 1901 | Harvard | 11.49 1-5 | 12.09 1-5 |
| 1902 | Harvard | 11.19 1-2 | 11.25 1-2 |
| 1903 | Yale | 10.59 2-5 | 11.10 1-5 |
| 1904 | Harvard | 12.12 | 12.15 |
| 1905 | Harvard | 11.22 | 11.27 |
| 1906 | Yale | 11.46 | 12.14 |
| 1907 | Yale | 12.33 | 13.15 |
| 1908 | Yale | 10.33 1-2 | 10.43 |
| 1909 | Harvard | 13.14 | 13.23 |
| 1910 | Harvard | 13.00 1-2 | 13.18 |
| 1911 | Harvard | 13.37 1-2 | 13.52 |
| 1912 | Harvard | 11.24 | 11.55 |
| 1913 | Harvard | 11.52 | 12.41 |
| 1914 | Harvard | 11.34 | 12.02 |
| 1915 | Yale | 10.40 | 10.43 |
| 1916 | Harvard | 10.25 | 10.27 |
| 1917 | No race | ..... | ..... |
| 1918 | No race | ..... | ..... |
| 1919 | Harvard | 10.40 4-5 | 10.41 4-5 |
| 1920 | Yale | 10.48 | 10.56 |
| 1921 | Harvard | 12.29 | 12.53 |
| 1922 | Harvard | 11.05 | 11.16 |

### INTERCOLLEGIATE ROWING REGATTAS.

FRESHMEN EIGHT-OAR CREWS; POUGHKEEPSIE; COURSE TWO MILES.

| YEAR. | Winner. | Second. | Third. | Fourth. | Fifth. |
|---|---|---|---|---|---|
| 1900, June 30 | Wisc'n, 9.45 2-5 | Pen'via, 9.54 3-5 | Cornell, 9.55 1-5 | Col'bia, 10.08 | ..... |
| 1901, July 2 | Pen'via, 10.20 1-5 | Cornell, 10.23 | Col'bia, 10.36 1-5 | S'racuse, 10.44 | ..... |
| 1902, June 21 | Cornell, 9.34 4-5 | Wisc'n, 9.42 4-5 | Col'bia, 9.49 | S'racuse, 9.53 | Pen'via, 10.05 |
| 1903, June 26 | Cornell, 9.18 | S'racuse, 9.22 1-5 | Wisc'n, 9.32 | Col'bia, 9.41 | Pen'via, 9.45 |
| 1904, June 28 | S'racuse, 10.01 | Cornell, 10.12 2-5 | Pen'via, 10.18 4-5 | Col'bia, 10.28 1-2 | ..... |
| 1905, June 28 | Cornell, 9.35 2-5 | S'racuse, 9.49 | Col'bia, 9.53 | Pen'via, 9.58 4-5 | ..... |
| 1906, June 23 | S'racuse, 9.51 3-5 | Cornell, 9.55 | Wisc'n, 9.55 3-5 | Col'bia, 10.07 1-5 | Pen'via, 10.13 1-5 |
| 1907, June 26 | Wisc'n, 9.58 | S'racuse, 10.03 | Pen'via, 10.04 | Col'bia, 10.05 2-5 | Cornell, 10.07 4-5 |
| 1908, June 27 | Cornell, 9.29 3-5 | S'racuse, 9.38 3-5 | Col'bia, 9.43 | Wisc'n, 9.55 1-5 | Pen'via, 10.42 |
| 1909, July 2 | Cornell, 9.07 3-5 | S'racuse, 9.14 4-5 | Fen'via, 9.21 | Wisc'n, 9.22 4-5 | Col'bia, 9.26 |
| 1910, June 26 | Cornell, 10.40 1-5 | Col'bia, 10.53 2-5 | S'racuse, 10.53 4-5 | Pen'via, 11.00 1-5 | Wisc'n, 11.15 1-5 |
| 1911, June 27 | Col'bia, 10.13 1-5 | Cornell, 10.20 3-5 | S'racuse, 10.23 1-5 | Pen'via, 10.24 4-5 | Wisc'n, 10.38 |
| 1912, June 29 | Cornell, 9.31 2-5 | Wisc'n, 9.35 2-5 | S'racuse, 9.42 3-5 | Pen'via, 9.46 2-5 | Col'bia, 9.47 |
| 1913, June 21 | Cornell, 10.04 4-5 | Wisc'n, 10.07 4-5 | S'racuse, 10.14 3-5 | Pen'via, 10.25 2-5 | Col'bia, 10.29 |
| 1914, June 26 | Cornell, 10.26 | S'racuse, 10.50 1-5 | Pen'via, 10.50 2-5 | Col'bia, 10.56 1-5 | Wisc'n, 10.59 |
| 1915, June 28 | S'racuse, 9.29 3-5 | Cornell, 9.43 | Col'bia, 9.47 4-5 | Pen'via, 10.01 2-5 | ..... |
| 1916, June 19 | Cornell, 11.05 4-5 | S'racuse, 11.15 3-5 | Pen'via, 11.16 1-5 | Col'bia, 11.29 2-5 | ..... |
| 1920, June 19 | Conrell, 10.45 2-5 | S'racuse, 11.03 4-5 | Pen'via, 11.10 3-5 | Col'bia, 11.15 1-5 | ..... |
| 1921, June 22 | Cornell, 10.32 | S'racuse, 10.36 | Pen'via ..... | Col'bia ..... | ..... |

The 1920 race was held on two-mile course, on Cayuga Lake.

UNIVERSITY EIGHT-OAR CREWS; POUGHKEEPSIE; COURSE FOUR MILES.

| Year. | Winner. | Second. | Third. | Fourth. | Fifth. |
|---|---|---|---|---|---|
| 1896, June 26... | Cornell, 19.59 | Harv'd, 20.18 | Pen'via 20.18 | Col'bia, 21.25 | ..... |
| 1897, June 25... | Cornell, 20.34 | Yale, 20.44 | Harv'd, 21.00 | ..... | ..... |
| 1897, July 2... | Cornell, 20.47 4-5 | Col'bia, 21.20 2-5 | Pen'via, swamp'd | ..... | ..... |
| 1898, July 2... | Pen'via, 15.51 1-2 | Cornell, 16.06 | Wisc'n, 16.10 | Col'bia, 16.21 | ..... |
| 1899, June 27... | Pen'via, 20.04 | Wisc'n, 20.05 1-2 | Cornell, 20.13 | Col'bia, 20.20 | ..... |
| 1900, June 30... | Pen'via, 19.44 3-5 | Wisc'n, 19.46 2-5 | Cornell, 20.04 1-5 | Col'bia, 20.08 1-5 | Geo't'n 20.19 1-5 |
| 1901, July 2... | Cornell, 18.53 1-5 | Col'bia, 18.58 | Wisc'n, 19.06 4-5 | Geo't'n, 19.21 | Syra. & Pa. dist. |
| 1902, June 21... | Cornell, 19.05 3-5 | Wisc'n, 19.13 3-5 | Col'bia, 19.18 3-5 | Pen'via, 19.26 | Syracuse19.31 2-5 |
| 1903, June 26... | Cornell, 18.57 | Geo't'n, 19.27 | Wisc'n, 19.29 2-5 | Pen'via, 19.30 2-5 | Syracuse19.36 1-5 |
| 1904, June 28... | S'racuse,20.22 3-5 | Cornell, 20.31 1-5 | Pen'via, 20.32 1-5 | Col'bia, 20.45 2-5 | Geo't'n, 20.52 3-5 |
| 1905, June 28... | Cornell, 20.29 | S'racuse,21.47 2-5 | Geo't'n, 21.49 | Col'bia, 21.53 4-5 | Pen'via, 21.59 4-5 |
| 1906, June 23... | Cornell, 19.36 4-5 | Pen'via, 19.43 4-5 | S'racuse,19.45 1-5 | Wisc'n, 20.13 4-5 | Col'bia, 20.18 3-5 |
| 1907, June 26... | Cornell, 20.02 2-5 | Col'bia, 20.04 | Navy, 20.13 4-5 | Pen'via, 20.33 2-5 | Wisc'n, no time. |
| 1908, June 27... | S'racuse,19.34 1-5 | Col'bia, 19.35 1-5 | Cornell, 19.39 | Pen'via, 19.52 3-5 | Wisc'n, 20.00 1-5 |
| 1909, July 2... | Cornell, 19.02 | Col'bia, 19.04 2-5 | S'racuse,19.15 1-5 | Wisc'n, 19.24 1-5 | Pen'via, 19.32 1-5 |
| 1910, June 26... | Cornell, 20.42 1-5 | Pen'via, 20.44 1-5 | Col'bia, 20.54 1-5 | S'racuse,21.13 | Wisc'n, 21.15 3-5 |
| 1911, June 27... | Cornell, 20.10 4-5 | Col'bia, 20.16 4-5 | Pen'via, 20.33 | Wisc'n, 20.34 | S'racuse,21.03 2-5 |
| 1912, June 29... | Cornell, 19.21 2-5 | Wisc'n, 19.25 | Col'bia, 19.41 2-5 | S'racuse,19.47 | Pen'via, 19.55 |
| 1913, June 21... | S'racuse,19.28 3-5 | Cornell, 19.31 | Wash., 19.33 | Wisc'n, 19.36 | Col'bia, 19.38 1-5 |
| 1914, June 26... | Col'bia, 19.37 4-5 | Pen'via, 19.41 | Cornell, 19.44 1-5 | S'racuse,19.59 2-5 | Wash., 20.01 3-5 |
| 1915, June 28... | Cornell, 19.36 3-5 | L.Stan., 20.37 4-5 | S'racuse,20.43 3-5 | Col'bia, 21.00 | Pen'via, 21.10 1-5 |
| 1916, June 17... | S'racuse,20.15 2-5 | Cornell, 20.22 4-5 | Col'bia, 20.41 1-2 | Pen'via, 20.52 4-5 | ..... |
| 1920, June 19... | S'racuse,11.02 3-5 | Cornell, 11.08 1-5 | Col'bia, 11.21 1-5 | Pen'via, 11.30 | ..... |
| 1921, June 22... | Navy, 14.07 | Calif., 14.22 | Cornell, 14.22 1-5 | Pen'via, | S'racuse, |
| 1922, June 23... | Navy, 13.33 3-5 | Wash., 13.36 1-5 | S'racuse,13.38 3-4 | Cornell, 13.38 4-5 | Col'bia, 13.45 1-5 |

The 1898 regatta was over a three-mile course, on Saratoga Lake. The 1920 race was on a two-mile course, on Cayuga Lake. The 1921 and 1922 races were three-mile events.

UNIVERSITY FOUR-OAR CREWS; POUGHKEEPSIE; COURSE TWO MILES.

| Year. | Winner. | Second. | Third. | Fourth. | Fifth. |
|---|---|---|---|---|---|
| 1901, July 2... | Cornell, 11.39 3-5 | Pen'via, 11.45 2-5 | Col'bia, 11.51 3-5 | ..... | ..... |
| 1902, June 21... | Cornell, 10.43 3-5 | Pen'via, 10.54 4-5 | Col'bia, 11.08 | ..... | ..... |
| 1903, June 26... | Cornell, 10.34 | Pen'via, 10.35 4-5 | Wisc'n, 10.55 3-5 | Col'bia, 11.14 | ..... |
| 1904, June 28... | Cornell, 10.50 3-5 | Col'bia, 11.12 1-5 | Pen'via, 11.15 3-5 | Wisc'n, 11.18 3-5 | G'town, 11.34 2-5 |
| 1905, June 28... | S'racuse,10.15 2-5 | Cornell, 10.17 2-5 | Pen'via, 10.33 2-5 | Col'bia, 10.45 | Wisc'n, 10.02 |
| 1906, June 28... | Cornell, 10.35 1-5 | S'racuse,10.43 4-5 | Col'bia, 10.55 2-5 | Pen'via, 11.06 4-5 | ..... |
| 1907, June 26... | S'racuse,10.37 1-5 | Cornell, 10.40 | Pen'via, 10.49 | Col'bia, 10.59 3-5 | ..... |
| 1908, June 27... | S'racuse,10.52 4-5 | Col'bia, 11.06 3-5 | Pen'via, disqual. | Cornell, did not | finish. |
| 1909, July 2... | Cornell, 10.01 | S'racuse,10.10 | Col'bia, 10.12 | Pen'via, 10.27 | ..... |
| 1910, June 26... | Cornell, 11.37 4-5 | S'racuse,11.43 2-5 | Col'bia, 11.48 1-5 | Pen'via, 12.22 | ..... |
| 1911, June 27... | Cornell..... | S'racuse..... | Col'bia..... | Pen'via..... | no official time. |
| 1912, June 29... | Cornell, 10.34 1-5 | Col'bia, 10.41 1-5 | S'racuse,10.58 3-5 | Pen'via, 11.23 2-5 | ..... |
| 1913, June 21... | Cornell, 10.47 2-5 | Pen'via, 10.52 1-5 | Col'bia, 10.54 4-5 | Wisc'n, 10.58 4-5 | Wash., 12.08 3-5 |
| 1914, June 26... | Cornell, 11.15 3-5 | Col'bia, 11.25 3-5 | Pen'via, 11.33 3-5 | S'racuse,11.50 3-5 | ..... |

Four-oared event discontinued after 1914.

JUNIOR EIGHTS; POUGHKEEPSIE; TWO MILES.

| Year. | Winner. | Second. | Third. | Fourth. |
|---|---|---|---|---|
| 1915, June 28... | Cornell.....10.00 1-5 | Penn'via....10.05 | Columbia...10.07 3-5 | ..... |
| 1916, June 17... | Syracuse....11.15 1-2 | Cornell.....11.20 | Columbia...11.21 | Penn'via....12.06 1-5 |
| 1920, June 19... | Cornell.....10.45 3-5 | Syracuse....10.52 | Penn'via....11.14 4-5 | Columbia...11.17 |
| 1921, June 22... | Cornell.....10.38 | Penn'via....10.54 | Syracuse..... | Columbia..... |
| 1922, June 26... | Cornell..... 9.45 3-5 | Columbia... 9.52 | Syracuse..... 9.54 | Penn via.... 9.58 |

The 1920 race was held on Cayuga Lake, two-mile course.

BEST INTERCOLLEGIATE RECORDS.

Varsity eight-oared, four-mile race: Cornell, July 2, 1901, 18m. 53 1-5s. Varsity eight-oared three-mile race: Navy, June 26, 1922, 13m. 33 3-5s. Varsity four-oared, two-mile race: Cornell, June 28, 1915, 10m. 1-5s. Freshmen eight-oared race: Cornell, July 2, 1900, 9m. 11 3-5s.

DUAL AND TRIANGULAR REGATTAS, 1922.

| Date. | Place. | Dist. | Winner. | Time. | Second. | Time. | Third. | Time. | |
|---|---|---|---|---|---|---|---|---|---|
| April 15 | Philadelphia. | 1 5-16 | Pennsylv'a.. | 6.53 | Yale..... | 7.02 | ..... | ..... | 2 lengths. |
| April 22 | Seattle..... | 3 | Washington. | 15.58 3-5 | California.... | ..... | ..... | ..... | 10 lengths. |
| April 29 | New York... | 1 5-16 | Columbia... | 7.30 | Yale..... | 7.42 | ..... | ..... | 3 lengths. |
| April 29 | Boston..... | 1 5-16 | Pennsylv'a. | 7.06 | Harvard.... | 7.08 | ..... | ..... | 1-2 length. |
| April 29 | Annapolis... | 1 5-16 | Navy..... | 7.40 2-5 | Mass. Tech. | 8.00 | ..... | ..... | 5 lengths. |
| May 6 | Cambridge... | 1 7-8 | Navy..... | 10.28 | Princeton... | 10.49 | Harvard.. | 10.57 | 6 l'gths—2 l'ghts. |
| May 13 | Princeton... | 1 3-4 | Princeton... | 9.20 | Columbia... | 9.21 | Penn'v'a.. | 9.30 | 15 feet—2 l'ghts. |
| May 20 | Derby, Conn. | 2 | Cornell..... | 10.11 | Princeton... | 10.25 | Yale..... | 10.42 | 4 l'gths—5 l'ghts. |
| May 20 | Annapolis... | 2 | Navy..... | 9.56 | Syracuse... | 10.06 | ..... | ..... | 2 lengths. |
| May 20 | New York... | 1 5-16 | Columbia... | 6.37 3'5 | Mass. Tech. | ..... | ..... | ..... | 4 lengths. |
| June 12 | Madison, Wis | 3 | Washington. | 16.24 | Wisconsin.. | ..... | ..... | ..... | 8 lengths. |

AMATEUR ROWING.

Golden Jubilee and National Championship Regatta of the National Association of Amateur Oarsmen of America, held at Philadelphia, Aug. 3-4-5, on Schuylkill River. Results, final heats only:

Aug. 3: *Junior Single Gigs*—Won by Charles McIlvaine, Vesper Boat Club, Philadelphia; John P. Cunningham, West Philadelphia Boat Club, second; John H. Brehm, Montrose Boat Club, Philadelphia, third; Francis Caton, Fairmount R. A., fourth. Time—8.22 4-5. *Junior Single Shells*—Won by W. J. S. Borie, University Barge Club, Philadelphia; Francis Finigan, Malta Boat Club, Philadelphia, second; Thomas Molloy, Nassau Boat Club, New York, third. Time—8.01. *Junior Double Shells*—Won by Arundel Boat Club, Baltimore (B. Viehmeyer, bow; L. C. Williams, stroke); Undine Barge Club, Philadelphia (B. H. Mackey, bow; Charles J. Curran jr., stroke), second; Crescent Boat Club, Philadelphia (G. Nonemaker, bow; G. Huber, stroke), third; Nassau Boat Club, New York (Thomas Molloy, bow; Clarence O. Ward, stroke), fourth; Pontchartrain R. C., New Orleans (Alton B. Eberts, bow; W. L. Falk, stroke), fifth. Time—7.21 1-5. *Junior Quadruple Shells*—Won by Union Boat Club, New York (C. J. Dixon, bow; G. Waschek, M. Lampmann, W. Bertsch, stroke); Bachelors' Barge Club, Philadelphia, second; New York Athletic Club, third; Undine Barge Club, Philadelphia, fourth. Time—6.39 2-5. *Junior Four-Oared Gigs*—Won by Arundel Boat Club, Baltimore (J. G. Caldwell, bow; C. A. Carrigan, H. W. Scharfer, R. B. Gerhardt, stroke; W. Downs, coxswain);

Malta Boat Club, Philadelphia, second; West Philadelphia Boat Club, third; Crescent Boat Club, Philadelphia, fourth. Time—7.2 1-5. *Junior Eight-Oared Shells*—Won by Undine Barge Club, Philadelphia (H. E. Humphreys, bow; Edward Flood, G. W. Letsch, Witheat Cutler, W. B. Lebel, A. L. Fort, W. Young, H. J. Rickmers, stroke; Benjamin Choate, coxswain); Pennsylvania Barge Club, Philadelphia, second; West Philadelphia Boat Club, third. Time—6.45 4-5.

Second day, Aug. 4: *Senior Single, Quarter-Mile Dash*—Won by Louis Zoha, First Bohemian B. C., New York; Thomas J. Rooney, Undine Barge Club, Philadelphia, second; William R. Hapgood, Bachelors' Barge Club, Philadelphia, third; August Muckler, Western Rowing Club, St. Louis, fourth. Time—1.19 2-5. *Intermediate Four-Oared Shells*—Won by Duluth Boat Club, Duluth, Minn. (W. Coventry, bow; D. Dever, L. Ward, L. Letourneau, stroke); Vesper Boat Club, Philadelphia, second; Nonpareil Boat Club, New York, third; West Philadelphia Boat Club, Philadelphia, fourth. Time—6.57. *Senior 150-lb. Double Shells*—Won by Undine Barge Club, Philadelphia (George W. Allison, John Blessing, stroke); Vesper Boat Club, Philadelphia, second; Pennsylvania Barge Club, Philadelphia, third; Western Rowing Club, St. Louis, fourth. Time—7.19. *Intermediate Single Shells*—Won by Robert H. Agnew, Undine Barge Club, Philadelphia; W. J. G. Borie, University Barge Club, Philadelphia, second; Manuel Gomez, Riverside B. C., Cambridge, Mass., third. Time—7.57 1-5. *Senior International Four-Oared Shells*—Won by Vesper Boat Club, Philadelphia (J. Hannes, bow; T. Maguire, Jack Costello, K. Myers, stroke); Duluth Boat Club, second; Pennsylvania Barge Club, Philadelphia, third; Bachelors' Barge Club, Philadelphia, fourth. Time—6.52 4-5. *Intermediate Quadruple Shells*—Won by New York Athletic Club, New York (John J. Sullivan, bow; George Crabtree, Lansing Van Houten, John H. Kerslake, stroke); Ravenswood B. C., Long Island City, second; Union Boat Club, New York, third; Crescent Boat Club, Philadelphia, fourth. Time—6.51. *Intermediate Eight-Oared Shells*—Won by Duluth Boat Club, Duluth, Minn. (J. McCarter, bow; C. Markham, P. Flaaten, J. Ellingson, A. O'Brien, S. Strong, S. Tart, B. Forward, stroke); New Rochelle Rowing Club, New Rochelle, second; Arundel Boat Club, Baltimore, third; Undine Barge Club, Philadelphia, fourth. Time—6.35. *Association Senior Single Shells*—Won by Hilton Belyea, St. John Amateur Rowing Club, St. John, N. B.; Edward McGuire Mutual Rowing Club, Buffalo, second; W. E. Garrett Gilmore, Bachelors' Barge Club, Philadelphia, third; Russell Codman jr., Union B. C., Boston, fourth. Time—7.39 1-5.

Third day, Aug. 5: *Senior Double Shells*—Won by Bachelors' Barge Club, Philadelphia (William R. Hapgood, bow; W. E. Garrett Gilmore, stroke); Undine Barge Club, Philadelphia, second; Metropolitan R. C., New York, third; Pennsylvania Barge Club, Philadelphia, fourth; Western Rowing Club, St. Louis, fifth. Time—7.05. *Senior Four-Oared Shells*—Won by Duluth Boat Club (W. Coventry, bow; D. Dever, L. Ward, L. Letourneau, stroke); Bachelors' Barge Club, Philadelphia, second; Pennsylvania Barge Club, Philadelphia, third. Time—7.00. *Intermediate Double Shells*—Won by New York A. C., New York (Wilbur B. Laly jr., bow; Carl A. Hasbrouck, stroke); Bachelors' Barge Club, Philadelphia, second; Arundel Boat Club, Baltimore, third; Nassau Boat Club, New York, fourth; Undine Barge Club, Philadelphia, fifth; Pontchartrain R. C., New Orleans, sixth. Time—7.20 1-5. *Championship Single Shells*—Won by Paul V. Costello, Vesper Boat Club, Philadelphia; Hilton A. Belyea, St. John Amateur Rowing Club, St. John, N. B., second; Louis Zoha, First Bohemian B. C., New York, third. Time—7.27 1-5. *Exhibition Race, Professional Veterans*—Won by Fred Plaisted, Philadelphia; James H. Riley, Saratoga Springs, N. Y., second. Time—8.35, three-quarters mile. *Senior Eight-Oared Shells*—Won by Duluth Boat Club, Crew No. 1, Duluth, Minn. (A. Kodin, bow; E. Johnson, J. Bjorkman, W. Councilman, C. Holmerud, H. Quade, F. Champion, and J. Howard, stroke); West Philadelphia Boat Club, second; University of Toronto Rowing Club, Toronto, Canada, third; Duluth Boat Club, Crew No. 2, Duluth, Minn., fourth; West Lynn Boat Club, Lynn, Mass., fifth; Union Boat Club, Boston, Mass., sixth. Time—6.20 2-5.

American Henley, held at Philadelphia, May 27. Results: *Interscholastic Eight-Oared Shells* (Franklin Challenge Cup)—Won by Washington (D. C.) H. S. (Gale, bow; Lobe, 2; Holme, 3; Crawford, 4; Krammer, 5; Watts, 6; Churchill, 7; Tissiham, stroke; Hoffman, coxswain); Episcopal Academy, Philadelphia, second. Time—5.06 4-5. *Special Eight-Oared Shells* (150-lb. crews)—Won by Pennsylvania (Wagner, bow; Beattie, 2; Henn, 3; Chesney, 4; Rohifurg, 5; Outcalt, 6; Teaf, 7; Barnhart, stroke; Shumway, coxswain); Princeton (Ellis, bow; Reed, 2; Witherspoon, 3; Cassing, 4; Baird 3d, 5; Guthrie, 6; Williamson, 7; Mueller, stroke; Miner, coxswain), second; Yale (Minor, bow; Folger jr., 2; Chess, 3; Hull, 4; Riker, 5; Colgate jr., 6; Law, 7; Freeman, stroke; Stoddard, coxswain), third. Time—6.41 2-5. *First Four-Oared Sculls*—Won by Undine Barge Club (Allison, bow; Blessing jr., 2; Graef, 3; Supplee stroke); West Philadelphia Boat Club (McCormick, bow; Cunningham, 2; Hefferman, 3; Duff, stroke), second. Time—7.26. *Freshmen Eight-Oared Shells*—Won by Navy (Mitchell, bow; Powell, 2; King, 3; Bell jr., 4; Zuber, 5; Chillingworth, 6; Clyde, 7; Compton, stroke; Field, coxswain); Penn. First Freshmen, second; Princeton, third; Penn, fourth. Time—6.43 1-5. *Special Interclub Second Eight-Oared Shells*—Won by Vesper Boat Club (Hanna, bow; Rabbit, 2; Schworbel, 3; Parker, 4; Costello, 5; Maguire, 6; Hannon, 7; Myers, stroke; Welsh, coxswain); West Philadelphia Boat Club, second; Undine Barge Club, third. Time—6.46 1-5. New record. *First Single Sculls* (Farragut Challenge Cup)—Won by Paul V. Costello, Vesper Boat Club, Philadelphia; Hilton Belyea, St. John Amateur Rowing Association, St. John, N. B., second; Russell Codman jr., Union Boat Club, Boston, third. Time—7.59 3-5. *Junior Collegiate Eight-Oared Shells* (New England Challenge Cup)—Won by Princeton (Page, bow; Moser, 2; Brunley, 3; Austin, 4; Newlin, 5; Burke, 6; Burnham, 7; Pini, stroke; Laidlaw, coxswain); Navy, second; Harvard, third; Penn's 150-lb. crew, fourth; Penn Junior Varsity, fifth. Time—6.38 4-5. *Special Eight-Oared Shell Race* (St. Paul's Cup), closed to Pennsylvania Crews—Won by Crew No. 2 (Sedam, bow; Sedgwick, 2; Vanverveer, 3; Kelley, 4; Hipple, 5; Townsend, 6; Tucker, 7; Ferger, stroke; Block, coxswain); Crew No. 1, second; Crew No. 3, third. Time—7.04. *Third Collegiate Eight-Oared Shells*—Won by Harvard (Coolidge, bow; Raymond, 2; Harris jr., 3; Campbell, 4; Hollister jr., 5; Hubbard, 6; McCreevy, 7; Hoover, stroke; Veale, coxswain); Navy, second; Princeton, third; Penn, fourth. Time—6.46 2-5. *First Double Sculls* (Schuylkill Challenge Cup)—Won by Undine Barge Club (Allison, bow; Blessing, stroke); Bachelors' Barge Club (Shoemaker, bow; Gilmore, stroke), second; Vesper Boat Club (Nelson, bow; Wilson, stroke), third; Malta Boat Club (Knowlan, bow; Sherwin, stroke), fourth. Time—7.20 3-5. *Second Eight-Oared Shells* (Stewards' Challenge Cup)—Won by Navy (Gallagher, bow; Higgins, 2; Capt. King, 3; Belles, 4; Sanborn, 5; Johnston, 6; Lee, 7; Frawley, stroke; Gwynn, coxswain); Penn, second; Union Boat Club, Boston, third. Time—6.28 1-5. *Special Four-Oared Shells* (United States Navy Cup)—Won by Vesper Boat Club (Hannes, bow; Maguire, 2; Costello, 3; Myers, stroke); Undine Barge Club (E. Graef, bow; Chambers, 2; F. H. Federschmidt, 3; E. H. Federschmidt, stroke), second. Time—7.27 1-5.

People's Regatta, held at Philadelphia, July 4. Results: *Senior Quarter-Mile Dash*—Won by Thomas J. Rooney, Undine Barge Club; George W. Allison, Undine Barge Club, second; W. E. Garrett Gilmore, Bachelors' Barge Club, third. Time—1.14 4-5. *Junior Single shells*—Won by Robert H. Agnew, Undine Barge Club; W. J. S. Borie, University Barge Club, second; L. M. Bailliere, Ariel Rowing Club, third; J. L. Engle, Undine Barge Club, fourth; C. E. Cornell, Potomac Boat Club, Washington, fifth; Edward J. Shea jr., Nonpareil Rowing Club, New York, sixth. Time—7.29. *Junior Eight-Oared Shells*—Won by New Rochelle Rowing Club, New Rochelle, N. Y.; Undine Barge Club, second; West Philadelphia Boat Club, third. Time—6.16 2-5. *Canoe Quadruple Double Paddle* (Half-Mile)—Won by Washington Canoe Club, Washington, D. C.; Philadelphia Canoe Club, second; Red Dragon Canoe Club, third; Philadelphia Canoe Club, fourth (second course); Lakanoo Boat Club, fifth. Time—3.19 3-5. *Junior Double Shells*—Won by Crescent Boat Club (Charles Marshall at bow; Herbert Henderson, stroke); Arundel Boat Club, Baltimore, second; Nassau Boat Club, New York, third; Undine Barge Club, fourth. Time—6.09 4-5. *Senior Quadruple Sculls, Shells*—Won by Vesper Boat Club (W. L. Nelson, bow; G. Faloon, 2; J. Severin, 3; S. Moorehead, stroke); First Bohemian Boat Club, New York, second. No time. *Intermediate Single Shells*—Won by William R. Hapgood, Bachelors' Barge Club; Robert H. Agnew, Undine Barge Club, second; James Fellows, Undine Barge Club, third; Carl O. Klose, Pennsylvania Barge Club, fourth. Time—7.28 *Association Senior Single Shells*—Won by A. Fitzpatrick, Malta Boat Club; Joseph Cremins, New York A. C., second. Time—7.34 2-5. *Intermediate Quadruple Sculls, Shells*—Won by West Philadelphia Boat Club (William Cormick, bow; William Wood, 2; Edward Hefferman, 3; Edward Huff, stroke); New York A. C. (H. J. Brooks, bow; John

Curren, 2; George Cusin, 3; William B. Daly jr., stroke), second. Time—6.25 1-5. *Intermediate Eight-Oared Shells*—Won by New York A. C., in row-over. Bachelors' Barge Club, scratched. No time. *Canoe Quadruple Single Paddle* (Half-Mile)—Won by Washington Canoe Club, Washington D. C.; Philadelphia Barge Club, second; Red Dragon Canoe Club, third. Time—3.41. *Junior Quadruple Sculls, Shells*—Won by New York A. C. (John J. O'Sullivan, bow; G. C. Crabtree, 2; Lansing Van Houten, 3; John H. Kerslake, stroke); Undine Boat Club, New York, second; New Rochelle Rowing Club, New York, third; Bachelors' Barge Club, fourth; Arundel Boat Club, Baltimore, fifth; Pennsylvania Barge Club, sixth. Time—6.19 2-5. *Senior 150-lb. Double Shells*—Won by Pennsylvania Barge Club (G. P. C. Jaeger, bow; S. G. Mollard, stroke); Vesper Boat Club, second. Time—7.04 2-5. *Senior Championship Single Shells*—Won by Paul V. Costello, Vesper Boat Club; W. E. Garrett Gilmore, Bachelors' Club, second; Thomas J. Rooney, Undine Barge Club, third; Henry Heller, Lone Star Boat Club, New York, fourth. Time—7.04 1-5. *Intermediate Double Shells*—Won by Metropolitan Rowing Club, New York (Dr. Walter Foley, bow; Frank McEnne, stroke); Bachelors' Barge Club, second; Westphalia Boat Club, third. Time—7.01. *Senior Four-Oared Shells*—Won by Vesper Boat Club; Pennsylvania Barge Club, second. No time. *Junior Four-Oared Gigs*—Won by Vesper Boat Club; Malta Boat Club, second; Potomac Boat Club, Washington, third; Arundel Boat Club, Baltimore, fourth. Time—6.52 3-5. *Intermediate Four-Oared Gigs*—Won by Pennsylvania Barge Club; West Philadelphia Boat Club, second. No time. *Senior Double Shells*—Won by Undine Barge Club (George W. Allison, bow; John Blessing jr., stroke); Bachelors' Barge Club, second. Time—6.48 2-5. *Senior Eight-Oared Shells*—Won by Westphalia Boat Club; Union Boat Club, New York, second; Vesper Boat Club, third; Potomac Boat Club, Washington, fourth; Bachelors' Barge Club, fifth; New York A. C., sixth. Time—6.12.

Gold Challenge Cup Race—1¼ miles, Schuylkill River, Philadelphia, June 5, winner to compete in English Royal Henley Regatta. Result: Won by Walter Hoover, Duluth B. C., time, 7.24; Paul Costello, Vesper B. C., Philadelphia, 7.29 2-5, second; Hilton Belyea, St. John A. R. A., 7.29 4-5, third; W. E. G. Gilmore, Bachelors' B. C., Philadelphia, no time taken, fourth.

English Royal Henley Regatta, July 5-8. Results, finals only, all events, 1 mile, 550 yards: *Diamond Sculls* (emblematic of World's Amateur Championship)—Won by Walter M. Hoover, Duluth B. C., U. S. A., time 9.32, defeating J. Beresford jr., Thames R. C., by 50 yards. Other finals: *Ladies' Plate*—Won by Brasenose College, Oxford, defeating Magdalen College, Oxford, by a length, in 7.47. *Thames Challenge Cup*—Won by Worcester College, Oxford, defeating Clare College, Cambridge, in 7.56. *Silver Goblets and Nickalls Challenge Cup*—Won by G. O. Nickalls and R. S. C. Lucas of Magdalen College, Oxford, who defeated H. E. West and K. Vernon of the Thames Club, by 1¼ lengths. Time—9.19. *Stewards Cup*—Won by Viking Club of Eton, which defeated the Grasshopper Club of Zurich, Switzerland, in 8.25. *Wyfold Challenge Cup*—Won by Thames Club, defeating the Kingston Rowing Club, by 2½ lengths, in 9.06. *Visitors' Challenge Cup*—Won by third College (Oxford) four. Time—8.23. *Grand Challenge Cup*—Won by Leander Club, defeating the Thames Club by a length. Time—7.36.

## OXFORD-CAMBRIDGE BOAT RACE—4¼ MILES.

(Oxford won 39, Cambridge 33, dead heat 1.)

| YEAR. | Date. | Winner. | Course. | Time. | YEAR. | Date. | Winner. | Course. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1841.. | April 14 | Cambridge... | W. to P... | 32.30 | 1884.. | April 7 | Cambridge... | P. to M... | 21.39 |
| 1842.. | June 11 | Oxford..... | W. to P... | 30.46 | 1885.. | Mar. 28 | Oxford..... | P. to M... | 21.47 |
| 1845.. | Mar. 15 | Cambridge... | P. to M... | 23.30 | 1886.. | April 3 | Cambridge... | P. to M... | 22.29½ |
| 1846.. | April 3 | Cambridge... | M. to P... | 21.05 | 1887.. | Mar. 26 | Cambridge... | P. to M... | 20.52 |
| 1849.. | Mar. 29 | Cambridge... | P. to M... | 22.00 | 1888.. | Mar. 24 | Cambridge... | P. to M... | 20.48 |
| 1849.. | Dec. 15 | Oxford..... | P. to M... | ..... | 1889.. | Mar. 30 | Cambridge... | P. to M... | 20.14 |
| 1852.. | April 3 | Oxford..... | P. to M... | 21.36 | 1890.. | Mar. 26 | Oxford..... | P. to M... | 22.03 |
| 1854.. | April 8 | Oxford..... | P. to M... | 25.29 | 1891.. | Mar. 21 | Oxford..... | P. to M... | 21.48 |
| 1856.. | Mar. 15 | Cambridge... | B. R. to P. | 25.50 | 1892.. | April 9 | Oxford..... | P. to M... | 19.21 |
| 1857.. | April 4 | Oxford..... | P. to M... | 22.35 | 1893.. | Mar. 22 | Oxford..... | P. to M... | 18.47 |
| 1858.. | Mar. 27 | Cambridge... | P. to M... | 21.23 | 1894.. | Mar. 17 | Oxford..... | P. to M... | 21.39 |
| 1859.. | April 15 | Oxford..... | P. to M... | 24.40 | 1895.. | Mar. 30 | Oxford..... | P. to M... | 20.50 |
| 1860.. | Mar. 31 | Cambridge... | P. to M... | 26.05 | 1896.. | Mar. 28 | Oxford..... | P. to M... | 20.02 |
| 1861.. | Mar. 23 | Oxford..... | P. to M... | 23.30 | 1897.. | April 3 | Oxford..... | P. to M... | 19.12 |
| 1862.. | April 12 | Oxford..... | P. to M... | 24.41 | 1898.. | Mar. 26 | Oxford..... | P. to M... | 22.15 |
| 1863.. | Mar. 28 | Oxford..... | M. to P... | 23.06 | 1899.. | Mar. 25 | Cambridge... | P. to M... | 21.04 |
| 1864.. | Mar. 19 | Oxford..... | P. to M... | 21.40 | 1900.. | Mar. 31 | Cambridge... | P. to M... | 18.47 |
| 1865.. | April 8 | Oxford..... | P. to M... | 21.24 | 1901.. | Mar. 30 | Oxford..... | P. to M... | 22.31 |
| 1866.. | Mar. 24 | Oxford..... | P. to M... | 25.35 | 1902.. | Mar. 22 | Cambridge... | P. to M... | 19.09 |
| 1867.. | April 13 | Oxford..... | P. to M... | 22.40 | 1903.. | April 2 | Cambridge... | P. to M... | 19.35 |
| 1868.. | April... | Oxford..... | P. to M... | 20.56 | 1904.. | Mar. 26 | Cambridge... | P. to M... | 21.37 |
| 1869.. | Mar. 17 | Oxford..... | P. to M... | 20.05 | 1905.. | April 1 | Oxford..... | P. to M... | 20.35 |
| 1870.. | April 6 | Cambridge... | P. to M... | 22.04 | 1906.. | April 7 | Cambridge... | P. to M... | 19.24 |
| 1871.. | April 1 | Cambridge... | P. to M... | 23.05 | 1907.. | Mar. 23 | Cambridge... | P. to M... | 20.26 |
| 1872.. | Mar. 23 | Cambridge... | P. to M... | 21.15 | 1908.. | April 4 | Cambridge... | P. to M... | 19.20 |
| 1873.. | Mar. 29 | Cambridge... | P. to M... | 19.35 | 1909.. | Mar. 27 | Oxford..... | P. to M... | 19.50 |
| 1874.. | Mar. 28 | Cambridge... | P. to M... | 22.35 | 1910.. | Mar. 23 | Oxford..... | P. to M... | 20.14 |
| 1875.. | Mar. 20 | Oxford..... | P. to M... | 22.02 | 1911.. | April 1 | Oxford..... | P. to M... | 18.29 |
| 1876.. | April 8 | Cambridge... | P. to M... | 20.20 | 1912.. | April 1 | Oxford..... | P. to M... | 22.05 |
| 1877.. | Mar. 24 | Dead heat... | P. to M... | 24.06½ | 1913.. | Mar. 13 | Oxford..... | P. to M... | 20.53 |
| 1878.. | April 13 | Oxford..... | P. to M... | 22.15 | 1914.. | Mar. 28 | Cambridge... | P. to M... | 20.23 |
| 1879.. | April 5 | Cambridge... | P. to M... | 21.18 | 1915–19 | No races account war. | | | |
| 1880.. | Mar. 22 | Oxford..... | P. to M... | 21.23½ | 1920.. | Mar. 27 | Cambridge... | P. to M... | 21.11 |
| 1881.. | April 8 | Oxford..... | P. to M... | 21.52 | 1921.. | Mar. 30 | Cambridge... | P. to M... | 19.44 |
| 1882.. | April 1 | Oxford..... | P. to M... | 20.12 | 1922.. | April 1 | Cambridge... | P. to M... | 19.27 |
| 1883.. | Mar. 15 | Oxford..... | P. to M... | 21.22 | | | | | |

## WORLD'S PROFESSIONAL SCULLING CHAMPIONSHIPS SINCE 1880.

| YEAR. | Winner. | Time. | Loser. | Course. |
|---|---|---|---|---|
| | | M. S. | | |
| 1880, Nov. 15... | E. Hanlan..... | 26.12 | E. Trickett..... | Thames River, London, Eng. |
| 1881, Feb. 14... | E. Hanlan..... | 25.41 | E. C. Laycock..... | Thames River, London, Eng. |
| 1882, April 3.... | E. Hanlan..... | 21.25 | R. W. Boyd..... | Tyne River, Eng. |
| 1882, May 1.... | E. Hanlan..... | 28.00 | E. Trickett..... | Thames River, London, Eng. |
| 1884, May 22... | E. Hanlan..... | Not taken. | E. C. Laycock..... | Nepean River, N. S. Wales. |
| 1884, Aug. 16... | W. Beach..... | Not taken. | E. Hanlan..... | Parramatta River, N. S. Wales. |
| 1885, Feb. 28... | W. Beach..... | 26.00 | T. Clifford..... | Parramatta River, N. S. Wales. |
| 1885, March 28.. | W. Beach..... | 22.51 | E. Hanlan..... | Parramatta River, N. S. Wales. |
| 1885, Dec. 18... | W. Beach..... | 24.11 | N. Matterson..... | Parramatta River, N. S. Wales. |
| 1886, Sept. 18... | W. Beach..... | 22.29 | J. Gaudaur..... | Thames River, London, Eng. |
| 1886, Sept. 25... | W. Beach..... | 23.05 | Wallace Ross..... | Thames River, London, Eng. |
| 1887, Nov. 26... | W. Beach..... | 19.55 | E. Hanlan..... | Nepean River, N. S. Wales. |
| 1888, Feb. 11... | P. Kemp..... | 23.47 | T. Clifford..... | Parramatta River, N. S. Wales. |
| 1888, May 5.... | P. Kemp..... | 21.36 | E. Hanlan..... | Parramatta River, N. S. Wales. |

WORLD'S PROFESSIONAL SCULLING CHAMPIONSHIPS SINCE 1880.—*Continued.*

| Year. | Winner. | Time. | Loser. | Course. |
|---|---|---|---|---|
| 1888, Sept. 28... | P. Kemp..... | 21.25 | E. Hanlan..... | Parramatta River, N. S. Wales. |
| 1888, Oct. 27.... | H. E. Searle..... | 22.44 | P. Kemp..... | Parramatta River, N. S. Wales. |
| 1889, Sept. 9.... | H. E. Searle..... | 22.42 | W. O Connor..... | Thames River, London, Eng. |
| 1890, June 30... | J. Stanbury..... | 22.59 | W. O'Connor..... | Parramatta River, N. S. Wales. |
| 1891, April 28... | J. Stanbury..... | Not taken. | J. McLean..... | Parramatta River, N. S. Wales. |
| 1892, May 2.... | J. Stanbury..... | 17.26 1-2 | T. Sullivan..... | Parramatta River, N. S. Wales. |
| 1896, July 13... | J. Stanbury..... | 21.51 | C. R. Harding..... | Thames River, London, Eng. |
| 1896, Sept. 7.... | J. Gaudaur..... | 23.01 | J. Stanbury..... | Thames River, London, Eng. |
| 1901, Unavail'ble | G. Towns..... | 20.30 | J. Gaudaur..... | Rat Portage River, Canada. |
| 1904, Unavail'ble | G. Towns..... | 21.49 | R. Tressider..... | Parramatta River, N. S. Wales. |
| 1905, July 22... | J. Stanbury..... | Not taken. | G. Towns..... | Parramatta River, N. S. Wales. |
| 1906, July 28... | G. Towns..... | 19.53 1-5 | J. Stanbury..... | Parramatta River, N. S. Wales. |
| 1907, March 2... | G. Towns..... | 22.27 | E. Durnan..... | Nepean River, N. S. Wales. |
| 1907, Aug. 3.... | W. Webb..... | 20.45 | G. Towns..... | Parramatta River, N. S. Wales. |
| 1908, Feb. 25... | W. Webb..... | 20.28 | R. Tressider..... | Wanganui River, New Zealand. |
| 1908, Dec. 15... | R. Arnst..... | 19.52 | W. Webb..... | Wanganui River, New Zealand. |
| 1909, June 22... | R. Arnst..... | 18.15 | W. Webb..... | Wanganui River, New Zealand. |
| 1910, April 4.... | R. Arnst..... | Not taken. | G. Whelch..... | Akaroa Harbor, New Zealand. |
| 1910, Aug. 18... | R. Arnst..... | 20.14 3-5 | E. Barry..... | Zambesi Riv., Rhodesia, Africa. |
| 1911, July 29... | R. Arnst..... | 19.46 | Harry Pearce..... | Parramatta River, N. S. Wales. |
| 1912, July 29... | E. Barry..... | 23.08 | R. Arnst..... | Thames River, London, Eng. |
| 1912, Oct. 14.... | E. Barry..... | 22.31 | E. Durnan..... | Thames River, London, Eng. |
| 1919, Oct. 27.... | A. Felton..... | 25.40 | E. Barry..... | Thames River, London, Eng. |
| 1920, Aug. 28... | E. Barry..... | 24.32 | A. Felton..... | Parramatta River, N. S. Wales. |
| 1922, Jan. 5.... | D. Hatfield..... | 19.46 | R. Arnst..... | Wanganui River, New Zealand. |

## YACHTING.

Small yacht races were the feature of the 1922 season, there being two international regattas of this type in Eastern waters during the summer. The first of these was the model or miniature races held at Bayside, (L. I.), N. Y., June 8-9-10. Won by United States entry in three straight races.

MODEL YACHT RACE.

| Yacht. | Owner. | Club. | Distance. | Time. 1st Race. | 2d Race. | 3d Race. |
|---|---|---|---|---|---|---|
| | | | | H. M. S. | H. M. S. | H. M. S. |
| Polka Dot..... | E. A. Bull.... | Prospect Park M. Y. C.. | 3 Miles.... | 2.24.03 | 2.03.50 | 1.33.22 |
| Endeavor..... | W. J. Daniels.. | London (Eng.) M.Y.C.. | 3 Miles.... | ..... | ..... | 1.43.13 |

Endeavor failed to finish within the time limit in first race and was disqualified for fouling stake boat at turn in second race.

SIX-METRE TEAM RACE.

The international six-metre team race between English and United States yachts, won in 1921 by England, was renewed at Oyster Bay (L. I.), N. Y., in September and won by United States team of four yachts, 111 points to 104.

| American Team. | | English Team. | |
|---|---|---|---|
| Yacht. | Owner. | Yacht. | Owner. |
| Lea..... | Birmingham | Jean..... | Sir J. Ward |
| Grebe..... | A. Boardman | Colia III... | Stephens |
| L'Esprit... | H. W. Childs | Caryl..... | Robertson |
| Clytie..... | H. B. Plant | Reg..... | N. C. Neill |

FINAL RESULTS—6 Twelve Mile Races.

The Lea and Colia scored the most points in the series. Each won two races and Jean and Reg won one race each. The following shows the positions at the finish of each race and the points scored:

| Yachts. | 1 | 2 | 3 | 4 | 5 | 6 | Pts. |
|---|---|---|---|---|---|---|---|
| Lea..... | 1 | 1 | 5 | 2 | 5 | 5 | 35 |
| Colia..... | 6 | 3 | 6 | 1 | 2 | 1 | 35 |
| Grebe..... | 4 | 8 | 3 | 3 | 3 | 3 | 30 |
| L'Esprit..... | 3 | 6 | 2 | 6 | 4 | 8 | 25 |
| Reg..... | 8 | 4 | 7 | 4 | 1 | 4 | 26 |
| Jean..... | 5 | 2 | 1 | 7 | 8 | 7 | 24 |
| Clytie..... | 2 | 5 | 4 | 8 | 7 | 6 | 21 |
| Caryl..... | 7 | 7 | 8 | 5 | 6 | 2 | 19 |

| | 1st. | 2d. | 3d. | 4th. | 5th. | 6th. | Tot. |
|---|---|---|---|---|---|---|---|
| America..... | 26 | 16 | 22 | 16 | 17 | 14 | 111 |
| British..... | 10 | 20 | 14 | 19 | 19 | 22 | 104 |

STAR CLASS CHAMPIONSHIPS.

Three-race regatta, held on Long Island Sound, September, distance each race about 10½ miles. Final standing and point scores, six points being allotted for first, five for second, etc.:

| Yacht. | Owner. | Division. | 1st Day. | 2d Day. | 3d Day. | Total. |
|---|---|---|---|---|---|---|
| Taurus..... | W. L. Inslee..... | West Long Island..... | 6 | 6 | 6 | 18 |
| Three Star..... | W. Churchille..... | California..... | 4 | 3 | 5 | 12 |
| Fajo..... | J. P. Schweitzer..... | Lake Erie..... | 3 | 4 | 3 | 10 |
| South Wind..... | W. J. McHugh, Jr.... | Central Long Island.. | 5 | 0 | 4 | 9 |
| Brownie..... | G. H. Armitage..... | Narragansett Bay.... | 1 | 5 | 2 | 8 |
| Tara..... | B. N. Heminway..... | Eastern Long Island.. | 2 | 2 | 1 | 5 |

ASTOR CUP RACES.

Held off Newport, R. I., Aug. 2. Results:

ASTOR CUPS FOR SCHOONERS; COURSE 37½ MILES.

| Yacht. | Start. | Finish. | Elap. Time. | Cor. Time |
|---|---|---|---|---|
| | H. M. S. | H. M. S. | H. M. S. | H. M. S. |
| Vagrant..... | 12.10.39 | 5.45 42 | 5.35.03 | 5.02.36 |
| Queen Mab..... | 12.10.52 | 6.19.03 | 6.08.11 | 5.03.55 |
| Irolita..... | 12.14.39 | 6.07.54 | 5.56.15 | 5.09.12 |
| Ohonkara..... | 12.11.07 | 5.50.15 | 5.39.08 | 5.09.45 |
| Flying Cloud... | 12.11.21 | 6.14.14 | 6.02.53 | 5.15.50 |

ASTOR CUPS FOR SLOOPS; COURSE 37½ MILES.

| Yacht. | Start. | Finish. | Elap. time. | Cor. time. |
|---|---|---|---|---|
| | H. M. S. | H. M. S. | H. M. S. | H. M. S. |
| Carolina..... | 12.15.43 | 6.02.35 | 5.46.52 | 4.47.49 |
| Istalena..... | 12.17.00 | 6.04.42 | 5.47.42 | 4.48.39 |
| Georgia..... | 12.16.06 | 6.38.34 | 6.21.28 | 4.52.23 |
| Harpoon..... | 12.15.53 | 6.09.18 | 5.53.25 | 4.54.23 |
| Barbara..... | 12.17.00 | 6.13.36 | 5.56.36 | 4.57.33 |
| Butterfly..... | 12.17.00 | Not timed. | | |

KING'S CUP RACE.

Held off Marblehead, Mass., Aug. 9. Course, 30 Nautical Miles. Results:

| Yacht. | Start. | Finish. | Elap. Time. | Cor. Time. | Yacht. | Start. | Finish. | Elap. time. | Cor. time. |
|---|---|---|---|---|---|---|---|---|---|
| | H. M. S. | H. M. S. | H. M. S. | H. M. S. | | H. M. S. | H. M. S. | H. M. S. | H. M. S. |
| Vagrant | 11.10.30 | 2.46.38 | 3.36.08 | 3.10.10 | Barbara | 11.13.31 | 3.25.41 | 4.12.10 | 3.24.55 |
| Istalena | 11.12.21 | 3.10.34 | 3.58.13 | 3.10.50 | Irolita | 11.12.37 | 3.32.23 | 4.19.46 | 3.32.08 |
| Harpoon | 11.11.24 | 3.09.53 | 3.58.29 | 3.11.14 | Winsome | 11.12.31 | 3.19.57 | 4.07.26 | 3.35.32 |
| Ohonkara | 11.10.52 | 2.49.15 | 3.33.23 | 3.14.44 | Shawna | 11.14.00 | 4.07.40 | 4.53.40 | 4.14.49 |
| Flying Cloud | 11.11.09 | 3.12.27 | 4.01.18 | 3.23.40 | | | | | |

Winner—Vagrant.

INTERNATIONAL FISHING SCHOONER CHAMPIONSHIP.

Held off Gloucester, Mass., Oct. 21-26. Course 40 miles; results:

| | Elapsed Time. | | |
|---|---|---|---|
| | 1st Race. | 2d Race. | 3d Race. |
| | H. M. S. | H. M. S. | H. M. S. |
| Blue Nose (Can.) | 5.42.10 | 5.57.41 | 4.48.38 |
| Henry Ford (U. S.) | 5.29.25 | 6.05.04 | 4.56.27 |

The international trophy was awarded to Captain Angus Walters, of Lunenberg, together with a purse of $3,000. Capt. Clayton Morrissey, of the Henry Ford received $2,000. The first race of the series was declared no-race when the schooners crossed the starting line and continued disregarding the race committee's recall signals. The Henry Ford defeated the Blue Nose in this unofficial contest which had no bearing on the final result.

## INTERNATIONAL RACES FOR THE AMERICA'S CUP.

| Date. | American Yacht. | Time. | English Yacht. | Time. | Result. |
|---|---|---|---|---|---|
| | | H. M. S. | | H. M. S. | M. S. |
| Aug. 22, 1851 | America | 10.37.00 | Aurora | 10.55.00 | American boat first home by 18.00 |
| Aug. 8, 1870 | Magic | 3.58.26 2-10 | Cambria | 4.37.38 9-10 | American boat won by 39.12 |
| Oct. 16, 1871 | Columbia | 6.19.41 | Livonia | 6.46.45 | American boat won by 27.04 |
| Oct. 18, 1871 | Columbia | 3.07.42 | Livonia | 3.18.15 | American boat won by 10.33 |
| Oct. 19, 1871 | *Columbia | 4.17.35 | Livonia | 4.02.25 | *English boat won by 15.10 |
| Oct. 21, 1871 | Sappho | 5.39.02 | Livonia | 6.09.23 | American boat won by 30.21 |
| Oct. 23, 1871 | Sappho | 4.46.17 | Livonia | 5.11.44 | American boat won by 25.27 |
| Aug. 11, 1876 | Madeleine | 5.23.54 | Countess of Dufferin | 5.34.53 | American boat won by 10.59 |
| Aug. 12, 1876 | Madeleine | 7.18.46 | Countess of Dufferin | 7.46.00 | American boat won by 27.14 |
| Nov. 9, 1881 | Mischief | 4.17.09 | Atalanta | 4.45.39¼ | American boat won by. 28.30¼ |
| Nov. 10, 1881 | Mischief | 4.54.53 | Atalanta | 5.33.47 | American boat won by 38.54 |
| Sept. 14, 1885 | Puritan | 6.06.05 | Genesta | 6.22.24 | American boat won by 16.19 |
| Sept. 16, 1885 | Puritan | 5.03.14 | Genesta | 5.04.52 | American boat won by 1.38 |
| Sept. 9, 1886 | Mayflower | 5.26.41 | Galatea | 5.38.43 | American boat won by 12.02 |
| Sept. 11, 1886 | Mayflower | 6.49.00 | Galatea | 7.18.09 | American boat won by 29.09 |
| Sept. 27, 1887 | Volunteer | 4.53.18 | Thistle | 5.12.41¾ | American boat won by 19.23¾ |
| Sept. 30, 1887 | Volunteer | 5.42.56¼ | Thistle | 5.54.45 | American boat won by 11.48¾ |
| Oct. 7, 1893 | Vigilant | 4.05.47 | Valkyrie II. | 4.11.35 | American boat won by 5.48 |
| Oct. 9, 1893 | Vigilant | 3.25.01 | Valkyrie II. | 3.35.36 | American boat won by 10.35 |
| Oct. 13, 1893 | Vigilant | 3.24 39 | Valkyrie II. | 3.25.19 | American boat won by .40 |
| Sept. 7, 1895 | Defender | 4.59.54 9-10 | Valkyrie III. | 5.08.44 | American boat won by 8.49 1-10 |
| Sept. 10, 1895 | Defender | 3.55.56 | Valkyrie III. | †disqualified | American boat won on foul. |
| Sept. 12, 1895 | Defender | 4.43.43 | Valkyrie III. | withdrew | American boat had walkover. |
| Oct. 16, 1899 | Columbia | 4.53.53 | Shamrock I. | 5.04.01 | American boat won by 10.08 |
| Oct. 17, 1899 | Columbia | 3.27.00 | Shamrock I. | disabled | American boat had walkover. |
| Oct. 20, 1899 | Columbia | 3.38.09 | Shamrock I. | 3.44.43 | American boat won by 6.34 |
| Sept. 28, 1901 | Columbia | 4.30.24 | Shamrock II. | 4.31.44 | American boat won by 1.20 |
| Oct. 3, 1901 | Columbia | 3.12.35 | Shamrock II. | 3.16.10 | American boat won by 3.35 |
| Oct. 4, 1901 | Columbia | 4.32.57 | Shamrock II. | 4.33.38 | ‡American boat won by .41 |
| Aug. 22, 1903 | Reliance | 3.32.17 | Shamrock III. | 3.39.20 | American boat won by 7.03 |
| Aug. 27, 1903 | Reliance | 3.14.54 | Shamrock III. | 3.16.13 | American boat won by 1.19 |
| Sept. 3, 1903 | Reliance | 4.28.06 | Shamrock III. | ..... | English boat lost in fog. |
| July 15, 1920 | Resolute | disabled | Shamrock IV. | 4.25.12 | English boat had walkover. |
| July 17, 1920 | Yachts failed | to finish with | in six hour tim | e limit. | |
| July 20, 1920 | Resolute | 5.24.44 | Shamrock IV. | 5.22.18 | English boat won by 2.26 |
| July 21, 1920 | Resolute | 3.56.05 | Shamrock IV. | 4.03.06 | American boat won by 7.01 |
| July 23, 1920 | Resolute | 3.31.12 | Shamrock IV. | 3.41.10 | American boat won by 9.58 |
| July 24, 1920 | Race postpon | ed, strong so | uthwest gale. | | |
| July 26, 1920 | Yachts failed | to finish wit | hin six hour ti | me limit. | |
| July 27, 1920 | Resolute | 5.28.35 | Shamrock IV. | 5.48.29 | American boat won by 19.45 |

* Columbia disabled, but finished race. † Valkyrie III. fouled Defender, and the race was awarded to American boat, though the challenger finished 47s. ahead in 3.55.09. ‡ Shamrock II. finished first, but lost race on time allowance of 43s. The Reliance allowed the Shamrock III. 1m. 57s. in all their races, Reliance measuring 108.41 ft. and Shamrock III. 104.37 ft. In the preliminary trials between Reliance, Constitution and Columbia the Constitution won three races, although Reliance was selected as the Cup defender.

## RACQUETS, COURT TENNIS, SQUASH.

COURT TENNIS.

*World's Professional Championship*, won by G. F. Covey, England, defeating W. A. Kinsella, 7 sets to 3.

*National Championships. Singles*—won by Jay Gould, defeating Hewitt Morgan, 6—2, 6—6, 6—0. *Doubles*—won by Jay Gould and J. W. Wear, defeating G. Fearing and D. P. Rhodes, 6—5, 6—0, 6—1.

*English Championship*—won by E. M. Baerlein, defeating W. Renshaw, 6—5, 5—6, 6—1, 6—0.

RACQUETS.

*National Singles Championship*—won by C. C Pell, defeating Hewitt Morgan, 15—10, 15—5, 15—4. *Doubles*—C. C. Pell and S. G. Mortimer defeated Jay Gould and J. W. Wear, 12—15, 17—15, 15—7, 7—15, 15—3.

*Gold Racquet Championship*—won by C. C. Pell, defeating Hewitt Morgan, 15—5, 5—15, 15—11, 13—15, 15—12.

*English Championship*—won by C. N. Bruce, defeating E. M. Baerlein, 15—2, 15—10, 15—9.

SQUASH—RACQUETS.

*National Singles*—won by S. W. Pearson, defeating Morton Newhall, 15—5, 17—14, 15—11. *Class B Championship*—won by G. E. Abbot, defeating W. Rand, Jr., 15—7, 5—15, 15—9, 15—8.

## MOTOR BOAT RACING.

Until 1921 the Gold Cup Trophy was for boats under 40 feet in length, with unlimited power. Very costly racing machines were developed under those rules. Under the new rules the boats must be under 26 feet in length and the cubic capacity of the engine is limited to 625 cubic inches. Such engines average 100 horse power, and the average speed of a boat is not much over 40 miles an hour, as against 70 miles an hour under the old rules.

There were no races for the Harmsworth Trophy, emblematic of the world's speed championship, in 1922. The National Gold Cup Trophy race, held at Detroit, Sept. 1–4, was the leading event of the season. Result:

THREE HEATS OF THIRTY MILES EACH (GOLD CUP TROPHY).

| Boat. | Owner. | Club. | Elapsed Time. | | | Pts. |
|---|---|---|---|---|---|---|
| | | | First Heat. | Second Heat. | Third Heat. | |
| | | | H. M. S. | H. M. S. | H. M. S. | |
| Packard Chriscraft | J. G. Vincent | Miss Detroit P.B.A. | 44.47.75 | 44.22.52 | 45.12.33 | 39 |
| Arab VI | R. H. Sidway | Buffalo Launch Cl'b | 45.24.87 | 44.23.96 | 48.40.13 | 34 |
| Red Bird | W. C. Wood | Minnetonka B. C. | 49.13.27 | 46.39.72 | 45.53.77 | 31 |
| Bear Cat Special | Richard Locke | Detroit Y. C. | 49.28.88 | 46.57.50 | 46.37.67 | 30 |
| Bear Cat Roamer | C. S. Morgan | Detroit Y. C. | 52.35.04 | 51.04.13 | 50.37.79 | 22 |
| Demon Bear Cat | F. G. Ericson | Toronto M. B. C. | 53.21.35 | 50.37.64 | 50.48.33 | 21 |
| Baby Gar Jr. | Gar Wood | Detroit Y. C. | 46.50.10 | 53.26.75 | Did not fin. | 17 |
| Chriscraft | C. Smith | Miss Detroit P.B.A. | 52.16.98 | Did not fin. | Did not start. | 12 |
| Blue Bird | P. H. Gray | Minnetonka, B. C. | Did not fin. | 47.42.59 | Did not fin. | 9 |
| Bear Cat Bee | F. D. Bornman | Detroit Y. C. | Did not fin. | ..... | 50.55.29 | 7 |
| Miss Mary | E. L. Grimm | Buffalo Launch Cl'b | 1.02.06 | ..... | ..... | 4 |
| Zephyr | Paul Strasburg | Detroit Boat Club. | 47.17.92 | ..... | ..... | 10 |

Packard Chriscraft also won the Detroit Times Trophy for the fastest heat in the race, i. e. 44.22.52 for 30 miles; average speed 40.6 miles per hour.

WOOD-FISHER TROPHY.

Three 50 Mile Heats.

| Boat. | Owner. | Club. | Elapsed Time. | | | Pts. |
|---|---|---|---|---|---|---|
| | | | First Heat. | Second Heat. | Third Heat. | |
| | | | H. M. S. | H. M. S. | H. M. S. | |
| Baby Gar II | Gar Wood | Detroit Y. C. | 1.07.27.11 | 1.08.02.46 | 1.01.37.49 | 15 |
| Packard Baby Gar | J. G. Vincent | M. D. P. B. A. | 1.07.27.34 | 1.08.03.58 | 1.41.02.45 | 11 |
| Woodfish | Edsel Ford | Detroit Y. C. | ..... | ..... | 1.16.47.31 | 4 |

WINNERS OF PREVIOUS GOLD CUP RACES.

| Year. | Course. | Winner. | Owner. |
|---|---|---|---|
| 1904 | Columbia Yacht Club | Standard | C. C. Riotte. |
| 1904 | Columbia Yacht Club | Vingt-et-Un | W. S. Kilmer. |
| 1905 | Chippewa Bay Y. C. | Chip | J. Wainwright. |
| 1906 | Chippewa Bay Y. C. | Chip II | J. Wainwright. |
| 1907 | Chippewa Bay Y. C. | Chip II | J. Wainwright. |
| 1908 | Chippewa Bay Y. C. | Dixie II | E. J. Schroeder. |
| 1909 | Thousand Islands Y. C. | Dixie II | E. J. Schroeder. |
| 1910 | Thousand Islands Y. C. | Dixie III | F. K. Burnham. |
| 1911 | Frontenac Y. C. | Mit II | J. H. Hayden. |
| 1912 | Thousand Islands Y. C. | P. D. Q. II | A. G. Miles. |
| 1913 | Thousand Islands Y. C. | Ankle Deep | C. S. Mankowski. |
| 1914 | Lake George Regatta Assn. | Baby Speed Demon II | P. Blackton. |
| 1915 | Long Island Sound P. B. A. | Miss Detroit | Miss Detroit P. B. A. |
| 1916 | Detroit Y. C. | Miss Minneapolis | Miss Minneapolis, P. B. A. |
| 1917 | Minneapolis P. B. A. | Miss Detroit II | G. A. Wood. |
| 1918 | Detroit Y. C. | Miss Detroit III | Detroit Y. C. |
| 1919 | Detroit Y. C. | Miss Detroit III | G. A. Wood. |
| 1920 | Detroit Y. C. | Miss America | G. A. Wood. |
| 1921 | Detroit Y. C. | Miss America II | G. A. Wood. |
| 1922 | Detroit Y. C. | Packard Chriscraft | J. G. Vincent. |

FISHER TROPHY RACE.

Held at Hamilton, Ont., Aug. 24, 25, 26. Three heats, 50 miles each. Result:

| Boat. | Owner. | 1st Heat Time. | Boat. | 2nd Heat Time. | Boat. | 3rd Heat Time. | Tot. Pts. |
|---|---|---|---|---|---|---|---|
| | | H. M. S. | | H. M. S. | | H. M. S. | |
| Baby Gar III | Gar Wood | 1.14.02 | Baby Gar III | 1.18.57 | Baby Gar III | 1.12.33 | 21 |
| Packard Baby Gar | J. G. Vincent | 1.14.10 | Miss St. Lawrence | 1.19.06 | Packard Baby Gar | 1.23.47 | 14 |
| Rainbow II | H. Greening | 1.17.22 | Nick Nack | 1.27.32 | Nick Nack | 1.39.04 | 12 |
| Miss St. Lawrence | G. Stephens | 1.17.24 | Ionic III | 1.28.06 | Ionic III | 1.22.53 | 11 |
| Nick Nack | H. Birge | 1.18.42 | Packard Baby Gar | 1.29.58 | ..... | ..... | .. |
| Miss Peerless | E. L. Grimm | 1.20.46 | ..... | ..... | ..... | ..... | .. |
| Ionic III | T. E. Duff | 1.24.29 | ..... | ..... | ..... | ..... | .. |

INTERNATIONAL HYDROPLANE TROPHY RACE.

Held at Buffalo, Sept. 14, 15, 16. Three heats of 20 miles each. Result:

| Boat and Owner. | 1st Heat. | 2nd Heat. | 3rd Heat. | Tot. Pts. |
|---|---|---|---|---|
| | M. S. | M. S. | M. S. | |
| Baby Sure Cure—Paul Strassburg | 20.05 | 19.35 | 19.25 | 7 |
| Baby Holo—Horace E. Dodge | 20.05½ | 19.19 | 19.14 | 8 |
| Miss Toronto—Toronto Syndicate | 23.38 | 21.33 | ..... | 2 |

## PUGILISTIC CHAMPIONS.

All attempts to designate and classify the pugilistic champions and title holders are more or less arbitrary because of the fact that few such champions won and defended the championships at the same weight. Among the lighter weight boxers it is not at all unusual for a pugilist to be forced from one class into the next higher by growth and increased weight. The following list, dating from 1890, is generally accepted by critics and boxers as being the correct classification, although holders did not always win title from previous champions:

HEAVYWEIGHTS (over 158 lbs.)—1890-1892, John L. Sullivan; 1892-1897, James J. Corbett; 1897-1899, Robert Fitzsimmons; 1899-1906, James J. Jeffries; 1906-1908, Tommy Burns; 1908-1915, Jack Johnson; 1915-1918, Jess Willard; 1919-1922, Jack Dempsey.

MIDDLEWEIGHTS (158 lbs.)—1890-1897, Robert Fitzsimmons; 1897-1907, Tommy Ryan; 1907-1908, Stanley Ketchel; 1908, Bill Papke and Stanley Ketchel; 1908-1910, Stanley Ketchel; 1911-1913, claimed by Frank Klaus, Mike Gibbons, Ed McGoorty and Geo. Chip; 1914-1917, Al McCoy; 1917-1920, Mike O'Dowd; 1921-1922, Johnny Wilson.

WELTERWEIGHTS (145 lbs.)—1890-1893, no recognized champion; 1894-1896, Tommy Ryan; 1896-1897, Kid McCoy; 1898-1900, Billy Smith; 1900, Rube Ferns; 1901, Matty Matthews and Rube Ferns; 1901-1904, Joe Walcott; 1904-1908, Dixie Kid; 1914-1916, Kid Graves; 1916, Jack Britton; 1917-1918, Ted (Kid) Lewis; 1919-1922, Jack Britton, Mickey Walker.

LIGHTWEIGHTS (133 lbs.)—1890-1893, Jack McAuliffe; 1893-1899, Kid Lavigne; 1899-1902, Frank Erne; 1902-1908, Joe Gans; 1908-1910, Battling Nelson; 1910-1912, Ad Wolgast; 1912-1914, Willie Ritchie; 1914-1917, Freddie Welsh; 1917-1922, Benny Leonard.

FEATHERWEIGHTS (122 lbs.)—1890-1892, no recognized champion; 1892-1897, George Dixon; 1897, Solly Smith; 1898, Solly Smith and Dave Sullivan; 1898-1900, George Dixon; 1900-1901, Terry McGovern; 1901-1904, Young Corbett; 1904-1908, Tommy Sullivan; 1908-1911 Abe Attell; 1911-1922, Johnny Kilbane.

BANTAMWEIGHTS (116 lbs.)—1890-1892, George Dixon; 1892-1894, no recognized champion; 1894-1898, Jimmy Barry; 1898-1901, no recognized champion; 1901-1903, Harry Forbes; 1903-1905, Frankie Neil; 1905-1907, no recognized champion; 1907-1913, Johnny Coulon; 1914-1915, Kid Williams; 1916-1920, Pete Herman; 1920-1921, Joe Lynch; 1921, Pete Herman, Johnny Buff; 1922, Johnny Buff, Joe Lynch.

### LARGEST CHAMPIONSHIP BATTLE GATE RECEIPTS.

| Date. | Winner. | Loser. | Place. | Gate Receipts. |
|---|---|---|---|---|
| July 2, 1921 | Dempsey | Carpentier | Jersey City, N. J. | $1,626,580 |
| July 4, 1919 | Dempsey | Willard | Toledo, Ohio | §452,522 |
| July 27, 1922 | Benny Leonard | Lew Tendler | Jersey City, N. J. | 367,862 |
| July 4, 1910 | Johnson | Jeffries | Reno, Nev. | 270,755 |
| December 14, 1920 | Dempsey | Brennan | New York City | 200,000 |
| March 25, 1916 | Willard | Moran | New York City | ‡151,524 |
| January 14, 1921 | Benny Leonard | Ritchie Mitchell | New York City | 133,745 |
| June 26, 1922 | Jack Britton | Benny Leonard | New York City | 130,265 |
| October 12, 1920 | Carpentier | Levinsky | Jersey City | 120,000 |
| May 17, 1921 | Johnny Wilson | Mike O'Dowd | New York City | 107,524 |
| July 25, 1921 | Pete Herman | Joe Lynch | New York City | 99,967 |
| September 3, 1906 | Gans | Nelson | Goldfield, Nev. | 69,715 |
| April 5, 1915 | Willard | Johnson | Havana, Cuba | †68,000 |
| December 26, 1908 | Johnson | Burns | Sydney, Australia | †67,500 |
| November 3, 1899 | Jeffries | Sharkey | New York City | 66,300 |
| August 14, 1903 | Jeffries | Corbett | San Francisco, Cal. | 63,340 |
| September 11, 1915 | ‡Gibbons | McFarland | New York City | 58,069 |
| August 30, 1900 | Corbett | McCoy | New York City | 56,350 |
| December 20, 1904 | Britt | Nelson | Colma, Cal. | 48,311 |
| September 7, 1892 | Corbett | Sullivan | New Orleans, La. | *45,000 |
| March 8, 1893 | Fitzsimmons | Hall | New Orleans, La. | 40,000 |
| February 22, 1910 | Wolgast | Nelson | San Francisco, Cal. | 37,750 |
| October 16, 1909 | Johnson | Ketchel | San Francisco, Cal. | 32,300 |
| March 25, 1904 | Britt | Corbett | San Francisco, Cal. | 32,345 |
| July 25, 1902 | Jeffries | Fitzsimmons | San Francisco, Cal. | 31,800 |
| November 15, 1901 | Jeffries | Ruhlin | San Francisco, Cal. | 30,800 |
| June 29, 1916 | Dillon | Moran | Brooklyn, N. Y. | 28,521 |
| September 9, 1905 | Nelson | Britt | San Francisco, Cal. | 27,775 |
| March 17, 1897 | Fitzsimmons | Corbett | Carson City, Nev. | 22,000 |
| October 31, 1904 | Britt | Gans | San Francisco, Cal. | 21,761 |
| August 26, 1904 | Jeffries | Munroe | San Francisco, Cal. | 21,760 |
| December 2, 1896 | Sharkey | Fitzsimmons | San Francisco, Cal. | 21,000 |
| March 31, 1903 | Corbett | McGovern | San Francisco, Cal. | 20,880 |

* Purse $25,000 and $10,000 a side. † Estimated. ‡ Ten-round, no-decision bout. § Before deduction of war tax.

### BOXING.

Lack of space prevents the recording of other than important bouts. Abbreviations used follow: K. O., knock out; R. D., referee's decision; P. V., public verdict; D., draw. In case of a draw, the names of boxers in winners' and losers' columns have no significance. The letter "X" opposite date indicates such a draw.

| Date. | Winner. | Loser. | Decision. | Rounds. | Place. |
|---|---|---|---|---|---|
| Jan. 2 | Bill Tate | Harry Wills | Foul—R. D. | 1 | Portland, Ore. |
| Jan. 2 | Lew Tendler | Barney Adair | P. V. | 8 | Philadelphia. |
| Jan. 2 | Harry Greb | Chuck Wiggins | P. V. | 10 | Cincinnati. |
| Jan. 3 | Bob Roper | Joe Dugan | K. O. | 3 | Memphis, Tenn. |
| Jan. 6X | Harry Wills | Bill Tate | D.—R. D. | 10 | Portland, Ore. |
| Jan. 11 | Bob Roper | Dan O'Dowd | R. D. | 10 | Providence, R. I. |
| Jan. 12 | Georges Carpentier | George Cook | K. O. | 4 | London, Eng. |
| Jan. 13 | Gene Tunney | Battling Levinsky | R. D. | 12 | New York. |
| Jan. 13X | Fred Fulton | Bartley Madden | D.—R. D. | 12 | New York. |
| Jan. 16 | Charley White | Johnny Dundee | R. D. | 10 | Boston. |
| Jan. 16 | Billy Miske | Charley Weinert | P. V. | 12 | Newark. |
| Jan. 17 | Harry Wills | Sam Langford | R. D. | 10 | Portland, Ore. |
| Jan. 23 | Willie Jackson | Ned Fitzgerald | K. O. | 5 | Philadelphia. |
| Jan. 26 | Johnny Dundee | Frankie Rice | R. D. | 12 | Baltimore. |
| Feb. 2 | Tom Gibbons | Pat McCarthy | K. O. | 4 | Boston. |
| Feb. 3 | Johnny Dundee | Joe Benjamin | R. D. | 15 | New York. |
| Feb. 4 | Eugene Criqui | Charles Ledoux | K. O. | 1 | Paris. |
| Feb. 6 | Joe Tiplitz | Ned Fitzgerald | K. O. | 3 | Philadelphia. |
| Feb. 10 | Benny Leonard | Rocky Kansas | R. D. | 15 | New York. |
| Feb. 10X | Bryan Downey | "Young" Fisher | D.—R. D. | 15 | Syracuse. |
| Feb. 11 | Mickey Walker | Johnny Griffiths | K. O. | 9 | Boston. |

| Date. | Winner. | Loser. | Decision. | Rounds. | Place. |
|---|---|---|---|---|---|
| Feb. 11 | Gene Tunney | Jack Clifford | K. O. | 6 | Brooklyn. |
| Feb. 14 | Gene Tunney | Whitey Wenzel | K. O. | 4 | Philadelphia. |
| Feb. 17 | Johnny Dundee | Johnny Darcey | R. D. | 10 | Providence. |
| Feb. 17X | Jack Britton | Dave Slade | D.—R. D. | 15 | New York. |
| Feb. 17 | Ted Lewis | Tom Gumner | K. O. | 1 | Brighton, Eng. |
| Feb. 20 | Billy Miske | Bob Roper | Foul—P. V. | 6 | Philadelphia. |
| Feb. 20 | Charley White | Willie Jackson | R. D. | 15 | New York. |
| Feb. 21 | Pete Herman | Babe Asher | K. O. | 7 | New Orleans. |
| Feb. 24 | Lew Tendler | Hymie Gold | K. O. | 7 | New York. |
| Feb. 25 | Benny Leonard | Pal Moran | R. D. | 10 | New Orleans. |
| Feb. 27X | Dave Shade | Billy Ryan | D.—P. V. | 10 | Cincinnati. |
| March 6 | Bob Martin | Sailor Thompson | K. O. | 3 | Marietta, Ohio. |
| March 6 | Pal Moore | Franklin Jumm | P. V. | 8 | Memphis, Tenn. |
| March 7 | Midget Smith | Frankie Daley | R. D. | 12 | New York. |
| March 7 | Bob Martin | Rickie Stellard | K. O. | 2 | Williams'n, W.Va |
| March 9 | Tom Gibbons | Tommy Murphy | P. V. | 10 | Peoria, Ill. |
| March 9 | Dave Shade | Morrie Schlaifer | P. V. | 10 | Omaha, Neb. |
| March 10X | Midget Smith | Ray Moore | D.—P. V. | 10 | Jersey City. |
| March 10 | Bob Roper | Sam Jordan | K.O. | 1 | Roanoke. |
| March 10 | Rocky Kansas | Gene Delmont | R. D. | 10 | Buffalo. |
| March 11 | Lew Tendler | Johnny Sheppard | K. O. | 3 | Brooklyn. |
| March 11X | Mike McTigue | Lou Bogash | D.—R. D. | 12 | New York. |
| March 11 | Joe Jackson | Joe Welsh | P. V. | 8 | Philadelphia. |
| March 13 | Harry Greb | Tom Gibbons | R. D. | 15 | New York. |
| March 13 | Lew Tendler | Alex Hart | P. V. | 8 | Philadelphia. |
| March 13 | Benny Valger | Jimmy Fruzetti | R. D. | 10 | Lynn, Mass. |
| March 13 | Honey Mellody | Frankie Smithies | P. V. | 6 | Salt Lake City. |
| March 14 | Mike Gibbons | Leo Stokes | P. V. | 10 | Grand Rapids. |
| March 14 | Johnny Dundee | Freddie Jones | R. D. | 12 | Baltimore. |
| March 14 | Fred Fulton | Jim Holland | P. V. | 6 | Philadelphia. |
| March 15 | Carl Tremaine | Jabez White | P. V. | 10 | St. Louis. |
| March 15 | Dave Shade | Johnny Riley | P. V. | 10 | Wilkes-Barre. |
| March 17 | Johnny Dundee | Charlie White | R. D. | 15 | New York. |
| March 17 | Willie Ritchie | Jimmy Sebo | P. V. | 8 | Shenandoah, Pa. |
| March 17 | Pal Moore | Tommy Ryan | P. V. | 12 | Louisville. |
| March 17 | Dave Shade | Jimmy Jones | R. D. | 12 | Canton, Ohio. |
| March 17 | Sam Langford | Cyclone Smith | K. O. | 2 | Hun'ton, W.Va. |
| March 17 | Bob Martin | Carl Danner | K. O. | 2 | Clarksb'g, W.Va. |
| March 18 | Mike O'Dowd | Soldier Bartfield | R. D. | 12 | Brooklyn. |
| March 20 | Joe Burman | Midget Smith | R. D. | 12 | New York. |
| March 20 | Benny Leonard | Johnny Clinton | R. D. | 10 | Boston. |
| March 20 | Luis Firpo | Sailor Maxted | K. O. | 7 | Newark. |
| March 20 | Pinky Mitchell | Willie Doyle | P. V. | 10 | Muskegon, Mich. |
| March 21 | Lew Tendler | Rocky Ford | K. O. | 3 | Newark. |
| March 27 | Dave Shade | Pinky Mitchell | K. O. | 4 | Milwaukee. |
| March 27 | Bill Tate | Sam Langford | P.V. | 8 | Memphis. |
| March 27 | Pat McCarthy | Bob Roper | R. D. | 12 | Boston. |
| March 27 | Billy Shade | Marty Burke | R. D. | 15 | New Orleans. |
| March 28 | Willie Jackson | Frankie Rice | P. V. | 8 | Philadelphia. |
| April 7 | Pinky Mitchell | Pal Moran | P. V. | 10 | Milwaukee. |
| April 7 | Fred Fulton | Homer Smith | K. O. | 7 | Grand Rapids. |
| April 10 | Charley Pitts | Lew Tendler | Foul—R. D. | 7 | Brooklyn. |
| April 10 | Gene Tunney | Jack Burke | K. O. | 9 | Pittsburgh. |
| April 10 | Billy Miske | Billy Shade | K. O. | 2 | Youngstown, O. |
| April 10 | Joe Beckett | George Cook | Foul—R. D. | 6 | London. |
| April 13 | Bob Roper | Carl Morris | Foul—R. D. | 3 | Tulsa, Okla. |
| April 15 | Archie Walker | Freddy Welsh | R. D. | 10 | Brooklyn. |
| April 17 | Lew Tendler | Tim Droney | P. V. | 8 | Philadelphia. |
| April 18 | Young Bob Fitzsimmons | Jack Reeves | Foul—R. D. | 10 | New York. |
| April 19 | Johnny Shugrue | Johnny Dundee | R. D. | 10 | Worcester. |
| April 24 | Bombardier Wells | Alfred Lloyd | R. D. | 10 | London. |
| April 24 | Pete Herman | Roy Moore | R. D. | 10 | Boston. |
| April 24X | Benny Valger | Phil Logan | D.—R. D. | 10 | Jamestown, N.Y. |
| April 24 | Charley Houx | Thomas Harris | R. D. | 15 | Liverpool, Eng. |
| April 24 | Billy Balzac | Maurice Punier | R. D. | 20 | Paris |
| May 2 | Vincent Martin | Babe Herman | K. O. | 1 | New York. |
| May 3 | Chief John Metoqua | Jim Flynn | K. O. | 6 | Guymon, Okla. |
| May 5 | Lew Tendler | Johnny Dundee | R. D. | 15 | New York. |
| May 11 | Georges Carpentier | Ted Lewis | K. O. | 1 | London. |
| May 13 | Luis Firpo | Jack Herman | K. O. | 5 | Brooklyn. |
| May 13 | Harry Greb | Al. Roberts | K. O. | 6 | Boston. |
| May 15 | Bryan Downey | Mike O'Dowd | P. V. | 12 | Columbus. |
| May 16 | Bill Brennan | Jim Tracy | K. O. | 8 | New York. |
| May 17 | Jack Britton | Morris Lux | K. O. | 5 | Tulsa, Okla. |
| May 18 | Mike Gibbons | Danny Fagan | K. O. | 5 | St. Paul. |
| May 20X | Vincent Martin | Jack Sharkey | D.—R. D. | 12 | Brooklyn. |
| May 27 | Frank Goddard | Bombardier Wells | K. O. | 6 | London. |
| May 29 | Billy Miske | Bob Roper | R. D. | 10 | New York. |
| May 29 | Eugene Criqui | Joe Fox | K. O. | 12 | London. |
| June 1 | Joe Lynch | Midget Smith | R. D. | 15 | New York. |
| June 5 | Bill Brennan | Jack Leon | K. O. | 2 | Detroit. |
| June 6 | Lew Tendler | Bobby Barrett | K. O. | 7 | Philadelphia. |
| June 13 | Jack Malone | Bryan Downey | R. D. | 10 | Aurora, Ill. |
| June 19 | Ted Lewis | Frank Burns | K. O. | 11 | London. |
| June 26 | Jack Britton | Benny Leonard | Foul—R. D. | 13 | New York. |
| June 30 | Harry Wills | Jeff Clark | K. O. | 2 | Trenton. |
| July 4 | Benny Leonard | Rocky Kansas | K. O. | 8 | Michigan City |
| July 4 | Johnny Wilson | Al Demaris | K. O. | 4 | Rutland, Vt. |
| July 4 | Bill Brennan | Bob Martin | P. V. | 12 | Ashland, Ky. |
| July 4 | Billy Miske | Willie Meekan | K. O. | 1 | Oklahoma City. |
| July 6 | Johnny Dundee | Jack Sharkey | R. D. | 15 | Brooklyn. |
| July 7 | Eugene Criqui | Arthur Wyns | K. O. | 12 | Paris. |
| July 10 | Harry Greb | Tommy Loughran | P. V. | 8 | Philadelphia. |
| July 10 | Joe Lynch | Johnny Buff | K. O. | 14 | New York. |
| July 17 | Fred Fulton | Bob Roper | P. V. | 12 | Newark. |
| July 27 | Benny Leonard | Lew Tendler | P. V. | 12 | Jersey City. |
| Aug. 5 | Benny Leonard | Ever Hammer | P. V. | 10 | Michigan City. |
| Aug. 14 | Dave Rosenberg | Phil Krug | R. D. | 15 | New York. |
| Aug. 15 | Johnny Dundee | Danny Frush | K. O. | 9 | Brooklyn. |
| Aug. 21 | Harry Wills | Buddy Jackson | K. O. | 2 | Newark. |
| Aug. 28 | Johnny Dundee | Pepper Martin | R. D. | 15 | New York. |

| DATE. | Winner. | Loser. | Decision. | Rounds. | Place. |
|---|---|---|---|---|---|
| Aug. 29 | Harry Wills | Tut Jackson | K. O. | 3 | Brooklyn. |
| Sept. 9 | Eugene Criqui | Arthur Wyns | K. O. | 6 | Paris. |
| Sept. 11 | Lew Tendler | Ever Hammer | P. V. | 8 | Philadelphia. |
| Sept. 14 | Pancho Villa | Johnny Buff | K. O. | 11 | Brooklyn. |
| Sept. 18 | Seaman Hall | Ernie Rice | R. D. | 20 | Liverpool, Eng. |
| Sept. 18 | Jack Malone | Bryan Downey | R. D. | 12 | Columbus. |
| Sept. 21 | Jack Wolfe | Joe Lynch | R. D. | 15 | New York. |
| Sept. 26 | Harry Greb | Al Benedict | K. O. | 2 | Toronto. |
| Sept. 29 | Harry Greb | Bob Roper | P. V. | 10 | Grand Rapids. |
| Oct. 6 | Floyd Johnson | Bob Martin | K. O. | 10 | New York. |
| Oct. 8 | Luis Firpo | Jim Tracy | K. O. | 4 | Buenos Ayres. |
| Oct. 11 | Jack Britton | Jimmy Kelly | P. V. | 12 | Havana. |
| Oct. 12 | Joe Beckett | Frank Moran | K. O. | 7 | London. |
| Oct. 13 | Billy Miske | Tom Gibbons | Foul—R. D. | 10 | N. Y. City. |
| Oct. 19 | Jeff Smith | Bob Roper | R. D. | 15 | New Orleans. |
| Oct. 20 | Charley White | Sid Marks | K. O. | 2 | N. Y. City. |
| Oct. 23 | Joe Tipitz | Sid Marks | K. O. | 1 | Philadelphia. |
| Oct. 24 | Lew Bogash | Pal Reed | R. D. | 12 | N. Y. City. |
| Oct. 24 | Battling Siki | Georges Carpentier | K. O. | 6 | Paris. |
| Oct. 27 | Harry Greb | Larry Williams | K. O. | 4 | Providence. |
| Oct. 27 | Gene Tunney | Chucks Wiggins | R. D. | 10 | Boston. |
| Oct. 31 | Floyd Johnson | Joe Vidas | K. O. | 2 | N. Y. City. |
| Nov. 1 | Mickey Walker | Jack Britton | R. D. | 15 | N. Y. City. |

## AMATEUR BOXING.

National Amateur Athletic Union Championships, held under auspices of Boston A. A., Boston, April 17-18. Results, final bouts only: *112-lb. Class*—T. P. McManus, Pittsburgh, defeated Harry Marcus, Cleveland, 3 rounds, judges' decision. *118-lb. Class*—Sidney Terris, New York, defeated Louis Raddy, Cleveland, 3 rounds, judges' decision. *126-lb. Class*—George Fifield, Toronto, defeated Eddie Sawyer, Boston, 3 rounds, judges' decision. *135-lb. Class*—Joe Ryan, Pittsburgh, defeated Eddie Williams, East Boston, Mass. Williams quit in 1 round. *147-lb. Class*—Harry D. Simons, Gary, Ind., defeated Buster Ryan. St. Jerome A. C., New York, 3 rounds, judges' jdecision. *160-lb. Class*—William Antrobus, Trinity Club, New York, defeated Homer Robinson, Morgan House, Pittsburgh, 3 rounds, judges' decision. *175-lb. Class*—Charles McKenna, New York, defeated Homer Robinson, Pittsburgh, 2 rounds. Robinson refused to come up for the third round. *Heavyweight Class*—John Williams, Olympic Club, San Francisco, defeated Gordon Munce, Pastime A. C., New York, 4 rounds, referee's decision.

English Amateur Championships, held at London, April 4. Results, final bouts only: *Flyweight Class*—L. M. Tarrant, Armstrong Siddeley B. C., defeated J. E. Dudley, Gainsford B. C., on points. *Bantamweight Class*—W. Goulding, St. Pancras B. C., defeated A. O. Barber, Brighton A. B. C., on points. *Featherweight Class*—E. H. Swash, Clapton Federation B. C.—w. o., E. Hunt, Polytechnic, retiring. *Lightweights*—G. B. Renouf, Leith Victoria A. A. C., defeated R. W. Caswell, Lynn B. C., on points. *Welterweight Class*—E. White, Limehouse, Poplar and District B. C., w. o., S. J. Simpson, Clapton Federation, retiring. *Middleweight Class*—H. Mallin, E. Div. Met. Police, defeated A. J. Jones, Fulham B. C., 2 rounds. *Light Heavyweight Class*—H. J. Mitchell, Polytechnic, defeated A. J. Clifton, P. L. A. Police A. C., on points. *Heavyweight Class*—T. Evans, Amman Valley A. B. C., defeated A. H. Monk, P. L. A. Police A. C., 1 round.

### INTERCOLLEGIATE BOXING.

Feb. 4—Army defeated Mass. I. of T., 6 to 0.
Feb. 11—Army defeated Springfield College, 6 to 1.
Feb. 17—University of Pennsylvania defeated Springfield College, 4 to 3.
Feb. 18—Army defeated Penn State, 6 to 1.
Feb. 18—Yale tied Mass. I. of T., 3 to 3.
March 3—Yale defeated Springfield College, 4 to 2.
March 4—Army defeated University of Pennsylvania, 5 to 1.
March 26—Yale defeated Queens University, 4 to 2.

## GYMNASTICS.

*Amateur Athletic Union* championships, held under auspices of New York A. C., New York City, April 21. *Summaries: Team title*—Won by New York A. C. Individual results: *Free Calisthenics*—Won by Bjarne Jorgenssen, Norwegian Turn Society, with 279 points; Curt Rottman, New York Turn Verein, 275 points, second; Frank J. Kriz, Bohemian Gymnastic Association, 270 points, third; Max Wandrer, Philadelphia Turngemeinde, 243 points, fourth. *Long Horse*—Won by Frank J. Kriz, Bohemian Gymnastic Association, with 579 points, *Fred Berg, Norwegian Turn Society, 577½ points, second; V. Winsjanssen, Norwegian Turn Society, 577½ points, third; A. Zink, New York Turn Verein, 573 points, fourth. *Won place in jump-off. *Side Horse*—Won by Paul Richter, Swiss Turn Verein, 586 points; Charles Cramer, New York Athletic Club, 557 points, second; Joseph Wolfrum, Philadelphia Turngemeinde, 549½ points, third; Frank J. Kriz, Bohemian Gymnastic Association, 527¾ points, fourth. *Horizontal Bar*—Won by Curt Rottman, New York Turn Verein, 580½ points; Frank J. Kriz, Bohemian Gymnastic Association, 562½ points, second; Bjarne Jorgenssen, Norwegian Turn Society, 559½ points, third; Max Wandrer, Philadelphia Turngemeinde, 505½ points, fourth. *25-Foot Rope Climb*—Won by Louis Weissmann, 92d St. Y. M. H. A., time 0:07 3-5; Edward C. Igesias, Bronx Union Y. M. C. A., 0:08 2-5, second; Paul Muller, Swiss Turn Verein, 0:09 2-5 third; William A. Hoffman, unattached, 0:10, fourth. *Tumbling*—Won by Joseph F. Dunn, New York A. C., 555½ points; W. Faulkner, 23d St. Y. M. C. A., 520½ points, second; Kimball Atha, Newark Y. M. C. A., 499¼ points, third; Fred Berg, Norwegian Turn Society qualified. *Indian Club Swinging*—Won by Ray W. Dutcher, New York A. C., 282 points; Thomas C. Summerill, Rutgers College A. A., 273 points, second; J. Lester McCloud, New York A. A., 262 points, third; C. W. F. Hahnes, Orange Y. M. C. A., 249 points, fourth. *Parallel Bars*—Won by Frank J. Kriz, Bohemian Gymnastic Association, 579¾ points; Curt Rottmann, New York Turn Verein, 577½ points, second; Alfred Jochim, Swiss Turn Verein, 561 points, third; B. Jorgenssen, Norwegian Turn Society, 557 points, fourth. *Flying Rings*—Won by J. D. Gleason, New York A. C., 532 points; A. Pfeiffer, National Turn Verein, 470 points, second; William Herr, National Turn Verein, 467 points, third; Frank J. Kriz, Bohemian Gymnastic Association, 467 points, fourth. *All-Around Championships*—Won by Frank J. Kriz, Bohemian Gymnastic Association, with 2,881.50 points; B. Jorgenssen, Norwegian Turn Society, 2,881.00 points, second; Curt Rottmann, New York Turn Verein, 2,833 points, third; Max Wandrer, Philadelphia Turngemeinde, 2,422.50 points, fourth.

### INTERCOLLEGIATE CHAMPIONSHIPS.

Held at Cambridge, Mass., under auspices of Massachusetts Institute of Technology, March 31. *Team Scores*—United States Naval Academy, 34 points; Princeton, 12; New York University, 6; Massachusetts Tech. and Haverford, 1 each. Individual point winners: *Horizontal Bar*—Won by Capt. W. C. Creamer, N. Y. U., 49.6 points; J. M. Dancy, Navy, second, 48.8; Capt. A. T. Cory, Navy, third, 45.5. *Side Horse*—Won by S. Sheldon, Princeton, 53.7; P. M. Clark, Navy, second, 51.3; J. B. Pearson, Navy, third, 50.6. *Clubs*—Tie for first place between P. F. Dugan, Navy, and Ten Eyck, Princeton, 24.1; Capt. W. B. Heilman, Haverford, third, 23.7. *Parallel Bars*—Won by J. B. Pearson, Navy, 53.6; A. L. Danis, Navy, second, 50.8; Schmoor, N. Y. U., third, 49.6. *Flying Rings*—Won by G. E. Nold, Navy, 52.9; G. E. Taylor, Navy, second, 52.6; J. T. McCoy, Tech, third, 48.9. *Tumbling*—Won by C. O. Comp, Navy, 56.1; O. Clark, Princeton, second, 48.4; H. McT. Sylvester, Navy, third, 48. *All Around Championship*—Won by J. B. Pearson, Navy, 243 points; T. A. Cory, Navy, second, 226.6; W. C. Creamer, N. Y. U., third, 224.8. *Point Score*—Navy, 34; Princeton, 12; N. Y. U., 6; M. I. T., 1; Haverford, 1; Dartmouth, 0; Harvard, 0; University of Pennsylvania, 0; Yale, 0; Rutgers, 0.

## WRESTLING.

### PROFESSIONAL.

The results of the more important professional wrestling bouts or those involving championships during the major portion of 1922 follow:

| Date. | Winner. | Loser. | Time of Falls. | | | | Place. | Falls. |
|---|---|---|---|---|---|---|---|---|
| | | | H. | M. | S. | H. M. S. | | |
| Jan. 3 | W. Zbyszko | Cliff Binckley | | 18 | 28 | 10 16 | Kansas City | Two. |
| Jan. 9 | S. Zbyszko | Armas Laltiman | | 2 | 10 | 11 20 | Springfield | Two. |
| Jan. 16 | S. Zbyszko | John Olin | | 19 | 30 | | Columbus | One. |
| Jan. 17 | S. Zbyszko | Ivan Linow | 1 | 20 | | 12 | Canton | Two. |
| Jan. 18 | S. Zbyszko | William Demetrail | 1 | 2 | | | Pittsburgh | One. |
| Jan. 30 | S. Zbyszko | Dick Daviscourt | | 42 | 35 | 22 14 | Boston | Two. |
| Jan. 31 | S. Zbyszko | Helmar Johnson | | 25 | 30 | 7 | Bridgeport | Two. |
| Feb. 1 | S. Zbyszko | Charlie Burkhart | | 15 | 40 | 4 45 | New Britain | Two. |
| Feb. 7 | S. Zbyszko | John Olin | | 35 | | 10 40 | Springfield | Two. |
| Feb. 13 | Ed. Lewis | Dick Daviscourt | 1 | 15 | 27 | | Boston | One. |
| Feb. 14 | Marin Plestina | John Freberg | 1 | 13 | 44 | | Chicago | One. |
| Feb. 18 | Joe Stecher | Ronato Gardini | 1 | 3 | 30 | 10 | Springfield | Two. |
| Feb. 21 | W. Zbyszko | Joe Stecher | | 29 | | 6 45 | New York | Two. |
| Feb. 22 | S. Zbyszko | Earl Caddock | | 25 | | 19 30 | New York | Two. |
| Mar. 3 | Ed. Lewis | S. Zbyszko | | 18 | | 3 | Wichita, Kan. | Two. |
| Mar. 6 | S. Zbyszko | Jack Rogers | | 34 | | 5 50 | Concordia, K'n | Two. |
| Mar. 7 | Ed. Lewis | John Grandovitch | | 52 | | 14 | Indianapolis | Two. |
| Mar. 9 | Ed. Lewis | Joe Petroff | 1 | 23 | | | Nashville | One. |
| Mar. 10 | Ed. Lewis | Carl Le Belge | | 39 | | 5 | Louisville | Two. |
| Mar. 11 | Ed. Lewis | George Bailey | | 46 | 19 | 13 | Lexington | Two. |
| Mar. 14 | Ed. Lewis | Jatindra Gobas | | 23 | | 1 | Fort Wayne | Two. |
| Mar. 17 | W. Zbyszko | Laurente Guerstmans | | 25 | | 12 | Springfield | Two. |
| Mar. 24 | Jim Londas | Ivan Linow | 1 | 55 | | | Chicago | One. |
| Mar. 27 | Ed. Lewis | Yousiff Mahmout | | 44 | 22 | 1 2 | Kansas City | Two. |
| Mar. 29 | Joe Stecher | Yousiff Mahmout | | 41 | 8 | 16 24 | Boston | Two. |
| Apr. 11 | S. Zbyszko | Yussif Ossman | 1 | 8 | | 17 | Houston | Two. |
| Apr. 13 | Ed. Lewis | Earl Caddock | | 35 | | 8 | Wichita, Kan. | Two. |
| Apr. 19 | Ed. Lewis | Dick Daviscourt | 1 | 13 | 31 | 14 10 | Boston | Two. |
| Apr. 25 | Ed. Lewis | S. Zbyszko | | 32 | 49 | 26 27 | Kansas City | Two. |
| May 17 | Marin Plestina | John Pesek | Stopped, 3h., 22m. | | | | Chicago | None. |
| May 18 | George Calza | Marin Plestina | Referee's decision. | | | | Boston | None. |
| May 31 | Ed. Lewis | John Grandovitch | | 41 | | 1 | Muskogee | Two. |
| June 2 | Earl Caddock | S. Zbyszko | Draw, one fall ea. | | | | Columbus | |
| June 7 | Ed. Lewis | Earl Caddock | | 22 | 2 | 17 | Boston | Two. |
| June 23 | S. Zbyszko | George Calza | Draw, one fall ea. | | | | Boston | |
| Sept. 27 | Ed. Lewis | Renato Gardini | 1 | 21 | 15 | 4 30 | San Francisco | 2 out 3 |
| Oct. 12 | S. Zbyszko | Ivan Linow | 1 | 11 | | 4 | | Two. |
| Nov. 1 | Joe Stecher | Charles Cutler | | 57 | 30 | 13 22 | | Two. |

### AMATEUR WRESTLING.

Intercollegiate championships held at Lehigh University, Bethlehem, Pa., March 25. Won by Cornell with 19 points. Other colleges in order of finish: Penn State, 12; Yale, 11; Lehigh, 9; Columbia, 8; Pennsylvania, 3; Princeton, 2. Results by weight classes, finals only: *115-lb. Class*—Watson, Penn State, threw Schwarzbach, Lehigh; crotch and half nelson. Time—5.44. *125-lb. Class*—Roberts, Cornell, defeated Warriner, Lehigh; judges' decision. Time advantage—2.00. *135-lb. Class*—Wallace, Yale, defeated Gihon, Lehigh; judges' decision. Time advantage—2.03. *145-lb. Class*—Parks, State, defeated Ayau, Cornell; judges' decision. Time advantage—2.52, in extra period. *158-lb. Class*—Johnson, Columbia, defeated Coxe, Lehigh; judges' decision. Time advantage—2.52, in second extra period. *176-lb. Class*—Hanson, Cornell, defeated Wilson, Penn State; judges' decision. Time advantage—5.31, in two extra periods. *Heavyweight Class*—Wright, Cornell, defeated Mackay, Yale, judges' decision. Time advantage—1.16, in extra period.

Bouts for second place—*115-lb. Class*—Ackerly, Cornell, threw Schwarzbach, Lehigh. Time—2.55. *135-lb. Class*—Wienshenk, State, defeated Warriner, Lehigh, on decision. Time advantage—5.26. *135-lb. Class*—Gihon, Lehigh, threw Lienhart, Columbia, in first of two extra periods. Time, 0.48. *145-lb. Class*—Shoemaker, Lehigh, defeated Ayau, Cornell, on decision. Time advantage—2.53. *158-lb. Class*—Benjamin, Yale, defeated Coxe, Lehigh, by default. *176-lb. Class*—Parsonette, Columbia, defeated Wilson, State, on decision. Time advantage—1.02. *Heavyweight Class*—MacKay, Yale, defeated Moorehouse, Lehigh, in extra period, by decision. Time advantage—2.38.

Bouts for third place—*115-lb. Class*—Schwab, Columbia, threw Schwarzbach, Lehigh. Time—3.03. *125-lb. Class*—Chasens, Penn, defeated Warriner, Lehigh, by decision. Time advantage—2.22. *135-lb. Class*—Davis, Penn, won from Lienhart, Columbia, in extra period. Time advantage—3.36. *145-lb. Class*—Ayau, Cornell, having thrown Hart, Columbia, won from Craven, Yale. *158-lb. Class*—Coxe, Lehigh, having thrown both Robinson, Princeton, and Wetzel, State. *175-lb. Class*—Wilson, Princeton, defeated Wilson, State, by default. *Heavyweight Class*—Moorehouse, Lehigh, won from Blaine, Columbia, in extra period. Time advantage—0.55.

National Amateur Athletic Union Championships, held at Boston, April 8. Results, final bouts only: *118-lb. Class*—Valentine Vozen, Illinois Athletic Club, defeated C. H. Hovies, Morningside A. C., New York (decision). *126-lb. Class*—Andrew Callas, Greek Olympic A. C., Chicago, defeated John Hurmerich, Los Angeles A. C. (decision). *135-lb. Class*—Robin Reed, Oregon Agricultural College, defeated P. Hart, Boys' Club, New York (Hart defaulted owing to injury). *147-lb. Class*—Russell Vis, Los Angeles A. C., defeated John Angelo, Greek-American A. C., New York (Angelo defaulted owing to injury). *160-lb. Class*—Emil B. Wolf, Manchester, N. H., Y. M. C. A., defeated Peter Smith, Boys' Club, New York (fall—1.49). *175-lb. Class*—Paul Berlenback, New York A. C., defeated F. F. Wolff, Boys' Club, New York (referee's decision). *192-lb. Class*—Fred Meyers, Chicago Hebrew Institute, defeated John F. Spellman, Brown University (judges' decision). *Heavyweight Class*—Fred Meyers, Chicago Hebrew Institute, defeated E. W. Stack, Newark, N. J., Y. M. C. A. (referee's decision).

International amateur championships, held at Stockholm, March 7. Results of final bouts: *Bantamweight Class*—Svenssen, Sweden, defeated Pyphepp, Esthonia. *Featherweight Class*—Anttila, Finland, defeated Egebert, Norway. *Lightweight Class*—Westerlund, Finland, defeated Radvany, Hungary. *Middleweight, Class A*—Westergren, Sweden, defeated Petersen, Norway. *Middleweight, Class B*—Rosenkzist, Finland, defeated Svenssen, Sweden. *Heavyweight Class*—Nilsson, Sweden, defeated Ahlgren, Sweden.

## POLO.

THE feature of the 1922 polo season was the tour of England and the United States by the Argentine Polo team, which won both the English and the American open championship tournaments. In a special series of matches at the close of the United States season the Meadow Brook "Big Four" team, winners of the International Championship Cup in 1921, defeated the Argentine team in two straight games. The results of the various important tournaments follow:

National Championships—Open; won by Argentime team defeating Meadow Brook 14 to 7 in final game. Junior—U. S. Army team defeated Meadow Brook Ramblers 8-7 in final game.

Other results: Herbert Memorial Trophy—won by Meadow Brook defeating Flamingo four 17-11 in final game; Monty Waterbury Trophy—won by Shelburne 7-6 in final game. Canadian championship won by Montreal four defeating Toronto 12-2 in final game.

Special exhibition matches between Meadow Brook "Big Four" combination, international champions, and Argentine team, winner of 1922 English and American Open Championships. Results, first game—Meadow Brook 7, Argentine 4; second game—Meadow Brook 5, Argentine 4.

INTERNATIONAL POLO CUP RECORD.

1886—Newport, R. I.—England, 2 matches; America, 0. America—1. W. Thorn, 2. R. Belmont, 3. F. P. Keene, Back, T. Hitchcock. England—1, Capt. T. Hone, 2. Hon. R. T. Lawley, 3. Capt. M. Little, Back, J. Watson.

1900—Hurlingham, England—England, 1 match; America, 0. America—1. W. McCreery, 2. F. J. Mackey, 3. F. P. Keene, Back, L. McCreery. England—1, Capt. Beresford, 2. F. M. Freake, 3 W. S. Buckmaster, Back, J. Watson.

1902—Hurlingham, England—England, 2 matches; America, 1. America—1. R. L. Agassiz, 1. M. Waterbury, 2. J. E. Cowdin, 2. L. Waterbury, 3. F. P. Keene, Back, L. Waterbury, Back, R. L. Agassiz. England—1. C. P. Nickalls, 2. P. W. Nickalls, 2. F M. Freake, 2. G. A. Miller, 3. W. Buckmaster, 3. G. A. Miller, 3. P. W. Nickalls, Back, C. D. Miller, Back, W. Buckmaster. America won first match, 2 to 1; England won second, 6 to 1, and third, 7 to 1.

1909—Hurlingham, England—America, 2 matches; England, 0. America—1. L. Waterbury, 2. J. M. Waterbury, Jr., 3. H. P. Whitney, Back, D. Milburn. England—1. Capt H. Wilson, 1. Harry Rich, 2. F. M. Freake, 3. P. W. Nickalls, 3. Lord Wodehouse, Back, Capt H. Lloyd. America won first match by 9 to 5, and second by 8 to 2.

1911—Meadow Brook, L. I.—America, 2 matches; England, 0. America—1. L. Waterbury, 2. J. M. Waterbury, Jr., 3. H. P. Whitney, Back, D. Milburn. England—1. Capt. Cheape, 2. Lieut. A. N. Edward, 3. Capt. J. H. Lloyd, Back, Capt Wilson. America won first match by 4½ to 3, and second by 4½ to 3¼.

1913—Meadow Brook, L. I.—America, 2 matches; England, 0. America—1. L. Waterbury, 1. L. E. Stoddard, 2. J. M. Waterbury, Jr., 2. L. Waterbury, 3. H. P. Whitney, Back, D. Milburn. England—1. Capt Cheape, 2. F. M. Freake, 2. Capt. Edwards, 3. Capt. R. G. Ritson, Back, Capt Lockett. America won first match by 5 to 3, and second match by 4½ to 4¼.

1914—Meadow Brook L. I.—England, 2 matches; America, 0. America—1. R. La Montagne, 2. J. M. Waterbury, Jr, 3. L. Waterbury, Back, D. Milburn. England—1. Capt. Tomkinson, 2. Capt. Cheape, 3. Major Barrett, Back, Capt. Lockett. England won first match by 8½ to 3, and second by 4 to 2¾.

1921—Hurlingham, England—America, 2 matches; England, 0. America—1. Louis E. Stoddard, 2. T. Hitchcock, Jr., 3. J. Watson Webb, Back, D. Milburn. England—1. Lieut.-Col. H. A. Tomkinson, 2. Major F. W Barrett, 3. Lord Wodehouse, Back, Major Lockett. America won first match by 11 to 4, and second by 10 to 6.

The history of the games between England and America dates back to 1886, when a Hurlingham team visited the United States and easily secured the cup. It remained at Hurlingham until 1909, when it was regained by Mr. H. P. Whitney's "Big Four." Lost to England again in 1914, and regained in 1921.

## GOLF.

### AMERICAN (UNITED STATES) GOLF CHAMPIONS.

| YR. | National Open. | National Amateur. | Nat'l Women's Amateur. | YR. | National Open. | National Amateur. | Nat'l Women's Amateur. |
|---|---|---|---|---|---|---|---|
| 1894 | W. Dunn | W.G.Lawrence | | 1909 | Geo. Sargent | R. A. Gardner | Dor. Campbell |
| 1895 | H. Rawlins | C.B.M'donald | Mrs.C.S.Brown | 1910 | Alex. Smith | W. C. Fownes | Dor. Campbell |
| 1896 | Jos. Foulis | H. J. Whigham | Beatrix Hoyt. | 1911 | J.J.McDermott | H. H. Hilton | Marg. Curtis. |
| 1897 | Jos. Floyd | H. J. Whigham | Beatrix Hoyt. | 1912 | J.J.McDermott | J. D. Travers | Marg. Curtis. |
| 1898 | Fred. Herd | F. S. Douglas | Beatrix Hoyt. | 1913 | Fr. Ouimet | J. D. Travers | Glad.R'nscroft. |
| 1899 | W. Smith | H.M. Harriman | Ruth Underhill | 1914 | W. C. Hagen | Fr. Ouimet | Mrs.H.Jackson |
| 1900 | H'y Vardon | W. J. Travis | F. C. Griscom. | 1915 | J. D. Travers | R. A. Gardner | Mrs.C.V'rbeck. |
| 1901 | W. Anderson | W. J. Travis | Genev. Hecker. | 1916 | Ch. Evans, Jr. | Ch. Evans, Jr. | Alexa Stirling. |
| 1902 | L. Auchterlonie | L. N. James | Genev. Hecker. | 1917 | J. Hutchison | No match | No match. |
| 1903 | W. Anderson | W. J. Travis | Bess. Anthony. | 1918 | No match | No match | No match. |
| 1904 | W. Anderson | H. C. Egan | Georg. Bishop. | 1919 | W. C. Hagen | S. D. Herron | Alexa Stirling. |
| 1905 | W. Anderson | H. C. Egan | Paul. MacKay. | 1920 | Edw. Ray | Ch. Evans, Jr. | Alexa Stirling. |
| 1906 | Alex. Smith | E. M. Byers | Har. S. Curtis. | 1921 | Jas. Barnes | T. Guilford | M. Hollins. |
| 1907 | Alex. Ross | J. D. Travers | Marg. Curtis. | 1922 | G. Sarazen | J. Sweetser | G. Collett. |
| 1908 | Fred. McLeod | J. D. Travers | Cath.C.Harley. | | | | |

### AMERICAN SECTIONAL CHAMPIONS.

| YEAR. | Western Open. | WESTERN AMATEUR. | | METROPOLITAN AMATEUR. | |
|---|---|---|---|---|---|
| | | Men. | Women. | Men. | Women. |
| 1899 | W. Smith | D. R. Forgan | | H. M. Harriman | |
| 1900 | No match | Wm. Waller | | W. J. Travis | Genev. Hecker. |
| 1901 | L. Auchterlonie | P. B. Hoyt | Bess. Anthony | F. S. Douglass | Genev. Hecker. |
| 1902 | W. Anderson | H. C. Egan | Bess. Anthony | W. J. Travis | Mrs. E. A. Manice. |
| 1903 | Alex. Smith | W. E. Egan | Bess. Anthony | F. S. Douglas | Mrs. E. A. Manice. |
| 1904 | W. Anderson | H. C. Egan | Fr. Everett | H. Wilcox | Mrs. E. A. Manice. |
| 1905 | Arthur Smith | H. C. Egan | Mrs. C. L. Dering | C. H. Seely | Mrs. C. T. Stout. |
| 1906 | Alex. Smith | D. E. Sawyer | Mrs. C. L. Dering | J. D. Travers | Mrs. C. T. Stout. |
| 1907 | Robt. Simpson | H. C. Egan | Lil. French | J. D. Travers | Georg. M. Bishop. |
| 1908 | W. Anderson | Mason Phelps | Mrs.W.F.Anderson | C. H. Seely | Georg. M. Bishop. |
| 1909 | W. Anderson | Ch. Evans, Jr. | Vid. Llewellyn | W. J. Travis | Julia R. Mix. |
| 1910 | Ch. Evans, Jr. | Mason Phelps | Mrs. Th. Harris | F. Herreshoff | Lil. B. Hyde. |
| 1911 | R. Simpson | Alb. Seckel | Car. Painter | J. D. Travers | Lil. B. Hyde. |
| 1912 | McD. Smith | Ch. Evans, Jr. | Car. Painter | J. D. Travers | Mrs. V. M. Earle. |
| 1913 | J. J. McDermott | W. K. Wood | Myra Helmer | J. D. Travers | Marion Hollins. |
| 1914 | J. M. Barnes | Ch. Evans, Jr. | Mrs. H. Hammond | Osw. Kirkby | Lil. B. Hyde. |
| 1915 | T. J. McNamara | Ch. Evans, Jr. | El. Rosenthal | W. J. Travis | Lil. B. Hyde. |
| 1916 | W. Hagen | Hein. Schmidt | Mrs. F. C. Letts | Osw. Kirkby | Mrs. Q. F. Feitner. |
| 1917 | J. M. Barnes | Fr. Ouimet | Mrs. F. C. Letts | | Mrs. W. A. Gavin. |
| 1918 | No match | No match | El. Rosenthal | | Mrs. L. C. Stockton |
| 1919 | J. M. Barnes | H. G. Legg | Mrs. Perry Fisk | Osw. Kirkby | Marion Hollins. |
| 1920 | J. Hutchison | Ch. Evans, Jr. | Mrs. F. C. Letts, Jr. | E. Sawyer | Mrs. Q. F. Feitner. |
| 1921 | W. Hagen | Ch. Evans, Jr. | Mrs. Melvin Jones | G. A. White | Mrs. W. A. Gavin. |
| 1922 | M. Brady | Ch. Evans, Jr. | Mrs. D. Gaut | J. Sweetser | Alexa. Stirling. |

## AMERICAN SECTIONAL GOLF CHAMPIONS.

| Year. | Massachusetts Amateur. | Trans-Mississippi. | Southern. | Eastern Women's. |
|---|---|---|---|---|
| 1901 | | J. Stuart | | |
| 1902 | | R. R. Kimball | A. F. Schwartz | |
| 1903 | A. G. Lockwood | J. R. Maxwell | A. W. Gaines | |
| 1904 | A. Carnegie, 2d | H. P. Bend | Andr. Manson | |
| 1905 | A. G. Lockwood | War. Dickinson | Andr. Manson | |
| 1906 | A. G. Lockwood | C. T. Jaffray | Leigh Carroll | Miss Fanny Osgood |
| 1907 | J. G. Anderson | Spr. Abbott | Nels. Whitney | Miss Mary B. Adams. |
| 1908 | T. R. Fuller | E. H. Seaver | Nels. Whitney | Miss Fanny Osgood. |
| 1909 | P. Gilbert | H. G. Legg | J. P. Edrington | Miss Mary B. Adams. |
| 1910 | H. W. Stucklen | H. G. Legg | F. G. Byrd | Miss Fanny Osgood. |
| 1911 | J. G. Anderson | H. G. Legg | W. P. Stewart | Mrs. R. H. Barlow. |
| 1912 | Heinrich Schmidt | H. G. Legg | W. P. Stewart | Mrs. R. H. Barlow. |
| 1913 | Francis Ouimet | Stu. Stickney | Nels. Whitney | Mrs. R. H. Barlow. |
| 1914 | Francis Ouimet | J. Cady | Nels. Whitney | Mrs. H. A. Jackson. |
| 1915 | Francis Ouimet | A. B. Swift | C. L. Dixon, Jr. | Mrs. C. H. Vanderbeck. |
| 1916 | J. P. Guilford | H. G. Legg | R. G. Bush, Jr. | Mrs. W. J. Gavin. |
| 1917 | | S. W. Reynolds | R. T. Jones, Jr. | |
| 1918 | | G. L. Conley | | |
| 1919 | Francis Ouimet | Nels. Whitney | Fr. Ouimet | Mrs. R. H. Barlow. |
| 1920 | F. J. Wright, Jr | Robert McKee | R. T. Jones, Jr. | Mrs. R. H. Barlow. |
| 1921 | J. P. Guilford | Geo. Von Elm | Perry Adair | Mrs. C. H. Vanderbeck. |
| 1922 | Francis Ouimet | R. E. Knepper | R. T. Jones, Jr. | Miss G. Collett. |

| Year. | Intercollegiate. | | Boston Women's. | Philadelphia Women's. | Connecticut Amateur. |
|---|---|---|---|---|---|
| | Winner. | College. | | | |
| 1897 | L. P. Bayard, Jr | Princeton | | Ruth Davis | |
| 1898 | J. F. Curtis | Harvard | | Elsie Cassatt | |
| | J. Reid, Jr | Yale | | | |
| 1899 | P. Pyne, 2d | Princeton | | Elsie Cassatt | T. L. Cheney. |
| 1900 | No match | | Grace B. Keyes | F. C. Griscom | C. E. Martin. |
| 1901 | H. Lindsley | Harvard | Marg. Curtis | Sophie Starr | C. H. Seely. |
| 1902 | C. H. Hitchcock, Jr. | Yale | Mary B. Adams | Mrs. C. F. Fox | C. H. Seely. |
| 1903 | F. Reinhart | Princeton | Fanny C. Osgood | Mrs. T. W. Reath, Jr. | C. H. Seely. |
| 1904 | A. G. White | Harvard | Fanny C. Osgood | A. F. McNeely | S. H. Patterson. |
| 1905 | R. Abbott | Yale | Pauline MacKay | Mrs. R. H. Barlow | W. K. Shepard. |
| 1906 | W. E. Claw, Jr | Harvard | Pauline MacKay | Mrs. R. H. Barlow | R. D. Sanford. |
| 1907 | E. Knowles | Yale | Marg. Curtis | F. C. Griscom | W. K. Shepard. |
| 1908 | H. H. Wilder | Harvard | Marg. Curtis | Mrs. C. F. Fox | B. P. Merriman. |
| 1909 | A. Seckel | Princeton | Mary B. Adams | El. Noblet | B. P. Merriman. |
| 1910 | R. Hunter | Yale | Fanny C. Osgood | Mrs. C. F. Fox | R. H. Hovey. |
| 1911 | G. C. Stanley | Yale | Fanny C. Osgood | Mrs. C. F. Fox | C. G. Waldo, Jr. |
| 1912 | F. C. Davidson | Harvard | Mrs. G. W. Roope | Mrs. R. H. Barlow | C. G. Waldo, Jr. |
| 1913 | N. Wheeler | Yale | Fanny C. Osgood | Mrs. R. H. Barlow | R. Abbott. |
| 1914 | E. P. Allis, 3d | Harvard | Marg. Curtis | Mrs. R. H. Barlow | W. P. Seely. |
| 1915 | F. R. Blossom | Yale | Vera Ramsay | Mrs. R. H. Barlow | H. K. Kerr. |
| 1916 | J. W. Hubbell | Harvard | Vera Ramsay | Mildred Caverly | R. M. Lewis. |
| 1917 | No match | | Mrs. H. A. Jackson | Mrs. C. F. Fox | |
| 1918 | No match | | | Mildred Caverly | |
| 1919 | A. L. Walker, Jr | Columbia | | Mrs. R. H. Barlow | R. Hovey. |
| 1920 | J. W. Sweetser | Yale | Miss H. Curtis | Miss M. Bell | R. Hovey. |
| 1921 | J. S. Dean | Princeton | Miss G. Collett | C. H. Vanderbeck | R. M. Lewis. |
| 1922 | A. P. Boyd | Dartmouth | Mrs. D. C. Hurd | Mrs. R. H. Barlow | W. P. Seeley. |

## BRITISH OPEN.

| Year | Winner. | Year | Winner. | Year | Winner. | Year | Winner. |
|---|---|---|---|---|---|---|---|
| 1860 | W. Parke, Sr. | 1875 | W. Parke, Sr. | 1890 | J. Ball. | 1904 | J. White. |
| 1861 | T. Morris, Sr. | 1876 | R. Martin. | 1891 | H. Kirkaldy. | 1905 | J. Braid. |
| 1862 | T. Morris, Sr | 1877 | J. Anderson. | 1892 | H. H. Hilton. | 1906 | J. Braid. |
| 1863 | W. Parke, Sr. | 1878 | J. Anderson. | 1893 | W. Auchterlonie. | 1907 | A. Massy. |
| 1864 | T. Morris, Sr. | 1879 | J. Anderson. | 1894 | J. H. Taylor. | 1908 | J. Braid. |
| 1865 | A. Strath. | 1880 | R. Ferguson. | 1895 | J. H. Taylor. | 1909 | J. H. Taylor. |
| 1866 | W. Parke, Sr. | 1881 | R. Ferguson. | 1896 | Hy. Vardon. | 1910 | J. Braid. |
| 1867 | T. Morris, Sr. | 1882 | R. Ferguson. | 1897 | H. H. Hilton. | 1911 | Hy. Vardon. |
| 1868 | T. Morris, Jr. | 1883 | W. Fernie. | 1898 | Hy. Vardon. | 1912 | E. Ray. |
| 1869 | T. Morris, Jr. | 1884 | J. Simpson. | 1899 | Hy. Vardon. | 1913 | J. H. Taylor. |
| 1870 | T. Morris, Jr. | 1885 | R. Martin. | 1900 | J. H. Taylor. | 1914 | Hy. Vardon. |
| 1871 | No match. | 1886 | D. Brown. | 1901 | J. Braid. | 1920 | Geo. Duncan. |
| 1872 | T. Morris, Jr. | 1887 | W. Parke, Jr. | 1902 | A. Herd. | 1921 | J. Hutchison. |
| 1873 | T. Kidd. | 1888 | J. Burns. | 1903 | Hy. Vardon. | 1922 | W. Hagen (U. S.) |
| 1874 | Mungo Park. | 1889 | W. Parke, Jr. | | | | |

## BRITISH AMATEUR.

| Year | Winner. | Year | Winner. | Year | Winner. | Year | Winner. |
|---|---|---|---|---|---|---|---|
| 1886 | H. Hutchison. | 1894 | J. Ball, Jr. | 1902 | C. Hutchings. | 1910 | J. Ball. |
| 1887 | H. Hutchison. | 1895 | L. B. Melville. | 1903 | R. Maxwell. | 1911 | H. H. Hilton. |
| 1888 | J. Ball, Jr. | 1896 | F. G. Tait. | 1904 | W. J. Travis. | 1912 | J. Ball. |
| 1889 | J. E. Laidlay. | 1897 | A. J. T. Allan. | 1905 | A. G. Barry. | 1913 | H. H. Hilton. |
| 1890 | J. Ball, Jr. | 1898 | F. G. Tait. | 1906 | Jas. Robb. | 1914 | J. L. C. Jenkins. |
| 1891 | J. E. Laidlay. | 1899 | J. Ball, Jr. | 1907 | J. Ball, Jr. | 1920 | C. Tolley. |
| 1892 | J. Ball, Jr. | 1900 | H. H. Hilton. | 1908 | E. A. Lassen. | 1921 | W. Hunter. |
| 1893 | Peter Anderson. | 1901 | H. H. Hilton. | 1909 | R. Maxwell. | 1922 | E. W. Holderness. |

## BRITISH WOMEN'S.

| Year | Winner. | Year | Winner. | Year | Winner. | Year | Winner. |
|---|---|---|---|---|---|---|---|
| 1893 | Lady Marg. Scott. | 1900 | Rhona Adair. | 1906 | Mrs. Kennion. | 1912 | G. Ravencroft. |
| 1894 | Lady Marg. Scott. | 1901 | M. Graham. | 1907 | May Hezlet. | 1913 | Muriel Dodd. |
| 1895 | Lady Marg. Scott. | 1902 | May Hezlet. | 1908 | Miss Titterton. | 1914 | Cecil Leitch. |
| 1896 | Amy Pascoe. | 1903 | Rhona Adair. | 1909 | Dorothy Campbell. | 1920 | Cecil Leitch. |
| 1897 | Edith Orr. | 1904 | Lottie Dod. | 1910 | E. Grant-Suttie. | 1921 | Cecil Leitch. |
| 1898 | L. Thomson. | 1905 | Bertha Thompson. | 1911 | Dorothy Campbell. | 1922 | J. Wethered. |
| 1899 | May Hecht. | | | | | | |

GOLF—*Continued.*

CANADIAN OPEN.

| Year | Winner | Year | Winner. | Year | Winner. | Year | Winner. |
|---|---|---|---|---|---|---|---|
| 1904. | J. H. Oke. | 1908. | Alb. Murray. | 1912. | G. Sargent. | 1920. | J. D. Edgar. |
| 1905. | G. Cumming. | 1909. | K. Keffer. | 1913. | Alb. Murray. | 1921. | W. H. Trovenger. |
| 1906. | C. Murray. | 1910. | D. Kennedy. | 1914. | K. Keffer. | 1922. | A. Watrous. |
| 1907. | P. F. Barratt. | 1911. | C. R. Murray. | 1919. | J. D. Edgar. | | |

CANADIAN AMATEUR.

| Year | Winner. | Year | Winner. | Year | Winner. | Year | Winner. |
|---|---|---|---|---|---|---|---|
| 1895. | T. H. Harley. | 1901. | W. A. H. Kerr. | 1907. | G. S. Lyon. | 1913. | G. H. Turpin. |
| 1896. | S. Gillespie. | 1902. | F. R. Martin. | 1908. | A. Wilson. | 1914. | G. S. Lyon. |
| 1897. | W. A. H. Kerr. | 1903. | G. S. Lyon. | 1909. | E. Legge. | 1919. | Wm. B. Luckie. |
| 1898. | G. S. Lyon. | 1904. | J. P. Taylor. | 1910. | Fritz Martin. | 1920. | C. B. Grier. |
| 1899. | V. C. Brown. | 1905. | G. S. Lyon. | 1911. | G. H. Hutton. | 1921. | F. Thompson. |
| 1900. | G. S. Lyon. | 1906. | G. S. Lyon. | 1912. | G. S. Lyon. | 1922. | C. C. Fraser. |

OTHER IMPORTANT GOLF RESULTS.

Walker Cup, emblematic of world's team golf championship, first competition held at National Links, Southampton, N. Y. Aug. 28-29, won by United States team, which defeated British team 8 points to 4. The teams were composed of the leading amateurs of the United States and England.

First public links national championship, held at Toledo, O., won by Eddie Held, St. Louis.

Canadian women's championship, won by Mrs. W. A. Gavin.

North and South open, won by P. O'Hara—amateur, H. J. Topping—women's, G. Collett.

National profes ional golfers' championship, won by G. Sarazen.

French open, won by A. Boomer—amateur, A. Scott.

## CRICKET.

(Compiled by F. F. Kelly.)

NEW YORK AND NEW JERSEY CRICKET ASSOCIATION.

| Club. | W. | L. | D. | Pts. |
|---|---|---|---|---|
| Brooklyn | 11 | 2 | 2 | 24 |
| Manor Field | 10 | 5 | 1 | 21 |
| Staten Island | 6 | 6 | 2 | 14 |
| Bensonhurst | 5 | 8 | 2 | 12 |
| Crescent A. C. | 3 | 9 | 3 | 9 |
| Columbia Oval | 3 | 9 | 2 | 8 |

Batting (First Three).

| Batsmen and Clubs. | Ins. | N.O. | H.S. | R. | Avgs. |
|---|---|---|---|---|---|
| E. G. Hull, Manor Field | 14 | 0 | 106 | 601 | 42.93 |
| J. L. Poyer, Brooklyn | 16 | 3 | 70 | 451 | 37.00 |
| H. R. St. C. Jones, St. Isl. | 12 | 1 | 110 | 327 | 29.73 |

Bowling (First Three).

| Bowlers and Clubs. | B. | R. | W. | Avgs. |
|---|---|---|---|---|
| L. Miller, Manor Field | 864 | 412 | 64 | 6.44 |
| H. Rushton, Brooklyn | 706 | 295 | 38 | 7.76 |
| H. Poyer, Brooklyn | 972 | 388 | 46 | 8.43 |

METROPOLITAN DIST. CRICKET LEAGUE.

| Club. | W. | L. | D. | Pts. |
|---|---|---|---|---|
| Manhattan | 11 | 2 | 2 | 24 |
| Brooklyn | 9 | 4 | 2 | 20 |
| Paterson | 7 | 6 | 2 | 16 |
| Cameron | 6 | 7 | 2 | 14 |
| Longfellows | 6 | 8 | 1 | 13 |
| Kings County | 1 | 13 | 1 | 3 |

Batting (First Three).

| Batsmen and Clubs. | Ins. | N.O. | H.S. | R. | Avgs. |
|---|---|---|---|---|---|
| J. L. Poyer, Brooklyn | 13 | 3 | 65 | 296 | 29.60 |
| C. Skinner, Cameron | 6 | 0 | 58 | 135 | 22.50 |
| C. Lewis, Cameron | 10 | 1 | 45 | 192 | 21.33 |

Bowling (First Three).

| Bowlers and Clubs. | B. | R. | W. | Avgs. |
|---|---|---|---|---|
| H. Rushton, Brooklyn | 656 | 245 | 41 | 5.97 |
| H. Poyer, Brooklyn | 676 | 271 | 45 | 6.02 |
| H. A. Meyer, Manhattan | 806 | 342 | 55 | 6.21 |

Norman Seagram's Canadian tour in England, won 0, lost 4, drawn 7.

Frankford Cricket Club won the Halifax Cup, New York being represented by Staten Island, this being the first time the Staten Island Club took part in the competition. J. L. Evans of the Merion Club won the batting average and R. Waad of the Frankford Club the bowling average.

Yorkshire won the English county championship in 1922.

The highest individual scores of the season were hit by J. L. Evans, 135 not out, in the United States and P. P. Barnett, 184 not out, in Canada.

H. Livingston of the Pittsburgh Field Club established a record for the United States by scoring three consecutive centuries in one week in a tournament held in Chicago in August, 1907; a similar feat was performed by H. N. R. Coblet in Canada in a tournament held in Vancouver, British Columbia, in August, 1906. H. V. Hordern of the University of Pennsylvania established a record for the United States and Canada by securing 213 wickets during 1907. J. B. King, F. F. Kelly and H. Rushton are the only three bowlers who have taken over 2,000 wickets. A. C. MacLaren scored 424 for Lancashire vs. Somerset at Taunton, England, July, 1895—the record in a first-class match. A. F. J. Collins, playing at Clifton, June, 1899, for Clarke's House against North Town, scored 628, not out—the record in any match. Melbourne University scored 1,094 runs against Essenden at Melbourne (Australia), 1898—the highest authenticated record. In a match between A. E. Stoddart's English team and New South Wales, 1,739 runs were scored—a record in first-class cricket. The longest partnership on record was 623 runs by Capt. Oakes and Private Fitzgerald, First Royal Munster Fusiliers vs. Army Service Corps, at Curragh, 1895. In a small match in Australia F. R. Spofforth bowled down all 10 wickets of his opponents in each inning—a feat without parallel. F. R. Spofforth on the Australian tour in 1878 took 764 wickets—a world's record. Dr. W. G. Grace, the world's greatest cricketer, died Oct. 23, 1915. He hit up 217 centuries during his career, which will not likely ever be equalled.

Best records in the United States and Canada are by G. S. Patterson eleven playing against A. M. Woods eleven at Philadelphia, scoring 689 runs, in 1894. Australians against Vancouver scored 633 for 8 wickets in 1913. J. B. King scored 344 runs for Belmont against Merion B. in 1906. W. Robertson, 206, not out, and A. G. Sheath, 118, not out, scored 340 runs in partnership, without the loss of a wicket, at San Francisco in 1894. Smallest score, Americas 0 against Roseville at Guttenberg, N. J., in 1897. The smallest score in international match in United States, West Indians 13 against Australians, 1913. Smallest score in Canada, Winnipeg 6 against Australians, 1913. Largest score in the Metropolitan District Cricket League Championship, New Jersey Athletic Club 385 runs for 5 wickets against Manhattan, at Bayonne, N. J., 1897.

Seven centuries in a season, P. J. Higgins of Los Angeles in 1912, 159, 100, 100, 121, 182, 110, 240.

G. S. Patterson of the Germantown C. C. scored 1,748 runs in season of 1892—a record for the United States. Rev. F. W. Terry of Toronto C. C. scored 1,509 runs in season of 1892—a record for Canada.

## TRAPSHOOTING.

The Twenty-third Grand American Tournament, at which the National Trapshooting Championship titles are contested for, was held at Atlantic City, N. J., September 11-16, 1922. A record was established for the number of targets thrown during the tournament—413,000 being thrown from 16 traps. There were 588 individual entries in the Grand American Handicap event, and this was won by J. S. Frink of Worthington, Minn., with a score of 96 from the 22 yard mark, after a shoot-off with L. G. Sefing (16 Yds.), E. T. Hall (21 Yds.), and H. B. Simpkins, (18 Yds.) Frink broke 25 straight in the tie, the scores of the others being 23, 22 and 20 respectively.

The winners of the several national championship titles competed for at this tournament were as follows:

National Singles, 16 yards, (Amateur)—Dave Fauskee, Worthington, Minn. Score 197x200. (Won from F. M. Troch, Vancouver, Wash., in shoot-off 25 to 24.)

National Singles, 16 yards, (Professional)—Art Killam, St. Louis, Mo. Score 197x200.

National Singles, 16 yards, (Women's)—Mrs. E. L. King, Winona, Minn. Score 187x200.

National Singles, 16 yards, (Junior)—Dudley Shalcross, South Seekonk, Mass. Score 96x100.

National Singles, 18 yards, (Amateur)—Phil Miller, Dallas, Texas. Score 194x200. (Won from Mark Arie, Champaign, Ill., in shoot-off—24, 23, 24 and 25 to 24, 23, 24 and 22.)

National Singles, 18 yards, (Professional)—J. R. Graham, Ingleside, Ill. Score 194x200. (Won from F. S. Tomlin, Glassboro, N. J., in shoot-off—25 to 24.

National Doubles (Amateur)—R. A. King, Delta, Colo. Score, 170x200 (100 pairs).

National Doubles (Professional)—J. R. Graham, Ingleside, Ill. Score 162x200 (100 pairs).

Zone Five-Man Team Championship—Winner—Prairie Zone Team (Phil Miller, 195; Frank Hughes, 193; E. C. Wheeler, 192; C. A. Gunning, 185; R. A. King, 190). Total score 955x1000.

Sectional Ten-Man Team Championship—200 targets per man—East vs. West. Won by West Team, score, 1899x2000. Individual scores—Frank Hughes, Mobridge, S. D., 195; Phil Miller, Dallas, Tex., 195; F. M. Troch, Vancouver, Wash., 194; S. T. Olin, East Alton, Ill., 193; Mark Arie, Champaign, Ill., 192; Dave Fauskee, Worthington, Minn., 191; J. S. Frink, Worthington, Minn., 187; Sam H. Sharman, Salt Lake City, Utah, 185; E. C. Wheeler, Pawhuska, Okla., 184; M. E. Jenny, Lexington, Ill., 183.

Other events on the program of this tournament resulted as follows:

Atlantic City Introductory—Won by C. B. W. Chapman, Clarksburg, W. Va., score 99x100.

Preliminary Handicap—(16 to 23 yards, 100 targets).—Won by H. C. Taylor, Tybee, Ga., score 97 from 16-yard mark. (Won from Mark Arie, Champaign, Ill., in shoot-off—22 and 24 to 22 and 23, Arie shooting from 23-yard mark.)

Classification event (200 targets)—Five classes, shooters classified under A. T. A. Standard System: Class 1—Phil Miller, Dallas, Tex., 195. (Won from Frank Hughes, Mobridge, S. D., in shoot-off—24 and 25 to 24 and 24.)

Class 2—Geo. Gray, Philadelphia, Pa., 192.

Class 3—C. B. W. Chapman, Clarksburg, W. Va., 191. (Won from G. F. Flaherty, Mason City, Ia., in shoot-off—25 to 24).

Class 4—H. L. Thompson, Savannah, Ga., 185.

Class 5—P. C. Fletcher, Richmond, Va., 185.

Governor's Cup (High score on the 1,000 targets on the program, open to all amateurs). Won by P. R. Miller, Dallas, Texas., score 939.

The Jim Day Cup—(Aggregate high score in National Singles Championship at 200 16-yard targets; National Doubles Championship at 100 pairs and the 100 targets in the Grand American Handicap—500 targets in all.) Won by P. R. Miller, Dallas, Tex., score 456x500. Open to all amateurs.

AMATEUR STATE TRAPSHOOTING CHAMPIONS, 1922.

| STATE. | Men's Singles. | Score. | Women's Singles. | Score. | Men's Doubles. | Score. |
|---|---|---|---|---|---|---|
| Alabama | E. R. Alexander | 187 | ..... | ... | L. L. Noble | 42 |
| Arizona | Joe Steed | 189 | ..... | ... | T. L. Edens | 44 |
| Arkansas | J. E. Chatfield | 197 | Mrs. F. J. Hixon | 170 | J. E. Chatfield | 47 |
| Cal.-Nev. | H. Pfirrmann | 195 | Mrs. C. E. Groat | 175 | F. S. Bair | 47 |
| Colo.-N. Mex. | Hugh M. Smith | 198 | ..... | 160 | C. A. Gunning | 47 |
| Connecticut | Geo. E. Sivers | 193 | Mrs. J. A. Hanson | 160 | F. O. Williams | 44 |
| Delaware | E. E. du Pont | 186 | ..... | ... | L. D. Willis | 42 |
| Florida | T. J. Aycock | 195 | ..... | ... | D. A. Deen | 40 |
| Georgia | H. J. Foster | 195 | Mrs. J. C. Wright | 159 | W. H. Jones | 43 |
| Idaho | A. E. Sherman | 189 | Mrs. O. M. Jones | 145 | A. E. Sherman | 43 |
| Illinois | M. E. Jenny | 197 | Mrs. A. H. Winkler | 192 | H. E. L. Timm | 46 |
| Indiana | F. D. Thompson | 193 | Mrs. B. P. Remy | 158 | K. Jewett | 46 |
| Iowa | Geo. Nunn | 197 | ..... | ... | Jesse Booth | 46 |
| Kansas | F. J. Cairns | 197 | Mrs. F. R. Etchen | 171 | F. J. Cairns | 47 |
| Kentucky | W. Henderson | 199 | Miss G. Hobson | 159 | A. B. Harris | 48 |
| Maryland-D. C. | C. C. Fawsett | 188 | ..... | ... | H. C. Krout | 45 |
| Massachusetts | Leon H. Davis | 197 | ..... | ... | J. Clark, Jr. | 40 |
| Michigan | J. N. McLoughlin | 198 | Mrs. L. G. Vogel | 180 | G. C. Weiler | 45 |
| Minnesota | Dave Fauskee | 194 | Mrs. E. L. King | 185 | W. H. Fawcett | 46 |
| Mississippi | R. W. Baird | 192 | Mrs. J. L. Fawcett | 184 | R. E. Stratton, Jr. | 43 |
| Missouri | W. S. Dempsey | 192 | ..... | ... | H. Dixon | 43 |
| Montana | N. S. Birrer | 197 | ..... | 27 | H. O'Brien | 48 |
| Nebraska | S. C. Tappan | 196 | Mrs. W. C. Edmiston | 182 | W. H. Lemburg | 47 |
| New Hampshire | Elmer E. Reed | 189 | ..... | ... | Eugene E. Reed | 41 |
| New Jersey | M. S. Haines | 195 | Mrs. L. R. Piercy | 170 | Dr. C. J. Grauch | 44 |
| New York | F. S. Wright | 199 | Mrs. H. Harrison | 184 | W. R. Patrick | 43 |
| North Carolina | L. P. Hazel | 181 | ..... | ... | F. Washington | 36 |
| North Dakota | D. C. Rand | 191 | ..... | ... | J. W. Sturgeon | 41 |
| Ohio | Fred Harlow | 196 | Mrs. V. C. Snyder | 139 | V. C. Snyder | 48 |
| Oklahoma | W. H. Heer | 199 | Mrs. L. Foster | 165 | Gus Paine | 49 |
| Oregon | J. W. Seavey | 195 | ..... | ... | S. T. Fox | 45 |
| Pennsylvania | S. M. Crothers | 197 | Mrs. I. M. Dallmeyer | 179 | S. M. Crothers | 49 |
| Rhode Island | W. A. Barstow | 195 | Miss M. Lister | 104 | E. E. Hills | 44 |
| South Carolina | J. H. Staples | 191 | ..... | ... | A. Geilfuss | 44 |
| South Dakota | Ray Middaugh | 194 | Mrs. F. A. Bradford | 173 | A. J. French | 45 |
| Tennessee | McGarock Hayes | 192 | Mrs. E. E. Buxton | 159 | Curtis King | 42 |
| Texas | W. H. France | 199 | ..... | ... | P. R. Miller | 47 |
| Utah | S. H. Sharman | 195 | ..... | ... | C. H. Reilly | 46 |
| Vermont | D. M. Barclay | 184 | Mrs. R. Harmon | 147 | H. B. Moulton | 37 |
| Virginia | H. C. Laird | 190 | ..... | ... | H. C. Laird | 46 |
| Washington | Jack MacDonald | 197 | Mrs. D. Coolidge | 165 | F. D. Stoop | 47 |
| West Virginia | Ira Williams | 186 | ..... | ... | Dr. P. C. Showalter | 42 |
| Wisconsin | Oscar Larson | 198 | Miss H. Smith | 175 | Dr. F. S. Cook | 46 |
| Wyoming | John Evers | 197 | ..... | ... | A. C. Rice | 48 |

CANADA.

| | | | | | | |
|---|---|---|---|---|---|---|
| Alberta | Chris Irgen | 193 | ..... | ... | P. L. Williams | 42 |
| British Columbia | C. E. MacLean | 191 | ..... | ... | T. H. Oliver | 41 |
| Eastern Canada | S. J. Vance | 198 | ..... | ... | Geo. Beattie | 45 |

CANAL ZONE.

| | | | | | | |
|---|---|---|---|---|---|---|
| Canal Zone | Albert Connor | 184 | ..... | ... | A. C. Garlington | 40 |

AMATEUR ZONE TRAPSHOOTING CHAMPIONS—1922.

*SOUTHERN ZONE.*

*Men's Singles*—(200 targets, 16 yards rise)—G. H. Griffith, Memphis, Tenn. Score, 197.

*Women's Singles*—Mrs. J. L. Doggett, Clarksdale, Miss. Score, 181.

*Doubles*—(100 targets, 50 pairs)—Sam Huntley, Memphis, Tenn. 86.

*18 Yards*—(100 targets)—P. R. Earle, Starr, S. C., 99.

*Preliminary Handicap*—(100 targets, 16 to 23 yards rise)—G. W. Moody, Shreveport, La. Score 97 from 17 yards.

*Southern Handicap*—(same conditions)—J. H. White, Spartanburg, S. C., 96 from 21 yards.

*All-Round*—(600 targets)—J. H. White, Spartanburg, S. C., 560.

*Five-Man Team*—(No report.)

(NOTE—The conditions governing each separate competition were identical at each of the Zone Amateur Trapshooting Championships.

*EASTERN ZONE.*

*Men's Singles*—M. S. Haines, Mt. Holly, N. J., 197.

*Women's Singles*—Miss Alice Doerken, Paterson, N. J., 180.

*Doubles*—S. M. Crothers, Philadelphia, Pa., 94.

*18-Yards*—C. B. Platt, Bridgeton, N. J., 99.

*Preliminary Handicap*—J. R. Kafes, Trenton, N. J., 94 from 17 yards.

*Eastern Handicap*—S. S. Hoffman, Harrisburg, Pa., 93 from 18 yards.

*All-Round*—G. S. McCarty, Newfield, N. J., 558.

*Five-Man Team*—Won by Pennsylvania—(Steve Crothers, Phila., 193; C. H. Newcomb, Phila., 193; Ed. Hellyer, Jr., Alexandria, 190; J. W. Napier, McKeesport, 188; W. B. Cockran, Kennett Square, 184.) Total score, 948x1000.

*GREAT LAKES ZONE.*

*Men's Singles*—Dave Fauskee, Worthington, Minn., 197.

*Women's Singles*—Miss Harriet Smith, Milwaukee, Wis., 170.

*Doubles*—B. C. Meents, Ashkum, Ill., 86.

*18 Yards*—M. S. Hootman, Hicksville, Ohio, 98

*Preliminary Handicap*—S. L. Jenny, Highland, Ill., 94 from 23 yards.

*Great Lakes Handicap*—J. S. Frink, Worthington, Minn., 95 from 22 yards.

*All-Round*—S. L. Jenny, Highland, Ill., 556.

*Five-Man Team*—Won by Ohio—(W. A. Ewing, Dayton, 188; C. D. Coburn, Mechanicsburg, 193; M. S. Hootman, Hicksville, 194; C. A. Bogert, Sandusky, 192; B. R. Barder, Akron, 185.) Total score, 952x1000.

*PRAIRIE ZONE.*

*Men's Singles*—Wm. H. Heer, Guthrie, Okla., 199.

*Women's Singles*—Mrs. Fred R. Etchen, Coffeyville, Kans., 184.

*Doubles*—Frank Hughes, Mobridge, S. D., 98.

*18-Yards*—Gus Paine, Tulsa, Okla., 100.

*Preliminary Handicap*—Wm. Lambert, Oklahoma City, Okla., 98 from 23 yards.

*Prairie Handicap*—Guy Von Schriltz, Pittsburg, Kan., 97 from 18 yards.

*All-Round*—P. R. Miller, Dallas, Texas, 587.

*Five-Man Team*—Won by Oklahoma (W. H. Heer, Guthrie, 199; Gus Paine, Tulsa, 197; Wm. Lambert, Oklahoma City, 193; D. Hunsaker, Fairfax, 194; Geo. Lewis, Oilton, 196.) Total score, 979x1000.

*PACIFIC COAST ZONE.*

*Men's Singles*—F. M. Troeh, Vancouver, Wash., 197.

*Women's Singles*—Mrs. Gus Knight, Highland, Cal., 156.

*Doubles*—F. M. Troeh, Vancouver, Wash., 90.

*18 Yards*—J. A. Troeh, Vancouver, Wash., 98.

*Preliminary Handicap*—C. W. Hadley, Wenatchee, Wash., 94 from 19 yards.

*Pacific Coast Handicap*—J. B. Troeh, Portland, Ore., 96 from 22 yards.

*All-Round*—J. B. Troeh, Portland, Ore., 564.

*Five-Man Team*—Won by Washington (J. D. Ankeny, Walla Walla, 194; J. A. Troeh, Vancouver, 190; H. L. Petit, Chehalis, 184; T. M. Gibbons, Wenatchee, 184; F. D. Stoop, Spokane, 183. Total score, 935x1000.

## INTERNATIONAL AMATEUR ATHLETIC FEDERATION RECORDS.

The last revision of records made by I. A. A. F. was May 28, 1921. A number of records have been made since that date but cannot be officially considered as such until the International Federation accepts them at the next meeting scheduled for 1923.

WALKING.

| | | | | | |
|---|---|---|---|---|---|
| 1 mile | 6m. 25.8s | G. H. Goulding | Canada | June 4, 1910 | Canada. |
| 2 miles | 13m. 11.4s | G. E. Larner | Gt. Britain | July 13, 1904 | England. |
| 3 miles | 20m. 25.8s | G. E. Larner | Gt. Britain | Aug. 19, 1905 | England. |
| 4 miles | 27m. 14s | G. E. Larner | Gt. Britain | Aug. 19, 1905 | England. |
| 5 miles | 36m. 0.2s | G. E. Larner | Gt. Britain | Sept. 30, 1905 | England. |
| 6 miles | 43m. 26.2s | G. E. Larner | Gt. Britain | Sept. 30, 1905 | England. |
| 7 miles | 50m. 40.8s | G. H. Goulding | Canada | Oct. 23, 1915 | U. S. A. |
| 8 miles | 58m. 18.4s | G. E. Larner | Gt. Britain | Sept. 30, 1905 | England. |
| 9 miles | 1h. 7m. 37.8s | G. E. Larner | Gt. Britain | July 17, 1908 | England. |
| 10 miles | 1h. 15m. 57.4s | G. E. Larner | Gt. Britain | July 17, 1908 | England. |
| 15 miles | 1h. 59m. 12.6s | H. V. L. Ross | Gt. Britain | May 20, 1911 | England. |
| 20 miles | 2h. 47m. 52s | T. Griffith | Gt. Britain | Dec. 30, 1907 | England. |
| 25 miles | 3h. 37m. 6.8s | S. C. A. Schofield | Gt. Britain | May 20, 1911 | England. |
| 1 hour | 8 miles 438 yds | G. E. Larner | Gt. Britain | Sept. 30, 1905 | England. |
| 2 hours | 15 miles 128 yds | H. V. L. Ross | Gt. Britain | May 20, 1911 | England. |

WALKING—METRIC DISTANCES.

| | | | | | |
|---|---|---|---|---|---|
| 3,000 metres | 12m. 53.8s | G. Rasmussen | Denmark | July 7, 1918 | Denmark. |
| 5,000 metres | 21m. 59.8s | G. Rasmussen | Denmark | July 6, 1918 | Denmark. |
| 10,000 metres | 45m. 26.4s | G. Rasmussen | Denmark | Aug. 18, 1918 | Denmark. |
| 15,000 metres | 1h. 10m. 23s | G. Rasmussen | Denmark | May 9, 1918 | Denmark. |
| 20,000 metres | 1h. 39m. 22s | N. Petersen | Denmark | June 30, 1918 | Denmark. |
| 25,000 metres | 2h. 7m. 10.3s | N. Petersen | Denmark | July 6, 1919 | Denmark. |
| 1 hour | 12,975 metres | G. Rasmussen | Denmark | May 9, 1918 | Denmark. |

JUMPING.

| | | | | | |
|---|---|---|---|---|---|
| Standing high jump | 5 ft. 5 3-4 in. | L. Goehring | U. S. A. | June 14, 1913 | ..... |
| Running high jump | 6 ft. 7 5-16 in. | E. Beeson | U. S. A. | July 2, 1914 | U. S. A. |
| Standing broad jump | 11 ft. 4 7-8 in. | R. C. Ewry | U. S. A. | Aug. 29, 1904 | ..... |
| Running broad jump | 24 ft. 11 3-4 in. | P. O'Connor | Gt. Britain | Aug. 5, 1901 | ..... |
| Running hop, step and jump | 50 ft. 11 in. | D. F. Ahearn | U. S. A. | July 31, 1909 | U. S. A. |
| Pole vault | 13 ft. 5 in. (4.09m) | F. K. Foss | U. S. A. | Aug. 20, 1920 | Belgium. |

WEIGHT EVENTS.

| EVENT. | Time or Measurement. | Holder. | Nation. | Date. | Place. |
|---|---|---|---|---|---|
| Putting 16-lb. weight | 51 ft. | R. Rose | U. S. A. | Aug. 21, 1909 | U. S. A. |
| Right hand...50 ft. 6 in. / Left hand...41 ft. 4.5 in. | 91 ft. 10.5 in. | R. Rose | U. S. A. | June 2, 1912 | U. S. A. |
| Throwng 16-lb. hammer | 189 ft. 6.5 in. | P. Ryan | U. S. A. | Aug. 17, 1913 | U. S. A. |
| Throwing 56-lb. weight | 40 ft. 6 3-8 in. | M. McGrath | U. S. A. | Sept. 23. 1911 | U. S. A. |

## RUNNING.

| Event. | Time or Measurement. | Holder. | Nation. | Date. | Place. |
|---|---|---|---|---|---|
| 100 yards | 9.6s | D. J. Kelly | U. S. A. | June 23, 1906 | U. S. A. |
| | | H. P. Drew | U. S. A. | Mar. 28, 1914 | U. S. A. |
| 220 yards | 21.2s | B. J. Wefers | U. S. A. | May 30, 1896 | U. S. A. |
| | | R. C. Craig | U. S. A. | May 28, 1910 | U. S. A. |
| | | D. F. Lippincott | U. S. A. | May 31, 1913 | U. S. A. |
| | | H. P. Drew | U. S. A. | Feb. 28, 1914 | U. S. A. |
| | | Geo. Parker | U. S. A. | Oct. 2, 1914 | U. S. A. |
| 300 yards | 30.6s | B. J. Wefers | U. S. A. | Sept. 26, 1896 | U. S. A. |
| 440 yards | 47.4s | J. E. Meredith | U. S. A. | Oct. 27, 1916 | U. S. A. |
| 600 yards | 1m. 10.8s | M. W. Sheppard | U. S. A. | Aug. 14, 1910 | U. S. A. |
| 880 yards | 1m. 52.2s | J. E. Meredith | U. S. A. | May 13, 1916 | U. S. A. |
| 1,000 yards | 2m. 12.4s | M. W. Sheppard | U. S. A. | July 17, 1910 | U. S. A. |
| 1,320 yards | 3m. 2.8s | T. P. Conneff | U. S. A. | Aug. 21, 1895 | U. S. A. |
| 1 mile | 4m. 12.6s | N. S. Taber | U. S. A. | July 16, 1916 | U. S. A. |
| 2 miles | 9m. 9.6s | A. Shrubb | Gt. Britain | June 11, 1904 | England. |
| 3 miles | 14m. 17.6s | A. Shrubb | Gt. Britain | May 21, 1903 | England. |
| 4 miles | 19m. 23.4s | A. Shrubb | Gt. Britain | June 13, 1904 | England. |
| 5 miles | 24m. 33.4s | A. Shrubb | Gt. Britain | May 12, 1904 | England. |
| 6 miles | 29m. 59.4s | A. Shrubb | Gt. Britain | Nov. 5, 1904 | England. |
| 7 miles | 35m. 4.6s | A. Shrubb | Gt. Britain | Nov. 5, 1904 | England. |
| 8 miles | 40m. 16s | A. Shrubb | Gt. Britain | Nov. 5, 1904 | England. |
| 9 miles | 45m. 27.6s | A. Shrubb | Gt. Britain | Nov. 5, 1904 | England. |
| 10 miles | 50m. 40.6s | A. Shrubb | Gt. Britain | Nov. 5, 1904 | England. |
| 15 miles | 1h. 20m. 4.4s | F. Appleby | Gt. Britain | July 21, 1902 | England. |
| 20 miles | 1h. 51m. 54s | G. Crossland | Gt. Britain | Sept. 22, 1894 | England. |
| 25 miles | 2h. 29m. 29.4s | H. Green | Gt. Britain | May 12, 1913 | England. |
| 1 hour | 11 miles, 1,442 yds. | J. Bouin | France | July 6, 1913 | France. |
| 2 hours | 20 miles, 952 yds. | H. Green | Gt. Britain | May 12, 1913 | England. |

## RUNNING—METRIC DISTANCES.

| | | | | | |
|---|---|---|---|---|---|
| 100 metres | 10.6s | D. F. Lippincott | U. S. A. | July 6, 1912 | Sweden. |
| | | J. V. Scholz | U. S. A. | Sept. 6, 1920 | Sweden. |
| 200 metres | 21.6s | A. Hahn | U. S. A. | Aug. 31, 1904 | U. S. A. |
| 300 metres | 35.8s | A. Kuffchinoeff | Finland | Sept. 26, 1920 | Finland. |
| 400 metres | 48.2s | C. D. Reidpath | U. S. A. | July 13, 1912 | Sweden. |
| 500 metres | 1m. 5 8s | M. Dalvert | France | Oct. 16, 1920 | France. |
| 800 metres | 1m. 51.9s | J. E. Meredith | U. S. A. | July 8, 1912 | Sweden. |
| 1,000 metres | 2m. 29.1s | A. Bolin | Sweden | Sept. 22, 1918 | Sweden. |
| 1,500 metres | 3m. 54.7s | J. Zander | Sweden | Aug. 5, 1917 | Sweden. |
| 2,000 metres | 5m. 30.4s | J. Zander | Sweden | June 16, 1918 | Sweden. |
| 3,000 metres | 8m. 33.1s | J. Zander | Sweden | Aug. 7, 1918 | Sweden. |
| 5,000 metres | 14m. 36.6s | H. Kolehmainen | Finland | July 10, 1912 | Sweden. |
| 10,000 metres | 30m. 58.8s | J. Bouin | France | 1913 | France. |
| 15 kilometres | 47m. 18 6s | J. Bouin | France | 1913 | France. |
| 20 kilometres | 1h. 7m. 40.2s | T. Kolehmainen | Finland | May 18, 1913 | Finland. |
| 25 kilometres | 1h. 26m. 29.6s | H. Kolehmainen | Finland | Oct. 10, 1920 | Finland. |
| 30 kilometres | 1h. 48m. 6.2s | A. Stenroos | Finland | Sept. 26, 1917 | Finland. |
| 1 hour | 19,021 met. 90 cm. | J. Bouin | France | 1913 | France. |

## THROWING DISCUS.

| | | | | | |
|---|---|---|---|---|---|
| 8 1-2 ft. circle | 156 ft. 1 3-8 in | J. Duncan | U. S. A. | May 27, 1912 | U. S. A. |
| Right hand 45.57m. | 90.13m | E. Nicklander | Finland | 1913 | Finland. |
| Left hand 44.56m. | | | | | |

## THROWING JAVELIN.

| | | | | | |
|---|---|---|---|---|---|
| Best hand | 66.10 metres | J. Myyra | Finland | Aug. 25, 1919 | Sweden. |
| Right hand | 114.20m | Y. Hackner | Sweden | Sept. 30, 1917 | |
| Left hand | | | | | |

## HURDLES (10 HURDLES).

| | | | | | |
|---|---|---|---|---|---|
| 120 yds. (hurdles 3 ft. 6 in.) | 14.4s | E. J. Thomson | Canada | May 29, 1920 | U. S. A. |
| 220 yds. (hurdles 2 ft. 6 in.) | 23.6s | A. Kraenzlein | U. S. A. | May 28, 1898 | U. S. A. |
| | | T. J. Wendell | U. S. A. | May 31, 1913 | U. S. A. |
| | | R. Simpson | U. S. A. | May 27, 1916 | U. S. A. |
| 440 yds. (hurdles 3 ft.) | 54.2s | J. K. Norton | U. S. A. | June 26, 1920 | U. S. A. |

## HURDLES—METRIC DISTANCES (10 HURDLES).

| | | | | | |
|---|---|---|---|---|---|
| 110 metres (hurdles 1.07m) | 14.8s | E. J. Thomson | Canada | Aug. 18, 1920 | Belgium. |
| 200 metres (hurdles 1.07m) | 24.6s | H. L. Hillman | U. S. A. | Sept. 1, 1904 | |
| 400 metres (hurdles 1.07m) | 54s | F. F. Loomis | U. S. A. | Aug. 16, 1920 | Belgium. |

## RELAY RACES.

| Event. | Time. | Holders. | Nation. | Date. | Place. |
|---|---|---|---|---|---|
| 440 yards | 42.8s | S. Landers, F. J. Davis, W. C. Haymond, E. Smith | U. S. A. | June 7, 1919 | U. S. A. |
| 880 yards | 1m. 27.8s | S. Landers, F. J. Davis, W. C. Haymond, E. Smith | U. S. A. | June 7, 1919 | U. S. A. |
| 1 mile | 3m. 18s | F. C. Kaufman, J. Lockwood, D. F. Lippincott, J. E. Meredith | U. S. A. | April 24, 1915 | U. S. A. |
| 2 miles | 7m. 50.4s | W. G. Taitt, H. B. Stallard, W. R. Milligan, B. G. D. Rudd | Achilles Club, England | May 1, 1920 | U. S. A. |
| 4 miles | 17m. 51.2s | G. Taylor, J. Hoffmire, V. L. Windnagle, D. F. Potter | U. S. A. | April 29, 1916 | U. S. A. |
| | | H. F. Mahoney, F. R. Marceau, J. Powers, O. Hedlund | U. S. A. | June 17, 1913 | U. S. A. |

## RELAY RACES—METRIC DISTANCES.

| | | | | | |
|---|---|---|---|---|---|
| 400 metres | 42.2s | J. V. Scholz, L. Murchison, M. M. Kirksey, C. W. Paddock | U. S. A. | Aug. 22, 1920 | Belgium. |
| 800 metres | 1m. 27s | S. Landers, F. J. Davis, W. C. Haymond, E. Smith | U. S. A. | June 7, 1919 | U. S. A. |
| 1,600 metres | 3m. 16.6s | M. Sheppard, C. D. Reidpath, J. E. Meredith, Lindberg | U. S. A. | July 15, 1912 | Sweden. |
| 5,000 metres | 16m. 40.2s | T. K. Gota | Sweden | Aug. 12, 1919 | Sweden. |

## NATIONAL TRACK AND FIELD CHAMPIONSHIPS.

AMATEUR Athletic Union Senior Championships (outdoor), held under auspices Newark A. C., Newark, N. J., Sept. 9. Results: Track Events. *100-Yard Dash*—Won by Robert McAllister, unattached, New York; J. A. Leconey, Meadowbrook, Philadelphia, second; Edward Farrell, New York A. C., third; William D. Hayes, Boston A. A., fourth. Time—10s. *220-Yard Run*—Won by J. A. Leconey, Meadowbrook, Philadelphia; Herald Jones, Illinois A. C., second; William D. Hayes, Boston A. A., third; Loren Murchison, Illinois A. C., fourth. Time—22 1-10s. *440-Yard Run*—Won by J. W. Driscoll, Boston A. A.; William E. Stevenson, New York A. C., second; E. S. Dudley, Jr., Boston A. A., third; Phil Spink, Chicago A. A., fourth. Time—49 9-10s. *120-Yard High Hurdles*—Won by Earl Thomson, Los Angeles A. C.; Carl Anderson, Illinois A. C., second; S. Harrison Thompson, Princeton, third; Harold A. Crawford, University of Iowa, fourth. Time—15 3-10s. *220-Yard Hurdles*—Won by J. C. Taylor, New York A. C.; Carl Anderson, Illinois A. C., second; Charles E. Brookins, University of Iowa, third; Otto Anderson, Los Angeles A. C., fourth. Time—24 6-10s. *440-Yard Hurdles*—Won by Joseph Hall, Chicago A. A., De Gay Ernst, Illinois A. C., second; G. B. Stolley, Illinois A. C., third; Walter Gegan, New York A. C., fourth. Time—56 1-10s. *880-Yard Run*—Won by Allan B. Helffrich, New York A. C.; Thomas Campbell, Yale, second; Joie Ray, Illinois A. C., third; Michael Devaney, Millrose A. C., New York, fourth. Time—1m. 56 3-10s *One-Mile Run*—Won by Joie Ray, Illinois A. C.; J. Connolly, Boston A. A., second; R. F. Wharton, Chicago A. A., third; Ray B. Watson, Kansas City A. C., fourth. Time—4m. 17s. *Five-Mile Run*—Won by R. Earl Johnson, Pittsburgh; William Ritola, Finnish-American A. C., second; Lloyd Rathburn, Winner, S. D., third; James P. Henningham, Dorchester, Mass., fourth. Time—25m. 33s. *Three-Mile Walk*—Won by William Plant, Morningside A. C., New York; Joseph B. Pearman, New York A. C., second; Myles Joyce, North Tonawanda, N. Y., third; Charles Foster, Detroit Y. M. C. A., fourth. Time—21m. 50 1-10s. (new championship record). Former record, 21m. 50 1-5s, set by G. H. Goulding, Toronto Y. M. C. A., in 1917.

Field Events. *Running Broad Jump*—Won by Dehart Hubbard, unattached, Cincinnati, 24 ft. 5 1-8 in.; E. O. Gourdin, Boston, 23 ft. 11¾ in., second; Sol Butler, unattached, New York, 23 ft. 7 5-8 in., third; Albert Rose, Meadowbrook, Philadelphia, 22 ft. 11½ in., fourth. *Putting 16-lb. Shot*—Won by Patrick J. McDonald, New York A. C., 46 ft. 11 7-8 in.; Ralph G. Hills, Princeton, 46 ft. 7¼ in., second; O. Wanzer, New York A. C., 46 ft. 1-3 in., third; Clarence Houser, Los Angeles A. C., 45 ft. 4 1-8 in., fourth. *Throwing 16-lb. Hammer*—Won by M. J. McGrath, New York A. C., 155 ft. 9 in.; C. G. Dandrow, Boston A. A., 152 ft. 7¼ in., third; F. D. Tootell, Boston A. A., 151 ft. 8½ in., fourth. *Running High Jump*—Won by D. V. Alberts, Chicago A. A., 6 ft. 5 1-8 in.; Harold Osborne, Illinois A. C., 6 ft. 5 1-8 in., second; Leroy Brown, New York A. C., 6 ft. 1 in., third; R. W. Landon, New York A. C., 6 ft., fourth. Alberts won in jump-off after tie. *Throwing 56-lb. Weight*—Won by M. J. McGrath, New York A. C., 35 ft. 10 in.; Patrick J. McDonald, New York A. C., 34 ft. 11⅛ in., second; Capt. Edward R. Roberts, U. S. A., Fort Myer, 31 ft. 11 1-8 in., third; H. C. Blackwood, Chicago A. A., 31 ft. 6¼ in., fourth. *Running Hop, Step and Jump*—Won by Dehart Hubbard, Cincinnati, 48 ft. 1½ in.; Harold Osborne, Illinois A. C., 46 ft. 9¼ in., second; A. J. Plansky, Boston K. C., 45 ft. 10½ in., third; Herbert Prem, Baltimore Cross-Country Club, 44 ft. 8¼ in., fourth. The jumps of both Alberts and Osborne made a new championship record; the former record, 6 ft. 4¼ in., having been made by J. Murphy, of Notre Dame. *Throwing the Discus*—Won by A. R. Pope, Portland, Ore., 145 ft. 11 in.; Clarence Houser, Los Angeles A. C., 141 ft. 5½ in., second; Thomas Lieb, Notre Dame, 137 ft. 7 in., third; C. B. Ashton, New York A. C., 135 ft. 5¼ in., fourth. *Pole Vault*—Won by Ed. Knourek, Illinois A. C., 13 ft.; Ralph Spearrow, Portland, Ore., 13 ft., second; E. E. Meyers, Chicago A. A., 12 ft., third; Richard Emmons, Los Angeles A. C., 12 ft., fourth. Knourek defeated Spearrow on vault-off; Meyers defeated Emmons on vault-off. *Throwing the Javelin*—Won by Flint Hanner, Los Angeles A. C., distance 193 ft. 2¼ in.; H. Hoffman, Illinois A. C., distance 183 ft. 4 in., second; Racine Thompson, Illinois A. C., distance, 167 ft. 10¼ in., third; Joe Butler, Baton Rouge (La.) A. C., distance, 165 ft. 3½ in., fourth. New championship record. Former mark, 192 ft. 10¾ in., by M. S. Angier, Illinois A. C., in 1920.

Amateur Athletic Union Junior Championships, held under auspices Newark A. C., Newark, N. J., Sept. 8. Results: Track Events. *100-Yard Dash*—Won by Robert McAllister, unattached, New York; L. Clarke, Baltimore Cross-Country Club, second; Royal Welch, Bridgeport A. C., third; Carl Altmaier, Meadowbrook Club, Philadelphia, fourth. Time—10 1-10s. *220-Yard Run*—Won by L. Clarke, Baltimore Cross-Country Club; J. W. Fuller, Montreal A. A., second; R. Wol., Newark A. C., third; L. Hallock, Newark A. C., fourth. Time—22 6-10s. *440-Yard Run*—Won by Douglas Fessenden, unattached, Onawa, Iowa; William Farley, Loughlin Lyceum, Brooklyn, second; A. Woostroff, Newark A. C., third; H. Boettischer, Newark A. C., fourth. Time—52 2-10s. *120-Yard High Hurdles*—Won by Harold A. Crawford, University of Iowa; Harold E. Parent, Meadowbrook Club, Philadelphia, second; G. McDonough, Baltimore Cross-Country Club, third; Tom Farrell, Newark A. C., fourth. Time—15 9-10s. *220-Yard Low Hurdles*—Won by H. Meyer, Newark A. C.; J. P. Sullivan, Boston A. A., second; Harold Parent, Meadowbrook Club, Philadelphia, third; G. McDonough, Baltimore Cross-Country Club, fourth. Time—26s. *440-Yard Hurdles*—Won by Walter Gegan, New York A. C.; Y. Chittick, Newark A. C., second; A. Dolder, New York A. C., third; J. Hunicke, Newark A. C., fourth. Time—57 6-10s. *880-Yard Run*—Won by G. M. Marsters, Boston A. A.; John Herr, Meadowbrook, Philadelphia, second; G. B. Noll, Iowa University, third; M. Perkins, Baltimore Cross-Country Club, fourth. Time—2m. 5 1-10s. *One Mile Run*—Won by W. J. Spencer, Mississippi A. and M. College; William R. Sullivan, unattached, New York, second; Edward Kirby, Newark A. C., third; B. Booth, Baltimore Cross-Country Club, fourth. Time—4m. 27 9-10s. *Three-Mile Walk*—Won by Charles Foster, Detroit Y. M. C. A.; Morris Greenberg, Pastime A. C., New York, second; Harry R. Henkle, New York, unattached, third; Mark Hanna, Indianapolis A. C., fourth. Time—23m. 39 3-5s. (new championship record). Former record, 23m. 57s., made by L. Labowitz, Pastime A. C., New York, 1918. *Five-Mile Run*—Won by Ilmar Prim, Finnish-American A. C., New York; Marion Rock, New York A. C., second; Grover C. Caughey, Pittsburgh A. A., third; H. Ackerman, New York A. C., fourth. Time—26m. 29 3-5s.

Field Events. *High Jump*—Won by B. P. Chamberlin, Baltimore Cross-Country Club, 6 ft. 1 in.; Carlos Figueroa, unattached, New York, second; Sidney Needs, Meadowbrook, Philadelphia, third; H. Bigelow, unattached, New York, fourth. *Running Broad Jump*—Won by Dehart Hubbard, Cincinnati Gymnasium and A. C., 24 ft. 3½ in.; A. Dowding, Illinois A. C., 23 ft. 6 in., second; Albert Rose, Meadowbrook Club, Philadelphia, 22 ft. 6½ in., third; James Bannon, Shanahan C. C., Philadelphia, 21 ft. 7 in., fourth. (New championship record). Former record, 23 ft. 1 in., made by H. T. Worthington, Boston A. A., in 1914. *Hop, Step and Jump*—Won by A. J. Plansky, Knights of Columbus, Boston, 46 ft. 9 3-8 in.; Leroy Ward, unattached, New Orleans, 44 ft. 9¾ in., second; W. Rosenburg, unattached, New York, 42 ft. 9 1-8 in., third; Albert Rose, Meadowbrook, Philadelphia, 42 ft. 8¾ in., fourth. (New championship record). Former record, 46 ft. 7½ in., made by K. Geist, Y. M. H. A., New York, in 1920. *Throwing Discus*—Won by Charles Ashton, New York A. C., 132 ft. 9 in.; E. J. Weatherdon, New York A. C., 131 ft. 11½ in., second; J. Anderson, Los Angeles A. C., 124 ft., third; Capt. Edward R. Roberts, U. S. A., Fort Myer, 118 ft. 3 in., fourth. *Pole Vault*—Won by A. Reich, Young Men's Club, Detroit, with 12 ft.; Sidney Needs, Meadowbrook Club, Philadelphia, 11 ft. 6 in., second; N. Atkinson, New York A. C., 11 ft. 6 in., third; E. Aaronson, Baltimore Cross-Country Club, 11 ft., fourth. *Putting 16-lb. Shot*—Won by Otto Wanzer, New York A. C., with 45 ft.; Norman Anderson, Los Angeles A. C., 43 ft. 6½ in., second; H. Van Orden, unattached, Ann Arbor, Mich., 41 ft. 8¾ in., third; Homer Hazel, Newark A. C., 40 ft. 2¾ in., fourth. *Throwing 16-lb. Hammer*—Won by F. D. Tootell, Boston A. A., with 158 ft. 9¾ in.; Harvey Emery, Princeton University, 140 ft. 4 in., second; Capt. E. R. Roberts, U. S. Army, Fort Myer, Va., 134 ft. 6½ in., third; B. F. Sherman, unattached, New York, 126 ft. 2¾ in., fourth. *Throwing 56-lb. Weight*—Won by Capt. E. R. Roberts, U. S. Army, Fort Myer, Va., with 31 ft. 7 7-8 in.; Patrick Flynn, Pastime A. C., New York, 26 ft. 11½ in., second; Patrick O'Connor, Pastime A. C., New York, 26 ft. 7¾ in., third; B. F. Sherman, unattached, New York, 24 ft. 10 5-8 n., fourth. *Throwing the Javelin*—Won by Joseph Butler, Baton Rouge (La.) A. C., with 169 ft. 9 in.; Benjamin Lingefelter, Drake University, Des Moines, Iowa, 165 ft. 2 in., second; Waino Tirri, Boston A. A., 163 ft. 8 in., third; J. Franklin Styer, Meadowbrook Club, Philadelphia, 156 ft. 4½ in., fourth.

Amateur Athletic Union Relay Championships, held at Newark, N. J., Sept. 11. Results: *440-Yard Relay*—Won by New York A. C. (B. J. Wefers, Jr., Fred Lovejoy, J. C. Taylor and Edward Farrell); Meadowbrook Club, Philadelphia (J. A. Leconey, C. Altmaier, Dewey Rodgers and Allan Woodring), second; Illinois A. C., Chicago (Loren Murchison, K. Anderson, P. Jones and D. Jones), third. Time—43 3-10s. *880-Yard Relay*—Won by Meadowbrook Club, Philadelphia (J. A. Leconey, Allan Woodring, Dewey Rodgers and A. Altmaier); New York A. C. (B. J. Wefers, Jr., Fred Lovejoy, J. C. Taylor and Edward Farrell), second; Illinois A. C., Chicago (K. Anderson, Loren Murchison, D. Jones and P. Jones), third. Time—1m. 29s. *One-Mile Relay*—Won by New York A. C. (B. J. Wefers, Jr., J. C. Taylor, Allan Helffrich and William Stevenson); Boston A. A. (E. S. Dudle, Jr., P. M. Dillow, H. H. Hile and J. W. Driscoll), second; Newark A. C. (H. Boettischer, A. Woostroff, Y. Chittick and H. Ray), third; Loughlin Lyceum, Brooklyn (James J. O'Brien, Thomas Foget, M. Foget and William Farley) fourth. Time—3m. 21s. *Two-Mile Relay*—Won by New York A. C. (J. R. Sellers, Joseph Higgins, R. Malone and Allan Helffrich); Boston A. A. (E. S. Dudley, Jr., C. M. Marsters, A. T. Kirley and J. J. Connolly), second; Chicago A. C. (A. Gustafson, H. N. Yates, R. F. Wharton and Phil Spink), third. Time—7m. 57 4-10s. *Four-Mile Relay*—Won by Boston A. A. (R. E. Brown, A. T. Kirley, J. M. Marsters and J. J. Connolly); New York A. C. (Walter Higgins, Al Hulsenbeck, W. M. Thompson and Sid Leslie), second; Newark A. C. (H. Stewart, G. Douglas, L. Austin and E. Kirby), third. Time—18m. 42s.

Amateur Athletic Union Decathlon Championship, held at Newark, N. J., Sept. 11. Results: Competitors: S. Harrison Thomson, Illinois A. C., Chicago; Andrew M. Lockett, Jr., Columbia University; Harold M. Osborne, Illinois A. C., Chicago; Lieut. Eugene L. Vidal, unattached, West Point; Victor Naegeli, Union Club, Hutchinson, Minn.; Frank J. Daley, Stamford A. A.; Thomas Rector, Stamford A. A.; Joseph Shevlin, Knights of St. Antony, Brooklyn, and Joseph Butler, Baton Rouge (La.) A. C. Point Scores: S. H. Thomson, 6,892.-57; H. M. Osborne, 6,796.26; Lieut. E. L. Vidal, 6,466.30; V. Naegeli, 6,254.32; A. M. Lockett, Jr., 4,999.92; J. Shevlin, 4,466.76; T. Rector, 4,430.11; F. J. Daley, 3,464.26.

Results and points scored in ten individual events: *100-Metre Dash*—Won by Thomson, 11 6-10s. (762 points); Vidal, 12s. (666.81 points), and Naegeli, 12s. (666.81 points), tied for second; Osborne, 12 2-10s. (619.20 points), fourth; Rector, 12 4-10s. (571.60 points), and Butler, 12 4-10s. (571.60 points), tied for fifth; Daley, 12 6-10s. (524 points), seventh; Lockett, 12 7-10s. (520.20 points), eighth. Shevlin did not appear in time for competition. *Running Broad Jump*—Won by Osborne, with 21 ft. 11 5-8 in. (778.52 points); Thomson, 21 ft. 5 1-8 in. (738.83 points), second; Naegeli, 21 ft. (706 points), third; Vidal, 20 ft. 10 in. (693.75 points), fourth; Shevlin, 19 ft. 9 7-8 in. (617.8 points), fifth; Lockett, 19 ft. 9 5-8 in. (617.04 points), sixth; Rector, 19 ft. 2 1-8 in. (570.51 points), seventh; Butler, 19 ft. 1 1-8 in. (563.9 points), eighth; Daley, 18 ft. 3¾ in. (505.1 points), ninth. *Putting 16-lb. Shot*—Won by Thomson, with 40 ft. 11 in. (713 points); Butler, 36 ft. 9 in. (586 points), second; Osborne, 36 ft. 8½ in. (585 points), third; Vidal, 35 ft. 6 in. (548 points), fourth; Naegeli, 35 ft. 3 in. (541 points), fifth; Rector, 30 ft. 6 in. (396 points), sixth; Shevlin, 28 ft. 9 in. (343 points), seventh; Daley, 28 ft. 3 in. (327 points), eighth; Lockett, 27 ft. 5¼ in. (303 points) ninth. *Running High Jump*—Won by Osborne, with 6 ft. 2¼ in. (938 points); Thomson, 6 ft. ¼ in. (868 points), second; Lockett, 5 ft. 9¼ in. (762 points), and Vidal, 5 ft. 9¼ in. (762 points), tied for third; Naegeli, 5 ft. 7¼ in. (687.80 points), fifth; Rector, 5 ft. 5½ in. (627.60 points), and Shevlin, 5 ft. 5½ in. (627.60 points), tied for sixth; Butler, 5 ft. 1 in. (468 points), eighth; Daley, 4 ft. 11¾ in. (426 points), ninth. *440-Metre Run*—Won by Naegeli, 54s. (781.92 points); Osborne, 55 9-10s. (710.48 points), second; Vidal, 56 1-10s. (702.90 points), third; Rector, 56 3-10s. (695.44 points), fourth; Daley, 56 5-10s. (687.92 points), fifth; Shevlin, 56 6-10s. (684.16 points), sixth; Thomson, 56 8-10s. (676.64 points), seventh; Lockett, 57 2-10s. (661.60 points), eighth; Butler, 58 5-10s. (612.72 points), ninth. *110-Metre Hurdle Race*—Won by Thomson, 16 1-10s. (895.50 points); Osborne, 16 7-10s. (838.50 points), second; Vidal, 17 1-10s. (800.50 points), third; Naegeli, 18s. (715 points), fourth; Lockett, 18 1-10s. (705.50 points), fifth; Shevlin, 19 2-10s. (601 points), sixth; Rector, 20s. (526 points), seventh; Daley, 22 2-10s. (316 points), eighth. *Throwing of Discus*—Won by Thomson, with 118 ft. 4½ in. (652.95 points); Vidal, 116 ft. 7-8 in. (626.35 points), second; Osborne, 108 ft. 8½ in. (541.69 points), third; Naegeli, 95 ft. (382.39 points), fourth; Daley, 92 ft. 1¼ in. (349.82 points), fifth; Shevlin, 84 ft. (255 points), sixth; Rector, 80 ft. 4 in. (213.71 points), seventh; Lockett, 76 ft. 6½ in. (168.52 points), eighth. *Pole Vault*—Vidal, with 11 ft. (680 points), and Naegeli, with 11 ft. (680 points), tied for first; Osborne, 10 ft. 6 in. (595 points), third; Lockett, 10 ft. (514 points), and Thomson, 10 ft. (514 points), tied for fourth, fifth and sixth; Shevlin, 9 ft. 2 in. (433 points), seventh; Daley, 8 ft. (182 points), eighth. *Throwing the Javelin*—Won by Osborne, with 140 ft. 11¼ in. (503.075 points); Naegeli, 135 ft. 8½ in. (460.212 points), second; Thomson, 133 ft. 5¾ in. (440.65 points), third; Vidal, 121 ft. 7 in. (341.65 points), fourth; Shevlin, 121 ft. 4½ in. (339 points), fifth; Lockett, 108 ft. 1 in. (228.262 points), sixth; Daley, 98 ft. 1 in. (146.42 points), seventh; Rector, 84 ft. 5 in. (32.25 points), eighth. *1,500 Metre-Run*—Won by Osborne, 4m. 49s. (686.9 points); Vidal, 4m. 56 1-10s. (644.2 points), second; Naegeli, 4m. 57 9-10s. (632.2 points), third; Thomson, 4m. 58 3-10s (631 points), fourth; Shevlin, 5m. 9 1-10s. (566.2 points), fifth; Lockett, 5m. 13 5-10s. (539.8 points), sixth; Rector, 5m. 55 8-10s. (284 points), seventh; Daley did not finish.

National Amateur Athletic Union Junior Indoor Championships, held at New York City, March 4. Results: *70-Yard High Hurdles*—Won by A. Hulman, Jr., Yale; Richard Oram, Union College, second; A. P. Roberts, N. Y. A. C., third; Ellis Boynton, N. Y. U., fourth. Time—9 3-5s. *60-Yard Dash*—Won by J. A. Le Coney, Lafayette College; T. Wood, St. Christopher's Club, second; Victor Graeb, Columbia, third; J. N. Lewis, Columbia, fourth. Time—6 3-5s. *1,000-Yard Run*—Won by Malcolm K. Douglas, Yale; W. M. Parker, St. Christopher's Club, second; Fred W. Hilles, Yale, third; W. E. Boettcher, Lafayette, fourth. Time—2m. 18 3-5s. *16-Pound Shot-Put*—Won by Robert W. Beattie, Princeton, 39 ft. 7 in.; Joseph Arneth, Paulist A. C., 36 ft. 7½ in., second. *Standing Broad Jump*—Won by P. Pendleton, Alpha P. C. C., 9 ft. 5¼ in.; J. N. Lewis, Columbia, 9 ft. 4½ in., second; J. H. Vickers, unattached, 9 ft. 3½ in., third; Theodore Vosburger, Ascension A. C., 9 ft. 1½ in., fourth. *Two-Mile Run*—Won by Edward Jetters, Buffalo; Andrew Craw, unattached, second; William Ritter, Jr., Meadowbrook Club, third; Arthur Cassot, Glencoe A. C., fourth. Time—9m. 42 4-5s. *600-Yard Run*—Won by Vincent Lally, St. Anselm's Club, C. Scherman, St. Christopher's Club, second; M. T. Bohannon, University of Virginia, third; Thomas Brodhead, Colgate, fourth. Time—1m. 16 4-5s. *One-Mile Walk*—Won by W. Von Bargen, Morningside A. C.; Michael Fekeet, unattached, second; Irving Boskin, American Walkers, third; Morris Greenberg, Pastime A. C., fourth. T me—7m. 16 2-5s. *800-Yard Run*—Won by Ellis Perlman, New York University; R. Georgi, N. Y. A. C., second; James S. Dorsey, Meadowbrook Club, Philadelphia, third; W. F. Downey, Paulist A. C. fourth. Time—35s. *Running High Jump*—Won by A. B. Abromet, unattached, 6 ft.; Harry Troup, Princeton, 5 ft. 10 in., second; B. Proctor, Jr., Mount St. Joseph, 5 ft. 9 in., third; Frank Boyd, Lincoln University, 5 ft. 8 in., fourth. *One-and-Seven-Eighths-Mile Medley Relay*—Won by Princeton University (J. C. Taylor, R. M. McKim, R. E. Johnson, S. C. Conger); Loughlin Lyceum (Philip Houser, Edward Faith, E. Swensen, M. Leslie), second; Morningside A. C. (A. Peters, J. Bohling, W. Feldstein, Arthur Treble), third. Time—8m. 6 2-5s. *600-Yard Run*—Won by Vincent Lally, St. Anselm's A. C.; Clarence Sherman, St. Christopher's Club, second; M. T. Bohannon, University of Virginia, third; Thomas Brodhead, Colgate, fourth. Time—1m. 16 4-5s. *Standing High Jump*—Won by S. R. Smith, unattached, 4 ft. 9 in.; Joe Smutney, Sokol Gymnasium, 4 ft. 8 in., second; J. H. Vickers, unattached, 4 ft. 7 in., third.

National Amateur Athletic Union Senior Indoor Championships, held at Buffalo, N. Y., Feb. 11. Results: *Running High Jump*—Won by L. T. Brown, Dartmouth College, 6 ft.; Richmond W. Landon, New York A. C., 5 ft. 10 in., second; C. E. Jacquith, Illinois A. C., 5 ft. 8 in., third. *60-Yard Run*—Won by Loren Murchison, Illinois A. C.; H. B. Lever, University of Pennsylvania, second; Bernie Wefers, Jr., New York A. C., third; J. W. Kelly, Carnegie Tech., fourth. Time—6 2-5s. (Equals championship and American record.) *Putting 16-lb. Shot*—Won by Ralph Hi is, Princeton, distance 46 ft. 10 3-8 in.; O. Wanzer, New York A. C., 44 ft. 6 1-8 in., second; Douglas C. Sinclaire, Meadowbrook A. C., 43 ft. 3½ in., third. *1,000-Yard Run* (4½ laps)—Won by H. C. Cutbill, Boston A. A.; Larry Shields, Penn State, second; Dale W. Ray, Illinois A. C., third. T me—2m. 13 2-5s (equals American record). *70-Yard High Hurdles*—Won by Harold Barron, Penn State; W. E. Massy, Princeton, second; Ralph Hills, Princeton, third. Time, 9 1-5s. *600-Yard Run* (2 2-3 laps)—Won by Sidney Leslie, New York A. C.; Melvin J.

Suttner, Syracuse University, second; Allen S. Monie, Syracuse University, third; Lawrence C. Butler, Illinois A. C., fourth. Time—1m. 14 4-5s. *Two-Mile Run* (16 laps)—Won by J. Romig, Penn State; R. Earl Johnston, Pittsburgh, second; E. O. McLane, University of Penn., third; Bramwell French, fourth. Time—9m. 21 ⅕s. *300-Yard Run*—Won by Allen Woodring, Syracuse University; Loren Murchison, Illinois A. C., second; Bernie Wefers, New York A. C., third. Time—31 1-5s. (new American record). *Standing Broad Jump*—Won by W. Irving Reid, Brown University, 10 ft. 8¼ in.; Ed. Eames, New York A. C., 10 ft. 6¼ in.; second; Edward Berquist, Mohawk A. C., 9 ft. 11 in., third. *Standing High Jump*—Won by Ed. Eames, New York A. C., height 5 ft. 1 in.; Ted Clark, New York A. C., 4 ft. 11¾ in., second; W. Irving Reid, Brown University, 4 ft. 11¼ in., third; C. E. Jacquith, Illinois A. C., 4 ft. 10 in., fourth. *One-Mile Walk*—Won by William Plant, Morningside A. C.; Joe Pearman, New York A. C., second; William Rolker, New York A. C., third; Charles H. Barnes, West End Y. M. C. A., Toronto, fourth. Time—6m. 40 3-5s. *One-and-Seven-Eighths-Mile Medley Relay Race*—Won by Georgetown University (Kinnaly, L. E. Gendre, Masters and Connelly); Illinois A. C. (Butler, Cussau, Murchison and Ray), second; Boston Athletic Association (Meanix, Dudley, King and Cutbill), third; Columbia University (Koppish, Graeb, Marzolf and Higgins), fourth. Time—7m. 41 2-5s.

ENGLISH AMATEUR CHAMPIONSHIPS.

Held at London, July 1. Many Continental athletes competed, including several 1920 Olympic Games champions, and a majority of the first places was won by competitors other than English. Results, first places only: *100-Yard Run*—Edwards, England, 10⅕s. *880-Yard Run*—Mountain, Cambridge University, 1m. 55 3-5s. *Throwing the Hammer*—Lindh, Sweden, 172 ft. 3 in. *Pole Vault*—Gerspach, Switzerland, 12 ft. *Two-Mile Walk*—Frigerio, Italy, 14m. 30s. *Throwing the Javelin*—Johanssen, Finland, 200 ft. 5 in. *440-Yard Run*—Edwards, England, 50 2-5s. *120-Yard Hurdles*—Gaby, England, 15 3-5s. *One-Mile Run*—McPhee, Scotland, 4m. 27s. *High Jump*—Lewden, France, 5 ft. 11 in. *Long Jump*—Hoff, Norway, 23 ft. 3 in.; *220-Yard Dash*—Edwards, England, 22s. *Two-Mile Steeplechase*—Nurmi, Finland, 11m. 1-5s.

## BILLIARDS.

INTERNATIONAL Amateur 18.2 Balkline Championship, played at Philadelphia, ending Feb. 21. Results:

| PLAYER. | W. | L. | H.R. | H. Av. |
|---|---|---|---|---|
| E. T. Appleby, U. S. | 4 | 1 | 123 | 21 6–14 |
| P. N. Collins, U. S. | 3 | 2 | 67 | 13 1–23 |
| F. S. Appleby, U. S. | 3 | 2 | 76 | 13 1–23 |
| E. Roudil, France | 3 | 2 | 70 | 16 12–18 |
| A. Bos, Holland | 2 | 3 | 82 | 11 14–26 |
| J. E. C. Morton, U. S. | 0 | 5 | 47 | 8 1–23 |

National Amateur Class A 18.2 Balkline Championship, played at New York, ending Feb. 6. Results:

| PLAYER. | W. | L. | H.R. | H. Av. | P. C. |
|---|---|---|---|---|---|
| E. T. Appleby | 5 | 0 | 142 | 17 11–17 | 1.000 |
| F. S. Appleby | 4 | 1 | 106 | 15 | .800 |
| E. A. Renner | 3 | 2 | 85 | 9 12–32 | .600 |
| P. N Collins | 2 | 3 | 92 | 27 3–11 | .400 |
| T. H. Clarkson | 1 | 4 | 57 | 9 8–17 | .200 |
| E. W. Gardner | 0 | 5 | 47 | 9 3–33 | .000 |

J. Ferdinand Poggenburg Memorial Cup Tournament, played at New York, ending May 12. Results:

| PLAYER. | W. | L. | P. C |
|---|---|---|---|
| Edgar T. Appleby | 5 | 1 | .833 |
| *Julian Rice | 4 | 2 | .667 |
| *Joseph R. Johann | 4 | 2 | .667 |
| *Francis S. Appleby | 4 | 2 | .667 |
| Charles J. Steinbugler | 3 | 3 | .500 |
| C. P. Mathews | 1 | 5 | .167 |
| Louis A. Servatius | 0 | 6 | .000 |

*Tied in games won and lost; places determined by point system.

National Amateur Class B, 18.2 Balkline Championship, played at New York, ending Feb. 25, resulted in a triple tie for first place. Julian Rice won the play-off, defeating Herbert G. Merrill 200 to 129. Second place went to Merrill, who defeated C. P. Mathews 200 to 141.

National Amateur Pocket Billiard Championship, played at Cleveland, ending Feb. 10. Results:

| PLAYER. | W. | L. | H.R. | P. C. |
|---|---|---|---|---|
| J. H. Schoemaker | 5 | 0 | 42 | 1.000 |
| W. H. Leu | 4 | 1 | 37 | .800 |
| C. E. Patterson | 2 | 3 | 21 | .400 |
| C. A. Vaughn | 2 | 3 | 26 | .400 |
| G. Gardner | 2 | 3 | 24 | .400 |
| W. J. Haworth | 0 | 5 | 16 | .000 |

### PROFESSIONAL PLAY.

Jacob Schaefer, 2d, winner of the 1921 18.2 Balkline World's Championship, defended his title twice during the early portion of 1922. He defeated Willie Hoppe, former champion, 1,500 points to 1,468. The match was played at Chicago, in three blocks of 500 points per night, the final being staged on March 29. With the score 1,490 to 1,468 in the last block, with Hoppe at the table, the latter needing but 32 points to win, miscued and Schaefer ran out his ten points.

The score by blocks:

FIRST BLOCK.

Schaefer—0, 8, 0, 252, 40, 145, 11, 9, 1, 31. Total, 500. Average, 50.

Hoppe—2, 14, 55, 114, 9, 260, 9, 2, 1. Total, 466. Average, 51 7-9.

SECOND BLOCK.

Schaefer—157, 143, 35, 16, 53, 27, 11, 58—500, 500—1,000. Average for night, 62 4-8. Grand average, 58 14-17.

Hoppe—43, 54, 0, 71, 17, 134, 167—486, 466—952. Average for night, 59 3-7. Grand average, 59 8-15.

THIRD BLOCK.

Schaefer—59, 107, 2, 22, 20, 3, 28, 4, 0, 0, 0, 213, 29, 3, 10. Total, 500. High run, 213. Average, 33 5-15.

Hoppe—6, 3, 1, 58, 69, 0, 83, 1, 111, 0, 44, 84, 43, 13. Total, 516. High run, 111. Average, 36 12-14.

Grand average—Schaefer, 48 12-31; Hoppe, 48 28-30.

Schaefer also defeated Welker Cochran, 1,500 points to 1,333, in a similar match played at Chicago and ending on May 18.

The score by innings of the entire match follows:

Schaefer—1, 79, 0, 1, 0, 20, 3, 0, 0, 0, 8, 26, 202, 75, 101, 0, 10, 33, 79, 2, 5, 76, 48, 81, 17, 62, 58, 9, 94, 1, 15, 0, 31, 115, 24, 112, 8, 49, 20, 3, 21, 7. Total—1,500. Average, 35 30-42.

Cochran—0, 72, 94, 2, 6, 0, 2, 1, 0, 17, 20, 31, 9, 76, 97, 4, 0, 60, 0, 0, 1, 75, 28, 40, 32, 0, 58, 159, 0, 0, 3, 1, 99, 34, 7, 79, 0, 166, 21, 4, 0. Total—1,333. Average—31 31-42.

High runs—Schaefer, 202; Cochran, 166.

Referee—Albert G. Cutler.

Ralph Greenleaf, winner of the 1921 Pocket Billiard Championship, also defended his title several times during the season of 1922. He defeated Thomas Hueston, former champion, at New York, 450 to 133, including a new world's record run of 100 balls in the final night's play. On May 6 he defeated Walter Franklin at New York 450 to 216. Bennie Allen also lost to the champion at Philadelphia on Oct. 28, by a score of 257 to 450.

John Layton, three-cushion champion, defended his title successfully, defeating Alfredo De Oro 180 to 135 at Milwaukee, March 1, and Charles McCourt 180 to 139 at Sedalia, Mo., May 3.

### BEST RECORD AVERAGES.

Professional—200 at 18.2, Jacob Schaefer 2d, Chicago, Nov. 19, 1921; 40 at 18.1, Jacob Schaefer, Chicago, 1898; 10 at straight cushion caroms, J. Schaefer, New York, 1883; 37.97 at champion's game, G. F. Slosson, Paris, 1882; 52 at 14.1, George Sutton, Baltimore, Md., Oct. 28, 1914.

Amateur—57.14 at 14.2, Calvin Demarest, Chicago, 1908; 33.33 at 18.2, Lucien Rerolle, Paris, 1903.

### BEST RECORD RUNS.

Professional—436 at 18.2, Jacob Schaefer 2d, New York, March 5, 1921; 155 at 18.1, Willie Hoppe, Philadelphia, Pa., Nov. 29, 1910; 246 at 18.2, Maurice Vignaux, Chicago, 1883, when record balkline was first played; 303 at 14.1, Willie Hoppe, New York, April 23, 1914; 85 at straight cushion caroms, F. C. Ives, Boston, 1906; 398, champion's game, Paris, 1882; 2,196 at English billiards, by George Gray, Australia, at London, March 18, 1911.

Amateur—175 at 18.2, L. Rerolle, Paris, 1908; 202 at 14.2, Calvin Demarest, Chicago, 1908.

Three-cushion—Best run, 18, Pierre Maupome, St. Louis, Mo., Sept. 18, 1914, in exhibition; 18, Charles Morin, St. Louis, Mo., May 20, in competition.

POOL.

Best run under new rule, one ball always on table—Amateur—74, Morton Phillips, Chicago, Feb. 13, 1913; in amateur city championship, Professional—100—Ralph Greenleaf, at New York, Feb. 24, 1922, in match against Thomas Hueston.

## COLLEGE ATHLETICS.

INTERCOLLEGIATE Association of Amateur Athletes of America. Forty-sixth annual championship games held at Cambridge, Mass., May 26 and 27. Score by events:

| COLLEGE. | 100-Yd. Dash | 220-Yd. Dash. | 440-Yd. Dash. | Half-Mile Run. | One-Mile Run | Two-Mile Run | 120-Yd. Hurdle. | 220-Yd. Hurdle. | Broad Jump. | High Jump. | Hammer Throw | Pole Vault. | Shot Put. | Javelin Throw. | Discus Throw. | Total Points. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| California | .... | .... | 3 | .... | .... | 2 | .... | .... | 2 | 4½ | 5 | 5 | 7 | 6 | 6 | 40½ |
| Princeton | 3 | .... | 4 | 4 | .... | .... | 7 | 5 | 3 | .... | 4 | .... | 1 | .... | .... | 31 |
| Stanford | 2 | 6 | .... | .... | .... | .... | .... | 3 | .... | .... | .... | 2 | 5 | 3½ | 5 | 26½ |
| Cornell | 4 | 3 | 1 | 2 | 4 | 1 | .... | 1 | .... | 2 | .... | 3½ | .... | 1 | .... | 21½ |
| Pennsylvania | .... | .... | .... | 5 | .... | .... | .... | .... | 4 | .... | .... | .... | 2 | 5 | .... | 16 |
| Harvard | .... | .... | .... | .... | 2 | .... | 5 | .... | .... | .... | 4 | .... | .... | .... | 3 | 14 |
| Penn State | .... | .... | .... | 4 | 5 | .... | .... | 2 | .... | .... | .... | .... | .... | .... | .... | 11 |
| Lafayette | 5 | 5 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 10 |
| Yale | 1 | 1 | .... | .... | 4 | .... | .... | .... | .... | .... | .... | 2½ | .... | .... | .... | 8½ |
| Columbia | .... | .... | .... | .... | .... | 8 | .... | .... | .... | .... | .... | .... | .... | .... | .... | 8 |
| Dartmouth | .... | .... | .... | .... | .... | .... | .... | .... | .... | 5 | .... | 2½ | .... | .... | .... | 7½ |
| Boston College | .... | .... | 5 | .... | .... | .... | 2 | .... | .... | .... | .... | .... | .... | .... | .... | 7 |
| Georgetown | .... | .... | .... | .... | .... | .... | .... | .... | 5 | .... | .... | .... | .... | .... | 1 | 6 |
| Rutgers | .... | .... | .... | .... | .... | .... | .... | 4 | .... | .... | .... | .... | .... | .... | .... | 4 |
| Bates | .... | .... | .... | .... | .... | 4 | .... | .... | .... | .... | .... | .... | .... | .... | .... | 4 |
| Amherst | .... | .... | .... | .... | .... | .... | .... | .... | .... | 3½ | .... | .... | .... | .... | .... | 3½ |
| Bowdoin | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | .... | .... | .... | 2 |
| Syracuse | .... | .... | 2 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 2 |
| N. Y. University | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |

Results by events:

TRACK EVENTS—*100-Yard Dash*—Won by J. A. Le Coney, Lafayette; F. K. Lovejoy, Cornell, second; E. R. McKim, Princeton, third; E. Sudden, Stanford, fourth; E. J. Rusnack, Yale, fifth. Time—9 7-10s. (new intercollegiate and collegiate record). Former intercollegiate mark, 9 4-5s., held jointly by Le Coney, Wefers, Craig and Patterson; collegiate record was held jointly by Wefers, Schick and Patterson. *220-Yard Dash*—Won by J. A. Le Coney, Lafayette; E. Sudden, Stanford, second; F. K. Lovejoy, Cornell, third; M. M. Kirksey, Stanford, fourth; S. Feldman, Yale, fifth. Time—21 3-10s. *440-Yard Dash*—Won by J. W. Driscoll, Boston College; W. E. Stevenson, Princeton, second; O. O. Hendrixson, California, third; A. S. Monie, Syracuse, fourth; C. F. John, Cornell, fifth. Time—49⅕s. *Half-Mile Run*—Won by L. A. Brown, Pennsylvania; R. L. Johnson, Princeton, second; M. L. Shields, Penn State, third; C. C. Carter, Cornell, fourth; A. B. Helfrich, Penn State, fifth. Time—1m. 55 1-5s. *One-Mile Run*—Won by M. L. Shields, Penn State; M. Douglas, Yale, second; E. B. Kirby, Cornell, third; J. W. Burke, Harvard, fourth; E. B. Strickler, Cornell, fifth Time—4m. 18 2-5s. *Two-Mile Run*—Won by W. Higgins, Columbia; R. B Buker, Bates, second; R. Moore, Columbia, third; C. M. Dorr, California, fourth; N. P. Brown, Cornell, fifth. Time—9m. 28 1-5s. *220-Yard Hurdles*—Won by J. C. Taylor, Princeton; H. H. Meyer, Rutgers, second; C. Haynes, Stanford, third; H. H. Hile, Penn State, fourth; H. N. Stone, Cornell, fifth. Time—23 9-10s. *120-Yard High Hurdles*—Won by C. R. Hauers, Harvard; W. E. Massey, Princeton, second; S. H Thompson, Princeton, third; R. V. Merrick, Boston College, fourth; (C. H. Kauffman, Penn State, disqualified). Time—15 3-10s.

FIELD EVENTS—*Broad Jump*—Won by R. L. Legendre, Georgetown, 23 ft. 7⅓ in.; A. E. Rose, Pennsylvania, 23 ft. 2½ in., second; D. B. Lourie, Princeton, 22 ft. 11¾ in., third; J. W. Merchant, California, 22 ft. 7¼ in., fourth; P. Courtois, New York University, 22 ft. ¼ in., fifth. *High Jump*—Won by L. T. Brown, Dartmouth, 6 ft. 4 5-8 in. (a new intercollegiate record); tie between R. H. Clark, Amherst, and H. P. Muller, California, 6 ft. 2 5-8 in., for second; P. B. Nicols, Cornell, 6 ft. 1¾ in., fourth; T. J. Treyer, California, 6 ft. ¾ in., fifth. *Javelin Throw*—Won by G. E. Bronder, Pennsylvania, 185 ft. 8 5-8 in.; S. S. Sorenti, California, 185 ft. 7¾ in., second; J. F. Hanner, Stanford, 180 ft. 8¾ in., third; J. W. Merchant, California, 177 ft. 10 in., fourth; S. H. Downs, Cornell, 169 ft. 11 in., fifth. *Pole Vault*—Won by A. G. Norris, California, 12 ft. 9 in.; tie among E. V. Gouinlock, Cornell, K. D. Libbey, Dartmouth, W. Black, Stanford, and T. Gardner, Yale, 12 ft. 6 in., for second. *Discus Throw*—Won by G. Hartranft, Stanford, 140 ft. 1-8 in.; H. P. Muller, California, 134 ft. 3¼ in., second; W. V. Miller, Harvard, 130 ft. 3 5-8 in., third; R. A. Berkey, California, 129 feet 9 7-8 in., fourth; R. L. Legendre, Georgetown, 127 ft. 7½ in., fifth. *Shot Put*—Won by G. Hartranft, Stanford, 48 ft 6½ in.; J. W. Merchant, California, 44 ft. 10½ in., second; J. I. Witter, California, 44 ft. 8 3-8 in., third; G. E. Bronder, Pennsylvania, 44 ft. 7¼ in., fourth; S. H. Thompson, Princeton, 43 ft. 9 1-8 in., fifth. *Hammer Throw*—Won by J. W. Merchant, University of California, 171 ft. 2 in.; J. F. Brown, Harvard, 159 ft. 6 in., second; H. F. Baker, Princeton, 155 ft. 11¼ in., third; F. D. Tootel, Bowdoin, 155 ft. 3 in., fourth; H. Emery, Princeton, 150 ft., fifth.

### BEST I. C. A. A. A. A. RECORDS.

*100-Yard Dash*—9 7-10s., J. A. Le Coney, Lafayette, Cambridge, Mass., May 27, 1922. *220-Yard Dash*—21 1-5s., B. J. Wefers, Georgetown University, New York, May 30, 1896, and R. C. Craig, Michigan, Philadelphia, May 28, 1910, and Cambridge, Mass., May 27, 1911, and D. F. Lippincott, Pennsylvania, Cambridge, Mass., May 31, 1913, *440-Yard Run*—47 2-5s., J. E. Meredith, Pennsylvania, Cambridge, Mass., May 27, 1916. *Half-Mile Run*—1m. 53⅘., J. E. Meredith, Pennsylvania, Cambridge, Mass., May 27, 1916. *One-Mile Run*—4m. 14 2-5s., J. P. Jones, Cornell, Cambridge, Mass., May 31, 1913. *Two-Mile Run*—9m. 22 2-5s., C. Dresser, Cornell, Cambridge, Mass., May 31, 1919. *Running Broad Jump*—24 ft. 4½ in., A. C. Kraenzlein, Pennsylvania, New York, May 27, 1899. *Running High Jump*—6 ft. 4⅝ in., L. T. Brown, Dartmouth, Cambridge, Mass., May 27, 1922. *Putting 16-Pound Shot*—48 ft. 10¾ in., P. Beatty, Columbia, Philadelphia, Pa., June 1, 1912. *Throwing the Hammer*—173 ft. 6 in., Lee Talbott, Pennsylvania, Harrisburg, Pa., May 7, 1910. *Pole Vault*—13 ft. 1 in., R. Gardner, Yale, Philadelphia, Pa., June 1, 1912. *120-Yard High Hurdles*—14 2-5s., Earl Thomson, Dartmouth, Philadelphia, May 29, 1920. *220-Yard Hurdles*—23 3-5s., A. C. Kraenzlein, Pennsylvania, New York, May 28, 1898, and J. I. Wendell, Wesleyan, Cambridge, Mass., May 31, 1913. *One-Mile Walk*—6m. 45 2-5s., W. B. Fetterman jr., Pennsylvania, New York, May 28, 1898.

### PREVIOUS WINNERS.

1876, Princeton; 1877, Columbia; 1878, Columbia; 1879, Columbia; 1880, Harvard; 1881, Harvard; 1882, Harvard; 1883, Harvard; 1884, Harvard; 1885, Harvard; 1886, Harvard; 1887, Yale; 1888, Harvard; 1889, Yale; 1890, Harvard; 1891, Harvard; 1892, Harvard; 1893, Yale; 1894, Yale; 1895, Yale; 1896, Yale; 1897, Univ. of Pennsylvania; 1898, Univ. of Pennsylvania; 1899, Univ. of Pennsylvania; 1900, Univ. of Pennsylvania; 1901, Harvard; 1902, Yale; 1903, Yale; 1904, Yale; 1905, Cornell; 1906, Cornell; 1907, Univ. of Pennsylvania; 1908, Cornell; 1909, Harvard; 1910, Univ. of Pennsylvania; 1911, Cornell; 1912, Univ. of Pennsylvania; 1913, Univ. of Pennsylvania; 1914, Cornell; 1915, Cornell; 1916, Cornell; 1917, no meet; 1918, Cornell; 1919, Cornell; 1920, Pennsylvania; 1921, California; 1922, California.

### WESTERN CONFERENCE.

Twenty-second Annual Championship Western Conference Athletic Association held at Iowa City, Iowa, June 2-3. Point winners: Illinois, 59 6-14; Iowa, 24 1-35; Minnesota, 23 1-10; Notre Dame, 22 13-14. Individual event winners:

TRACK EVENTS—*100-Yard Dash*—Won by Hayes, Notre Dame; Paulu, Grinnell, second; Wilson, Iowa, third; Morehead, Ohio, fourth; Ayres, Illinois, fifth. Time—9 7-10s. *220-Yard Dash*—Won by Paulu, Grinnell; Wilson, Iowa, second;

Spetz, Wisconsin, third; Hayes, Notre Dame, fourth; Morehead, Ohio, fifth. Time—21 7-10s. *440-Yard Dash*—Won by Wolters, Ames; Fessenden, Illinois, second; Sweet, Illinois, third; Hultkranz, Minnesota, fourth; Schlapprizzi, Illinois, fifth. Time—48s. *880-Yard Run*—Won by Wolters, Ames; Higgins, Ames, second; Harrison, Purdue, third; Yates, Illinois, fourth; Morrow, Iowa, fifth. Time—1m. 55s. *One-Mile Run*—Won by Patterson, Illinois; Wells, Illinois, second; Sweitzer, Minnesota, third; Ashton, Iowa, fourth; Murphy, Purdue, fifth. Time—4m. 22s. *Two-Mile Run*—Won by Rathbun, Ames; Wharton, Illinois, second; Doolittle, Butler, third; Scott, Illinois, fourth; Watson, Illinois, fifth. Time—9m. 27s. (new conference record: 9m. 29 3-5s. made by Stout, Chicago, 1916). *120-Yard High Hurdles*—Won by Knollin, Wisconsin; Anderson, Minnesota, second; Sargent, Michigan, third; Martineau, Minnesota, fourth. Time—15s. (No fifth place; Wallace, Illinois, finished fourth, but was disqualified.) *One-Mile Relay*—Won by Iowa (Knoll, Keppler, Beck and Wilson); Chicago, second; Ames, third; Wisconsin, fourth; Michigar, fifth. (No time given on account of Illinois finishing first in 3m. 20s., but being disqualified for alleged roughness by Sweet.) *220-Yard Low Hurdles*—Won by Brookins, Iowa; Anderson, Minnesota, second; Desch, Notre Dame, third; Knollin, Wisconsin, fourth; S. H. Wallace, Illinois, fifth. Time—23 4-5s. (Ties conference record.)

FIELD EVENTS—*Running High Jump*—Osborne, Illinois, and Murphy, Notre Dame, tied for first and second, 6 ft. 5 1-16 in.; Hoffman, Iowa, third, 6 ft.; Conn, Iowa, Platten, Wisconsin, Campbell, Minnesota, McEllven, Michigan, and Woods, Butler, tied for fourth and fifth, 5 ft. 10 in. *Shot Put*—Won by Cannon, Illinois, 42 ft. 11¼ in.; Hulscher, West Michigan State Normal, second, 42 ft. 6¼ in.; Sundt, Wisconsin, third, 42 ft. 5 in.; Lieb, Notre Dame, fourth, 41 ft. 11¼ in.; Dahl, Northwestern, fifth, 41 ft. 5¼ in. *Javelin Throw*—Won by Angier, Illinois, 196 ft. 11 in.; Hoffman, Michigan, second, 194 ft. 6¼ in.; Hanny, Indiana, third, 171 ft. 5¾ in.; Miller, Purdue, fourth, 171 ft. 4¾ in.; Moes, Notre Dame, fifth, 170 ft. 4½ in. *Discus Throw*—Won by Lieb, Notre Dame, 147 ft. 8 in.; Frida, Chicago, second, 134 ft. 5 in.; Carlson, Illinois, third, 133 ft; Grossmiun, fourth, 129 ft. 6 in.; Howard, Drake, fifth, 123 ft 8 in. *Pole Vault*—Won by Landowski, Michigan, 12 ft. 6 in.; Hawker, Minnesota, and Collins, Illinois, tied for second and third, 12 ft ; Devine, Iowa; Chandler, Illinois, McClure, Wisconsin, Merrick, Wisconsin, Hogan, Notre Dame, Hall, Chicago, and Faust, Northwestern, tied for fourth and fifth, 11 ft. 6 in. *Hammer Throw*—Won by Hill, Illinois, 137 ft. 5½ in.; Schmidt, Michigan, second, 129 ft. 4½ in.; Thomas, Ohio, third, 127 ft. 1 in.; White, Ohio, fourth, 117 ft. 1 in.; Michael, Chicago, fifth, 115 ft. 8¾ in.; *Running Broad Jump*—Won by Osborne, Illinois, 22 ft. 9 in.; Sundt, Wisconsin, second, 22 ft. 6¼ in.; Schmidt, Michigan, third, 22 ft. 5¼ in.; Farley, Minnesota, fourth, 22 ft. 1½ in.; Johnson, Wisconsin, fifth, 21 ft. 11¾ in.

## BEST CONFERENCE RECORDS.

*100-Yard Dash*—9 7-10s., W. Hayes, Notre Dame, Iowa City, June 3, 1922. *220-Yard Run* (around a turn)—22s., William Hogenson, Chicago, June 3, 1905; H. J. Huff, Grinnell, June 1, 1907. *Straightaway*—21 3-5s., J. Ward, Chicago, Urbana, Ill., June 5, 1915, and J. Scholz, Missouri, Ann Arbor, June 5, 1920. *440-Yard Run*—47 2-5s., Binga Dismond, Chicago, Evanston, Ill., June 3, 1916. *880-Yard Run*—1m. 53 1-5s., Don Scott, Mississippi A. and A., Evanston, Ill., June 3, 1916. *One-Mile Run*—4m. 15 4-5s., E. H. Fall, Oberlin, Chicago, Ill., June 9, 1917. *Two-Mile Run*—9m. 29 3-5s., C. J. Stout, Chicago, Evanston, June 3, 1916. *120-Yard High Hurdles*—14 3-5s., Robert Simpson, Missouri, Evanston, Ill., June 3, 1916. *220-Yard Low Hurdles*—23 4-5s., Robert Simpson, M ssouri, Evanston, Ill., June 3, 1916. *Pole Vault*—12 ft. 8¼ in., J. K. Gold, Madison, Wis., June 7, 1913. *Running High Jump*—6 ft. 5 1-16 in., H. Osborne, Illinois, and J. Murphy, Notre Dame, Iowa City, June 3, 1922. *Running Broad Jump*—24 ft. 1 in., C. E. Johnson, Michigan, Chicago, Ill., June 7, 1919. *Putting 16-Pound Shot*—47 ft. ¼ in., Ralph Rose, Michigan, June 4, 1904. *Throwing 16-Pound Hammer*—160 ft. 4 in., K. Shattuck, California, Madison. Wis., June 7, 1913. *Throwing the Discus*—155 ft. 2 in., A. M. Mucks, Wisconsin, Evanston, Ill., June 3, 1916. *One-Mile Relay* (4 men)—3m. 21 4-5s., Chicago (Campbell, Stegemann, Cornwall, Dismond), Urbana, Ill., June 5, 1915, and Illinois (Donohue, Prescott, Spink, Emery), Ann Arbor, June 5, 1920. *Javelin Throw*—178 ft. 4 in., Hoffman, Michigan, Chicago. June 4, 1921.

## NATIONAL COLLEGIATE A. A. CHAMPIONSHIPS.

Twenty-third Annual N. C. A. A. Championships held at Chicago, June 17. The point scores: California, 28½; Penn State, 19½; Notre Dame, 16 7-10; Illinois, 14 7-10; Iowa, 13 34-45; Grinnell, 10; Michigan, 10; Georgetown, 7; Mississippi A. & M., 7; Penna., 6; Ames, 5; Wisconsin, 3 34-45; Butler, 3 1-18; Montana, 3; Central Wesleyan, 3; Chicago, 3; Kansas Aggies, 2½; Minnesota, 2 1-18; Depauw, 2 1-18; Ohio State, 2 1-18; Earlham, 2; Hamilton, 2; Nebraska, 1 1-18; Amherst, 1 1-18; Western State Normal, 1; Georgia Tech, 1; Kansas, 7-10; Texas A. & M., ½; Purdue, ½. Individual event winners:

TRACK EVENTS—*100-Yard Dash*—Won by Paulu, Grinnell; Hayes, Notre Dame, second; Irwin, Kansas Aggies, third; Wilson, Iowa, fourth; Smith, Nebraska, fifth. Time—9 9-10s. (New meet record. Former record of 10s. made by Paulu in 1921.) *220-Yard Dash*—Won by Paulu, Grinnell; Wilson, Iowa, second; Spetz, Wisconsin, third, Hayes, Notre Dame, fourth; Erwin, Kansas Aggies. fifth. Time—21 4-5s. (New collegiate record. Former record of 22 3-5s. made by Wilson, Iowa, in 1921.) *440-Yard Run*—Won by Cochran, Mississippi A. & M.; McDonald, California, second; Fessenden, Illinois, third; Pyott, Chicago, fourth; Brickman, Chicago, fifth. Time—49 7-10s. *880-Yard Run*—Won by Helfrich, Penn State; Brown, Pennsylvania, second; Morrow, Iowa, third; Yates, Illinois, fourth; Gardner, Nebraska, fifth. Time—1m. 58 1-10s. *One-Mile Run*—Won by Shields, Penn State; Patterson, Illinois, second; Connelly, Georgetown, third; Wikoff, Ohio State, fourth; Furnas, Purdue, fifth. Time—4m. 20 2-5s. (New collegiate record. Former record of 4m. 23 2-5s. made by Ray Watson, Kansas Aggies, in 1921.) *Two-Mile Run*—Won by Rathbun Ames; Doolittle, Butler, second; Thompson, Hamilton, third; Enck, Penn State, fourth; Swanson, Illinois, fifth. Time—9m. 32 1-10s. *120-Yard High Hurdles*—Won by Barron, Penn State; Cook, Central Wesleyan, second; Ivey, Earlham, third; Brickman, Chicago, fourth; Sargeant, Michigan, fifth. Time—15 2-5s. *220-Yard Low Hurdles*—Won by Brookins, Iowa; Desch, Notre Dame, second; Ellis, Mississippi A. & M., third; Stolley, Wisconsin, fourth; Barron, Penn State, fifth. Time—24 1-5s. (New collegiate record. Former record of 24 4-5s. made by Desch, Notre Dame, in 1921.)

FIELD EVENTS—*Pole Vault*—Tie between Norris, California, and Landowski, Michigan, at 12 ft. 6 in., for first and second; tie between Devine, Iowa; Collins, Illinois; Hogan, Notre Dame; Merriol. Wisconsin, and Rogers, Kansas, at 12 ft., for third, fourth and fifth. (New collegiate record. Former record of 12 ft. made by Welch, Georgia Tech, in 1921.) *Shot-Put*—Won by Merchant, California, 44 ft. 6½ in.; Bronder, Pennsylvania, 44 ft. ¾ in., second; Whittier, California, 43 ft. 2 in., third; Hulscher, Western State Normal, 43 ft. 1¼ in., fourth; Keen, Texas A. & M., 42 ft. 6 in., fifth. *Running High Jump*—Tie between Murphy, Notre Dame, and Osborne, Illinois, 6 ft. 2 5-8 in., for first and second; Muller, California, 6 ft. 2 in., third; Clark, Amherst, 6 ft. 1 in., fourth; tie between Teryer, California; Darling, Amherst; Campbell, Minnesota; Hoffman, Iowa; Turner, Nebraska; Jones, De Pauw; Woods, Butler; Platten, Wisconsin; and Shidecker, Ohio State, 5 ft. 9 in., for fifth. *Running Broad Jump*—Won by Legendre, Georgetown, 24 ft. 3 in.; Miller, California, 23 ft. 8¾ in., second; Jones, De Pauw, third; Merchant, California, fourth; Osborne, Illinois, fifth. (New collegiate record. Former record, 23 ft. 3 3-8 in., made by Stinchcomb, Ohio State, in 1921.) *Discus Throw*—Won by Lieb, Notre Dame, 144 ft. 2½ in.; MacGowan, Montana, 136 ft. 6 in., second; Gross, Minesota, third; Muller, California, fourth; Frida, Chicago, fifth. (New collegiate record. Former record of 142 ft. 2¼ in., made by Pope, Washington, in 1921.) *Hammer Throw*—Won by Merchant, California, 161 ft. 4 in.; Palm, Penn State, 136 ft. 3½ in., second; Hill, Illinois, third; White, Ohio State, fourth; Schmidt, Michigan, fifth. (New collegiate record. Former record, 133 ft. 9¾ in., made by Redmon, Chicago, in 1921.) *Javelin Throw*—Won by Hoffmann, Michigan, 202 ft. 3 in.; Bronder, Pennsylvania, 190 ft. 9½ in., second; Sorrenti, California, 188 ft. 11 in., third; Angier, Illinois, 187 ft. 5 in., fourth; Welch, Georgia Tech, 173 ft. 3½ in., fifth. (New collegiate record. Former record, 191 ft. 2¼ in., made by Hanner, Stanford, in 1921.)

I. C. A. A. A. A. INDOOR CHAMPIONSHIPS.

Held New York City March 11. Point scores: Cornell, 35½; Dartmouth, 25; Pennsylvania, 24; Princeton, 16; Penn State, 14; Yale, 12; Harvard, 8½; Amherst, 6½; Boston College, 6; Lafayette, 5; Brown, 4. Individual event winners: *Freshman Medley Relay, 1 7-8 Miles*—Won by University of

Pennsylvania; Dartmouth, second; Cornell, third; Yale, fourth; Harvard, fifth. Time—7m. 45 1-5s. *Pole Vault*—Won by Libbey, Dartmouth, 12 ft.; tie between S. J. Needs, Pennsylvania; S. F. Smith, Dartmouth; E. W. Gournlock, Cornell; Richard Stevens, Cornell, and Ted Gardner, Yale, 11 ft. 6 in, for second. *16-Pound Shot Pu*—Won by Harrison S. Thompson, Princeton, 43 ft. 5½ in.; Edward F. Bell, Boston College, 41 ft. 9 in., second; John H. Lee, Dartmouth 41 it. 8 in., third; Leonard Thurnbull, Dartmouth, 40 ft. 6 in., fourth; R. Jordan, Yale, 40 ft. 2 in., fifth. *One-Mile Run*—Won by Larry Shields, Penn State; Malcolm Douglass, Yale, second; Edward B. Kirby, Cornell, third; William Burke, Harvard, fourth; Walter Higgins, Columbia, fifth. Time—4m. 20 8-10s. *Throwing 35-Pound Weight*—Won by J. F. Brown, Harvard, 47 ft. 11 in.; Humphrey R. Wagar, Cornell, 43 ft. 4½ in., second; H. F. Baker, Princeton. 43 ft. ¼ in., third; Merwin W. Swenson, Dartmouth, 40 ft. ½ in., fourth; Herbert D. Tobey, Cornell, 39 ft. 8½ in., fifth. (Decided at Columbia Field in afternoon.) *70-Yard Dash*—Won by J. A. Lecony, Lafayette; F. K. Lovejoy, Cornell, second; H. B. Lever, University of Pennsylvania, third; J. F. Carter, Brown, fourth; Victor Graeb, Columbia, fifth. Time—7 3-10s. *60-Yard High Hurdles*—Won by Harold Barron, Penn State; David W. Kimball, Cornell, second; Tony Hulman, Yale, third; H. H. Hile, Penn State, fourth; H. S. Thompson, Princeton, fifth. Time—7 4-5s. *One-Mile Relay*—Tie between Syracuse and Princeton; Massachusetts Institute of Technology, third; Boston College, fourth; Cornell, fifth. Time—3m. 22 4-5s. *Two-Mile Run*—Won by Norman P. Brown, Cornell; Robert C. Brown, Cornell, second; R. B. Whearty, Fordham, third; Charles J. Cooper, Penn State, fourth; J. G. Young, Dartmouth, fifth. Time—9m. 45 3-5s. *Running High Jump*—Won by Leroy Brown, Dartmouth, 6 ft. 4 7-8 in.; Robert H. Clark, Amherst, 6 ft. ½ in., second; tie between H. Troupe, Princeton, and V. B. Darling, Amherst, 5 ft. 10¾ in., for third; tie between P. Nichols, Cornell, and M. Morse, Harvard, 5 ft. 8¾ in., for fourth. *Running Broad Jump*—Won by S. Chow, University of Pennsylvania, 21 ft. 10½ in.; A. M. Rose, University of Pennsylvania, 21 ft. 5½ in., second; Paul Courtoss, New York University, 21 ft. 1¼ in., third; W. I. Ried, Brown University, 21 ft., fourth; V. L. Chum, Dartmouth, 20 ft. 6¼ in., fifth.

## CONFERENCE INDOOR CHAMPIONSHIPS.

Held at Evanston, Ill., Mar. 18. Point winners: Illinois, 44 6-7; Wisconsin, 22 11-21; Ohio State, 8¼; Iowa, 8 1-3; Michigan, 7 1-3; Minnesota, 5½. Individual event winners: *One-Mile Run*—Won by McGinnis, Illinois; Patterson, Illinois, second; Wikoff, Ohio, third; Sweitzer, Minnesota, fourth. Time—4m. 25 3-5s. *Fifty-Yard Dash*—Won by Brookins, Iowa; Ayres, Illinois, second; Moorehead, Ohio State, third; Spetz, Wisconsin, fourth. Time—5 2-5s. *440-Yard Run*—Won by Spetz, Wisconsin; Pyott, Chicago, second; Schlapprizzi, Illinois, third; Sweet, Illinois, fourth. Time—52 3-5s. *60-Yard High Hurdles*—Won by Knollin, Wisconsin; Johnson, Illinois, second; Sargent, Michigan, third. Time—7 3-5s. *One-Mile Relay*—Won by Illinois; Iowa, second; Chicago, third; Wisconsin, fourth. Time—3m. 30 2-5s. *Pole Vault*—Tie between Merrick, Wisconsin, and Landowski, Michigan, for first; tie between Faust, Northwestern, Collins, Illinois, Chandler, Illinois, Hawker, Minnesota, McClure, Wisconsin, Hammann, Wisconsin, and Teal, Purdue, for third and fourth. Height—12 ft. 6 in. *Two-Mile Run*—Won by Wharton, Illinois; Swanson, Illinois, second; Scott, Illinois, third; Furnas, Purdue, fourth. Time— 9m. 41 3-5s. *880-Yard Run*—Won by Yates, Illinois; Hirt, Minnesota, second; Wikoff, Ohio State, third; Winter, Minnesota, fourth. Time—1m. 58 2-5s. *High Jump*—Won by Osborne, Illinois; tie between Platten, Wisconsin, and Moorehead, Ohio State, for second and third, tie between Anderson, Minnesota, McEllven, Michigan, Smith, Michigan, Gibson, Wisconsin, Hoffman, Iowa, and Conn, Iowa, for fourth. Height—6 ft. 2½ in. *Shot Put*—Won by Dahl, Northwestern; Sundt, Wisconsin, second; Cannon, Illinois, third; Stipe, Michigan, fourth. Distance—42 ft. 6 in.

## PENNSYLVANIA RELAY CARNIVAL.

Twenty-eighth Annual Relay Championships held at Franklin Field, Philadelphia, April 28-29. College Pentathlon Championship won by Robert Legendre, Georgetown. Results by events:

PENTATHLON—*Running Broad Jump*—Won by Robert Legendre, Georgetown, 22 ft. 8½ in.; C. Reinartz, Muhlenberg, 21 ft. 11½ in., second; F. Byrd, Virginia Poly. Institute, 21 ft. 2½ in., third; Charles West, Washington and Jefferson, 20 ft. 8 in., fourth, Emery, Princeton, 20 ft. 2½ in., fifth; Vernon Clapp, United States Naval Academy, 19 ft. 9 1-8 in., sixth; F. Moroney, Georgetown, 19 ft. 6¾ in., seventh; Taylor, United States Naval Academy, 19 ft. 4½ in., eighth. *Throwing the Javelin*—Won by Legendre, 171 ft. 1 in.; West, 168 ft., second; Reinartz, 165 ft. 4 in., third; Moroney, 159 ft. 8½ in., fourth; Emery, 149 ft. 9½ in., fifth; Clapp, 149 ft. 3¼ in., sixth; Taylor, 138 ft. 10¾ in., seventh; Byrd, 132¼ ft., eighth. Former record by W. Bartels, Penn, 168 ft. 11¼ in., in 1921. *1,500-Metre Run*—Won by Emery, 4m. 35 3-5s; West, 4m. 44 4-5s., second; Legendre, 4m. 48 4-5s., third; Clapp, 5m. 26s., fourth; Moroney, 5m. 52 1-5s., fifth; Reinartz, 5m. 52 4-5s., sixth. *200-Metre Run*—Won by Legendre, 22 1-5s. He beat Clapp, who finished in 24 2-5s. in their third heat. First heat, Reinartz won in 23s. from Emery, 23 2-5s.; third, Byrd, 26 4-5s.; second heat, West, 23 1-5s.; Clapp, 24 2-5s., second. (New record. Former mark, 22 2-5s., by J. H. Berry, Penn, 1917.) *Throwing Discus*—Won by Clapp, 121 ft. ½ in.; Legendre, 112 ft. 3½ in., second; Moroney, 109 ft. 9¾ in., third; Reinartz, 105 ft. 7 in., fourth; Byrd, 102 ft. 6 in., fifth; Emery, 100 ft. 5 in., sixth; West, 89 ft. 8¾ in., seventh. *440-Yard Hurdles* (10 hurdles 2 ft. 6 in. high)—Won by W. G. Harmer, University of Delaware; K. M. McCreary, Ohio State, second; Thomas F. Allen, Lafayette, third; J. W. Green, Ohio State, fourth; A. B. Alderette, Washington and Jefferson, fifth. Time—56 2-5s.

RELAY CHAMPIONSHIPS—*American College Championship Sprint, Medley Relay* (first man ran 440 yards, second and third men 220 yards each, and fourth man 880 yards)—Won by Pennsylvania (J. Holden, H. Lever, E. Gill, Brown); Syracuse (A. Monie, A. Woodring, W. Stone, H. Smith), second; United States Naval Academy, third; Princeton, fourth. Time—3m. 33 1-5s. *One-Quarter-Mile College Relay Championship*—Won by Pennsylvania (H. Lever, C. Altmaier, V. Welch, C. Shattuck); Lafayette, second; Ohio State, third; Georgetown, fourth. Time—43 2-5s. (First time in championships.) *One-Mile College Relay Championship*—Won by Syracuse (Stone, Monie, Smith and Woodring); Princeton, second; Chicago, third; Massachusetts Institute of Tech, fourth. Time—3m. 19 2-5s. *One-Half-Mile College Relay Championship of America*—Won by Georgetown (Legendre, Birch, Byrd and Gaffney); Ohio State, second; University of Pennsylvania, third. Time—1m. 30 3-5s. *Two-Mile College Relay Championship*—Won by University of Pennsylvania (G. Meredith, McMullin, Hanlon and Brown); Pennsylvania State College (Enck, Edgerton, Shields and Helfrich), second; Georgetown, (Masters, Brewster, Higgins and Connolly), third. Time—7m. 49 2-5s. (New world's record.) *Four-Mile College Relay Championship*—Won by Cornell (Strickler, R. Brown, N. Brown and Carter); Ohio State, second; Yale, third; Columbia, fourth. Time—17m. 56 3-5s. *Class B One-Mile College Relay Championship*—Won by Boston College (Nolan, Kinley, Dillon and Driscoll); Columbia, second; Navy, third; Pittsburgh, fourth. Time—3m. 24 1-5s. *One-Mile Freshmen College Relay Championship*—Won by University of Pennsylvania (Kehoe, Mitchell, Jensen and Hayes); Syracuse, second; Navy, third. Time—3m. 28s. *Middle Atlantic States Conference A. A. Mile Relay*—Won by Rutgers (De Witt, Robinson, Beattie and Ray); Lehigh, second; Bucknell, third; Swarthmore, fourth. Time—3m. 24 1-5s. *South Atlantic I. A. A. Mile Championship*—Won by University of Virginia (Gammon, Talbot, Bohannson and Baker); Georgetown, second; Johns Hopkins, third. Time—3m. 23s. *College Class, One-Mile Relay*—Won by George Washington University; Gallaudet College, second; Juniata College, third. Time—3m. 36 1-5s. *College Class, One-Mile Relay*—Won by New York College Dental and Oral Surgery; College City of New York, second; Ursinus, third. Time—3m. 40 3-5s. *College Class, One-Mile Relay*—Won by Bates; Hamilton College, second; Colby, third. Time—3m. 28s. *College Class, One-Mile Relay*—Won by Bucknell; University of Maryland, second; Washington and Jefferson, third. Time—3m. 29 2-5s. *College Class, One-Mile Relay*—Won by Carnegie Institute of Technology; Rensselaer Polytechnic Institute, second; Northeastern, third. Time—3m. 32s. *College Class, One-Mile Relay*—Won by Colgate; Brown, second; University of Maine, third. Time—3m. 27 1-5s.

HIGH SCHOOL RELAYS—*Class B, High School One-Mile Relay Championship*—Won by Germantown High; Harrisburg Technical High School, second; De Witt Clinton High, third. Time—3m. 7s. *Interscholastic Two Mile-Relay Championship*—Won by Hamilton Collegiate Institute of Canada (Barnes, Christie, Thompson and Bascom); Lakewood (Ohio) High School, second; Rochester Shop School, third. Time—8m. 27 3-5s. *One-Mile High School Relay Championship*—Won by, Hamilton Collegiate Institute of Canada (Shea;

Christie, Bascom and Smith); Lakewood (Ohio) High, second; Brooklyn High, third; Medford (Mass.) High, fourth. Time—3m. 32 2-5s. *One-Mile Preparatory School Relay*—Won by Brown Prep; Baltimore Friends, second; Pennsylvania Institute for Deaf, third. Time—3m. 42s. *One-Mile Preparatory School Relay*—Won by Potomac State; Franklin and Marshall Academy, second; La Salle Prep., third. Time—3m. 41 1-5s. *Class B, Preparatory School One-Mile Relay Championship*—Won by Brooklyn Poly Prep; St. Benedict's Prep, second; Bethlehem Prep, third. Time—3m. 36 1-5s. *One-Mile High School Relay*—Won by Brooklyn Manual Training; Hartford, second; Atlantic City, third. Time—3m. 37 1-5s. *One-Mile Preparatory School Relay Championship*—Won by Exeter Academy (Lindell, Norton, O'Neill and Rogers); Mercersburg Academy, second; Hill School, third. Time—3m. 29 3-5s.

### DRAKE RELAY CARNIVAL.

Held Des Moines, April 29. Results: *Quarter-Mile University Relay*—Won by Nebraska; Notre Dame, second; Iowa, third; tie between Missouri and Wisconsin for fourth. Time—42 4-5s. *Half-Mile College Relay*—Won by Occidental; Carleton, second; Knox, third; Des Moines, fourth. Time—1m. 30 3-5s. *Half-Mile University Relay*—Won by Illinois; Nebraska, second; Iowa, third; Michigan, fourth. Time—1m. 28 4-5s. (Ties Drake record) *One-Mile College Relay* (first section)—Won by Centre; De Paul, second; Central, third; Simpson, fourth. Time—3m. 31 4-5s. *One-Mile College Relay* (second section)—Won by Occidental; Knox, second; Cornell, third; Butler, fourth Time—3m. 25 3-5s. *One-Mile University Relay*—Won by Illinois; Ames, second; Nebraska, third; Notre Dame, fourth. Time—3m. 20 2-5s. (New Drake record.) Former record, 3m. 21¾s.) *Special One-Mile Match Race*—Won by Ray Watson, formerly of the Kansas Aggies; Joie Ray, Illinois A. C., second. Time—4m. 24 3-5s. *Two-Mile College Relay*—Won by Michigan Aggies; Carleton, second; Morningside, third. Time—8m. 16 2-5s. *Four-Mile University Relay*—Won by Illinois; Purdue, second; Kansas, third; Iowa, fourth. Time—17m. 45s. (New world's record outdoor. Former record made by Boston A. A. in 1913.) *440-Yard Low Hurdles*—Won by Ernst, Michigan Aggies; Stolley, Wisconsin, second; Anderson, Minnesota, third; Wallace, Illinois, fourth. Time—54 2-5s.

### OXFORD-CAMBRIDGE DUAL MEET.

Held at Queen's Club, London, March 25. Won by Cambridge, 9 events to 1, firsts only counting. Results: *100-Yard Dash*—Won by H. M. Abrahams, Cambridge, with S. M. Butler, Cambridge, a close second. Time—10 1-5s. *One-Mile Run*—Won by H. R. Stallard, Cambridge; W. G. Tatham, Cambridge, second. Time—4m. 22 2-5s. *Shot Put*—Won by A. I. Reese, Lincoln College, Oxford, an American, from Nebraska; F. K. Brown, also an American, from Washington, representing Exeter College, Oxford, second. Distance—37 ft. 2½ in. *High Jump*—Won by E. S. Burns, Cambridge; R. J. Dickinson, Oxford, second. Height—5 ft. 10½ in. Dickinson's height was 5 ft. 9½ in. *Half-Mile Run*—Won by E. D. Mountain, Cambridge; W. R. Milligan, Oxford, second. Time—2m. 2-5s. *220-Yards Low Hurdles*—Won by W. S. Bristowe, Cambridge; B. Stapleton, Oxford, second. Time—26 1-5s. *Broad Jump*—Won by H. M. Abrahams, Cambridge; K. R. Saxon, Cambridge, second. Distance—22 ft. *120-Yard Hurdle Race*—Won by I. F. Patridge, Cambridge; A. E. C. Tennyson, Oxford, second. Time—16s. *440-Yard Run*—Won by G. M. Butler, Cambridge; H. M. Bray, Oxford, second. Time—51 1-5s. *Three-Mile Run*—Won by W. R. Seagrove, Cambridge; F. R. Courtenay Thompson, Cambridge, second. Time—15m. 2 3-5s.

### OTHER SECTIONAL CHAMPIONSHIPS.

Thirty-sixth Annual Championship Games New England Intercollegiate A. A., Worcester, May 20. The final points standing was: Massachusetts Technology, 24; Boston College, 24; Brown, 19; Williams, 17½; Bates, 18; Amherst, 16; Bowdoin, 12; Wesleyan, 10; Middlebury, 4½; Holy Cross, 3; University of Maine, 3; New Hampshire, 2; Vermont, 1. Eastern Intercollegiate A. A. Championship, Springfield, Mass., May 13. The final standing was: Boston College, 49½; New York University, 28; Springfield College, 26; Holy Cross, 13; Norwich, 11½; Connecticut Agriculture College, 8; St. Lawrence University, 7; Worcester Polytechnic Institute, 3½; Northeastern, 3½; Massachusetts Agriculture College, 3; University of Vermont, 2; Tufts, 0. Middle Atlantic Intercollegiate Championships, Lancaster, Pa., May 13. Won by Rutgers College, with 48½.

### DUAL AND TRIANGULAR MEETS.

April—Harvard 69, University of Virginia 57; University of Delaware 66, Stevens Tech 38; Navy 64½, Harvard 32½, Virginia 29½; Horace Mann 56, McBurney 25, Ethical Culture 1; Johns Hopkins 64½, Swarthmore 19½; Mercersburg Academy 71, Penn Freshmen 55; Stanford 65½, California 65½; Princeton Freshmen 96½, Lawrenceville Academy 29½; Springfield College 68, Wesleyan 67; Princeton 85 1-3, Virginia 21 2-3, Johns Hopkins 19; Virginia 83 1-3, Washington and Lee 42 2-3.

May—Brown 75, Bowdoin 52; Stevens 89, City College 28; Michigan 90, Ohio State 45; Princeton 71 1-3, Yale 48 2-3, West Virginia University 83; Washington and Jefferson College 52; Pennsylvania 80, Dartmouth 55; Dartmouth 80 2-3, Columbia 54 1-3; Louisiana 53, Mississippi A. and M. 46 1-3. Vanderbilt 18. University of South Carolina 11; Harvard 70 13-15, Yale 64 2-15; Cornell 79 1-3, University of Pennsylvania 55 2-3; Princeton 95½, Harvard 39½; Rutgers 62½, Swarthmore 46½, Lehigh 17¼; Columbia 83, New York University 52; Navy 77 1-3, Lafayette 28 2-3.

## ASSOCIATION (SOCCER) FOOTBALL.

United States Football Association National Challenge Cup competition series, emblematic of national championship. Final round at St. Louis, Mo., March 19—Scullin Steel F. C., 3; Todd Shipyard F. C., (Brooklyn) 2.

### PREVIOUS WINNERS.

1913-14—At Pawtucket, R. I., May 16, 1914; Brooklyn Field Club, 2; Brooklyn Celtic F. C., 1; referee, Charles E. Creighton, New York City.

1914-15—At Taylor Stadium, Lehigh University, South Bethlehem, Pa., May 1, 1915; Bethlehem Steel Co. F. C., 3; Brooklyn Celtic F. C., 1; referee, George Lambie, Boston, Mass.

1915-16—At Pawtucket, R. I., May 6, 1916; Bethlehem Steel Co. F. C., 1; Fall River Rovers F. C., 0; referee, David M. Whyte, Brooklyn, N. Y.

1916-17—At Pawtucket, R. I., May 5, 1917; Fall River Rovers F. C., 1; Bethlehem Steel Co. F. C., 0; referee. William Taylor, Pawtucket, R. I.

1918-19—At Harrison, N. J., May 19, 1918; Bethlehem Steel Co. F. C., 3; Fall River Rovers F. C., 0; referee, C. E. Creighton, New York City.

1919-20—At Fall River, Mass., April 19, 1920; Bethlehem Steel Co., F. C., 2; Paterson (N. J.), F. C., 0.

1920-21—At St. Louis, May 2, 1921; Ben Miller A. C., (St. Louis), 2; Fall River F. C., (Quincy, Mass.), 1.

1921-22—At Fall River, Mass., April 19, 1921; Robins Dry Dock F. C., (Brooklyn), 4; Scullin Steel F. C., (St. Louis), 2.

### EASTERN INTERCOLLEGIATE LEAGUE.

Final standing 1921 season.

| College. | Played. | Won | Lost | Drawn. | Goals. For. | Agst | Pts. |
|---|---|---|---|---|---|---|---|
| Princeton | 5 | 5 | 0 | 0 | 13 | 1 | 10 |
| Cornell | 5 | 4 | 1 | 0 | 18 | 4 | 8 |
| Haverford | 5 | 2 | 3 | 0 | 9 | 9 | 4 |
| Pennsylvania | 5 | 2 | 3 | 0 | 11 | 13 | 4 |
| Harvard | 5 | 2 | 3 | 0 | 10 | 13 | 4 |
| Yale | 5 | 0 | 5 | 0 | 0 | 21 | 0 |

### PREVIOUS WINNERS.

| | |
|---|---|
| 1904-05—Haverford. | 1913-14—Harvard. |
| 1905-06—Haverford. | 1914—Pennsylvania. |
| 1906-07—Haverford. | 1915—Haverford. |
| 1907-08—Haverford-Yale | 1916—Pennsylvania. |
| 1908-09—Columbia. | 1917—Haverford. |
| 1909-10—Columbia. | 1918—No competition. |
| 1910-11—Haverford. | 1919—Pennsylvania. |
| 1911-12—Yale. | 1920—Pennsylvania. |
| 1912-13—Harvard. | 1921—Princeton. |

In 1914 and thereafter schedule was arranged to close late in December.

### PENNSYLVANIA INT'COLLEGIATE LEAGUE.

| College. | Played. | Won | Lost | Drawn. | Goals. For. | Agst | Pts. |
|---|---|---|---|---|---|---|---|
| Swarthmore | 4 | 1 | 0 | 3 | 5 | 4 | 5 |
| Lehigh | 4 | 2 | 1 | 1 | 5 | 5 | 5 |
| Lafayette | 4 | 1 | 1 | 2 | 4 | 3 | 4 |
| Pennsylvania | 4 | 1 | 1 | 2 | 5 | 5 | 4 |
| Haverford | 4 | 0 | 2 | 2 | 4 | 6 | 2 |

Swarthmore defeated Lehigh in play-off.

## THE TURF.

PURCHASE PRICES AMERICAN THOROUGHBREDS.

| Horse. | Dollars | Horse. | Dollars | Horse. | Dollars | Horse. | Dollars |
|---|---|---|---|---|---|---|---|
| Tracery | 265,000 | Hastings | 37,000 | Kilmarnock | 26,000 | Consideration | 21,000 |
| Rock Sand | 150,000 | Bolero | 35,000 | Order | 26,000 | Falsetto | 21,000 |
| Whiskaway | 125,000 | Endur. by Right | 35,000 | Requital | 26,000 | Yankee | 21,000 |
| Inchcape | 115,000 | Henry of Navarre | 35,000 | Sir Francis | 26,000 | Pr. of Melbourne | 20,500 |
| Playfellow | 115,000 | W. H. Daniel | 35,000 | Clifford | 25,000 | Tippity Witchet | 20,500 |
| St. Blaise | 100,000 | Iroquois | 34,000 | Compute | 25,000 | Dobbins | 20,200 |
| Meddler | 72,500 | Tournament | 33,500 | David Garrick | 25,000 | Aloha | 20,000 |
| Watercress | 71,000 | Rayon d'Or | 33,000 | Halma | 25,000 | Celt | 20,000 |
| Hamburg | 70,000 | Heno | 32,500 | Horace E | 25,000 | Ban Fox | 20,000 |
| Hamburg | 60,000 | Ornament | 31,000 | Iris | 25,000 | Bat Masterson | 20,000 |
| Hermis | 60,000 | The Earl | 30,500 | Lady Languish | 25,000 | Burgomaster | 20,000 |
| Sir Martin | 55,000 | Colin | 30,000 | Maj. Dalngerfield | 25,000 | Duke of Magenta | 20,000 |
| Meddler | 55,000 | Bashti | 30,000 | George Smith | 25,000 | Garry Herrmann | 20,000 |
| Nasturtium | 50,000 | Chacornac | 30,000 | Maxim | 25,000 | His Eminence | 20,000 |
| Friar Rock | 50,000 | Don Alonzo | 30,000 | Mortemer | 25,000 | Lamplighter | 20,000 |
| Hamburg | 49,500 | Galore | 30,000 | Plaudit | 25,000 | Louisburg | 20,000 |
| Meddler | 49,000 | Kingston | 30,000 | Potomac | 25,000 | Luke Blackburn | 20,000 |
| De Mund | 45,000 | L. Primrose colt | 30,000 | Savable | 25,000 | Mexican | 20,000 |
| Fitz Herbert | 45,000 | Lamplighter | 30,000 | Tremont | 25,000 | Mortemer | 20,000 |
| The Commoner | 41,000 | Laureate | 30,000 | Silver King | 25,000 | Raceland | 20,000 |
| Accountant | 40,000 | McChesney | 30,000 | Virgil | 25,000 | Timber | 20,000 |
| Dalmatian | 40,000 | Oaklawn | 30,000 | Yorkville Belle | 24,000 | Viola | 20,000 |
| Fitz Herbert | 40,000 | Uncle | 30,000 | Hautesse | 23,000 | Yankee | 20,000 |
| Kentucky | 40,000 | Cudgel | 30,000 | Water Color | 23,000 | Yankee Consul | 20,000 |
| King Thomas | 38,000 | Dewdrop | 29,500 | Handspun | 22,000 | Westy Hogan | 20,000 |
| Uncle | 38,000 | Oiseau | 27,500 | Silver Fox | 22,000 | Liberty Loan | 20,000 |
| Peter Pan | 38,000 | Omar Khayyam | 26,600 | | | | |

PURCHASE PRICES EUROPEAN THOROUGHBREDS.

| Horse. | Dollars | Horse. | Dollars | Horse. | Dollars | Horse. | Dollars |
|---|---|---|---|---|---|---|---|
| Prince Palatine | 209,000 | Flair | 78,000 | Isonomy | 45,000 | Rosicrucian | 30,000 |
| Charles O'Malley | 200,000 | Meddler | 75,400 | Florist | 45,000 | Laelia | 29,640 |
| Flying Fox | 189,000 | Common | 75,000 | Busybody | 44,000 | Sister to Memoir | 27,500 |
| Cyllene | 157,500 | Melton | 75,000 | Harvester | 43,000 | Spinaway | 27,400 |
| Diamond Jubilee | 151,200 | Sieve Gallion | 75,000 | Cupbearer | 40,000 | Blue Gown | 26,000 |
| Jardy | 150,000 | Woolwinder | 75,000 | Galopin | 40,000 | Sun Kiss | 26,000 |
| Craganour | 150,000 | Doncaster | 70,000 | Petrarch | 40,000 | Gallicule | 25,500 |
| Ormonde | 150,000 | Ormonde | 70,000 | Robert the Devil | 40,000 | Julius Caesar | 25,000 |
| Val d'Or | 140,000 | St. Gatien | 70,000 | Scottish Chief | 40,000 | West Australian | 25,000 |
| Cyllene | 125,000 | The Bard | 70,000 | Verneuil | 39,000 | Stornoway | 25,000 |
| Rock Sand | 125,000 | Carbine | 68,250 | Flying Lemur | 38,500 | Wheel of Fortune | 25,000 |
| Dark Ronald | 125,000 | La Fleche | 66,150 | Sceptre | 36,400 | Cyanin | 24,440 |
| Sceptre | 125,000 | Aboyeur | 65,000 | Macaroni | 35,500 | Carbine—Sceptre filly | 24,000 |
| Prince Palatine | 125,000 | Blair Athol | 62,500 | Beaudesert | 35,000 | | |
| Your Majesty | 112,500 | Bronzino | 62,400 | Silvio | 35,000 | Full Cry | 23,920 |
| Ard Patrick | 110,000 | Bridge of Canny | 60,000 | The Palmer | 35,000 | Cyrene | 23,920 |
| Galtee More | 110,000 | Kangaroo | 60,000 | Dark Legend | 35,000 | Maid of the Mist | 23,400 |
| Lancaster | 110,000 | Ormonde | 60,000 | Admiral Hawke | 32,760 | Salamanca | 23,400 |
| D. of Westminst'r | 109,200 | Rosicrucian | 60,000 | Little Goose | 32,200 | Rosedrop | 22,500 |
| Gouvernant | 100,000 | Adam | 58,000 | Hobbie Noble | 31,500 | Lindal | 21,310 |
| Minoru | 100,000 | Chittabob | 55,000 | Bachelor's D'ble | 30,000 | Hampton | 21,000 |
| Lycaon | 93,600 | Kendal | 52,500 | *Bonnie Scotland | 30,000 | Janette | 21,000 |
| Kendal | 90,000 | Sceptre | 52,500 | Childwick | 30,000 | Cantiniere | 20,500 |
| Matchbox | 90,000 | Friar's Balsam | 50,000 | Gladiateur | 30,000 | Maximilian | 20,500 |
| Polar Star | 90,000 | St. Maclou | 50,000 | Gorgos | 30,000 | Chamant | 20,000 |
| Adam | 80,000 | Melton | 50,000 | King Lud | 30,000 | Maid of Corinth | 20,000 |
| Bona Vista | 80,000 | Saraband | 50,000 | Priam | 30,000 | The Fly. Dutch'n | 20,000 |
| Pietermaritzburg | 80,000 | The Prince | 50,000 | | | | |

* Lord Rosebery's; not imported. Botafogo, an Argentine thoroughbred, sold for $225,000 in 1919.

WINNINGS OF LEADING AMERICAN OWNERS AND STABLES, 1922.
(To October 25, 1922.)

| Owner. | 1st. | 2d. | 3d. | Amount. | Owner. | 1st. | 2d. | 3d. | Amount. |
|---|---|---|---|---|---|---|---|---|---|
| Rancocas Stable | 63 | 44 | 40 | $229,285 | Goldblatt, M. | 36 | 40 | 41 | $66,459 |
| Whitney, H. P. | 59 | 40 | 36 | 224,087 | Madden, J. E. | 30 | 29 | 28 | 60,110 |
| Ross, J. K. L. | 75 | 73 | 38 | 164,544 | Block, B. | 1 | 6 | 1 | 58,475 |
| Wilson, R. T. | 31 | 27 | 30 | 152,623 | Swinke, A. | 52 | 30 | 22 | 54,507 |
| Kilmer, W. S. | 21 | 12 | 10 | 143,238 | Winfrey, G. C. & C. P. | 42 | 34 | 46 | 53,511 |
| Cosden, J. S. | 32 | 33 | 40 | 139,093 | Livingston, J. | 11 | 14 | 7 | 48,391 |
| Jones, Montfort | 61 | 55 | 51 | 128,932 | Thorncliffe Stable | 16 | 19 | 13 | 45,145 |
| Greentree Stable | 43 | 62 | 39 | 108,803 | Gerry, R. L. | 22 | 11 | 11 | 43,240 |
| Quincy Stable | 27 | 22 | 25 | 79,899 | Hewitt, H. H. | 16 | 20 | 23 | 42,669 |
| Seagram Stable | 33 | 28 | 27 | 72,740 | Widener, J. E. | 20 | 16 | 18 | 41,250 |

TOTAL WINNINGS OF FAMOUS AMERICAN HORSES.
(To November 1, 1922.)

| Horse. | Starts. | 1st. | 2d. | 3d. | Amount. | Horse. | Starts. | 1st. | 2d. | 3d. | Amount. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Man-o'-War | 21 | 20 | 1 | 0 | $244,465 | Potomac | 20 | 11 | 4 | 2 | $115,885 |
| Exterminator | 83 | 34 | 16 | 13 | 230,257 | Delhi | 23 | 8 | 2 | 1 | 115,640 |
| Domino | 25 | 19 | 2 | 1 | 193,550 | Strathmeath | 133 | 59 | 33 | 19 | 114,958 |
| Sysonby | 15 | 14 | 0 | 1 | 184,438 | Sir Barton | 12 | 13 | 4 | 3 | 114,807 |
| Colin | 15 | 15 | 0 | 0 | 180,912 | Salvator | 19 | 16 | 1 | 1 | 113,710 |
| Morvich | 16 | 12 | 2 | 1 | 172,909 | Tammany | 14 | 9 | 1 | 1 | 113,290 |
| Ballot | 37 | 20 | 5 | 6 | 154,545 | His Highness | 22 | 13 | 5 | 0 | 113,080 |
| Kingston | 138 | 89 | 34 | 11 | 138,917 | Firenze | 82 | 48 | 20 | 9 | 112,586 |
| Hanover | 50 | 32 | 13 | 3 | 118,872 | Dobbins | 42 | 21 | 11 | 6 | 111,012 |
| Banquet | 166 | 62 | 42 | 23 | 118,535 | Tournament | 44 | 12 | 9 | 4 | 107,407 |
| Miss Woodford | 38 | 37 | 7 | 2 | 118,270 | King James | 57 | 24 | 14 | 10 | 103,405 |
| Peter Pan | 18 | 10 | 3 | 1 | 116,450 | Beldame | 31 | 17 | 6 | 4 | 102,570 |
| Raceland | 130 | 70 | 25 | 12 | 116,391 | Africander | 59 | 19 | 14 | 10 | 101,345 |

Botafogo is said to have won $350,000 in the Argentine Republic, while six horses have earned over $200,000 in England with Isinglass at the top with $291,275. The others are Donovan, Rock Sand, Bayardo, Lemberg and Flying Fox.

Only one horse in France has passed the $200,000 mark, Sardanapale being credited with $211,505.

LEADING AMERICAN PURSE WINNING HORSES OF 1922.
(To October 30, 1922.)

| Horse. | Sts. | 1st. | 2d. | 3d. | Unp | Won. | Horse. | Sts. | 1st. | 2d. | 3d. | Unp | Won. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pillory | 7 | 4 | 1 | 1 | 1 | $95,654 | Enchantment | 9 | 4 | 1 | 0 | 4 | $28,269 |
| Exterminator | 14 | 10 | 1 | 0 | 3 | 69,575 | Kai-Sang | 6 | 3 | 2 | 0 | 1 | 27,847 |
| Morvich | 5 | 1 | 2 | 1 | 1 | 57,675 | Dr. Clark | 16 | 6 | 5 | 3 | 2 | 27,556 |
| Sally's Alley | 8 | 4 | 0 | 0 | 4 | 53,832 | Snob II | 4 | 2 | 1 | 1 | 0 | 27,000 |
| Whiskaway | 4 | 3 | 0 | 0 | 1 | 49,462 | Grey Lag | 6 | 5 | 1 | 0 | 0 | 26,937 |
| Dunlin | 11 | 3 | 3 | 3 | 2 | 43,441 | Brainstorm | 27 | 9 | 5 | 4 | 9 | 26,746 |
| Mad Hatter | 17 | 5 | 8 | 2 | 2 | 43,250 | Goshawk | 8 | 3 | 2 | 1 | 2 | 25,800 |
| Firebrand | 10 | 5 | 3 | 2 | 7 | 33,650 | Rebuke | 28 | 8 | 4 | 2 | 14 | 25,372 |
| Rockminster | 11 | 4 | 3 | 3 | 7 | 33,587 | Zev | 12 | 5 | 4 | 2 | 1 | 24,665 |
| Donges | 18 | 6 | 1 | 5 | 6 | 30,573 | Bunting | 7 | 4 | 2 | 0 | 1 | 24,625 |

LEADING AMERICAN JOCKEYS FOR SEASON OF 1922.
(To October 25, 1922.)

| Name. | Mts. | 1st. | 2d. | 3d. | Unpl. | Pct. | Name. | Mts. | 1st. | 2d. | 3d. | Unpl. | Pct. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C. Lang | 765 | 154 | 119 | 105 | 387 | .20 | C. Eames | 432 | 100 | 78 | 65 | 189 | .23 |
| L. M. Fator | 679 | 141 | 119 | 93 | 323 | .21 | M. Garner | 453 | 98 | 80 | 76 | 199 | .22 |
| T. Wilson | 650 | 133 | 111 | 112 | 294 | .20 | T. Wayt | 496 | 88 | 74 | 85 | 249 | .18 |
| B. Kennedy | 623 | 121 | 107 | 89 | 303 | .19 | J. Owens | 640 | 88 | 79 | 100 | 373 | .14 |
| J. Huntamer | 526 | 112 | 86 | 95 | 233 | .21 | W. Pool | 537 | 87 | 79 | 80 | 291 | .16 |
| E. Sande | 336 | 108 | 71 | 58 | 99 | .32 | E. Pool | 438 | 84 | 62 | 65 | 227 | .19 |

BEST AMERICAN RUNNING RECORDS.

| Distance. | Horse. | Age. | Wgt. | Track. | Date. | Time. |
|---|---|---|---|---|---|---|
| 1-4 mile | Bob Wade | 4 | 122 | Butte, Mont | Aug. 20, 1890 | 0.21 1-4 |
| 2 1-2 furlongs | Nash Cash | 2 | 112 | Charleston, S. C. (Palmetto Park) | Feb. 5, 1912 | 0.29 4-5 |
| 3-8 mile | Atoka | 6 | 105 | Butte, Mont | Sept. 7, 1906 | 0.33 1-2 |
| 3 1-2 furlongs | Joe Blair | 5 | 115 | Juarez, Mexico | Feb. 5, 1916 | 0.39 |
| 1-2 mile | Donau | 2 | 115 | Los Angeles, Cal. (Santa Anita) | Mar. 13, 1909 | 0.46 1-5 |
| | Amon | 2 | 115 | Juarez, Mexico | Feb. 9, 1911 | 0.46 1-5 |
| 4 1-2 furlongs | Distinction | 2 | 107 | Latonia, Ky | June 10, 1919 | .52 2-5 |
| 5-8 mile | Pan Zareta | 5 | 120 | Juarez, Mexico | Feb. 10, 1915 | 0.57 1-5 |
| 5 1-2 furlongs | Iron Mask | 6 | 150 | Juarez, Mexico | Mar. 8, 1914 | 1.03 2-5 |
| *Old Futurity C'se. | Kingston | 7 | 139 | Sheepshead Bay, N. Y | June 22, 1891 | 1.08 |
| 3-4 mile | Iron Mask | 6 | 115 | Juarez, Mexico | Jan. 4, 1914 | 1.09 3-5 |
| 6 1-4 furlongs | Montanic | 4 | 109 | Chicago (Washington Park) | July 20, 1901 | 1.15 4-5 |
| 6 1-2 furlongs | Br'kd'le Nymph | 4 | 124 | Belmont Park, N. Y | Oct. 14, 1907 | 1.17 2-5 |
| | Sweep On | 3 | 112 | Belmont Park, N. Y | May 31, 1919 | 1.17 2-5 |
| 7-8 mile | Roseben | 5 | 126 | Belmont Park, N. Y | Oct. 16, 1906 | 1.22 |
| 7 1-2 furlongs | High Cloud | 6 | 118 | Louisville, Ky | May 22, 1922 | 1.30 |
| 1 mile | Audacious | 5 | 118 | Belmont Park, N. Y | June 1, 1921 | 1.35 3-5 |
| 1 mile 20 yards | Frogiegs | 4 | 107 | Louisville (Churchill Downs) | May 13, 1913 | 1.39 |
| | Senator James | 8 | 103 | Oriental Park (Havana) | Feb. 15, 1918 | 1.39 |
| 1 mile 40 yards | Preen | 4 | 104 | Buffalo, N. Y. (Kenilworth Park) | June 16, 1906 | 1.42 |
| | Mainchance | 3 | 114 | Buffalo, N. Y. (Kenilworth Park) | June 29, 1907 | 1.42 |
| | Harry Shaw | 4 | 104 | Baltimore, Md. (Pimlico) | Nov. 9, 1915 | 1.42 |
| | Chiclet | 4 | 114 | Baltimore, Md. (Pimlico) | Nov. 8, 1916 | 1.42 |
| 1 mile 50 yards | Vox Populi | 4 | 104 | Seattle, Wash. (The Meadows) | Sept. 5, 1908 | 1.40 4-5 |
| 1 mile 55 yards | First Whip | 3 | 101 | Saratoga, N. Y | Aug. 22, 1909 | 1.43 1-4 |
| 1 mile 60 yards | Watervale | 3 | 98 | Baltimore, Md. (Pimlico) | May 9, 1911 | 1.42 2-5 |
| | Pit Jr | 6 | 120 | Louisville, Ky. (Douglas Park) | May 29, 1918 | 1.41 3-5 |
| 1 mile 70 yards | The Porter | 4 | 110 | Louisville, Ky | May 30, 1919 | 1.41 3-5 |
| 1 mile 100 yards | Rapid Water | 6 | 114 | Oakland, Cal | Nov. 30, 1907 | 1.44 1-5 |
| 1 1-16 miles | Celesta | 4 | 108 | Syracuse, N. Y | Sept. 3, 1914 | 1.42 3-4 |
| 1 1-8 miles | Goaler | 5 | 94½ | Belmont Park, N. Y | June 10, 1921 | 1.49 |
| | Grey Lag | 3 | 123 | Aqueduct, N. Y | July 7, 1921 | 1.49 |
| 1 3-16 miles | Sir Barton | 4 | 133 | Saratoga, N. Y | Aug. 28, 1920 | 1.55 3-5 |
| 1 1-4 miles | Whisk Broom II | 6 | 139 | Belmont Park, N. Y | June 28, 1913 | 2.00 |
| 1 mile 500 yards | Swiftwing | 5 | 100 | Latonia, Ky | July 8, 1905 | 2.10 1-5 |
| 1 5-16 miles | Ballot | 4 | 126 | Sheepshead Bay, N. Y | July 1, 1904 | 2.09 3-5 |
| 1 3-8 miles | Man-o'-War | 3 | 126 | Belmont Park, N. Y | June 12, 1920 | 2.14 1-5 |
| 1 1-2 miles | Man-o'-War | 3 | 118 | Belmont Park, N. Y | Sept. 11, 1920 | 2.28 4-5 |
| 1 5-8 miles | Man-o'-War | 3 | 126 | Belmont Park, N. Y | Sept. 4, 1920 | 2.40 4-5 |
| 1 3-4 miles | Rockminster | 3 | 126 | Latonia, Ky | Oct. 21, 1922 | 2.55 3-5 |
| 1 7-8 miles | Orcagna | 4 | 96 | Oakland, Cal | Mar. 2, 1909 | 3.17 3-5 |
| 2 miles | Exterminator | 5 | 128 | Belmont Park, N. Y | Sept. 15, 1920 | 3.31 4-5 |
| 2 miles 70 yards | Grosgrain | 4 | 101 | New Orleans (City Park) | Jan. 27, 1906 | 3.35 1-5 |
| 2 1-16 miles | War Whoop | 4 | 96 | Toronto, Ont. (Woodbine Park) | Sept. 23, 1905 | 3.34 1-4 |
| 2 1-8 miles | Joe Murphy | 4 | 99 | Chicago (Harlem) | Aug. 30, 1894 | 3.42 |
| 2 14 miles | Radio | 4 | 100 | Latonia, Ky | Nov. 4, 1922 | 3.49 |
| 2 1-2 miles | Kyrax | 3 | 88 | Newport, Ky | Nov. 18, 1899 | 4.24 1-2 |
| 2 5-8 miles | Ten Broeck | 4 | 104 | Lexington, Ky | Sept. 16, 1876 | 4.58 1-2 |
| 2 3-4 miles | Hubbard | 4 | 107 | Saratoga, N. Y | Aug. 9, 1873 | 4.58 3-4 |
| 3 miles | Mamie Algol | 5 | 105 | New Orleans, (City Park) | Feb. 16, 1907 | 5.19 |
| 4 miles | †Lucret Borgia | 4 | 85 | Oakland, Cal | May 20, 1897 | 7.11 |
| | Sotemia | 5 | 110 | Louisville (Churchill Downs) | Oct. 7, 1912 | 7.10 4-5 |

*170 feet less than 1-4 mile.

BEST AMERICAN RECORDS—STRAIGHT COURSE.

| Distance. | Horse. | Age. | Wgt. | Track. | Date. | Time. |
|---|---|---|---|---|---|---|
| 1-2 mile | Geraldine | 4 | 122 | Morris Park, N. Y | Aug. 30, 1889 | 0.46 |
| 4 1-2 furlongs | Preceptor | 2 | 112 | Belmont Park, N. Y | May 19, 1908 | 0.51 |
| 5-8 mile | Pen Rose | 2 | 110 | Belmont Park, N. Y | Sept. 12, 1918 | 0.55 3-5 |
| 5 1-2 furlongs | Plater | 2 | 107 | Morris Park, N. Y | Oct. 21, 1902 | 1.02 2-5 |
| 3-4 mile | Artful | 2 | 130 | Morris Park, N. Y | Oct. 15, 1904 | 1.08 |
| 6 1-2 furlongs | Lady Vera | 2 | 90 | Belmont Park, N. Y | Oct. 19, 1906 | 1.16 3-5 |
| 7-8 mile | Paris | 2 | 110 | Belmont Park, N. Y | Sept. 12, 1914 | 1.22 2-5 |
| 1 mile | *Salvator | 4 | 110 | Monmouth Park, N. J | Aug. 28, 1890 | 1.35 1-2 |
| | Kildeer | 4 | 91 | Monmouth Park, N. J | Aug. 13, 1892 | 1.37 1-4 |
| 1 1-4 miles | Banquet | 3 | 108 | Monmouth Park, N. J | July 17, 1890 | 2.03 3-5 |

* Against time.

HIGH JUMP RECORD.

8 feet 1-2 inch, made by Confidence at Ottawa, 1912. Ridden by Jack Hamilton; owned by Sir Clifford Sisson.

## CHIEF AMERICAN STAKE RACES.

### KENTUCKY DERBY.

(Louisville, Ky.)

3-year-olds; 1 1-2 miles, 1875-1895; 1 1-4 miles, 1896 and since.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1875 | Aristides | Lewis | 100 | Volcano | 100 | Verdigris | 100 | $2,850 | 2.37 3-4 |
| 1876 | Vagrant | Swim | 97 | Creedmoor | 100 | Harry Hill | 100 | 2,950 | 2.38 1-4 |
| 1877 | Baden Baden | Walker | 100 | Leonard | 100 | King William | 104 | 3,300 | 2.38 |
| 1878 | Day Star | Carter | 100 | Himyar | 100 | Leveler | 100 | 4,050 | 2.37 1-4 |
| 1879 | Lord Murphy | Shauer | 100 | Falsetto | 100 | Strathmore | 100 | 3,550 | 2.37 |
| 1880 | Fonso | G. Lewis | 105 | Kimball | 105 | Bancroft | 105 | 3,800 | 2.37 1-2 |
| 1881 | Hindoo | J.McLaughlin | 105 | Lelex | 102 | Alfambra | 105 | 4,410 | 2.40 |
| 1882 | Apollo | Hurd | 102 | Runnymede | 105 | Bengal | 105 | 4,560 | 2.40 1-4 |
| 1883 | Leonatus | W. Donohue | 105 | Drake Carter | 104½ | Lord Raglan | 105 | 3,760 | 2.43 |
| 1884 | Buchanan | I. Murphy | 110 | Loftin | 110 | Audrian | 110 | 3,990 | 2.40 1-4 |
| 1885 | Joe Cotton | Henderson | 110 | Bersan | 110 | Ten Booker | 107 | 4,630 | 2.37 1-4 |
| 1886 | Ben Ali | P. Duffy | 118 | Blue Wing | 118 | Free Knight | 118 | 4,890 | 2.36 1-2 |
| 1887 | Montrose | Lewis | 118 | Jim Gore | 118 | Jacobin | 118 | 4,200 | 2.39 1-4 |
| 1888 | Macbeth II | Covington | 115 | Galifet | 118 | White | 118 | 4,740 | 2.38 1-4 |
| 1889 | Spokane | Riley | 118 | Proctor Knott | 115 | Once Again | 118 | 4,970 | 2.34 1-2 |
| 1890 | Riley | I. Murphy | 118 | Bill Letcher | 118 | Robespierre | 118 | 5,460 | 2.45 |
| 1891 | Kingman | I. Murphy | 122 | Balgowan | 122 | High Tariff | 122 | 4,680 | 2.52 1-4 |
| 1892 | Azra | Clayton | 122 | Huron | 122 | Phil Dwyer | 122 | 4,230 | 2.41 1-2 |
| 1893 | Lookout | Kunze | 122 | Plutus | 122 | Boundless | 122 | 4,090 | 2.39 1-4 |
| 1894 | Chant | Goodale | 122 | Pearl Song | 122 | Sigurd | 122 | 4,020 | 2.41 |
| 1895 | Halma | Perkins | 122 | Basso | 122 | Laureate | 122 | 2,970 | 2.37 1-2 |
| 1896 | Ben Brush | Simms | 117 | Ben Eder | 117 | Semper Ego | 117 | 4,850 | 2.07 3-4 |
| 1897 | Typhoon II | Garner | 117 | Ornament | 117 | Dr. Catlett | 117 | 4,850 | 2.12 1-2 |
| 1898 | Plaudit | Simms | 117 | Lieber Karl | 122 | Isabey | 117 | 4,850 | 2.09 |
| 1899 | Manuel | Taral | 117 | Corsini | 122 | Mazo | 117 | 4,850 | 2.12 |
| 1900 | Lieut. Gibson | Boland | 117 | Florizar | 122 | Thrive | 122 | 4,850 | 2.06 1-4 |
| 1901 | His Eminence | Winkfield | 117 | Sannazarro | 117 | Driscoll | 110 | 4,850 | 2.07 3-4 |
| 1902 | Allan-a-Dale | Winkfield | 117 | Inventor | 117 | The Rival | 117 | 4,850 | 2.08 3-4 |
| 1903 | Judge Himes | H. Booker | 117 | Early | 117 | Bourbon | 110 | 4,850 | 2.09 |
| 1904 | Elwood | Prior | 117 | Ed Tierney | 117 | Brancas | 117 | 4,850 | 2.08 1-2 |
| 1905 | Agile | J. Martin | 122 | Ram's Horn | 117 | Layson | 117 | 4,850 | 2.10 3-4 |
| 1906 | Sir Huon | Troxler | 117 | Lady Navarre | 117 | James Reddick | 117 | 4,850 | 2.08 4-5 |
| 1907 | Pink Star | Minder | 117 | Zal | 117 | Ovelando | 117 | 4,850 | 2.12 3-5 |
| 1908 | Stone Street | Pickens | 117 | Sir Cleges | 117 | Dunvegan | 114 | 4,850 | 2.15 1-5 |
| 1909 | Wintergreen | V. Powers | 117 | Miami | 117 | Dr. Barkley | 117 | 4,850 | 2.08 1-5 |
| 1910 | Donau | Herbert | 117 | Joe Morris | 117 | Fighting Bob | 117 | 4,850 | 2.06 2-5 |
| 1911 | Meridan | G. Archibald | 117 | Governor Gray | 119 | Colston | 110 | 4,850 | 2.05 |
| 1912 | Worth | C. H. Shilling | 117 | Duval | 117 | Flamma | 112 | 4,850 | 2.09 2-5 |
| 1913 | Donerail | Goose | 117 | Ten Point | 117 | Gowell | 112 | 5,475 | 2.04 4-5 |
| 1914 | Old Rosebud | J. McCabe | 114 | Hodge | 114 | Bronzewing | 117 | 9,125 | 2.03 2-5 |
| 1915 | Regret | J. Notter | 112 | Pebbles | 117 | Sharpshooter | 114 | 11,450 | 2.05 2-5 |
| 1916 | George Smith | J. Loftus | 117 | Star Hawk | 117 | Franklin | 117 | 9,750 | 2.04 |
| 1917 | Omar Khayyam | C. Borel | 117 | Ticket | 117 | Midway | 117 | 16,600 | 2.04 3-5 |
| 1918 | Exterminator | W. Knapp | 114 | Escoba | 117 | Viva America | 113 | 14,700 | 2.10 4-5 |
| 1919 | Sir Barton | J. Loftus | 112½ | Billy Kelly | 119 | Under Fire | 122 | 20,825 | 2.09 4-5 |
| 1920 | Paul Jones | T. Rice | 126 | Upset | 126 | On Watch | 126 | 30,375 | 2.09 |
| 1921 | Behave Yourself | Thompson | 126 | Black Servant | 126 | Prudery | 121 | 38,450 | 2.04 1-5 |
| 1922 | Morvich | Johnson | 126 | Bet Mosie | 126 | John Finn | 126 | 46,775 | 2.04 3-5 |

### METROPOLITAN HANDICAP.

(Morris Park, N. Y., 1891-1904; Belmont Park, N. Y., 1905 and since.)

3-year-olds and over; 1 1-8 miles, 1891-1896; 1 mile, 1907 and since.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1891 | Tristan | Taylor | 114 | Tenny | 129 | Clarendon | 107 | $7,300 | 1.51 1-2 |
| 1892 | Pessara | Taral | 117 | Locohatchee | 105 | Sleipner | 107 | 12,200 | 1.54 |
| 1893 | Charade | Doggett | 107½ | His Highness | 125 | Illume | 98½ | 13,740 | 1.52 1-4 |
| 1894 | Ramapo | Taral | 117 | Roche | 105 | H. of Navarre | 106 | 6,145 | 1.52 1-2 |
| 1896 | Counter Tenor | Hamilton | 115 | St. Maxim | 109 | Sir Walter | 112 | 3,850 | 1.53 |
| 1897 | Voter | Lamley | 99 | The Winner | 115 | Casseopia | 99 | 3,850 | 1.40 1-2 |
| 1898 | Bowling Brook | P. Clay | 102 | Geo. Keene | 102 | Octagon | 116 | 4,280 | 1.44 |
| 1899 | Filigrane | Clawson | 102 | Ethelbert | 106 | Sanders | 110 | 6,750 | 1.39 3-5 |
| 1900 | Ethelbert | Maher | 126 | Box | 121 | Imp | 127 | 6,250 | 1.41 1-4 |
| 1901 | Banastar | Odom | 123 | Contestor | 112 | All Green | 102 | 6,810 | 1.42 |
| 1902 | Arsenal | J. Daly | 90 | Herbert | 119 | Carbuncle | 103 | 8,920 | 1.42 |
| 1903 | Cunibre | T. Burns | 109 | Old England | 118 | Lux Casta | 102 | 11,080 | 1.38 3-5 |
| 1904 | Irish Lad | Shaw | 123 | Toboggan | 103 | Beldame | 98 | 10,880 | 1.40 |
| 1905 | *Sysonby | Shaw | 107 | *Race King | 97 | Colonial Girl | 111 | 5,655 | 1.41 3-5 |
| 1906 | Grapple | Garner | 106 | Dandelion | 108 | Oxford | 109 | 10,850 | 1.39 |
| 1907 | Glorifier | Garner | 119 | Okenite | 99 | Roseben | 124 | 10,650 | 1.40 4-5 |
| 1908 | Jack Atkin | C. H. Shilling | 128 | Restigouche | 98 | Don Creole | 95 | 9,260 | 1.38 3-5 |
| 1909 | King James | G. Burns | 125 | Fayette | 108 | Juggler | 112 | 3,875 | 1.40 |
| 1910 | Fashion Plate | M. McGee | 105 | Prince Imperial | 97 | Jack Atkin | 129 | 3,800 | 1.37 4-5 |
| 1913 | Whisk Broom II | Notter | 126 | G. M. Miller | 100 | Meridian | 120 | 3,500 | 1.39 |
| 1914 | Buskin | C.Fairbrother | 114 | Figinny | 97 | Rock View | 127 | 4,200 | 1.37 4-5 |
| 1915 | Stromboli | C. Turner | 118 | Sharpshooter | 103 | Flying Fairy | 115 | 2,325 | 1.39 4-5 |
| 1916 | The Finn | A.Schuttinger | 120 | Stromboli | 122 | Spur | 99½ | 3,350 | 1.38 |
| 1917 | Ormesdale | J. McTaggart | 111 | Spur | 117 | Borrow | 117 | 3,850 | 1.39 1-5 |
| 1918 | Trompe La Mort | L. McAtee | 102 | Old Koenig | 118 | Pr. Mullens | 104 | 3,865 | 1.38 2-5 |
| 1919 | Lanius | J. Loftus | 115½ | Flags | 119 | Star Master | 116 | 3,865 | 1.45 2-5 |
| 1920 | Wildair | E. Ambrose | 107 | Thunderclap | 114 | On Watch | 112 | 3,865 | 1.38 4-5 |
| 1921 | Mad Hatter | E. Sande | 127 | Audacious | 117 | Yellow Hand | 110 | 8,150 | 1.37 2-5 |
| 1922 | Mad Hatter | E. Sande | 129 | Careful | 111 | Sennings Park | 127 | 8,025 | 1.36 3-5 |

* Dead heat.

## LATONIA DERBY (HINDOO STAKES, 1883-1886).

(Latonia, Ky.)

3-year-olds; 1 1-2 miles.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1883 | Leonatus | I. Murphy | 110 | Drake Carter | 107 | Lord Raglan | 110 | $2,850 | 2.40 1-2 |
| 1884 | Audrain | Fishburn | 110 | Fallen Leaf | 105 | Buchanan | 110 | 3,860 | 2.42 |
| 1885 | Bersan | I. Murphy | 118 | Lepanto | 118 | Lord Coleridge | 118 | 4,080 | 2.42 3-4 |
| 1886 | Silver Cloud | I. Murphy | 118 | Blue Wing | 118 | Mont'na Reg'nt | 118 | 3,810 | 2.40 |
| 1887 | Libretto | I. Murphy | 118 | Jim Gore | 121 | Montrose | 124 | 4,390 | 2.38 1-4 |
| 1888 | Los Angeles | Armstrong | 110 | White | 112 | Gallifet | 121 | 4,270 | 2.39 1-4 |
| 1889 | Hindoocraft | Hollis | 115 | Come to Taw | 118 | King Regent | 112 | 4,300 | 2.41 |
| 1890 | Bill Letcher | Allen | 115 | Riley | 124 | Avondale | 112 | 5,380 | 2.43 |
| 1891 | Kingman | I. Murphy | 128 | Dickerson | 117 | Poet Scout | 112 | 4,540 | 2.45 1-4 |
| 1892 | Newton | Clayton | 117 | Ronald | 117 | ..... | ... | 3,760 | 3.14 |
| 1893 | Buck McCann | Thorpe | 117 | Boundless | 128 | Midway | 112 | 4,450 | 2.44 |
| 1894 | Lazarone | W. Martin | 117 | Pearl Song | 117 | Selika | 120 | 6,555 | 2.51 |
| 1895 | Halma | Thorpe | 127 | Free Advice | 117 | Basso | 117 | 6,720 | 2.34 1-2 |
| 1896 | Ben Brush | Simms | 122 | Ben Eder | 122 | Loki | 122 | 12,290 | 2.40 1-2 |
| 1897 | Ornament | Clayton | 127 | F. F. V | 114 | Endurance | 114 | 8,740 | 2.35 1-4 |
| 1898 | Han d'Or | Conley | 114 | Plaudit | 127 | ..... | ... | 7,620 | 2.32 1-2 |
| 1899 | Prince McClurg | Beauchamp | 122 | Deering | 114 | Ways & Means | 115 | 6,825 | 2.36 1-2 |
| 1900 | *Lieut. Gibson | Boland | 127 | ..... | ... | ..... | ... | 4,715 | ..... |
| 1901 | Hermando | J. Winkfield | 114 | Gaheris | 110 | Judge Redwine | 114 | 4,985 | 2.35 1-4 |
| 1902 | Harry New | Otis | 114 | South Trimble | 114 | Martin Burke | 110 | 4,390 | 2.38 3-4 |
| 1903 | Woodlake | Crowhurst | 114 | Bad News | 111 | Tancred | 114 | 7,035 | 2.36 3-4 |
| 1904 | Elwood | Prior | 127 | Ed Tierney | 117 | Lonsdale | 112 | 5,730 | 2.42 3-4 |
| 1905 | The Foreman | Treubel | 110 | Hambright | 110 | McClellan | 117 | 5,950 | 2.38 |
| 1906 | Sir Huon | Troxler | 127 | Lady Navarre | 122 | ..... | ... | 5,095 | 2.36 4-5 |
| 1907 | The Abbot | J. Lee | 114 | Redgauntlet | 114 | Beau Brummel | 111 | 4,410 | 2.46 1-5 |
| 1908 | Pinkola | Minder | 114 | Czar | 114 | Ordono | 114 | 3,655 | 2.35 2-5 |
| 1909 | Olambala | T. Rice | 114 | The Peer | 111 | Plate Glass | 110 | 3,095 | 2.39 1-5 |
| 1910 | Joe Morris | C. Grand | 117 | Boola Boola | 117 | Donau | 127 | 2,925 | 2.33 2-5 |
| 1911 | Governor Gray | T. Rice | 124 | Star Charter | 125 | Messenger Boy | 117 | 3,550 | 2.30 2-5 |
| 1912 | Free Lance | C. Peak | 114 | The Manager | 114 | Worth | 127 | 4,250 | 2.31 |
| 1913 | Gowell | Teahan | 117 | Great Britain | 122 | Foundation | 122 | 5,725 | 2.33 1-5 |
| 1914 | John Gun | A. Neylon | 122 | Constant | 122 | Dr. Samuel | 119 | 6,025 | 2.30 2-5 |
| 1915 | Royal II | C. Ganz | 122 | Tetan | 122 | Dortch | 122 | 10,125 | 2.32 |
| 1916 | Dodge | F. Murphy | 122 | George Smith | 127 | Dick Williams | 119 | 9,950 | 2.37 |
| 1917 | Liberty Loan | J. Loftus | 122 | Cudgel | 122 | Midway | 122 | 9,950 | 2.30 4-5 |
| 1918 | Johren | F. Robinson | 127 | Exterminator | 124 | Free Cutter | 122 | 9,925 | 2.33 |
| 1919 | Be Frank | J. Kummer | 119 | Omond | 122 | Regalo | 117 | 16,000 | 2.37 3-5 |
| 1920 | Upset | Rodriguez | 126 | Gladiator | 126 | Ethel Gray | 112 | 16,300 | 2.32 |
| 1921 | Brother Batch | M. Gardner | 126 | Behave Yourself | 131 | Uncle Velo | 126 | 14,900 | 2.47 3-5 |
| 1922 | Thibodaux | E. Pool | 126 | Yoshimi | 126 | Olympus | 126 | 15,000 | 2.33 4-5 |

1888 race was dead heat, on first try, between Los Angeles and White. Former won on second try.
* Walkover.

## SUBURBAN HANDICAP.

(Sheepshead Bay, N. Y., 1884-1912; Belmont Park, N. Y., 1913 and since.)

3-year-olds and over; 1 1-4 miles.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1884 | Gen. Monroe | W. Donohue | 124 | War Eagle | 102 | Jack of Hearts | 114 | $4,945 | 2.11 3-4 |
| 1885 | Pontiac | Olney | 102 | *Richmond | 110 | Rataplan | 116 | 5,855 | 2.09 1-2 |
| 1886 | Troubadour | Fitzpatrick | 115 | †Richmond | 110 | Saranac | 110 | 5,697 | 2.12 1-4 |
| 1887 | Eurus | Davis | 102 | Oriflamme | 104 | Wickham | 114 | 6,095 | 2.12 |
| 1888 | Elkwood | Martin | 119 | Terra Cotta | 122 | Firenze | 117 | 6,812 | 2.07 1-2 |
| 1889 | Raceland | Garrison | 120 | Terra Cotta | 124 | Gorgo | 110 | 6,900 | 2.09 4-5 |
| 1890 | Salvator | I. Murphy | 127 | Cassius | 107 | Tenny | 126 | 6,900 | 2.06 4-5 |
| 1891 | Loantaka | Bergen | 110 | Major Domo | 107½ | Cassius | 115 | 9,900 | 2.07 |
| 1892 | Montana | Garrison | 115 | Major Domo | 115 | Lamplighter | 104 | 17,750 | 2.07 2-5 |
| 1893 | Lowlander | McDermott | 105 | Terrifier | 95 | Lamplighter | 129 | 17,750 | 2.06 3-5 |
| 1894 | Ramapo | Taral | 120 | Banquet | 119 | Sport | 114 | 12,070 | 2.06 1-5 |
| 1895 | Lazzarone | Hamilton | 115 | Sir Walter | 126 | Song & Dance | 99 | 4,730 | 2.07 4-5 |
| 1896 | Henry of Navarre | Griffin | 129 | The Commoner | 113 | Clifford | 126 | 5,850 | 2.07 |
| 1897 | Ben Brush | Simms | 123 | The Winner | 115 | Havoc | 104½ | 5,850 | 2.07 1-5 |
| 1898 | Tillo | Clayton | 119 | Semper Ego | 106 | Ogden | 109 | 6,800 | 2.08 1-5 |
| 1899 | Imp | Turner | 114 | Bannockburn | 112 | Warrenton | 114 | 6,800 | 2.08 2-5 |
| 1900 | Kinley Mack | McCue | 125 | Ethelbert | 130 | Gulden | 100 | 6,800 | 2.06 4-5 |
| 1901 | Alcedo | Spencer | 112 | Watercure | 101½ | Toddy | 100 | 7,800 | 2.05 3-5 |
| 1902 | Gold Heels | Wonderly | 124 | Pentecost | 99 | Blues | 124 | 7,800 | 2.05 1-5 |
| 1903 | Africander | Fuller | 110 | Herbert | 118 | Hunter Raine | 98 | 16,490 | 2.10 2-5 |
| 1904 | Hermis | Redfern | 127 | The Picket | 124 | Irish Lad | 127 | 16,800 | 2.05 |
| 1905 | Beldame | F. O'Neill | 123 | Proper | 109 | First Mason | 118 | 16,800 | 2.05 2-5 |
| 1906 | Go Between | Shaw | 116 | Dandelion | 107 | Colonial Girl | 113 | 16,800 | 2.05 1-5 |
| 1907 | Nealon | W. Dugan | 113 | Montgomery | 104 | Beacon Light | 100 | 16,800 | 2.06 2-5 |
| 1908 | Ballot | Notter | 127 | King James | 98 | Fair Play | 111 | 19,750 | 2.03 |
| 1909 | Fitz Herbert | E. Dugan | 105 | Alfred Noble | 104 | Fayette | 101 | 3,850 | 2.03 2-5 |
| 1910 | Olambala | G. Archibald | 115 | Prince Imperial | 101 | Ballot | 129 | 4,800 | 2.04 2-5 |
| 1913 | Whisk Broom II | J. Notter | 139 | Lahore | 112 | Meridian | 119 | 3,000 | 2.00 |
| 1915 | Stromboli | C. Turner | 122 | Sam Jackson | 110 | Sharpshooter | 106 | 3,925 | 2.05 2-5 |
| 1916 | Friar Rock | M. Garner | 101 | Short Grass | 117 | Stromboli | 123 | 3,450 | 2.05 |
| 1917 | Boots | J. Loftus | 122 | Borrow | 115 | The Finn | 129 | 4,900 | 2.05 1-5 |
| 1918 | Johren | F. Robinson | 110 | Hollister | 118 | Battle | 107 | 7,500 | 2.06 |
| 1919 | Corn Tassel | L. Ensor | 108 | Sweep On | 108 | Boniface | 107 | 5,200 | 2.02 1-5 |
| 1920 | Paul Jones | A. Schuttinger | 106 | Boniface | 115 | Exterminator | 123 | 6,350 | 2.09 3-5 |
| 1921 | Audacious | C. Kummer | 120 | Mad Hatter | 130 | Sennings Park | 110 | 8,100 | 2.02 1-5 |
| 1922 | Capt. Alcock | Ponce | 108 | Flying Cloud | 102 | Mad Hatter | 132 | 8,200 | 2.05 2-5 |

* By Bold Dayrell. † By Virgil.

## OTHER IMPORTANT RACES 1922.

| | First. | Second. | Third. |
|---|---|---|---|
| Kentucky Special | Whiskaway | Thibodaux | Morvich. |
| Grand Nat. Steeplechase (England) | Music Hall | Drifter | Taffytum. |
| Thousand Guineas (England) | St. Louis | Pondoland | Capt. Cuttle. |
| Irish Derby | Spike Island | Ordoney | Monserret. |
| French Derby | Ramus | Keefaling | Algerien. |
| King's Plate (Canada) | South Shore | Paddle | El Jesmar. |

## SARATOGA CUP.

(Saratoga, N. Y.)

3-year-olds and over; 2 1-4 miles, 1865-1886; 2 miles, 1891; 1 5-8 miles, 1901; 1 3-4 miles, 1902 and since.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1865 | Kentucky | Gilpatrick | 104 | Captain Moore | 114 | Rhinodyne | 114 | $1,850 | 4.01 1-2 |
| 1866 | Kentucky | C. Littlefield | 114 | Beacon | 114 | Delaware | 104 | 2,250 | 4.04 |
| 1867 | Muggins | Clark | 118 | Onward | 114 | Delaware | 114 | 1,850 | 4.03 |
| 1868 | Lancaster | Hayward | 114 | J. A. Connolly | 108 | F. Cheath'm | 105 | 1,950 | 4.14 |
| 1869 | Bayonet | Miller | 108 | Nell. McDonald | 105 | Vauxhall | 108 | 2,250 | 4.10 |
| 1870 | Helmbold | Robinson | 108 | Hamburg | 90 | Glenelg | 108 | 1,850 | 4.03 3-4 |
| 1871 | Longfellow | Swim | 108 | Kingfisher | 108 | ..... | ..... | 1,550 | 4.02 3-4 |
| 1872 | Harry Bassett | Rowe | 108 | Longfellow | 114 | Defender | 114 | 1,550 | 3.59 |
| 1873 | Joe Daniels | McCabe | 108 | Harry Bassett | 114 | True Blue | 108 | 1,700 | 4.10 3-4 |
| 1874 | Springbok | Barbee | 108 | Preakness | 114 | Katie Please | 105 | 2,450 | 4.11 3-4 |
| 1875 | §Springbok | W. Clark | 114 | ..... | ..... | ..... | ..... | ..... | ..... |
| | §Preakness | Hayward | 114 | ..... | ..... | Grinstead | 108 | 2,250 | 3.56 1-4 |
| 1876 | Tom Ochiltree | Barbee | 118 | Parole | 97 | Big Sandy | 118 | 1,850 | 4.06 1-2 |
| 1877 | Parole | Barrett | 115 | Tom Ochiltree | 124 | Athlene | 115 | 2,150 | 4.04 1-2 |
| 1878 | Parole | Barrett | 121 | Joe | 118 | Gen. Phillips | 118 | 1,700 | 4.08 1-2 |
| 1879 | Bramble | McLaughlin | 118 | Wilful | 100 | Lou Lanier | 115 | 1,500 | 4.11 3-4 |
| 1880 | Long Taw | Wolfe | 125 | Franklin | 121 | ..... | ..... | 1,300 | 4.08 |
| 1881 | Checkmate | L Murphy | 126 | Monitor | 119 | Irish King | 122 | 1,800 | 4.00 3-4 |
| 1882 | Thora | Brophy | 113 | Carley B | 101 | Alta B | 96 | 1,850 | 4.05 1-2 |
| 1883 | Gen. Monroe | Fitzpatrick | 122 | Boatman | 115 | ..... | ..... | 1,950 | 4.21 1-2 |
| 1884 | Gen. Monroe | Blaylock | 123 | Compensation | 120 | L. Stanhope | 118 | 1,650 | 4.05 |
| 1885 | Bob Miles | Fitzpatrick | 118 | Boatman | 120 | Powhattan III | 118 | 2,150 | 4.02 |
| 1886 | Volante | I. Murphy | 118 | Aretino | 118 | ..... | ..... | 1,700 | 4.25 |
| 1891 | Los Angeles | I. Lewis | 121 | Vallera | 110½ | Ind. Rubber | 107 | 2,900 | 3.43 1-2 |
| 1901 | Blues | Shaw | 113 | Baron Pepper | 113 | Imp | 122 | 3,350 | 2.52 2-5 |
| 1902 | Advance Guard | McCue | 127 | Wyeth | 113 | A. Williams | 113 | 3,350 | 3.01 4-5 |
| 1903 | Africander | Fuller | 113 | Heno | 126 | Waterboy | 126 | 7,600 | 2.58 |
| 1904 | Beldame | F. O'Neill | 108 | Africander | 126 | The Picket | 126 | 8,350 | 3.03 4-5 |
| 1905 | Caughnawaga | Redfern | 127 | Beldame | 121 | Cairngorm | 113 | 5,800 | 3.00 4-5 |
| 1906 | Go Between | Shaw | 127 | Sir Huon | 113 | Samson | 113 | 6,050 | 3.05 2-5 |
| 1907 | Running Water | W. Miller | 121 | Nealon | 126 | Frank Gill | 113 | 6,050 | 3.06 1-5 |
| 1909 | Olambala | Butwell | 113 | Wintergreen | 113 | Pins & Needles | 122 | 2,175 | 2.58 |
| 1910 | Countless | V. Powers | 113 | Olambala | 126 | A. Jenks | 108 | 4,100 | 2.58 3-5 |
| 1913 | Sam Jackson | Loftus | 124 | Ringling | 108 | Lahore | 124 | 1,650 | 3.08 2-5 |
| 1914 | Star Gaze | J. McCahey | 126 | San Vega | 113 | Flying Fairy | 121 | 2,175 | 3.10 |
| 1915 | Roamer | J. Butwell | 123 | Virile | 124 | Star Gaze | 127 | 2,225 | 3.01 4-5 |
| 1916 | Friar Rock | J. McTaggart | 113 | Roamer | 127 | The Finn | 126 | 3,375 | 3.03 |
| 1917 | Omar Khayyam | J. Butwell | 113 | Spur | 126 | Fair Mac | 127 | 5,050 | 3.07 4-5 |
| 1918 | Johren | F. Robinson | 113 | Roamer | ..... | Schuger | 127 | 5,250 | 3.02 1-5 |
| 1919 | Exterminator | Schuttinger | 126 | Purchase | 116½ | The Trump | 116 | 5,350 | 2.58 |
| 1920 | Exterminator | C. Fairbrother | 126 | Cleopatra | 111 | ..... | ..... | 4,950 | 2.56 2-5 |
| 1921 | Exterminator | Kelsey | 126 | Walkover | ..... | ..... | ..... | 5,000 | 3.04 3-5 |
| 1922 | Exterminator | Johnson | 126 | Mad Hatter | 126 | Bon Homme | 126 | 5,525 | 3.00 2-5 |

§ Dead heat; stakes divided.

## BROOKLYN HANDICAP.

(Gravesend, N. Y., 1887-1910; Belmont Park, N. Y., 1913; Aqueduct, N. Y., 1914 and since.)

3-year-olds and over; 1 1-4 miles, 1887-1914; 1 1-8 miles, 1915 and since.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1887 | Dry Monopole | McCarthy | 106 | Blue Wing | 112 | Hidalgo | 115 | $5,850 | 2.07 |
| 1888 | The Bard | Hayward | 125 | Hanover | 125 | Exile | 114 | 6,925 | 2.13 |
| 1889 | Exile | Hamilton | 116 | Prince Royal | 129 | Terra Cotta | 125 | 6,900 | 2.07 1-2 |
| 1890 | Castaway II | Bunn | 100 | Badge | 114 | Erie | 110 | 6,900 | 2.10 |
| 1891 | Tenny | Barnes | 128 | Prince Royal | 117 | Tea Tray | 116 | 14,800 | 2.10 |
| 1892 | Judge Morrow | Covington | 116 | Pessara | 115 | Russell | 114 | 17,750 | 2.08 3-4 |
| 1893 | Diablo | Taral | 112 | Lamplighter | 125 | Leonawell | 110 | 17,500 | 2.09 |
| 1894 | Dr. Rice | Taral | 112 | Henry of Nav're | 109 | Sir Walter | 120 | 17,750 | 2.07 1-4 |
| 1895 | Hornpipe | Hamilton | 105 | Lazzarone | 114 | Sir Walter | 124 | 7,750 | 2.11 1-4 |
| 1896 | Sir Walter | Taral | 113 | Clifford | 125 | St. Maxim | 108 | 7,750 | 2.08 1-2 |
| 1897 | Howard Mann | Martin | 106 | Lake Shore | 106 | Volley | 95 | 7,750 | 2.09 3-4 |
| 1898 | Ornament | Sloan | 127 | Ben Holladay | 121 | Sly Fox | 92 | 7,800 | 2.10 |
| 1899 | Banastar | Maher | 110 | Lanky Bob | 105 | Filigrane | 98 | 7,800 | 2.06 1-4 |
| 1900 | Kinley Mack | McCue | 122 | Raffaello | 113 | Herbert | 99 | 7,800 | 2.10 |
| 1901 | Couroy | O'Connor | 102½ | Herbert | 99 | Standing | 113 | 7,800 | 2.09 |
| 1902 | Reina | O'Connor | 104 | Advance Guard | 117 | Pentecost | 100 | 7,800 | 2.07 |
| 1903 | Irish Lad | O'Neill | 103 | Gunfire | 111 | Heno | 113 | 14,950 | 2.05 2-5 |
| 1904 | The Picket | Helgesen | 119 | Irish Lad | 125 | Proper | 110 | 15,800 | 2.06 3-5 |
| 1905 | Delhi | T. Burns | 124 | Ostrich | 96 | Graziallo | 109 | 15,800 | 2.06 1-5 |
| 1906 | Tokalon | Bedell | 108 | Dandelion | 107 | The Picket | 120 | 15,800 | 2.05 3-5 |
| 1907 | Superman | Miller | 99 | Beacon Light | 100 | Nealon | 114 | 15,800 | 2.09 |
| 1908 | Celt | Notter | 106 | Fair Play | 99 | Master Robert | 95 | 19,750 | 2.04 1-5 |
| 1909 | King James | E. Dugan | 126 | Restigouche | 114 | Celt | 127 | 3,850 | 2.04 |
| 1910 | Fitz Herbert | E. Dugan | 130 | Olambala | 116 | Prince Imperial | 97 | 4,800 | 2.05 3-5 |
| 1913 | Whisk Broom II | Notter | 130 | G. M. Miller | 106 | Sam Jackson | 108 | 3,125 | 2.03 2-5 |
| 1914 | Buckhorn | McCahey | 113 | Ruskin | 119 | Rock View | 128 | 3,750 | 2.08 |
| 1915 | Tartar | J. McTaggart | 103 | Roamer | 125 | Borrow | 128 | 3,850 | 1.50 3-5 |
| 1916 | Friar Rock | Haynes | 108 | Pennant | 123 | Slumber II | 111 | 3,850 | 1.50 |
| 1917 | Borrow | Knapp | 117 | Regret | 122 | Old Rosebud | 120 | 4,850 | 1.49 2-5 |
| 1918 | Cudgel | Lyke | 122 | Roamer | 120 | George Smith | 122 | 4,850 | 1.50 1-5 |
| 1919 | Eternal | Schuttinger | 105 | Purchase | 117 | Questionnaire | 100 | 5,000 | 1.49 4-5 |
| 1920 | Cirrus | L. Ensor | 108 | Bonifface | 122 | Mad Hatter | 115 | 5,850 | 1.50 |
| 1921 | Grey Lag | L. Fator | 110 | John P. Grier | 124 | Exterminator | 129 | 7,600 | 1.49 4-5 |
| 1922 | Exterminator | Johnson | 135 | Grey Lag | 126 | Polly Ann | 103 | 7,600 | 1.50 |

## SARATOGA HANDICAP

(Saratoga, N. Y.)

3-year-olds and over; 1 1-8 miles, 1901; 1 3-16 miles, 1902; 1 1-4 miles, 1903 and since.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1901 | Rockton | N. Turner | 116 | Water Cure | 107 | Water Color | 115 | $6,800 | 1.53 1-5 |
| 1902 | Francesco | H. Michaels | 97 | Herbert | 118 | Articulate | 119 | 6,800 | 1.59 |
| 1903 | Waterboy | Odom | 127 | Hunter Raine | 107 | Caughnawaga | 109 | 8,800 | 2.05 3-5 |
| 1904 | Lord of the Vale | Lyne | 112 | Bad News | 108 | Caughnawaga | 111 | 8,800 | 2.05 |
| 1905 | Caughnawaga | T. Burns | 119 | Water Light | 108 | Beldame | 120 | 8,300 | 2.07 |
| 1906 | Dandelion | Sewell | 113 | Tangle | 97 | Gallavant | 99 | 8,300 | 2.04 3-5 |
| 1907 | McCarter | W. Miller | 111 | Running Water | 115 | Dandelion | 117 | 8,300 | 2.05 3-5 |
| 1908 | Monfort | McCahey | 100 | Far West | 102 | Danoscara | 100 | 1,150 | 2.05 4-5 |
| 1909 | Affliction | E. Martin | 90 | K's Daughter | 104 | Olambala | 116 | 3,850 | 2.05 |
| 1910 | Olambala | Butwell | 128 | Ballot | 133 | Stanley Fay | 102 | 5,800 | 2.08 3-5 |
| 1913 | Cock o' the Walk | J. Glass | 107 | Lahore | 110 | Rolling Stone | 95 | 3,850 | 2.06 |
| 1914 | Borrow | J. Notter | 123 | Hedge | 98 | Flying Fairy | 117 | 3,875 | 2.05 2-5 |
| 1915 | Roamer | J. Butwell | 128 | Saratoga | 102 | S. Jasmine | 103 | 2,300 | 2.04 2-5 |
| 1916 | Stromboli | J. McTaggart | 121 | Ed Crump | 123 | Friar Rock | 107 | 3,850 | 2.05 1-5 |
| 1917 | Roamer | J. Butwell | 122 | Spur | 123 | Ticket | 107 | 4,850 | 2.06 1-5 |
| 1918 | Roamer | F. Robinson | 129 | Cudgel | 133 | Bondage | 105 | 5,350 | 2.02 1-5 |
| 1919 | Purchase | Knapp | 118 | Fairy Wand | 105 | War Cloud | 117 | 7,000 | 2.02 2-5 |
| 1920 | Sir Barton | E. Sande | 129 | Exterminator | 126 | Wildair | 115 | 5,200 | 2.01 4-5 |
| 1921 | Yellow Hand | Miller | 120 | Mad Hatter | 132 | Audacious | 127 | 5,100 | 2.03 4-5 |
| 1922 | Grey Lag | Fator | 130 | Bon Homme | 109 | Prudery | 116 | 7,750 | 2.03 1-5 |

## SARATOGA SPECIAL.

(Saratoga, N. Y.)

2-year-olds; 5½ furlongs, 1901-1905; ¾ mile, 1906 and since.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1901 | Goldsmith | ..... | ... | Blue Girl | ... | Masterman | ... | $14,500 | 1.08 1-5 |
| 1902 | Irish Lad | ..... | ... | Dazzling | ... | Blue Ribbon | ... | 18,000 | 1.08 1-5 |
| 1903 | Aristocracy | ..... | ... | Broomstick | ... | Stalwart | ... | 23,500 | 1.11 4-5 |
| 1904 | Sysonby | Redfern | 122 | Hot Shot | 122 | Britisher | 122 | 13,000 | 1.07 |
| 1905 | Mohawk II | Redfern | 122 | Voorhees | 122 | Tangle | 119 | 16,500 | 1.07 |
| 1906 | Salvidere | Sewell | 119 | McCarter | 122 | Peter Pan | 122 | 15,000 | 1.12 2-5 |
| 1907 | Colin | W. Miller | 122 | Uncle | 122 | ..... | ... | 13,000 | 1.12 |
| 1908 | Sir Martin | C. H. Shilling | 122 | Wedding Bells | 119 | Mediant | 119 | 9,250 | 1.18 4-5 |
| 1909 | Waldo | Nicol | 122 | Sweep | 122 | Herkimer | 122 | 4,875 | 1.15 4-5 |
| 1910 | Novelty | C. H. Shilling | 122 | Iron Mask | 122 | Naushon | 122 | 12,250 | 1.14 2-5 |
| 1913 | Roamer | Byrne | 119 | Gainer | 122 | Black Toney | 122 | 6,500 | 1.13 |
| 1914 | Regret | J. Notter | 119 | Pebbles | 122 | Paris | 122 | 5,125 | 1.11 3-5 |
| 1915 | Dominant | T. McTaggart | 122 | Puss in Boots | 119 | Friar Rock | 122 | 5,125 | 1.16 |
| 1916 | Campfire | J. McTaggart | 122 | T. McTaggart | 122 | Hourless | 122 | 5,625 | 1.13 1-5 |
| 1917 | Sun Briar | W. Knapp | 122 | Rosie O'Grady | 119 | Papp | 122 | 11,750 | 1.15 |
| 1918 | Hannibal | L. Ensor | 122 | Terentia | 119 | Yurucari | 122 | 9,000 | 1.16 1-5 |
| 1919 | Golden Broom | Ambrose | 122 | Wildair | 122 | King Thrush | 122 | 8,500 | 1.12 4-5 |
| 1920 | Tryster | J. Rodriguez | 122 | Prudery | 119 | Dimmesdale | 122 | 9,500 | 1.12 3-5 |
| 1921 | Morvich | Keogh | 122 | Kai Sang | 122 | Whiskaway | 122 | 9,300 | 1.12 1-5 |
| 1922 | Goshawk | McAtee | 122 | McKee | 122 | Bud Lerner | 122 | 9,375 | 1.12 1-5 |

## PREAKNESS STAKES.

(Pimlico, Maryland).

3-year-olds; 1 mile, 1909-1910; 1 1-8 miles, 1911 and since.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1909 | Effendi | W. Doyle | 116 | Fashion Plate | 111 | Hill Top | 111 | $3,225 | 1.39 4-5 |
| 1910 | Layminster | Estep | 84 | Dalhousie | 110 | Sager | 116 | 3,300 | 1.40 3-5 |
| 1911 | Watervale | E. Dugan | 112 | Zeus | 118 | The Nigger | 107 | 2,700 | 1.51 |
| 1912 | Col. Holloway | C. Turner | 107 | Bwana Tumbo | 120 | Tipsand | 107 | 1,450 | 1.56 3-5 |
| 1913 | Buskin | Butwell | 117 | Kleburne | 111 | Barnegat | 104 | 1,670 | 1.53 2-5 |
| 1914 | Holiday | Schuttinger | 108 | Brave Cunarder | 112 | Defendum | 106 | 1,355 | 1.53 4-5 |
| 1915 | Rhine Maiden | D. Hoffman | 104 | Half Rock | 100 | Runes | 116 | 1,275 | 1.58 |
| 1916 | Damrosch | L. McAtee | 115 | Greenwood | 107 | Achievement | 126 | 1,380 | 1.54 4-5 |
| 1917 | Kalitan | E. Haynes | 116 | Al. M. Dick | 116 | Kentucky Boy | 116 | 4,800 | 1.54 2-5 |
| 1918 | *War Cloud | J. Loftus | 117 | Sunny Slope | 107 | Lanius | 110 | 12,250 | 1.53 3-5 |
| 1918 | *Jack Hare, Jr | C. Peak | 115 | The Porter | 107 | Kate Bright | 105 | 11,250 | 1.53 2-5 |
| 1919 | Sir Barton | J. Loftus | 126 | Eternal | 126 | Sweep On | 126 | 24,500 | 1.53 |
| 1920 | Man o'War | C. Kummer | 126 | Upset | 122 | Wildair | 114 | 23,000 | 1.51 3-5 |
| 1921 | Broomspun | Coltiletti | 114 | Polly Ann | 100 | Jeg | 114 | 43,000 | 1.54 1-5 |
| 1922 | Pillory | Morris | 114 | Hea | 114 | June Grass | 114 | 51,000 | 1.51 3-5 |

*Run in two divisions.

## KEENE MEMORIAL STAKES

(Belmont Park, N. Y.)

2-year-olds; ¾ mile, 1913-1914; 5½ furlongs, straight, 1915 and since.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1913 | Stake and Cap | J. McCahey | 97 | Gainer | 116 | Executor | 113 | $3,275 | 1.14 1-5 |
| 1914 | Comely | J. McCabe | 100 | Hauberk | 116 | Geo. Roesch | 102 | 4,600 | 1.13 1-5 |
| 1915 | Ormesdale | J. McCahey | 113 | Paddy Whack | 113 | Kilmer | 110 | 2,325 | 1.06 |
| 1916 | Ivory Black | F. Keogh | 115 | Campfire | 115 | Tumbler | 116 | 3,900 | 1.04 2-5 |
| 1917 | Tracksend | J. Loftus | 115 | Lucullite | 127 | Bughouse | 115 | 5,350 | *..... |
| 1918 | Hannibal | W. Knapp | 112 | Star Hampton | 122 | The Trump | 112 | 6,850 | 1.05 |
| 1919 | Man o' War | J. Loftus | 115 | On Watch | 115 | Anniversary | 115 | 4,200 | 1.05 3-5 |
| 1920 | Tryster | E. Ambrose | 128 | Kirklevington | 112 | Normal | 115 | 5,150 | 1.05 3-5 |
| 1921 | William A | E. Sande | 115 | Sweep By | 115 | Big Heart | 115 | 6,525 | 1.05 1-5 |
| 1922 | Cherry Pie | Lyke | 115 | Cresta | 122 | Canaque | 115 | 6,200 | 1.05 2-5 |

*No time taken.

## DWYER STAKES (BROOKLYN DERBY).

(Gravesend, N. Y., 1887-1910; Belmont Park, N. Y., 1913; Aqueduct, N. Y., 1914 and since.)

3-year-olds; 1½ miles, 1887; 1 1-8 miles, 1888-1897; 1½ miles, 1898-1909; 1¼ miles, 1910-1914; 1 1-8 miles, 1915 and since.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1887 | Hanover | McLaughlin | 118 | Dunbine | 118 | Bronzomarte | 115 | $2,675 | 2.43 1-2 |
| 1888 | Emp. of Norfolk | Murphy | 118 | Sir Dixon | 118 | Prince Royal | 118 | 3,740 | 2.08 3-4 |
| 1889 | Cynosure | Fitzpatrick | 118 | Carroll | 118 | Zephyrus | 118 | 4,790 | 2.10 1-2 |
| 1890 | Burlington | Barnes | 118 | Torso | 118 | Kenwood | 118 | 6,960 | 2.12 3-4 |
| 1891 | Russell | Taylor | 122 | Ambulance | 117 | Bolero | 122 | 5,270 | 2.10 |
| 1892 | Patron | Haywood | 122 | Charade | 122 | Mars | 122 | 5,240 | 2.10 1-4 |
| 1893 | Rainbow | Littlefield | 122 | Don Alonzo | 122 | Comanche | 122 | 4,350 | 2.09 1-4 |
| 1894 | Dobbins | Simms | 122 | Assignee | 122 | Sir Excess | 122 | 5,340 | 2.14 1-2 |
| 1895 | Keenan | Griffin | 122 | Counter Tenor | 127 | Sir Galahad | 122 | 4,640 | 2.10 1-2 |
| 1896 | Handspring | Doggett | 122 | Intermission | 117 | Hamilton II | 122 | 7,800 | 2.10 1-2 |
| 1897 | Octagon | Simms | 122 | Buddha | 122 | Don de Oro | 127 | 7,960 | 2.10 3-4 |
| 1898 | The Huguenot | Spencer | 122 | Previous | 117 | Latson | 117 | 7,750 | 2.37 1-4 |
| 1899 | Ahom | H. Martin | 119 | The Bouncer | 119 | M'Leod of Dare | 119 | 7,750 | 2.36 |
| 1900 | Petruchio | Spencer | 108 | Kilmarnock | 126 | David Garrick | 111 | 8,475 | 2.34 |
| 1901 | Bonnibert | Spencer | 112 | Blues | 111 | The Parader | 126 | 7,750 | 2.33 4-5 |
| 1902 | Maj. Daingerfield | Odom | 118 | Homestead | 118 | King Hanover | 126 | 7,750 | 2.37 |
| 1903 | Whorler | F. O'Neill | 118 | Golden Maxim | 118 | Merry Acrobat | 118 | 7,750 | 2.39 1-4 |
| 1904 | Bryn Mawr | Lyne | 118 | Highball | 118 | TheSoutherner | 118 | 10,000 | 2.35 |
| 1905 | Cairngorm | W. Davis | 118 | Migraine | 118 | Merry Lark | 118 | 5,390 | 2.34 3-5 |
| 1906 | Belmere | F. O'Neill | 118 | The Quail | 118 | King Henry | 115 | 9,475 | 2.37 |
| 1907 | Peter Pan | W. Miller | 126 | Paumonok | 114 | Yankee Girl | 121 | 10,475 | 2.41 |
| 1908 | Fair Play | E. Dugan | 114 | King James | 122 | Chapultepec | 126 | 13,350 | 2.33 |
| 1909 | Joe Madden | E. Dugan | 126 | Fayette | 122 | County Fair | 111 | 9,225 | 2.37 4-5 |
| 1910 | Dalmatian | C. H. Shilling | 122 | Prince Imperial | 122 | Sweep | 126 | 2,300 | 2.07 |
| 1913 | Rock View | T. McTaggart | 123 | Prince Eugene | 101 | ..... | ..... | 2,150 | 2.07 3-5 |
| 1914 | Roamer | J. Butwell | 117 | Gainer | 120 | Charlestonian | 123 | 2,300 | 2.05 3-5 |
| 1915 | Norse King | J. Butwell | 111 | Sharpshooter | 118 | S. McMeekin | 111 | 2,275 | 1.54 |
| 1916 | Chicle | T. McTaggart | 116 | Star Hawk | 116 | Churchill | 112 | 2,950 | 1.51 3-5 |
| 1917 | Omar Khayyam | A. Collins | 125 | Rickety | 119 | Ticket | 122 | 3,850 | 1.54 1-5 |
| 1918 | Cudgel | L. Lyke | 129 | Roamer | 120 | George Smith | 122 | 4,850 | 1.50 1-5 |
| 1919 | Purchase | Knapp | 118 | Sir Barton | 127 | Crystal Ford | 109 | 4,850 | 1.52 3-5 |
| 1920 | Man-o'-War | Kummer | 126 | John P. Grier | 108 | ..... | ..... | 4,850 | 1.49 1-5 |
| 1921 | Grey Lag | E. Sande | 123 | Sporting Blood | 112 | Copper Demon | 108 | 7,100 | 1.49 |
| 1922 | Rag Joy | Ponce | 117 | Letterman | 108 | Oceanic | 108 | 7,300 | 1.52 3-5 |

## WITHERS STAKES.

(Jerome Park, N. Y., 1874-1889; Morris Park, N. Y., 1890-1904; Belmont Park, N. Y., 1905 and since.)

3-year-olds; 1 mile.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1874 | Dublin | Ponton | 110 | Vandalite | 107 | Redfern | 110 | $3,200 | 1.50 |
| 1875 | Aristides | Swim | 110 | Rhadamanthus | 110 | Ozark | 110 | 4,150 | 1.45 3-4 |
| 1876 | Fiddlesticks | Flakes | 110 | Charl'y Howard | 110 | Merciless | 107 | 3,500 | 1.46 1-2 |
| 1877 | Bombast | Barrett | 110 | Card. Wolsey | 110 | Glen Dudley | 110 | 4,200 | 1.46 |
| 1878 | D'k of Magenta | Hughes | 118 | Bramble | 118 | Danicheff | 118 | 3,500 | 1.48 |
| 1879 | Dan Sparling | Kelly | 118 | Spendthrift | 118 | Report | 118 | 5,305 | 1.48 |
| 1880 | Fernclife | Barrett | 118 | Grenada | 118 | Oden | 118 | 3,800 | 1.49 |
| 1881 | Crickmore | Hughes | 115 | Priam | 118 | Filette | 113 | 4,275 | 1.48 |
| 1882 | Forester | J. McLaugh'n | 118 | Marsh Redon | 118 | Rica | 113 | 4,600 | 1.46 1-2 |
| 1883 | Geo. Kinney | J. McLaugh'n | 118 | Pizarro | 118 | Trombone | 118 | 2,990 | 1.45 |
| 1884 | Panique | Fitzpatrick | 118 | Himalaya | 118 | Pampero | 118 | 3,240 | 1.48 |
| 1885 | Tyrant | P. Duffy | 118 | Richmond | 118 | Tecumseh | 118 | 3,070 | 1.45 1-4 |
| 1886 | Bigonet | Maynard | 113 | Repartee | 118 | Headland | 118 | 3,260 | 1.48 |
| 1887 | Hanover | J. McLaugh'n | 118 | Stockton | 118 | Belvidere | 118 | 3,490 | 1.46 1-2 |
| 1888 | Sir Dixon | Fitzpatrick | 118 | Prince Royal | 118 | Tea Tray | 119 | 3,620 | 1.47 |
| 1889 | Diablo | Godfrey | 121 | Eric | 118 | Reporter | 118 | 5,380 | 1.45 |
| 1890 | King Eric | Garrison | 110 | Magnate | 113 | Cayuga | 113 | 3,140 | 1.41 |
| 1891 | Picknicker | F. Littlefield | 117 | Montana | 117 | Laureston | 114 | 4,190 | 1.40 3-4 |
| 1892 | Tammany | Garrison | 122 | Patron | 122 | Yorkville Belle | 117 | 7,460 | 1.40 |
| 1893 | Dr. Rice | Taral | 122 | Rainbow | 122 | Sir Walter | 122 | 9,470 | 1.42 |
| 1894 | Domino | Taral | 122 | H'y of Navarre | 122 | Dobbins | 122 | 7,100 | 1.40 |
| 1895 | Lucania | Reiff | 109 | Brandywine | 105 | Gotham | 111 | 2,700 | 1.41 3-4 |
| 1896 | Handspring | Simms | 122 | Hastings | 122 | Sherlock | 112 | 2,550 | 1.41 |
| 1897 | Octagon | Simms | 119 | Ogden | 122 | Regulator | 119 | 2,550 | 1.43 |
| 1898 | The Huguenot | Spencer | 122 | Mr. Balter | 122 | Handball | 122 | 3,815 | 1.43 |
| 1899 | Jean Bereaud | Clawson | 122 | Filon d'Or | 119 | The Bouncer | 122 | 4,450 | 1.42 1-4 |
| 1900 | Kilmarnock | N. Turner | 126 | Mesmerist | 126 | Ildrim | 126 | 5,470 | 1.41 1-4 |
| 1901 | The Parader | Landry | 126 | Bonnibert | 126 | Bellario | 126 | 5,020 | 1.42 1-2 |
| 1902 | Compute | Shaw | 126 | Old England | 123 | King Hanover | 126 | 4,815 | 1.42 |
| 1903 | Shorthose | Haack | 126 | Mexican | 126 | Injunction | 126 | 6,395 | 1.41 |
| 1904 | Delhi | Odom | 126 | Bryn Mawr | 126 | Conjurer | 126 | 5,750 | 1.40 |
| 1905 | Blandy | W. Davis | 126 | Hot Shot | 126 | Sparkling Star | 126 | 6,320 | 1.44 3-5 |
| 1906 | Accountant | J. Martin | 126 | Bohemian | 126 | Clark Griffith | 126 | 6,850 | 1.38 4-5 |
| 1907 | Frank Gill | Notter | 126 | Peter Pan | 126 | Saracinesca | 123 | 7,775 | 1.40 |
| 1908 | Colin | Notter | 126 | Fair Play | 126 | King James | 126 | 12,090 | 1.41 |
| 1909 | Hilarious | Butwell | 126 | Joe Madden | 126 | Fayette | 126 | 11,070 | 1.41 1-5 |
| 1910 | The Turk | M. McGee | 126 | Prince Imperial | 126 | Grasmere | 126 | 3,000 | 1.40 |
| 1913 | Rock View | Butwell | 118 | Prince Eugene | 118 | Yank. Notions | 118 | 2,325 | 1.39 2-5 |
| 1914 | Charlestonian | Burlingame | 115 | Gainer | 118 | Roamer | 115 | 2,900 | 1.39 4-5 |
| 1915 | The Finn | G. Byrne | 118 | Sharpshooter | 115 | Half Rock | 118 | 1,425 | 1.39 2-5 |
| 1916 | Spur | J. Loftus | 118 | Churchill | 118 | Friar Rock | 118 | 2,900 | 1.38 2-5 |
| 1917 | Hourless | J. Butwell | 118 | Rickety | 118 | Skeptic | 118 | 5,475 | 1.39 |
| 1918 | Motor Cop | E. Taplin | 118 | Cum Sah | 118 | Tr. La Mort | 118 | 7,100 | 1.39 3-5 |
| 1919 | Sir Barton | J. Loftus | 118 | Eternal | 118 | Pastoral Swain | 118 | 8,075 | 1.38 4-5 |
| 1920 | Man-o'-War | C. Kummer | 118 | Wildair | 118 | David Harum | 118 | 4,825 | 1.35 4-5 |
| 1921 | Leonardo II | Schuttinger | 118 | Sporting Blood | 118 | Grey Lag | 118 | 5,475 | 1.37 2-5 |
| 1922 | Snob II | Kummer | 118 | Pillory | 118 | June Grass | 118 | 7,240 | 1.35 4-5 |

## TRAVERS STAKES.

(Saratoga, N. Y.)

3-year-olds; 1¼ miles, 1864-1889; 1¼ miles, 1890-1892; 1¼ miles, 1893-1894; 1 1-8 miles, 1895; 1¼ miles, 1897; 1 1-8 miles, 1901-1903; 1¼ miles, 1904 and since.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1864 | Kentucky | Gilpatrick | 100 | Tipperary | 100 | Throg's N'k, Jr. | 100 | $2,950 | 3.18 3-4 |
| 1865 | Malden | Sewell | 97 | Oliata | 97 | Sarah K. | 97 | 3,400 | 3.18 1-2 |
| 1866 | Merrill | Abe | 100 | Ulrica | 97 | Bayswater | 100 | 3,500 | 3.29 |
| 1867 | Ruthless | Gilpatrick | 103 | R. B. Connolly | 100 | DeCourcey | 100 | 2,850 | 3.13 1-4 |
| 1868 | Banshee | Smith | 97 | Boaster | 100 | Albuera | 100 | 3,150 | 3.10 3-4 |
| 1869 | Glenelg | C. Miller | 110 | Onyx | 110 | Ivercauld | 107 | 3,000 | 3.14 |
| 1870 | Kingfisher | C. Miller | 110 | Telegram | 110 | Foster | 110 | 4,950 | 3.15 1-4 |
| 1871 | Harry Bassett | W. Miller | 110 | Nellie Gray | 107 | Alroy | 110 | 5,000 | 3.21 3-4 |
| 1872 | Joe Daniels | Rowe | 110 | Silent Friend | 110 | Wade Hampt'n. | 110 | 5,500 | 3.08 1-4 |
| 1873 | Tom Bowling | Swin | 110 | Waverly | 110 | Merodac | 110 | 5,400 | 3.09 3-4 |
| 1874 | *Attila | Barbee | 110 | Acrobat | 110 | Steel Eyes | 110 | 5,050 | 3.09 1-2 |
| 1875 | D'Artagnan | Barbee | 110 | Milner | 110 | Aristides | 110 | 4,850 | 3.06 1-2 |
| 1876 | Sultana | Hayward | 107 | Barricade | 110 | Frederickstown. | 110 | 3,700 | 3.15 1-2 |
| 1877 | Baden Baden | Savers | 110 | Bradamante | 107 | St. James | 110 | 4,550 | 3.12 1-2 |
| 1878 | D'k of Magenta | Hughes | 118 | Bramble | 118 | Spartan | 118 | 4,250 | 3.08 |
| 1879 | Falsetto | I. Murphy | 118 | Spendthrift | 118 | Harold | 118 | 4,950 | 3.09 1-4 |
| 1880 | Grenada | Hughes | 118 | Oden | 118 | Turfman | 118 | 3,750 | 3.12 1-2 |
| 1881 | Hindoo | J. McLaugh'n | 118 | Catoctin | 118 | Getaway | 118 | 2,950 | 3.07 1-2 |
| 1882 | Carley B. | Quantrell | 115 | Tom Plunkett | 118 | Mandamus | 118 | 3,450 | 3.28 3-4 |
| 1883 | Barnes | J. McLaugh'n | 118 | Tennyson | 118 | ..... | ..... | 3,400 | 3.18 |
| 1884 | Rataplan | Fitzpatrick | 118 | Blast | 118 | Tecoma | 118 | 4,150 | 3.07 1-2 |
| 1885 | Bersan | Spellman | 118 | Irish Pat | 118 | Boot Black | 118 | 4,025 | 3.08 1-4 |
| 1886 | Inspector B. | J. McLaugh'n | 118 | Elkwood | 118 | Silver Cloud | 118 | 3,825 | 3.10 1-4 |
| 1887 | Carey | Blaylock | 118 | Oarsman | 118 | Pendennis | 118 | 3,825 | 3.17 1-2 |
| 1888 | Sir Dixon | J. McLaugh'n | 118 | Los Angeles | 113 | Falcon | 118 | 4,625 | 3.07 3-4 |
| 1889 | Long Dance | Barnes | 118 | Flood Tide | 118 | ..... | ..... | 3,700 | 3.08 3-4 |
| 1890 | Sir John | Bergen | 118 | Frontenac | 118 | Burlington | 118 | 4,925 | 2.39 |
| 1891 | Vallera | R. Williams | 122 | Hoodlum | 122 | Silver King | 115 | 2,900 | 2.49 |
| 1892 | Azra | Clayton | 122 | Ronald | 122 | ..... | ..... | 2,750 | 2.43 3-4 |
| 1893 | Stowaway | McDermott | 107 | Mirage | 110 | Walnut | 107 | 2,450 | 2.10 3-4 |
| 1894 | H'y of Navarre | Taral | 125 | Joe Ripley | 110 | Rel San Anita | 125 | 2,350 | 2.10 1-4 |
| 1895 | Liza | Griffin | 104 | Rey del Caredes | 109 | Maurice | 111 | 1,125 | 1.55 1-2 |
| 1897 | Rensselaer | Taral | 126 | Tragedian | 114 | Don de Oro | 131 | 1,425 | 2.12 |
| 1901 | Blues | Shaw | 126 | Dublin | 111 | The Parader | 129 | 6,750 | 1.56 3-5 |
| 1902 | Hermis | Rice | 111 | Gold Cure | 116 | Cunard | 111 | 6,750 | 1.54 4-5 |
| 1903 | Ada May | F. O'Neill | 106 | Reliable | 126 | Gimcrack | 111 | 8,150 | 1.57 |
| 1904 | Broomstick | T. Burns | 129 | Bobadil | 116 | Auditor | 111 | 5,850 | 2.06 4-5 |
| 1905 | Dandelion | Shaw | 111 | Merry Lark | 126 | Glenecho | 126 | 8,350 | 2.08 |
| 1906 | Gallavant | W. Miller | 111 | Roidmoore II | 111 | Roidmoore | 111 | 5,850 | 2.08 1-5 |
| 1907 | Frank Gill | Notter | 129 | Golf Ball | 116 | Cork Hill | 111 | 5,800 | 2.07 |
| 1908 | Dorante | J. Lee | 116 | King James | 111 | Beaucoup | 111 | 5,800 | 2.09 3-5 |
| 1909 | Hilarious | Scoville | 129 | Practical | 108 | Fayette | 121 | 5,800 | 2.06 |
| 1910 | Dalmatian | C. H. Shilling | 129 | Barleythorpe | 111 | Hampton Court | 111 | 4,825 | 2.10 |
| 1913 | Rock View | T. McTaggart | 129 | Prince Eugene | 126 | Barnegat | 115 | 2,725 | 2.06 3-5 |
| 1914 | Roamer | J. Butwell | 129 | Surprising | 126 | Gainer | 121 | 3,000 | 2.04 |
| 1915 | †Lady Rotha | M. Garner | 106 | Saratoga | 121 | Iron Duke | 111 | 2,150 | 2.11 2-5 |
| 1916 | Spur | J. Loftus | 129 | Star Hawk | 116 | Franklin | 111 | 3,125 | 2.05 |
| 1917 | Omar Knayyam | J. Butwell | 129 | Rickety | 123 | Ticket | 120 | 5,350 | 2.08 4-5 |
| 1918 | Sun Briar | W. Knapp | 120 | Johren | 126 | War Cloud | 126 | 7,700 | 2.03 1-5 |
| 1919 | Hannibal | L. Ensor | 120 | War Pennant | 120 | Thunderclap | 115 | 9,835 | 2.02 4-5 |
| 1920 | Man-o'-War | Schuttinger | 129 | Upset | 123 | John P. Grier | 115 | 9,275 | 2.01 4-5 |
| 1921 | Sporting Blood | L. Lyke | 116 | Frudery | 121 | ..... | ..... | 10,550 | 2.05 4-5 |
| 1922 | Little Chief | Fator | 123 | Kai Sang | 120 | Sweep By | 123 | 11,325 | 2.13 2-5 |

*Dead heat, Attila winning run-off in 3.08 3-4. †Trial by Jury finished first but was disqualified.

## CARLTON STAKES

(Gravesend, N. Y., 1887-1910; Aqueduct, N. Y., 1914.)

3-year-olds; 1 mile.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1887 | Hanover | J. McLaugh'n | 118 | Fitzroy | 108 | Dunbine | 108 | $2,070 | 1.43 1-4 |
| 1888 | Sir Dixon | J. McLaugh'n | 119 | Raceland | 115 | ..... | ..... | 1,955 | 1.56 3-4 |
| 1889 | Carroll | F. Littlefield | 118 | Longstreet | 118 | Cynosure | 118 | 4,130 | 1.42 1-2 |
| 1890 | Kenwood | Bergen | 118 | Tournament | 118 | Magnate | 118 | 5,130 | 1.42 1-2 |
| 1891 | Russell | F. Littlefield | 122 | Terrifier | 122 | Picknicker | 122 | 4,420 | 1.45 |
| 1892 | Charade | Garrison | 122 | Mars | 122 | Actor | 122 | 4,510 | 1.44 |
| 1893 | Prince George | Lamley | 122 | Comanche | 122 | Young Arion | 122 | 3,290 | 1.46 |
| 1894 | Hornpipe | Taral | 122 | Dobbins | 122 | St. Julien | 122 | 5,580 | 1.43 3-4 |
| 1895 | Counter Tenor | Lamley | 122 | Kennel | 122 | Sir Galahad | 122 | 3,850 | 1.44 1-2 |
| 1896 | Handspring | Simms | 122 | Hamilton II | 122 | Bonaparte | 122 | 3,850 | 1.43 |
| 1897 | Don de Oro | Simms | 122 | Braw Lad | 122 | Octagon | 122 | 3,850 | 1.44 3-4 |
| 1898 | The Huguenot | Spencer | 122 | Sanders | 117 | George Boyd | 117 | 3,850 | 1.45 1-4 |
| 1899 | Lotharlo | H. Martin | 119 | Half Time | 116 | Prestidigit'ce | 114 | 3,850 | 1.42 |
| 1900 | Standing | N. Turner | 111 | McMeekin | 111 | Mesmerist | 111 | 5,150 | 1.40 3-5 |
| 1901 | Commando | Spencer | 126 | Blues | 111 | ..... | ..... | 3,850 | 1.39 2-5 |
| 1902 | King Hanover | T. Burns | 118 | Masterman | 126 | Hyphen | 118 | 3,850 | 1.40 1-5 |
| 1903 | Reliable | T. Burns | 118 | Fire Eater | 118 | River Pirate | 118 | 4,150 | 1.40 |
| 1904 | Montresor | Redfern | 118 | Orm'n's Right | 118 | Orthodox | 118 | 6,100 | 1.43 1-5 |
| 1905 | Cairngorm | W. Davis | 118 | Merry Lark | 118 | Sparkling Star | 118 | 3,200 | 1.41 3-5 |
| 1906 | Burgomaster | Lyne | 118 | The Quail | 118 | Pegasus | 118 | 4,380 | 1.41 3-5 |
| 1907 | Dinna Ken | C. Koerner | 111 | Peter Pan | 122 | Charles Edward | 118 | 5,455 | 1.38 4-5 |
| 1908 | Chapultepec | R. McDaniel | 118 | Question Mark | 118 | Transvaal | 114 | 6,790 | 1.39 2-5 |
| 1909 | Hallarious | Butwell | 126 | Joe Madden | 126 | Fayette | 122 | 4,815 | 1.41 1-5 |
| 1910 | Sweep | V. Powers | 126 | The Turk | 126 | Dalmatian | 122 | 1,900 | 1.39 1-5 |
| 1914 | Luke McLuke | M. Buxton | 126 | Stromboli | 113 | Charlestonian | 123 | 5,125 | 1.38 4-5 |

## TIDAL STAKES.

(Sheepshead Bay, N. Y.)

3-year-olds; 1 mile, 1880-1901; 1⅛ miles, 1902-1910. Then the track closed.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1880 | L. Blackburn | J. McLaugh'n | 118 | Kimball | 118 | Kitty J. | 113 | $2,350 | 1.45 |
| 1881 | Hindoo | J. McLaugh'n | 118 | Crickmore | 115 | Saunterer | 118 | 3,430 | 1.43 1-4 |
| 1882 | Runnymede | J. McLaugh'n | 118 | Marsh Redon | 118 | Hilarity | 118 | 3,960 | 1.43 3-4 |
| 1883 | Barnes | J. McLaugh'n | 118 | Pizarro | 118 | ..... | ..... | 4,320 | 1.46 3-4 |
| 1884 | Young Duke | Shaner | 118 | Greystone | 118 | Wecher | 118 | 4,180 | 1.48 3-4 |
| 1885 | *Joe Cotton | J. McLaugh'n | 118 | Pardee | 118 | Brookwood | 118 | 5,310 | 1.44 1-4 |
| 1886 | Inspector B. | J. McLaugh'n | 118 | Quito | 118 | Rock and Rye | 118 | 5,810 | 1.46 3-4 |
| 1887 | Hanover | J. McLaugh'n | 118 | Kingston | 118 | Oneko | 118 | 6,740 | 1.41 3-4 |
| 1888 | Defense | F. Littlefield | 118 | Bella B. | 113½ | Prince Royal | 118 | 7,720 | 1.42 3-4 |
| 1889 | Salvator | J. McLaugh'n | 121 | Eric | 118 | Reporter | 118 | 7,000 | 1.44 2-5 |
| 1890 | Burlington | I. Murphy | 118 | Chesapeake | 118 | Banquet | 118 | 8,480 | 1.45 |
| 1891 | Porchester | Hamilton | 122 | Russell | 122 | Terrifier | 122 | 5,770 | 1.42 4-5 |
| 1892 | Charade | Simms | 122 | Tammany | 122 | Patron | 122 | 6,690 | 1.41 1-5 |
| 1893 | Sir Walter | Doggett | 122 | Sir Francis | 122 | Lidgerwood | 122 | 6,330 | 1.43 |
| 1894 | Dobbins | Simms | 122 | Sir Excess | 122 | St. Maxim | 122 | 7,900 | 1.40 |
| 1895 | Keenan | Griffin | 122 | Connoisseur | 122 | Dolabra | 119 | 6,380 | 1.42 |
| 1896 | Margrave | Griffin | 122 | Hastings | 122 | Formal | 122 | 5,690 | 1.43 |
| 1897 | Buddha | Simms | 117 | Scot. Chieftain | 127 | Imperator | 117 | 3,090 | 1.42 1-5 |
| 1898 | Handball | R. Williams | 122 | Sanders | 122 | Boy Orator | 115 | 3,770 | 1.41 2-5 |
| 1899 | Filon d'Or | McCue | 123 | Lothario | 129 | Half Time | 123 | 4,660 | 1.41 1-5 |
| 1900 | McMeekin | Mitchell | 118 | David Garrick | 126 | Mesmerist | 126 | 4,900 | 1.40 3-5 |
| 1901 | Watercolor | Shaw | 126 | Smile | 126 | Military | 126 | 4,770 | 1.38 4-5 |
| 1902 | Mj. Daingerfield | Shaw | 126 | Goldsmith | 126 | Dixieline | 126 | 14,575 | 2.09 3-5 |
| 1903 | Shortnose | Haack | 126 | Charles Elwood | 126 | Whorler | 126 | 14,450 | 2.12 1-5 |
| 1904 | Ort Wells | Hildebrand | 126 | Delhi | 126 | St. Valentine | 126 | 15,250 | 2.06 |
| 1905 | Sysonby | Nicol | 126 | Agile | 126 | Cairngorm | 126 | 14,550 | 2.05 |
| 1906 | Accountant | J. Martin | 126 | Bohemian | 126 | Bull's Eye | 126 | 15,050 | 2.10 |
| 1907 | Peter Pan | W. Miller | 126 | Hickory | 126 | Paumonok | 126 | 15,050 | 2.07 2-5 |
| 1908 | Colin | Notter | 126 | Dorante | 126 | Stamina | 121 | 15,050 | 2.04 |
| 1909 | Hilarious | Scoville | 126 | Fayette | 126 | Joe Madden | 126 | 14,550 | 2.05 |
| 1910 | The Turk | M. McGee | 119 | Dalmatian | 119 | Prince Imperial | 119 | 1,450 | 2.03 4-5 |

*Dead heat.

## HOPEFUL STAKES.

(Saratoga, N. Y.)

2-year-olds; ¾ mile.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1903 | Delhi | Gannon | 112 | Highball | 112 | Palmbearer | 112 | $22,275 | 1.13 1-5 |
| 1904 | Tanya | Hildebrand | 127 | Rose of Dawn | 112 | Hot Shot | 115 | 29,790 | 1.13 2-5 |
| 1905 | Monawk II | Redfern | 130 | Athletic | 115 | Juggler | 112 | 16,490 | 1.13 2-5 |
| 1906 | Peter Pan | W. Knapp | 130 | McCarter | 122 | Jope Joan | 112 | 17,640 | 1.12 1-5 |
| 1907 | Jim Gaffney | Nicol | 115 | Fair Play | 125 | Bar None | 115 | 17,500 | 1.15 |
| 1908 | Helmet | Notter | 115 | Perseus | 115 | Fayette | 130 | 10,990 | 1.12 1-5 |
| 1909 | Rocky O'Brien | V. Powers | 122 | Sweep | 130 | Barleythorpe | 115 | 17,160 | 1.13 1-5 |
| 1910 | Novelty | A. Thomas | 130 | Iron Mask | 125 | Naushon | 125 | 19,140 | 1.14 |
| 1913 | Bringhurst | Loftus | 113 | Little Nephew | 113 | Black Broom | 107 | 4,100 | 1.12 2-5 |
| 1914 | Regret | J. Notter | 127 | Andrew M. | 114 | Pebble | 130 | 9,590 | 1.16 2-5 |
| 1915 | Dominant | J. Notter | 130 | Big Smoke | 107 | Primero | 107 | 9,150 | 1.13 4-5 |
| 1916 | Campfire | J. McTaggart | 130 | Omar Khayyam | 110 | Star Master | 110 | 18,850 | 1.14 3-5 |
| 1917 | Sun Briar | W. Knapp | 130 | Papp | 130 | Sycamore | 115 | 30,600 | 1.15 3-5 |
| 1918 | Eternal | Schuttinger | 115 | Daydue | 115 | War Marvel | 115 | 30,150 | 1.13 3-5 |
| 1919 | Man-o'-War | J. Loftus | 130 | Cleopatra | 112 | Constancy | 124 | 24,600 | 1.13 |
| 1920 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1921 | Morvich | Johnson | 136 | Kai Sang | 130 | Whiskaway | 115 | 34,900 | 1.12 3-5 |
| 1922 | Dunlin | Kummer | 115 | Goshawk | 130 | Zev | 130 | 33,950 | 1.12 2-5 |

## GRAND UNION HOTEL STAKES.

(Saratoga, N. Y.)

2-year-olds; ¾ mile.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1901 | King Hanover | T. Burns | 110 | Goldsmith | 127 | Dixieline | 117 | $6,975 | 1.13 1-5 |
| 1902 | Grey Friar | T. Burns | 114 | Judith Camp'l | 122 | White Chapel | 122 | 10,990 | 1.13 |
| 1903 | Highball | Fuller | 117 | Dimple | 110 | Rapid Water | 117 | 10,815 | 1.14 1-5 |
| 1904 | Sigligh | H. Phillips | 110 | Jack Lory | 117 | Cairngorm | 117 | 8,250 | 1.15 |
| 1905 | Battleaxe | Redfern | 117 | Sandy D. (Bull's Eye) | 112 | Jerry Wernberg | 112 | 8,650 | 1.14 |
| 1906 | Penarris | Shaw | 114 | Aletheuo | 112 | Don Enrique | 117 | 8,250 | 1.13 3-5 |
| 1907 | Colin | W. Miller | 127 | Jim Gaffney | 112 | Ben Fleet | 117 | 8,250 | 1.13 |
| 1908 | Edward | C. H. Shilling | 122 | Bobbin | 114 | Lady Hubbard | 111 | 8,250 | 1.15 |
| 1909 | Chickasaw | Page | 117 | Amelia Jenks | 114 | Shannon | 117 | 1,295 | 1.13 2-5 |
| 1910 | Iron Mask | Notter | 114 | Footprint | 130 | Watervale | 114 | 8,040 | 1.12 4-5 |
| 1913 | Black Broom | Ambrose | 107 | Bradley's Ch'e | 113 | Little Nephew | 114 | 2,440 | 1.13 1-5 |
| 1914 | Garbage | T. Davies | 127 | Royal Martyr | 104 | Distant Shore | 107 | 3,985 | 1.13 3-5 |
| 1915 | Puss in Boots | M. Garner | 104 | Dominant | 130 | Big Smoke | 107 | 4,100 | 1.13 3-5 |
| 1916 | Hourless | J. McTaggart | 125 | Rickety | 119 | T. McTaggart | 125 | 5,850 | 1.12 3-5 |
| 1917 | Sun Briar | W. Knapp | 130 | Kashmir | 115 | War Machine | 116½ | 8,550 | 1.16 2-5 |
| 1918 | Sweep On | L. Gentry | 127 | War Marvel | 115 | Lady Rosebud | 116 | 8,525 | 1.12 2-5 |
| 1919 | Man-o'-War | J. Loftus | 130 | Upset | 125 | Blazes | 122 | 7,600 | 1.12 |
| 1920 | Prudery | E. Ambrose | ..... | ..... | ..... | ..... | ..... | 7,600 | ..... |
| 1921 | Kai Sang | Fator | 127 | William A | 127 | Pegasus | 119 | 9,050 | 1.12 3-5 |
| 1922 | Zev | Fator | 115 | Dunlin | 115 | Bud Lerner | 127 | 9,775 | 1.15 |

## GREAT AMERICAN STAKES.

(Aqueduct, N. Y., 1889-1910; Belmont Park, N. Y., 1913; Aqueduct, N. Y., 1914 and since.)

2-year-olds; 5-8 mile.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1889 | St. Carlo | Garrison | 115 | Ballarat | 115 | Torso | 115 | $17,650 | 1.02 1-4 |
| 1890 | Russell | Garrison | 118 | Correction | 115 | St. Charles | 118 | 17,650 | 1.02 |
| 1891 | St. Florian | Taylor | 118 | Victory | 118 | Lester | 118 | 16,650 | 1.03 1-2 |
| 1892 | Sir Walter | Garrison | 118 | Don Alonzo | 118 | Ajax | 118 | 16,650 | 1.01 1-4 |
| 1893 | Domin | Taral | 118 | Dobbins | 118 | Joe Ripley | 119 | 18,675 | 1.01 3-4 |
| 1894 | Waltzer | Griffin | 118 | Utica | 118 | Applause | 115 | 15,600 | 1.04 1-4 |
| 1895 | Applegate | McCafferty | 118 | Hazlet | 118 | Handspring | 118 | 16,400 | 1.02 |
| 1896 | George Kessler | Taral | 118 | Arbuckle | 118 | Rhodesia | 115 | 12,195 | 1.02 1-4 |
| 1897 | Previous | T. Sloan | 113 | Handball | 118 | Varus | 113 | 9,750 | 1.01 3-4 |
| 1898 | Jean Bereaud | T. Sloan | 122 | Miller | 115 | Autumn | 112 | 9,750 | 1.01 3-4 |
| 1899 | Vulcan | N. Turner | 112 | Missionary | 112 | McMeekin | 112 | 13,305 | 1.02 1-2 |
| 1900 | Prince Charles | N. Turner | 122 | Prince Pepper | 115 | Tommy Atkins | 125 | 9,750 | 1.02 1-5 |
| 1901 | Blue Girl | T. Burns | 122 | Nasturtium | 115 | M. Daingerfield | 115 | 9,750 | 1.02 4-5 |
| 1902 | Dalesman | Shaw | 115 | Artysis | 115 | Martie Lewis | 112 | 10,570 | 1.00 |
| 1903 | Broomstick | Odom | 125 | Stalwart | 115 | Tim Sullivan | 115 | 10,060 | 1.00 |
| 1904 | Song and Wine | F. O'Neill | 115 | Britisher | 115 | The Claimant | 115 | 9,800 | 1.02 3-5 |
| 1905 | Burgomaster | Lyne | 115 | Bohemian | 115 | Jerry Wernberg | 115 | 10,025 | 1.01 |
| 1906 | Water Pearl | J. Jones | 125 | Ballot | 115 | Superman | 125 | 11,200 | 1.01 |
| 1907 | Cohort | R. Lowe | 115 | Masque | 115 | Bar None | 115 | 14,750 | 1.00 |
| 1908 | Sir Martin | J. Lee | 125 | Fayette | 115 | Bobbin | 115 | 13,200 | 1.00 3-5 |
| 1909 | Starbottle | E. Dugan | 115 | Big Stick | 115 | Medallion | 125 | 1,925 | 1.02 4-5 |
| 1910 | Babbler | E. Dugan | 122 | Trap Rock | 129 | Housemaid | 122 | 7,120 | 1.02 1-5 |
| 1913 | Gainer | J. Wilson | 113 | Mater | 110 | Golden Chimes | 113 | 3,700 | .59 3-5 |
| 1914 | Lady Barbary | C. Turner | 109 | Lampoon | 106 | Trial by Jury | 106 | 1,925 | 1.01 3-5 |
| 1915 | Ormesdale | J. McCahey | 120 | Bromo | 108 | Damrosch | 109 | 2,325 | 1.01 4-5 |
| 1916 | Campfire | J. McTaggart | 112 | Ivory Black | 127 | Ticket | 108 | 3,900 | 1.00 |
| 1917 | Sun Briar | W. Knapp | 112 | Lucullite | 128 | Tracksend | 125 | 5,250 | 1.01 2-5 |
| 1918 | Dunboyne | G. Byrne | 115 | Eternal | 115 | High Time | 125 | 6,600 | .59 2-5 |
| 1919 | Bonnie Mary | W. Knapp | 127 | Head O'r Heels | 112 | Ralco | 112 | 5,050 | .58 2-5 |
| 1920 | Touch Me Not | C. Kummer | 112 | ..... | ..... | ..... | ..... | 6,600 | .59 1-5 |
| 1921 | Broomster | L. Penman | 115 | Toil | 115 | Olympus | 112 | 7,600 | .59 3-5 |
| 1922 | Goshawk | Morris | 115 | Sunference | 125 | Bud Lerner | 125 | 7,600 | .59 1-5 |

## THE FUTURITY STAKES.

(Sheepshead Bay, N. Y., 1888-1909; Saratoga, N. Y., 1910-1914; Belmont Park, N. Y., 1915 and since.)

2-year-olds; ¾ mile, 1888-1891; 1,263 yds., 1 ft., 1892-1901; ¾ mile, 1902 and since.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1888 | Proctor Knott | Barnes | 112 | Salvator | 108 | Galen | 115 | $40,900 | 1.15 1-5 |
| 1889 | Chaos | Day | 109 | St. Carlo | 122 | Sinaloa II | 105 | 54,500 | 1.16 4-5 |
| 1890 | Potomac | Hamilton | 115 | Masher | 108 | Strathmeath | 124 | 67,675 | 1.14 1-5 |
| 1891 | His Highness | McLaughlin | 130 | Yorkville Belle | 115 | Dagonet | 108 | 61,675 | 1.15 1-5 |
| 1892 | Morello | Hayward | 118 | Lady Violet | 118 | St. Blaise-Bel'a | 115 | 40,450 | 1.12 1-5 |
| 1893 | Domino | Taral | 130 | Galilee | 115 | Dobbins | 130 | 49,350 | 1.12 4-5 |
| 1894 | Butterflies | Griffin | 112 | Brandywine | 108 | Agitator | 110 | 48,710 | 1.11 |
| 1895 | Requital | Griffin | 115 | Crescendo | 114 | Silver II | 108 | 53,190 | 1.11 2-5 |
| 1896 | Ogden | Tuberville | 115 | Ornament | 116 | Rodermond | 115 | 43,790 | 1.10 |
| 1897 | L'Alouette | Clawson | 115 | Lydian | 115 | Uriel | 115 | 34,290 | 1.11 |
| 1898 | Martimus | H. Lewis | 118 | High Degree | 113 | Mr. Clay | 118 | 36,610 | 1.12 2-5 |
| 1899 | Chacornac | Spencer | 114 | Brigadier | 109 | Windmere | 112 | 30,630 | 1.10 2-5 |
| 1900 | Ballyhoo Bey | T. Sloan | 112 | Olympian | 112 | T. Atkins | 129 | 33,580 | 1.10 |
| 1901 | Yankee | O'Connor | 119 | Lux Casta | 109 | Barron | 112 | 36,850 | 1.09 1-5 |
| 1902 | Savable | Lyne | 119 | Lord of the Vale | 117 | Dazzling | 116 | 44,850 | 1.14 |
| 1903 | Hamburg Belle | Fuller | 114 | Leonidas | 122 | The Min. Man | 122 | 35,930 | 1.13 |
| 1904 | Artful | Hildebrand | 114 | Tradition | 127 | Sysonby | 127 | 42,880 | 1.14 4-5 |
| 1905 | Ormondale | Redfern | 117 | Timber | 119 | Belmere | 117 | 43,680 | 1.11 4-5 |
| 1906 | Electioneer | Shaw | 117 | Pope Joan | 116 | De Mund | 123 | 44,070 | 1.13 3-5 |
| 1907 | Colin | Miller | 125 | Bar None | 117 | Chapultepec | 117 | 32,930 | 1.11 1-5 |
| 1908 | Maskette | J. Notter | 118 | Sir Martin | 127 | Helmet | 123 | 33,360 | 1.11 1-5 |
| 1909 | Sweep | J. Butwell | 126 | Candleberry | 117 | Grasmere | 122 | 33,660 | 1.11 4-5 |
| 1910 | Novelty | C. H. Shilling | 127 | Bashti | 118 | Love-Not | 114 | 25,360 | 1.12 1-5 |
| 1913 | Pennant | C. Borel | 119 | Southern Maid | 119 | Addie M | 114 | 15,060 | 1.15 |
| 1914 | Trojan | Burlingame | 117 | ..... | ..... | ..... | ..... | 22,110 | 1.16 4-5 |
| 1915 | Thunderer | J. Notter | 122 | Bromo | ..... | Achievement | ..... | 16,590 | 1.11 4-5 |
| 1916 | Campfire | J. McTaggart | 125 | Rickety | ..... | Skeptic | ..... | 22,950 | 1.13 4-5 |
| 1917 | Papp | J. Allen | 127 | Escoba | 127 | Rosie O'Grady | 124 | 15,450 | 1.12 |
| 1918 | Dunboyne | Schuttinger | 127 | Sir Barton | 117 | Purchase | 119 | 30,280 | 1.12 4-5 |
| 1919 | Man-o'-War | Loftus | 127 | John P. Grier | 117 | Dominique | 122 | 26,650 | 1.11 3-5 |
| 1920 | Step Lightly | F. Keogh | 116 | Star Voter | 127 | Gray Lag | 119 | 35,870 | 1.12 1-5 |
| 1921 | Bunting | F. Coltilletti | 117 | Gallantman | 117 | Dream of Allah | 114 | 40,700 | 1.11 2-5 |
| 1922 | Sally's Alley | Johnson | 116 | Zev | 124 | Wilderness | 119 | 47,550 | 1.12 |

## HUDSON STAKES.

(Gravesend, N. Y., 1887-1910; Aqueduct, N. Y., 1914 and since.)

3-year-olds, 5-8 mile.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1887 | King Fish | J. McLaugh'n | 115 | Guarantee | 120 | Tea Tray | 115 | $2,160 | 1.02 3-5 |
| 1888 | Oregon | J. McLaugh'n | 120 | Buddhist | 115 | Hot Scotch | 112 | 2,535 | 1.04 |
| 1889 | Ballarat | Hamilton | 115 | Leda | 112 | Houston | 115 | 5,840 | 1.02 1-2 |
| 1890 | Gray Rock | Bergen | 118 | Chatham<br>D'k'g of Montrose | 118 | Miss Ransom | 115 | 5,470 | 1.05 3-4 |
| 1891 | Georgia | F. Littlefield | 115 | L'g L'fel'w Colt | 118 | Oppressor | 118 | 6,500 | 1.03 |
| 1892 | Wallace | Taral | 118 | Don Alonzo | 118 | Integrity | 118 | 4,020 | 1.05 |
| 1893 | Halton | T. Sloan | 118 | Hurlingham | 118 | Declare | 118 | 5,680 | 1.03 1-2 |

HUDSON STAKES—*Continued.*

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1894 | Gotham | Lamley | 118 | Mirage | 118 | P. of Monaco | 118 | $3.430 | 1.02 1-4 |
| 1895 | Applegate | Reiff | 118 | Hazlet | 118 | Formal | 118 | 4,000 | 1.03 |
| 1896 | *Arbuckle | McCafferty | 118 | *Geo. Kessler | 118 | Lithos | 123 | 4,670 | 1.03 |
| 1897 | George Keene | Doggett | 113 | Handball | 118 | Murello | 113 | 2,980 | 1.02 3-4 |
| 1898 | Jean Bereaud | T. Sloan | 122 | Frohsinn | 115 | Kingdon | 122 | 4,040 | 1.02 1-2 |
| 1899 | High Order | McCue | 112 | Maribert | 112 | Withers | 112 | 4,530 | 1.01 1-2 |
| 1900 | Prince Charles | N. Turner | 115 | Irritable | 125 | Prince Pepper | 115 | 3,900 | 1.01 3-5 |
| 1901 | Hanover Queen | Spencer | 112 | Meridian | 115 | Whiskey King | 115 | 2,910 | 1.02 1-5 |
| 1902 | River Pirate | Odom | 115 | Sir Voorhies | 115 | Injunction | 115 | 3,950 | 1.00 2-5 |
| 1903 | Palmbearer | Gannon | 112 | Highball | 115 | Luxembourg | 115 | 5,080 | 1.01 |
| 1904 | Glorifier | Gannon | 125 | Diamond | 115 | Veto | 112 | 3,720 | 1.00 3-5 |
| 1905 | Jacobite | W. Davis | 112 | Jerry Wernberg | 115 | Nostromo | 115 | 4,080 | 1.02 |
| 1906 | Gretna Green | Sewell | 119 | Clara Russell | 112 | Boola | 112 | 4,660 | 1.01 4-5 |
| 1907 | Royal Vane | Mountain | 115 | Transvaal | 122 | Alauda | 115 | 5,895 | 1.00 3-5 |
| 1908 | Lawton Wiggins | J. Lee | 115 | Esperanto | 115 | Sir John | 115 | 5,690 | 1.01 |
| 1910 | Trap Rock | E. Dugan | 125 | Doncaster | 115 | Anna Casse | 112 | 3,560 | 1.02 2-5 |
| 1914 | Sea Shell | J McCahey | 114 | Double Eagle | 114 | The Masqu'r'r | 122 | 8,050 | 1.00 |
| 1915 | Paddy Whack | C. Borel | 113 | Emden | 102 | Damrosch | 107 | 1,525 | 1.01 |
| 1916 | Tumbler | T. McTaggart | 122 | Hollister | 107 | Woodtrap | 112 | 1,925 | 1.00 3-5 |
| 1917 | Drastic | J. Butwell | 112 | Bughouse | 115 | Panaman | 112 | 3,050 | 1.00 1-5 |
| 1918 | High Time | E. Taplin | 112 | American Ace | 116 | Dif. Eyes | 112 | 3,650 | 0.58 2-5 |
| 1919 | Man-o'-War | J. Loftus | 130 | Violet Tip | 109 | Shoal | 115 | 2,825 | 1.01 3-5 |
| 1920 | | | | | | | | | |
| 1921 | Parader | Scoble | 98 | Devastation | 108 | | | 1,575 | No time |
| 1922 | Sunference | Johnson | 112 | Cherry Pie | 130 | Bud Lerner | | 2,025 | .59 2-5 |

*Dead heat.

## BELMONT STAKES.

(Jerome Park, N. Y., 1867-1889; Morris Park, N. Y., 1890-1905; Belmont Park, N. Y., 1906 and since.)

3-year-olds; 1 5-8 miles, 1867-1873; 1 1-2 miles, 1874-1889; 1 1-4 miles, 1890-1892; 1 1-8 miles, 1893-1894; 1 1-4 miles, 1895; 1 3-8 miles, 1896-1903; 1 1-4 miles, 1904-1905; 1 3-8 miles, 1906 and since.

| Yr. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1867 | Ruthless | Gilpatrick | 107 | De Courcey | 110 | Rivoli | 110 | $1,850 | 3.05 |
| 1868 | General Duke | Swim | 110 | N. Cumberland | 110 | Fanny Ludlow | 107 | 2,800 | 3.02 |
| 1869 | Fenian | C. Miller | 110 | Glenelg | 110 | Invercauld | 107 | 3,350 | 3.04 1-4 |
| 1870 | Kingfisher | Dick | 110 | Foster | 110 | Midway | 110 | 3,750 | 2.59 1-2 |
| 1871 | Harry Bassett | W. Miller | 110 | Stockwood | 110 | By-the-Sea | 107 | 5,450 | 2.56 |
| 1872 | Joe Daniels | Rowe | 110 | Meteor | 110 | Shylock | 110 | 4,500 | 2.58 1-4 |
| 1873 | Springbok | Rowe | 110 | Count D'Orsay | 110 | Strachino | 110 | 5,200 | 3.01 3-4 |
| 1874 | Saxon | Barbee | 110 | Grinstead | 110 | Aaron Penn't'n | 110 | 4,200 | 2.39 1-2 |
| 1875 | Calvin | Swim | 110 | Aristides | 110 | Milner | 110 | 4,450 | 2.42 1-4 |
| 1876 | Algerine | Donahue | 110 | Fiddlesticks | 110 | Barricade | 110 | 3,700 | 2.40 1-2 |
| 1877 | Cloverbrook | Holloway | 110 | Loiterer | 110 | Baden Baden | 110 | 5,200 | 2.46 |
| 1878 | D'k of Magenta | Hughes | 118 | Bramble | 118 | Spartan | 118 | 3,850 | 2.43 1-2 |
| 1879 | Spendthrift | Evans | 118 | Monitor | 118 | Jericho | 118 | 4,250 | 2.42 3-4 |
| 1880 | Grenada | Hughes | 118 | Ferncliffe | 118 | Turenne | 118 | 2,800 | 2.47 |
| 1881 | Saunterer | Costello | 118 | Eole | 118 | Baltic | 118 | 3,000 | 2.47 |
| 1882 | Forester | J. McLaugh'n | 118 | Babcock | 118 | Wyoming | 115 | 2,600 | 2.43 |
| 1883 | George Kinney | J. McLaugh'n | 118 | Trombone | 118 | Renegade | 118 | 3,070 | 2.43 1-2 |
| 1884 | Panique | J. McLaugh'n | 118 | Kt. of Ellerslie | 118 | Himalaya | 118 | 3,150 | 2.42 |
| 1885 | Tyrant | P. Duffy | 118 | St. Augustine | 118 | Tecumseh | 118 | 2,710 | 2.43 |
| 1886 | Inspector B | J. McLaugh'n | 118 | The Bard | 118 | Linden | 118 | 2,720 | 2.41 |
| 1887 | Hanover | J. McLaugh'n | 118 | Oneko | 118 | | | 2,900 | 2.43 1-2 |
| 1888 | Sir Dixon | J. McLaugh'n | 118 | Prince Royal | 118 | | | 3,440 | 2.40 1-4 |
| 1889 | Eric | Haywood | 118 | Diable | 125 | Zephyrus | 118 | 4,960 | 2.47 |
| 1890 | Burlington | Barnes | 118 | Devotee | 115 | Pandishah | 113 | 8,500 | 2.08 3-4 |
| 1891 | Foxford | Garrison | 118½ | Montana | 117 | Laureston | 112 | 5,000 | 2.08 3-4 |
| 1892 | Patron | Hayward | 122 | Shellbark | 122 | | | 5,610 | 2.17 |
| 1893 | Comanche | Simms | 117 | Dr. Rice | 122 | Rainbow | 119 | 5,310 | 1.53 1-4 |
| 1894 | H'y of Navarre | Simms | 117 | Prig | 119 | Assignee | 115 | 6,680 | 1.56 1-2 |
| 1895 | Belmar | Taral | 119 | Counter Tenor | 126 | Nanki Pooh | 126 | 2,700 | 2.11 1-2 |
| 1896 | Hastings | Griffin | 122 | Handspring | 125 | Hamilton II | 110 | 3,025 | 2.24 1-2 |
| 1897 | Scot. Chieftain | Scherrer | 115 | On Deck | 115 | Octagon | 122 | 3,550 | 2.23 1-2 |
| 1898 | Bowling Brook | Littlefield | 122 | Previous | 122 | Hamburg | 122 | 7,810 | 2.32 |
| 1899 | Jean Bereaud | Clawson | 122 | Half Time | 119 | Glengar | 122 | 9,445 | 2.23 |
| 1900 | Ildrin | N. Turner | 126 | Petruchio | 126 | Missionary | 126 | 14,790 | 2.21 1-2 |
| 1901 | Commando | Spencer | 126 | The Parader | 126 | All Green | 126 | 11,595 | 2.21 |
| 1902 | Masterman | Bullman | 126 | Ranald | 126 | King Hanover | 126 | 13,220 | 2.22 1-2 |
| 1903 | Africander | Bullman | 126 | Whorler | 126 | Red Knight | 126 | 12,285 | 2.23 1-5 |
| 1904 | Delhi | Odom | 126 | Graziallo | 126 | Rapid Water | 126 | 11,575 | 2.06 3-5 |
| 1905 | Tanya | Hildebrand | 121 | Blandy | 126 | Hot Shot | 126 | 17,240 | 2.08 |
| 1906 | Burgomaster | Lyne | 126 | The Quail | 126 | Accountant | 126 | 22,700 | 2.20 |
| 1907 | Peter Pan | Mountain | 126 | Superman | 126 | Frank Gill | 126 | 22,765 | * |
| 1908 | Colin | Notter | 126 | Fair Play | 126 | King James | 126 | 22,765 | * |
| 1909 | Joe Madden | E. Dugan | 126 | Wise Mason | 123 | Don McDonald | 123 | 24,550 | 2.21 3-5 |
| 1910 | Sweep | Butwell | 126 | D. of Ormonde | 126 | | | 9,700 | 2.22 |
| 1913 | Princess Eugene | Troxler | 109 | Rock View | 128 | Flying Fairy | 106 | 2,825 | 2.18 |
| 1914 | Luke McLuke | M. Buxton | 126 | Gainer | 126 | Charlestonian | 123 | 3,025 | 2.20 |
| 1915 | The Finn | G. Byrne | 126 | Half Rock | 126 | Pebble | 126 | 1,825 | 2.18 2-5 |
| 1916 | Friar Rock | E. Haynes | 126 | Spur | 126 | Churchill | 126 | 4,100 | 2.22 |
| 1917 | Hourless | J. Butwell | 126 | Skeptic | 126 | Wonderful | 123 | 5,800 | 2.17 4-5 |
| 1918 | Johren | T. Robinson | 126 | War Cloud | 126 | Cum Sah | 126 | 8,950 | 2.20 2-5 |
| 1919 | Sir Barton | J. Loftus | 126 | Sweep On | 126 | Nat. Bridge | 126 | 11,950 | 2.17 2-5 |
| 1920 | Man-o'-War | C. Kummer | 126 | Donnacona | 126 | | | 7,950 | 2.14 1-5 |
| 1921 | Grey Lag | E. Sande | 126 | Sporting Blood | 126 | Leonardo | 126 | 8,400 | 2.16 4-5 |
| 1922 | Pillory | Miller | 126 | Snob II | 126 | Hea | 126 | 38,700 | 2.18 4-5 |

No racing in 1911 and 1912. *No time taken.

### BRIGHTON CUP.

(Brighton Beach, N. Y., 1897-1907. Track discontinued after 1908 racing.)

3-year-olds and over; 2 1-4 miles.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1897 | The Friar | Littlefield | 115 | Sunny Slope | 111 | Ben Brush | 130 | $3,300 | 3.56 1-2 |
| 1898 | Hamburg | T. Sloan | 112 | Ogden | 130 | How. Mann | 133 | 5,300 | 4.02 3-4 |
| 1899 | Bangle | Maher | 124 | Don de Oro | 127 | Latson | 124 | 5,675 | 3.56 2-5 |
| 1900 | Ethelbert | Spencer | 124 | Imp | 121 | Sid. Lucas | 109 | 6,600 | 3.49 1-5 |
| 1901 | Pr. of Melbourne | Shaw | 124 | Rochester | 121 | ..... | ..... | 5,775 | 4.03 3-5 |
| 1902 | Gold Heels | Odom | 124 | Sun Shower | 101 | Sunrise | 121 | 6,350 | 3.54 3-5 |
| 1903 | Hermis | Redfern | 124 | Maj. Daingerf'd | 124 | Igniter | 124 | 8,825 | 3.53 2-5 |
| 1904 | Africander | O'Neill | 124 | McChesney | 125 | Maj. Daingerf'd | 125 | 9,800 | 3.55 |
| 1905 | Cairngorm | O'Neill | 110 | Caughnawaga | 125 | ..... | ..... | 9,800 | 4.08 3-5 |
| 1906 | Holscher | Noone | 111 | Flip Flap | 108 | Proper | 124 | 9,800 | 3.59 1-5 |
| 1907 | Salvidere | E. Dugan | 108 | Running Water | 121 | Ballot | 111 | 9,800 | 3.52 |

### BRIGHTON DERBY.

(Brighton Beach, N. Y., 1901-1907.)

3-year-olds; 1 1-2 miles, 1901; 1 1-4 miles, 1902-1903; 1 1-2 miles, 1904-1907.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1901 | Watercolor | Spencer | 126 | All Green | 116 | Mortallo | 116 | $8,300 | 2.34 1-5 |
| 1902 | Hyphen | Odom | 115 | Maj. Daingerf'd | 126 | Homestead | 111 | 7,550 | 2.04 1-5 |
| 1903 | Charles Elwood | F. O'Neill | 106 | Slave | 106 | Rigodon | 126 | 7,550 | 2.05 |
| 1904 | Ort Wells | F. O'Neill | 126 | Knight Errant | 126 | Bobadil | 111 | 9,725 | 2.32 2-5 |
| 1905 | Sysonby | Nicol | 126 | Agile | 126 | Pasadena | 118 | 11,750 | 2.33 1-5 |
| 1906 | Accountant | J. Martin | 126 | Samson | 126 | Albert F | 112 | 11,750 | 2.37 1-5 |
| 1907 | Charles Edward | W. Knapp | 126 | Frank Gill | 126 | ..... | ..... | 11,750 | 2.30 4-5 |

### BRIGHTON HANDICAP.

(Brighton Beach, N. Y., 1896-1907; Empire City track, N. Y., 1910.)

3-year-olds and over; 1 1-4 miles.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1896 | Nanki Pooh | Doggett | 109 | Clifford | 128 | Dutch Skater | 98 | $1,850 | 2.12 3-4 |
| 1897 | Ben Brush | Simms | 126 | The Friar | 107 | Volley | 105 | 1,850 | 2.09 |
| 1898 | Ornament | Simms | 128 | Tillo | 126 | Geo. Keene | 101 | 2,490 | 2.07 3-4 |
| 1899 | Imp | O'Leary | 115 | Ethelbert | 106 | Bangle | 112 | 8,420 | 2.05 2-5 |
| 1900 | Jack Point | Henry | 109 | The Kentuckian | 109 | Imp | 129 | 9,945 | 2.04 3-5 |
| 1901 | Toddy | L. Smith | 100 | Water Cure | 100 | Alcedo | 123 | 8,640 | 2.07 1-5 |
| 1902 | Gold Heels | Odom | 126 | Blues | 123 | Argregor | 109 | 8,045 | 2.03 4-5 |
| 1903 | Waterboy | Odom | 124 | Royal Hampton | 107 | Riv. Pirate | 105 | 15,995 | 2.03 1-5 |
| 1904 | Broomstick | T. Burns | 104 | Irish Lad | 127 | Highball | 115 | 21,750 | 2.02 4-5 |
| 1905 | Artful | Hildebrand | 103 | Ort Wells | 125 | Beldame | 125 | 21,750 | 2.04 4-5 |
| 1906 | Ram's Horn | Sewell | 114 | First Mason | 114 | Tokalon | 118 | 19,750 | 2.03 3-5 |
| 1907 | Peter Pan | Notter | 115 | McCarter | 101 | Montgomery | 109 | 19,750 | 2.03 3-5 |
| 1910 | Olambala | G. Archibald | 119 | Hampton Court | 96 | Czar | 110 | 4,800 | 2.06 3-5 |

### AMERICAN DERBY.

(Washington Park, Chicago.)

3-year-olds; 1 1-2 miles.

| YR. | First. | Jockeys. | Wgt. | Second. | Wgt. | Third. | Wgt. | Value. | Time. |
|---|---|---|---|---|---|---|---|---|---|
| 1884 | Modesty | Murphy | 117 | Kosciusko | 117 | Bob Cook | 115 | $10,700 | 2.42 3-4 |
| 1885 | Volante | Murphy | 123 | Favor | 123 | Troubadour | 123 | 9,570 | 2.49 1-2 |
| 1886 | Silver Cord | Murphy | 121 | Blue Wing | 121 | Sir Joseph | 118 | 8,160 | 2.37 1-4 |
| 1887 | C. H. Todd | Hamilton | 118 | Miss Ford | 113 | Wary | 116 | 13,690 | 2.36 1-2 |
| 1888 | Emp'r of Norfolk | Murphy | 123 | Falcon | 121 | Los Angeles | 116 | 14,340 | 2.40 1-4 |
| 1889 | Spokane | Kiley | 121 | Sorrento | 118 | Retrieve | 116 | 15,440 | 2.41 1-4 |
| 1890 | Uncle Bob | Kiley | 115½ | Santiago | 118 | Ben Kingsbury | 108½ | 15,260 | 2.55 3-4 |
| 1891 | Stratmeath | Covington | 112 | Poet Scout | 115 | Kingman | 129 | 18,610 | 2.49 1-4 |
| 1892 | Carisbad | R. Williams | 122 | Zaldivar | 122 | Cicero | 115 | 16,930 | 3.04 1-4 |
| 1893 | Boundless | Garrison | 122 | St. Leonards | 122 | Clifford | 122 | 49,500 | 2.36 |
| 1894 | Rey el Anita | Van Kuren | 122 | Senator Grady | 122 | Despot | 122 | 19,750 | 2.36 |
| 1898 | Pink Coat | W. Martin | 127 | Warrenton | 122 | Isabey | 122 | 9,225 | 2.42 3-4 |
| 1900 | Sidney Lucas | Bullman | 122 | James | 122 | Lieut. Gibson | 129 | 9,425 | 2.40 1-4 |
| 1901 | Robert Waddell | Bullman | 119 | Terminus | 127 | The Parader | 122 | 19,275 | 2.33 4-5 |
| 1902 | Wyeth | Lyne | 122 | L. Appleby | 122 | Aladdin | 122 | 19,875 | 2.40 1-5 |
| 1903 | The Picket | Helgesen | 115 | Claude | 127 | Bernays | 122 | 27,025 | 2.33 |
| 1904 | Highball | Fuller | 122 | Woodson | 122 | Rapid Water | 122 | 26,325 | 2.33 |

Track dismantled in 1906.

## HARNESS HORSE RACING.

The Grand Circuit season of 1922 included fourteen meetings at which 274 races were decided. These were divided into 161 events for trotters and 113 races for pacers. The prize money divided during the season amounted to $517,012.25. Czar Worthy was the largest individual winner on the circuit, his record consisting of eight firsts, two seconds, two thirds in twelve starts for a total of $22,800. Lee Worthy was second high winning winner with $22,700, and Peter the Brewer third with $17,287.50.

### GRAND CIRCUIT SUMMARY.

Grand circuit leading drivers: Walter R. Cox won 45 events, Thomas W. Murphy 34 events and Alonzo McDonald 24. Cox was the leading money winner with $65,713 and Murphy second with $60,809.

### WORLD'S PACING RECORDS—BY A TEAM.

| DISTANCE. | Name. | Place. | Date. | Time. |
|---|---|---|---|---|
| 1 mile against time | { Minor Heir / Geo. Gano | Columbus, Ohio | Oct. 1, 1912 | 2.02 |
| 1 mile in a race | Billy M. & Doctor M. | Springfield, Ill. | Sept. 24, 1914 | 2.07¼ |
| 1 mile in a race | Cohen & Dep. Sheriff | Des Moines, Iowa | Aug. 28, 1916 | 2.07¼ |

## WORLD'S PACING RECORDS.

| Distance. | Name. | Place. | Date. | Time. | | |
|---|---|---|---|---|---|---|
| ½ mile | Directum I.* | Syracuse, N. Y. | Sept. 14, 1916 | | | .55¾ |
| 1 mile | Dan Patch† | Lexington, Ky.† | Oct. 7, 1905 | | | 1.55¼ |
| 1 mile, by a stallion | Dan Patch† | Lexington, Ky.† | Oct. 7, 1905 | | | 1.55¼ |
| 1 mi., by stallion, in open | Directum I.* | Syracuse, N. Y. | Sept. 15, 1915 | | | 1.56¾ |
| 1 mile, by a gelding | Prince Alert† | New York, N. Y.† | Sept. 23, 1903 | | | 1.57 |
| 1 mile, by gelding, in open | Frank Bogash Jr. | Detroit, Mich. | Sept. 18, 1914 | | | 1.59¼ |
| 1 mile, in a race | Directum I. | Columbus, Ohio | Sept. 30, 1914 | | | 1.58 |
| 1 mi., by mare, in a race | Miss Harris M. | Toledo, Ohio | July 23, 1918 | | | 1.58¼ |
| 1 mile, half-mile track | Single G. | Des Moines, Iowa | Aug. 26, 1918 | | | 2.01 |
| 1 mile, yearling filly | Rose McGee* | Lexington, Ky. | Aug. 12, 1914 | | | 2.19¼ |
| 1 mile, yearling colt | Frank Perry* | Lexington, Ky. | Sept. 12, 1911 | | | 2.15 |
| 1 mile, two-year-old colt | Direct the Work* | Lexington, Ky. | Sept. 13, 1917 | | | 2.06½ |
| 1 mile, two-year-old filly | Palmetto | Lexington, Ky. | Oct. 3, 1922 | | | 2.07 |
| 1 mile, three-year-old | Anna Bradford | Columbus, Ohio | Sept. 29, 1914 | | | 2.00¾ |
| 1 mile, four-year-old | William | Grand Rapids, Mich. | Aug. 5, 1914 | | | 2.00 |
| 1 mile, high-wheel sulky | Dan Patch* | Macon, Ga.† | Nov. 30, 1903 | | | 2.04¾ |
| 2 miles | Dan Patch* | Macon, Ga.† | Nov. 30, 1903 | | | 4.17 |
| 3 miles | Elastic Pointer | Kendallville, Ind. | Oct. 1, 1909 | | | 7.31½ |
| 4 miles | Joe Jefferson | Knoxville, Iowa (reg). | Nov. 13, 1891 | | | 10.10 |
| 5 miles | Marconi | Quebec, Canada | Sept. 10, 1917 | | | 12.02¾ |
| Best 2 heats, by stallion | Directum I. | Columbus, Ohio | Sept. 30, 1914 | 1.58 | | 2.00 |
| Best 2 heats, by mare | Margaret Dillon | Lexington, Ky. | Oct. 6, 1922 | 1.59¼ | | 1.59 |
| Best 3 heats | Single G. | Atlanta, Ga. | Oct. 22, 1920 | 1.59 | 2.00 | 2.00¾ |

### PACING—WITH RUNNING MATE.

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 mile | Flying Jib & mate | Chillicothe, Ohio | Oct. 4, 1894 | | | 1.58¼ |

### TO WAGON.

| Distance. | Name. | Place. | Date. | Time. | | |
|---|---|---|---|---|---|---|
| 1 mile (against time) | Dan Patch* | Memphis, Tenn. | Oct. 27, 1903 | | | 1.57¼ |
| 1 mile, in a race | Angus Pointer | Memphis, Tenn. | Oct. 20, 1904 | | | 2.04½ |
| 2 miles | Young America | | | | | 4.58½ |
| 3 miles | Longfellow | Sacramento, Cal. | Sept. 7, 1869 | | | 7.53 |
| 4 miles | Longfellow | San Francisco, Cal. | Dec. 31, 1869 | | | 10.42½ |
| 5 miles | Lady St. Clair | San Francisco, Cal. | Dec. 11, 1874 | | | 12.54¾ |
| Best 2 heats | Coney | St. Louis, Mo. | Oct. 4, 1900 | | 2.05¼ | 2.05¾ |
| Best 3 heats | Johnston | St. Paul, Minn. | Sept. 16, 1887 | 2.16¼ | 2.15½ | 2.15¼ |

* Against time. † Paced by runner to sulky carrying a wind or dust shield, the runner preceding the pacer.

## WORLD'S TROTTING RECORDS.

(See notes on next page.)

| Distance. | Name. | Place. | Date. | Time. | | |
|---|---|---|---|---|---|---|
| 1 mi. (world's record) | Peter Manning* | Lexington, Ky. | Oct. 4, 1922 | | | 1.56¾ |
| 1 mi., in a race | Hamburg Belle | North Randall, Ohio. | Aug. 25, 1909 | | | 2.01¼ |
| 1 mi., on half-mile track | Uhlan* | Goshen, N. Y. | Aug. 24, 1911 | | | 2.02¾ |
| 1 mi., by a stallion | Lee Axworthy* | Lexington, Ky. | Oct. 8, 1916 | | | 1.58¼ |
| 1 mi., by a gelding | Peter Manning* | Lexington, Ky. | Oct. 4, 1922 | | | 1.56¾ |
| 1 mi., by a mare | Nedda* | Lexington, Ky. | Oct. 4, 1922 | | | 1.58¼ |
| 1 mi., with running mate | Uhlan* | Lexington, Ky. | Oct. 9, 1913 | | | 1.54½ |
| 1 mi., by a yearling | Airdale* | Lexington, Ky. | Oct. 2, 1912 | | | 2.15¾ |
| 1 mi., by a two-year-old | The Real Lady | Lexington, Ky. | Oct. 7, 1916 | | | 2.04¼ |
| 1 mi., by a three-year-old | Sister Bertha* | Lexington, Ky. | Oct. 12, 1920 | | | 2.02¾ |
| 1 mi., by a four-year-old | Arion Guy* | Lexington, Ky. | Oct. 6, 1921 | | | 1.59½ |
| 1 mi., by a five-year-old | Peter Manning* | Lexington, Ky. | Oct. 6, 1921 | | | 1.57¾ |
| 1 mi., by a six-year-old | Peter Manning* | Lexington, Ky. | Oct. 4, 1922 | | | 1.56¾ |
| 1 mi., to high-wheel sulky | Major Delmar* | Memphis, Tenn. | Oct. 26, 1904 | | | 2.07 |
| 1 mi., to high-wheel sulky | Peter Billiken*† | Goshen, N. Y. | Aug. 20, 1914 | | | 2.14¼ |
| Best 2 heats | Hamburg Belle | North Randall, Ohio. | Aug. 25, 1909 | | 2.01¼ | 2.01¾ |
| Best 3 heats | Peter Manning | Lexington, Ky. | Oct. 7, 1920 | 2.03 | 2.02¾ | 2.02½ |
| 2 miles | The Harvester* | Lexington, Ky. | Oct. 13, 1910 | | | 4.15¼ |
| 2 miles | Nightingale* / Fairy Wood | Nashville, Tenn. (reg) / Minneapolis, Minn. | Oct. 20, 1893 / July 1, 1895 | | | 6.55½ / 7.16½ |
| 4 miles | Bertie R. / Senator L. | Blackpool, England† / San Jose, Cal. (reg) | Sept. 11, 1899 / Nov. 2, 1894 | | | 9.58 / 10.12 |
| 5 miles | Imogene Const'tine | Quebec, P. Q., Can. | Sept. 29, 1919 | | | 12.08¼ |
| 10 miles | Pascal* / Controller | New York, N.Y. (reg) / S. Francisco, Cal. (reg) | Nov. 2, 1893 / Nov. 23, 1878 | | | 26.15 / 27.23¼ |
| 20 miles | Capt. McGowan* | Boston, Mass. (reg) | Oct. 31, 1865 | | | 58.25 |
| 30 miles | Gen. Taylor* | San Francisco, Cal. | Feb. 21, 1857 | | | 1.47.59 |
| 50 miles | Ariel* | Albany, N. Y. | May 5, 1846 | | | 3.55.40½ |
| 100 miles | Conqueror* | Centreville, L. I. | Nov. 12, 1853 | | | 8.55.53 |

### TROTTING—TO WAGON.

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 mile (against time) | Lou Dillon* | Memphis, Tenn.† | Oct. 28, 1903 | | | 2.00 |
| 1 mile (against time) | Uhlan* | Cleveland, Ohio | Aug. 8, 1911 | | | 2.00 |
| 1 mile in a race | Lou Dillon | Memphis, Tenn. | Oct. 21, 1903 | | | 2.04¾ |
| Best 2 heats | Lou Dillon | Memphis, Tenn. | Oct. 21, 1903 | | 2.04¾ | 2.04¾ |
| Best 3 heats | American Boy | Philadelphia, Pa. | Sept. 27, 1907 | 2.12½ | 2.12 | 2.12½ |
| 2 miles | Pelegon | Belmont, Philadelphia | Oct. 20, 1909 | | | 4.38 |
| 3 miles | Ed. Bryan | Point Breeze, Phila. | Nov. 8, 1905 | | | 7.30½ |
| 5 miles | Ed. Bryan | Philadelphia, Pa. | Aug. 22, 1907 | | | 13.03 |
| 10 miles | Julia Aldrich | San Francisco, Cal. | June 15, 1858 | | | 29.04½ |
| 20 miles | Controller | San Francisco, Cal. | April 20, 1878 | | | 58.57 |

### TROTTING—WITH RUNNING MATE.

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 mile against time | Uhlan and mate | Lexington, Ky. | Oct. 9, 1913 | | | 1.54½ |
| 1 mile in race | Frank and mate | Prospect Park, L. I. | Nov. 15, 1883 | | | 2.08½ |

TROTTING—BY TEAMS.

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 mile | Uhlan*, Lewis Forrest* | Lexington, Ky. | Oct. 11, 1912 | ..... | ..... | 2.03¼ |
| 1 mile in a race | Roy Miller, Lucy Van | Syracuse, N. Y. | Sept. 11, 1918 | ..... | ..... | 2.10¼ |
| 1 mile, road wagon | Maud S.*, Aldine* | Fleetwood Park, N.Y. | June 15, 1883 | ..... | ..... | 2.15½ |
| Best 3 heats in a race | Arab, Conde | San Francisco, Cal. | Nov. 26, 1887 | 2.29¼ | 2.23 | 2.18¾ |

* Against time. † Paced by runner to sulky carrying wind or dust shield, runner preceding trotter. ‡ Half-mile track.

## ENGLISH RACING STATISTICS FOR 1922.

(Five months ending October 20.)

LEADING BRITISH OWNERS AND WINNINGS.

| Owner. | Won. | Raced. | Win'gs. | Owner. | Won. | Raced. | Win'gs. |
|---|---|---|---|---|---|---|---|
| Lord Woolavington | 10 | 20 | $157,845 | Sir Robert Warr | 4 | 4 | $62,870 |
| Lord Derby | 16 | 32 | 112,920 | S. B. Joel | 8 | 12 | 58,835 |
| S. Tattersall | 5 | 15 | 105,005 | Sir W. Cooke | 8 | 16 | 43,227 |
| Sir G. Bullough | 6 | 12 | 82,065 | W. M. G. Singer | 7 | 16 | 42,925 |
| Lord Astor | 4 | 7 | 72,012 | Duke of Westminster | 7 | 11 | 40,330 |
| Lord Lonsdale | 7 | 11 | 71,470 | Sir E. Hulton | 8 | 13 | 37,927 |
| Mrs. S. Whitburn | 7 | 15 | 70,260 | G. Langley | 6 | 9 | 33,712 |
| Prince Aga Khan | 5 | 13 | 68,665 | Lord Rosebery | 10 | 14 | 33,647 |
| Lord Queenborough | 2 | 3 | 68,078 | Barclay Walker | 6 | 13 | 30,525 |
| Jas. White | 16 | 25 | 64,310 | Mrs. A. James | 2 | 7 | 29,080 |

WINNING BRITISH HORSES.

| Horse. | Races | Amt. | Horse. | Races | Amt. | Horse. | Races | Amt. |
|---|---|---|---|---|---|---|---|---|
| Royal Lancer | 5 | $72,610 | Silver Urn | 3 | $50,020 | Double Hackle | 4 | $27,975 |
| Golden Myth | 4 | 72,175 | Drake | 5 | 45,832 | Selene | 5 | 27,210 |
| Captain Cuttle | 3 | 70,895 | Lady Juror | 3 | 40,285 | Tetrabbazia | 3 | 24,175 |
| Pogrom | 3 | 58,737 | Cos | 6 | 40,110 | Soubriquet | 5 | 23,855 |
| St. Louis | 2 | 55,420 | Spike Island | 2 | 33,825 | Express Delivery | 5 | 23,790 |
| Town Guard | 6 | 55,080 | | | | | | |

LEADING ENGLISH JOCKEYS.

| Name. | Mts. | 1st. | 2d. | 3d. | Unpl. | Pct. | Name. | Mts. | 1st. | 2d. | 3d. | Unpl. | Pct. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J. Ledson | 214 | 41 | 26 | 19 | 128 | 19.15 | F. Bullock | 276 | 45 | 49 | 27 | 155 | 16.23 |
| C. Elliott | 430 | 80 | 60 | 46 | 244 | 18.60 | B. Carslake | 288 | 47 | 44 | 42 | 155 | 16.31 |
| S. Donoghue | 509 | 92 | 67 | 65 | 284 | 18.07 | R. A. Jones | 325 | 47 | 29 | 46 | 203 | 14.46 |
| E. Gardner | 329 | 58 | 53 | 38 | 200 | 17.62 | A. Whalley | 399 | 58 | 62 | 38 | 240 | 14.53 |
| V. Smyth | 351 | 62 | 58 | 36 | 195 | 17.66 | T. Weston | 231 | 36 | 24 | 29 | 142 | 15.38 |
| J. Thwaites | 247 | 42 | 35 | 26 | 144 | 17.40 | M. Beary | 527 | 62 | 67 | 52 | 346 | 11.76 |
| G. Hulme | 217 | 37 | 26 | 30 | 124 | 17.05 | F. Lane | 379 | 44 | 39 | 41 | 255 | 10.81 |
| J. Childs | 307 | 51 | 45 | 29 | 182 | 16.61 | F. Fox | 397 | 38 | 38 | 33 | 288 | 9.57 |

## GRAND PRIX DE PARIS WINNERS—1863-1922.

| Yr. | Horse. | Owner. | Yr. | Horse. | Owner. | Yr. | Horse. | Owner. |
|---|---|---|---|---|---|---|---|---|
| 1863 | The Ranger | Mr. Savile. | 1884 | Little Duck | Duke Castrie. | 1903 | QuoVadis | M. E. Blanc. |
| 1864 | Vermont | H. Delamarre. | 1885 | Paradox | Mr. Bro-Cloete. | 1904 | Ajax | M. E. Blanc. |
| 1865 | Gladiateur | Count F. de Lagrange. | 1886 | Minting | R. Vyner. | 1905 | Finasseur | M. E. Ephrussi. |
| | | | 1887 | Tennbreuse | M. P. Airmart. | 1906 | Spearmint | Maj. E. Loder. |
| 1866 | Ceylon | Duke of Beauf't. | 1888 | Stuart | M. P. Donon. | 1907 | San Sousse II | Baron Rothsc'ld |
| 1867 | Feryacques | D. de Montg'y. | 1889 | Vasistas | M. H. Delam're. | 1908 | North East | W. K. Vand'bilt. |
| 1868 | Earl | Mar.ofHastings. | 1890 | Fitz Roye | Baron A. de Schickler. | 1909 | Verdun II | Baron Rothsc'ld |
| 1869 | Glaneur | M. Lupin. | | | | 1910 | Nuage | Mme. Cheremeteff. |
| 1870 | Sornette | Maj. Fridolin. | 1891 | Clamart | M. E. Blanc. | | | |
| 1871 | No race on account of war. | | 1892 | Rueil | M. E. Blanc. | 1911 | As d'Atout | Mar. de Ganay. |
| 1872 | Cremorne | Mr. Savile. | 1893 | Ragotsky | M. Webb. | 1912 | Houli | M. A. Fould. |
| 1873 | Boisrd | M. Delamarre. | 1894 | Dolma-Baghtche. | Baron A. de Schickler. | 1913 | Bruleur | M. E. de St. Alary. |
| 1874 | Trent | W. R. Marshall. | | | | | | |
| 1875 | Salvatur | M. Lupin. | 1895 | Andree | M. E. Blanc. | 1914 | Sardanap'ls | Baron Rothsc'ld |
| 1876 | Kisber | A. Baltazzi. | 1896 | Arreau | M. E. Blanc. | 1915 | No race—war. | |
| 1877 | St. Christophe | Count Lagrange | 1897 | Doge | M. J. Armand. | 1916 | No race—war. | |
| | | | 1898 | Le Roi Soleil | Baron de Rothschild. | 1917 | No race—war. | |
| 1878 | Thurio | Pr. Soltykoff. | | | | 1918 | No race—war. | |
| 1879 | Nubienne | M. Blanc. | 1899 | Perth | M. Caillant. | 1919 | Gal. Light | Baron Rothsc'ld |
| 1880 | Robert the Devil | O. Brewer. | 1900 | Semendria | Baron Schickler. | 1920 | Comrade | E. de St. Alary. |
| | | | 1901 | Cheri | M. Caillant. | 1921 | Lemonora | Joseph Watson. |
| 1881 | Foxhall | Mr. Keene. | 1902 | Kizil Kourgan | M. E. de St. Alary. | 1922 | Kefalin | M. Ambatielos. |
| 1882 | Bruce | Mr. Rymiel. | | | | | | |
| 1883 | Frontin | Duke Castrie. | | | | | | |

Record time, 3.11 3-5, in 1914.

The Grand Prix course, near Paris, is 1 mile and 7 furlongs. The 1922 winner was ridden by S. Donoghue, who rode the 1922 Epsom Derby Winner.

## DOG RACING DERBY.

Fifth Annual Dog Derby, Distance 200 Miles, Finishing at The Pas, Manitoba, March 1—Won by W. Grayson, driving C. B. Morgan team. Time—24 hrs. 51 min. T. Dupas, driving Dupas-Bancroft team, second. Time—25 hrs. 27 min. S. Cook, third. Time—27 hrs. 2 min.

International Derby, Distance 120 Miles, Finishing at Berlin, N. H., Feb. 4—Won by A. T. Walden's team. Time for 3-day relay—15 hrs. 36 min. Jean Lebel's team, second. Time—16 hrs. 22 min.

American Dog Derby, Distance 25 Miles, Finishing at Ashton, Idaho—Won by T. Kent's team. Time—2 hrs. 35 min. W. Kooch, second. Time—2 hrs. 45 min. G. Pitcher, third. Time—2 hrs. 49 min.

## ENGLISH EPSOM DERBY WINNERS—1780-1922.

| YR. | Horse. | Owner. | Jockey. |
|---|---|---|---|
| 1780 | Diomed | Sir E. Bunbury | S. Arnull. |
| 1781 | Y. Eclipse | Mr. O'Kelly | Hindley. |
| 1782 | Assassin | Lord Egremont | S. Arnull. |
| 1783 | Saltram | Mr. Parker | Hindley. |
| 1784 | Sergeant | Mr. O'Kelly | J. Arnull. |
| 1785 | Almwell | Lord Clermont | Hindley. |
| 1786 | Noble | Mr. Panton | J. White. |
| 1787 | Sir Peter Teazle | Lord Derby | S. Arnull. |
| 1788 | Sir Thomas | Prince of Wales | W. Smith. |
| 1789 | Sky Scraper | Duke of Bedford | Chifney, Sr. |
| 1790 | Rhadamanthus | Lord Grosvenor | J. Arnull. |
| 1791 | Eager | Duke of Bedford | Stephenson. |
| 1792 | John Bull | Lord Grosvenor | Buckle. |
| 1793 | Waxy | Sir F. Poole | Clift. |
| 1794 | Daldalus | Lord Grosvenor | Buckle. |
| 1795 | Spread Eagle | Sir F. Standish | A. Wheatley |
| 1796 | Didelot | Sir F. Standish | J. Arnull. |
| 1797 | Sis. to Pharam'd | Duke of Bedford | J. Singleton. |
| 1798 | Sir Harry | Mr. Cookson | S. Arnull. |
| 1799 | Archduke | Sir F. Standish | J. Arnull. |
| 1800 | Champion | Mr. Wilson | Clift. |
| 1801 | Eleanor | Sir C. Bunbury | Sanders. |
| 1802 | Tyrant | Duke of Grafton | Buckle. |
| 1803 | Ditto | Sir H. Williams'n | Clift. |
| 1804 | Hannibal | Lord Egremont | W. Arnull. |
| 1805 | Card'l Beaufort | Lord Egremont | Fitzpatrick. |
| 1806 | Paris | Lord Foley | Shepherd. |
| 1807 | Election | Lord Egremont | J. Arnull. |
| 1808 | Pan | Sir H. Williams'n | Collinson. |
| 1809 | Pope | Duke of Grafton | Goodison. |
| 1810 | Whalebone | Duke of Grafton | Clift. |
| 1811 | Phantom | Sir J. Shelly | Buckle. |
| 1812 | Octavius | Mr. Ladbrooke | W. Arnull. |
| 1813 | Smolensko | Sir C. Bunbury | Goodison. |
| 1814 | Blucher | Lord Stawell | W. Arnull. |
| 1815 | Whisker | Duke of Grafton | Goodison. |
| 1816 | Prince Leopold | Duke of York | Wheatley. |
| 1817 | Azar | Mr. Payne | Robinson. |
| 1818 | Sam | Mr. Thornhill | S. Chifney. |
| 1819 | Tiresias | Duke of Portland | Clift. |
| 1820 | Sailor | Mr. Thornhill | S. Chifney. |
| 1821 | Gustavus | Mr. Hunter | S. Day. |
| 1822 | Moses | Duke of York | Goodison. |
| 1823 | Emilius | Mr. Udney | Buckle. |
| 1824 | Cedric | Sir J. Shelly | Robinson. |
| 1825 | Middleton | Sir J. Shelly | Robinson. |
| 1826 | Lapdog | Lord Egremont | Dockeray. |
| 1827 | Mameluke | Lord Jersey | Robinson. |
| 1828 | Cadland | Duke of Rutland | Robinson. |
| 1829 | Frederick | Mr. Gratwicke | Forth. |
| 1830 | Priam | Mr. Chifney | S. Day. |
| 1831 | Spaniel | Lord Lowther | J. Scatley. |
| 1832 | St. Giles | Sir R. Hisdale | Scott. |
| 1833 | Dangerous | Mr. Saddler | Chapple. |
| 1834 | Plenipotentiary | Mr. Batson | Conolly. |
| 1835 | Mundig | Mr. Bowes | Scott. |
| 1836 | Bay Middleton | Lord Jersey | Robinson. |
| 1837 | Phosphorus | Lord Berner | G. Edwards. |
| 1838 | Amato | Sir G. Heathcote | Chapple. |
| 1839 | Bloomsbury | Mr. W. Ridsdale | Templeman. |
| 1840 | Little Wonder | Mr. Robertson | Macdonald. |
| 1841 | Coronation | Mr. Rawlinson | Conolly. |
| 1842 | Attila | Colonel Anson | Scott. |
| 1843 | Cotherstone | Mr. Bowes | Scott. |
| 1844 | Orlando | Colonel Peel | Flatman. |
| 1845 | Merry Monarch | Mr. Gratwicke | F. Bell. |
| 1846 | Pyrrhus | Mr. Gully | S. Day. |
| 1847 | Cossack | Mr. Pedley | Templeman. |
| 1848 | Surplice | Lord Clifden | Templeman. |
| 1849 | Flying D'tchm'n | Lord Eglinton | Marlow. |
| 1850 | Voltigeur | Lord Zetland | J. Marson. |
| 1851 | Teddington's | Sir J. Hawley | J. Marson. |
| 1852 | Daniel O'Rourke | Mr. Bowes | F. Butler. |
| 1853 | West Australian | Mr. Bowes | F. Butler. |
| 1854 | Andover | Mr. Gully | A. Day. |
| 1855 | Wild Dayrell | Mr. Popham | R. Sherwood |
| 1856 | Ellington | Adm. Harcourt | Aldcroft. |
| 1857 | Blink Bonny | Mr. W. I. Anson | Charlton. |
| 1858 | Bladsman | Sir J. Hawley | Wells. |
| 1859 | Misjid | Sir J. Hawley | Wells. |
| 1860 | Thormanby | Mr. Merry | Custance. |
| 1861 | Kettledrum | Col. Towneley | Bullock. |
| 1862 | Caractus | Mr. C. Snewny | J. Parsens. |
| 1863 | Macaroni | Mr. R. C. Naylor | T. Chaloner. |
| 1864 | Blair Athol | Mr. W. I. Anson | J. Snowden. |
| 1865 | Gladiateur | Co't de Lagrange | H. Grimsh'w |
| 1866 | Lord Lyon | Mr. Sutton | Custance. |
| 1867 | Hermit | Mr. H. Chaplin | J. Daley |
| 1868 | Blue Gown | Sir J. Hawley | Wells. |
| 1869 | Pretender | Mr. J. Johnstone | J. Osborne. |
| 1870 | Kingcraft | Lord Falmouth | T. French. |
| 1871 | Favonius | Baron Rothschild | T. French. |
| 1872 | Cremorne | Mr. H. Saville | Maidment. |
| 1873 | Doncaster | Mr. J. Merry | F. Webb. |
| 1874 | George Frederich | Mr. Cartwright | Custance. |
| 1875 | Galopin | Cou't Balthyany | Morris. |
| 1876 | Kisber | Mr. Baltazzi | Maidment. |
| 1877 | Silvio | Lord Falmouth | F. Archer. |
| 1878 | Sefton | Mr. Crawford | Constable. |
| 1879 | Sir Bevys | Mr. Acton | G. Fordham |
| 1880 | Bend Or | Duke of Westm'r | F. Archer. |
| 1881 | Iroquois | Mr. Lorillard | F. Archer. |
| 1882 | Shotover | Duke of Westm'r | T. Cannon. |
| 1883 | St. Blaise | Sir F. Johnstone | R. Wood. |
| 1884 | *Harvester | Sir J. Willoughby | C. Wood. |
| | *St. Gatien | Mr. Hammond | S. Loates. |
| 1885 | Melton | Lord Hastings | F. Archer. |
| 1886 | Ormonde | Duke of Westm'r | F. Archer. |
| 1887 | Merry Hampton | Mr. Abington | J. Watts. |
| 1888 | Ayrshire | Duke of Portland | F. Barrett. |
| 1889 | Donovan | Duke of Portland | T. Loates. |
| 1890 | Sainfoin | Sir J. Miller | J. Watts. |
| 1891 | Common | Sir F. Johnstone | G. Barrett. |
| 1892 | Sir Hugo | Lord Bradford | Allsop. |
| 1893 | Isinglass | Mr. McCalmont | T. Loates. |
| 1894 | Ladas | Lord Roseberry | J. Watts. |
| 1895 | Sir Visto | Lord Roseberry | S. Loates. |
| 1896 | Persimmon | Prince of Wales | J. Watts. |
| 1897 | Galtee More | Mr. Gubbins | C. Wood. |
| 1898 | Jeddah | Mr. Larnach | O. Madden |
| 1899 | Flying Fox | Duke of Westm'r | M. Cannon. |
| 1900 | Diamond Jubilee | Prince of Wales | H. Jones. |
| 1901 | Volodyovski | Mr. Whitney | L. Reiff. |
| 1902 | Ard Patrick | Mr. Gubbins | C. H. Martin |
| 1903 | Rock Sand | Sir J. Miller | Maher. |
| 1904 | St. Amant | L. de Rothschild | K. Cannon. |
| 1905 | Cicero | Lord Roseberry | Maher. |
| 1906 | Spearmint | Major Loder | Maker. |
| 1907 | Orby | Mr. Croker | J. Reiff. |
| 1908 | Signorinetta | Chev. Ginistrelli | W. Bullock. |
| 1909 | Minoru | King Edward | H. Jones. |
| 1910 | Lemberg | Mr. Fairie | B. Dillon. |
| 1911 | Sunstar | Mr. J. B. Joel | G. Stern. |
| 1912 | Tagalie | Mr. Raphael | J. Reiff. |
| 1913 | Aboyeur | Mr. Cunliffe | Piper. |
| 1914 | Durbar II | H. B. Duryea | M. MacGee. |
| 1915 | Pommern | Mr. S. Joel | S. Donoghue |
| 1916 | Fifinella | Mr. E. Hulton | J. Childs. |
| 1917 | Gay Crusader | Mr. Fairie | S. Donoghue |
| 1918 | Gainsborough | Lady J. Douglass | J. Childs. |
| 1919 | Grand Parade | Lord Glanely | W. Langford |
| 1920 | Spion Kop | Capt. G. Loder | F. O'Neill. |
| 1921 | Humorist | J. B. Joel | S. Donoghue |
| 1922 | Captain Cuttle | Sir J. Buchanan | S. Donoghue |

* Dead heat, stakes divided.

NOTE. The Derby of 1915-6-7-8 was run at Newmarket as the "New" Derby. The 1920 Derby was won in record time of 2 minutes 34 4-5 seconds; previous best time being Lemberg's, 1910, 2 minutes 35 1-5 seconds.

The 1921 Derby was run on June 1. Humorist at 12 to 1 in the betting, won in a hard drive by a neck from Viscount Astor's Craig an Eran, while three lengths back Joseph Watson's Lemonora finished third, and Allen Breck, the favorite, fourth. A. K. Macomber's The Bohemian, an American bred horse was never prominent and finished among the also rans. The time was 2 minutes, 45 seconds. The King and Queen were present.

### THE 1922 DERBY.

The 1922 Derby was won in a canter in the record time of 2 minutes, 34 3-5 seconds. Tamar, owned by Lord Astor, was second; Craigangower, third; and the betting favorite, St. Louis, fourth.

The Derby was instituted by the twelfth Earl of Derby in 1780. A year earlier the same racing peer had started the Oaks, named after his place at Banstead Downs—the Valley of Lambert's Oaks. Lord Derby won his own race in 1787 with Sir Peter Teazle, named thus in honor of his wife, who was Miss Farren, and had been acting as Lady Teazle in "The School for Scandal," when Lord Derby saw her for the first time. On May 18, 1847, Lord George Bentinck moved the adjournment of the House of Commons over Derby Day. This motion was moved each year until 1879.

The Derby course on Epsom Downs is left-handed, and consists of two straights and a turn—the historic Tottenham Corner.

### 1922 CALCUTTA SWEEPSTAKES.

The winner of the Calcutta sweepstakes, a Liverpool woman, Miss Gwendoline Thomas, thirty-four, is the sole support of her widowed mother.

Miss Thomas would have won £122,000 but she sold half her ticket for £3,000 to a Calcutta man. Her winnings, therefore, amount to £64,000 and are free from income tax, as the authorities do not recognize income from such a source.

## FOOTBALL.

Intercollegiate football developed marvellous popularity in 1922, record throngs attending many big games in all parts of the country and the largest stadiums were unable to accommodate all who desired to witness the play. The scores of a few of the leading college teams follow:

### ARMY.

| | |
|---|---|
| 12—Lebanon Valley.. | 0 |
| 35—Springfield..... | 0 |
| 13—Kansas..... | 0 |
| 19—Auburn..... | 6 |
| 33—N. H. State..... | 0 |
| 7—Yale..... | 7 |
| 53—Bonaventure.... | 0 |
| 0—Notre Dame.... | 0 |
| 39—Bates..... | 0 |
| 17—Navy..... | 14 |

### BROWN.

| | |
|---|---|
| 27—R. I. State..... | 0 |
| 13—Colby..... | 0 |
| 0—Syracuse..... | 0 |
| 6—Lehigh..... | 2 |
| 16—Boston Univ.... | 6 |
| 0—Yale..... | 20 |
| 27—Bates..... | 12 |
| 3—Harvard..... | 0 |
| 0—Dartmouth..... | 7 |

### BUCKNELL.

| | |
|---|---|
| 61—Mansfield..... | 0 |
| 41—Alfred..... | 0 |
| 51—Susquehanna.... | 0 |
| 7—Navy..... | 14 |
| 7—Lafayette..... | 28 |
| 0—Pittsburgh..... | 7 |
| 33—Muhlenberg..... | 6 |
| 14—Lehigh ..... | 0 |
| 7—Georgetown..... | 19 |
| 20—Rutgers..... | 13 |
| 19—Dickinson..... | 7 |

### CALIFORNIA.

| | |
|---|---|
| 45—Santa Clara..... | 14 |
| 80—Mare Isl. Mar... | 0 |
| 41—St. Mary's..... | 0 |
| 25—Olympic Club... | 0 |
| 12—So. California... | 0 |
| 61—Washington St.. | 0 |
| 57—Washington..... | 7 |
| 61—Nevada..... | 13 |
| 28—Stanford..... | 0 |

### CENTRE.

| | |
|---|---|
| 72—Carson-Newman. | 0 |
| 21—Clemson..... | 0 |
| 55—Mississippi..... | 0 |
| 10—Virginia Poly.... | 6 |
| 10—Harvard..... | 24 |
| 32—Louisville..... | 7 |
| 27—Kentucky..... | 3 |
| 27—Wash. and Lee.. | 6 |
| 0—Auburn..... | 6 |
| 42—So. Carolina.... | 0 |

### CHICAGO.

| | |
|---|---|
| 20—Georgia ..... | 0 |
| 15—Northwestern... | 7 |
| 12—Purdue..... | 0 |
| 18—Princeton..... | 21 |
| 14—Ohio State..... | 9 |
| 9—Illinois..... | 0 |
| 0—Wisconsin..... | 0 |

### COLGATE.

| | |
|---|---|
| 50—Clarkson..... | 6 |
| 19—Allegheny..... | 0 |
| 0—Princeton..... | 10 |
| 0—Cornell..... | 14 |
| 87—Susquehanna.... | 6 |
| 35—Lehigh..... | 6 |
| 40—Rochester..... | 0 |
| 7—Syracuse..... | 14 |
| 56—Columbia..... | 0 |

### COLUMBIA.

| | |
|---|---|
| 48—Ursinus..... | 7 |
| 43—Amherst..... | 6 |
| 10—Wesleyan..... | 6 |
| 6—N. Y. U..... | 2 |
| 10—Williams..... | 13 |
| 0—Cornell..... | 56 |
| 17—Middlebury..... | 6 |
| 7—Dartmouth..... | 28 |
| 0—Colgate..... | 56 |

### CORNELL.

| | |
|---|---|
| 55—St. Bonaventure.. | 6 |
| 66—Niagara..... | 0 |
| 68—N. H. State..... | 7 |
| 14—Colgate..... | 0 |
| 56—Columbia..... | 0 |
| 23—Dartmouth..... | 0 |
| 48—Albright..... | 14 |
| 9—Pennsylvania..... | 0 |

### DARTMOUTH.

| | |
|---|---|
| 20—Norwich..... | 0 |
| 19—Maine..... | 0 |
| 21—Middlebury..... | 0 |
| 3—Vermont..... | 6 |
| 3—Harvard..... | 12 |
| 10—Boston Univ.... | 7 |
| 0—Cornell..... | 23 |
| 28—Columbia..... | 7 |

### GEORGIA.

| | |
|---|---|
| 82—Newberry..... | 13 |
| 41—Mercer..... | 0 |
| 0—Chicago..... | 20 |
| 7—Furman..... | 0 |
| 7—Tennessee..... | 3 |
| 26—Oglethorpe..... | 6 |
| 3—Auburn..... | 7 |
| 6—Virginia..... | 6 |
| 0—Vanderbilt..... | 12 |
| 6—Alabama..... | 10 |

### GEORGIA TECH.

| | |
|---|---|
| 31—Oglethorpe..... | 6 |
| 19—Davidson..... | 0 |
| 33—Alabama..... | 7 |
| 0—Navy..... | 13 |
| 3—Notre Dame.... | 13 |
| 21—Clemson..... | 7 |
| 19—Georgetown..... | 7 |
| 17—N. Carolina S... | 0 |
| 14—Auburn..... | 6 |

### GEORGETOWN.

| | |
|---|---|
| 19—Lebanon Valley.. | 6 |
| 37—Cincinnati..... | 0 |
| 28—Fordham..... | 13 |
| 6—Quant. Marines.. | 9 |
| 0—Holy Cross..... | 10 |
| 7—Georgia Tech..... | 19 |
| 19—Bucknell..... | 7 |
| 0—Boston College.. | 0 |
| 46—Geo. Washington. | 0 |
| 13—Lafayette..... | 7 |

### HARVARD.

| | |
|---|---|
| 20—Middlebury..... | 0 |
| 20—Holy Cross..... | 0 |
| 15—Bowdoin..... | 0 |
| 24—Centre..... | 10 |
| 12—Dartmouth..... | 3 |
| 24—Florida..... | 0 |
| 3—Princeton..... | 10 |
| 0—Brown..... | 3 |
| 10—Yale..... | 3 |

### ILLINOIS.

| | |
|---|---|
| 7—Butler..... | 10 |
| 7—Iowa..... | 8 |
| 0—Michigan..... | 24 |
| 6—Northwestern... | 3 |
| 3—Wisconsin..... | 0 |
| 0—Chicago..... | 9 |
| 3—Ohio State..... | 6 |

### IOWA.

| | |
|---|---|
| 61—Knox..... | 0 |
| 6—Yale..... | 0 |
| 8—Illinois..... | 7 |
| 56—Purdue..... | 0 |
| 28—Minnesota..... | 14 |
| 12—Ohio State..... | 9 |
| 37—Northwestern... | 3 |

### INDIANA.

| | |
|---|---|
| 0—De Pauw..... | 0 |
| 0—Minnesota..... | 20 |
| 0—Wisconsin..... | 20 |
| 14—Mich. Aggies.... | 6 |
| 0—Notre Dame.... | 27 |
| 0—West Virginia... | 33 |
| 7—Purdue..... | 7 |

### LAFAYETTE.

| | |
|---|---|
| 34—Richmond..... | 0 |
| 7—Pittsburgh..... | 0 |
| 62—Muhlenberg..... | 0 |
| 28—Bucknell..... | 7 |
| 12—Boston College.. | 0 |
| 13—Wash. & Jeff.... | 14 |
| 33—Rutgers..... | 6 |
| 3—Lehigh..... | 0 |
| 7—Georgetown..... | 13 |

### LEHIGH.

| | |
|---|---|
| 0—Gettysburg..... | 0 |
| 37—St. Francis..... | 0 |
| 7—Rutgers..... | 12 |
| 2—Brown..... | 6 |
| 26—Muhlenberg..... | 7 |
| 6—Colgate..... | 35 |
| 0—Bucknell..... | 14 |
| 6—Lebanon Valley.. | 2 |
| 0—Lafayette..... | 3 |

### MICHIGAN.

| | |
|---|---|
| 48—Case..... | 0 |
| 0—Vanderbilt..... | 0 |
| 19—Ohio State..... | 0 |
| 24—Illinois..... | 0 |
| 63—Mich. Aggies.... | 0 |
| 13—Wisconsin..... | 6 |
| 16—Minnesota..... | 7 |

### MINNESOTA.

| | |
|---|---|
| 22—North Dakota... | 0 |
| 20—Indiana..... | 0 |
| 7—Northwestern... | 7 |
| 9—Ohio State..... | 0 |
| 0—Wisconsin..... | 14 |
| 14—Iowa..... | 28 |
| 7—Michigan..... | 16 |

### NAVY.

| | |
|---|---|
| 71—Westn. Reserve.. | 0 |
| 14—Bucknell..... | 7 |
| 13—Georgia Tech... | 0 |
| 7—Pennsylvania.... | 13 |
| 14—Penn State..... | 0 |
| 52—St. Xavier..... | 0 |
| 14—Army..... | 17 |

### NEBRASKA.

| | |
|---|---|
| 56—So. Dakota..... | 0 |
| 48—Missouri..... | 0 |
| 39—Oklahoma..... | 7 |
| 6—Syracuse..... | 9 |
| 28—Kansas..... | 0 |
| 21—Kansas Aggies... | 0 |
| 54—Ames..... | 6 |
| 14—Notre Dame..... | 6 |

### NORTH CAROLINA.

| | |
|---|---|
| 62—Wake Forest..... | 3 |
| 0—Yale..... | 18 |
| 20—Trinity..... | 0 |
| 10—So. Carolina.... | 7 |
| 14—N. C. State..... | 9 |
| 27—Maryland..... | 3 |
| 19—Tulane..... | 12 |
| 9—Va. Mil. Inst.... | 7 |
| 29—Davidson..... | 6 |
| 32—Wake Forest..... | 0 |
| 6—Maryland..... | 6 |

### NORTHWESTERN.

| | |
|---|---|
| 17—Beloit..... | 0 |
| 7—Chicago..... | 15 |
| 7—Minnesota..... | 7 |
| 3—Illinois..... | 6 |
| 24—Purdue..... | 13 |
| 58—Monmouth..... | 14 |
| 3—Iowa..... | 37 |

### NOTRE DAME.

| | |
|---|---|
| 46—Kalamazoo..... | 0 |
| 46—St. Louis..... | 0 |
| 20—Purdue..... | 0 |
| 34—De Pauw..... | 7 |
| 13—Georgia Tech... | 3 |
| 27—Indiana..... | 0 |
| 0—Army..... | 0 |
| 38—Butler..... | 3 |
| 19—Carnegie Tech... | 0 |
| 6—Nebraska..... | 14 |

### OHIO STATE.

| | |
|---|---|
| 5—Ohio Wesleyan.. | 0 |
| 14—Oberlin..... | 0 |
| 0—Michigan..... | 19 |
| 0—Minnesota..... | 9 |
| 9—Chicago..... | 14 |
| 9—Iowa..... | 12 |

### PENN. STATE.

| | |
|---|---|
| 54—St. Bonaventure. | 0 |
| 28—W. and M..... | 7 |
| 20—Gettysburg..... | 0 |
| 32—Lebanon Valley.. | 6 |
| 33—Middlebury..... | 0 |
| 0—Syracuse..... | 0 |
| 0—Army..... | 14 |
| 10—Carnegie Tech.. | 0 |
| 6—Pennsylvania.... | 7 |
| 0—Pittsburgh..... | 14 |

### PENNSYLVANIA.

| | |
|---|---|
| 14—F. and M..... | 0 |
| 27—Univ. of South.. | 0 |
| 12—Maryland..... | 0 |
| 14—Swarthmore..... | 6 |
| 13—Navy..... | 7 |
| 7—Alabama..... | 9 |
| 6—Pittsburgh..... | 7 |
| 7—Penn State..... | 6 |
| 0—Cornell..... | 9 |

### PITTSBURGH.

| | |
|---|---|
| 37—Cincinnati..... | 0 |
| 0—Lafayette..... | 7 |
| 6—West Virginia... | 9 |
| 21—Syracuse..... | 14 |
| 7—Bucknell..... | 0 |
| 62—Geneva..... | 0 |
| 7—Pennsylvania.... | 6 |
| 19—Wash. and Jeff.. | 0 |
| 14—Penn State..... | 0 |

### PRINCETON.

| | |
|---|---|
| 30—Johns Hopkins.. | 0 |
| 5—Virginia..... | 0 |
| 10—Colgate..... | 0 |
| 26—Maryland..... | 0 |
| 21—Chicago..... | 18 |
| 22—Swarthmore..... | 13 |
| 10—Harvard..... | 3 |
| 3—Yale..... | 0 |

### PURDUE.

| | |
|---|---|
| 10—James Milliken.. | 0 |
| 0—Notre Dame.... | 20 |
| 0—Chicago..... | 12 |
| 0—Iowa..... | 56 |
| 6—Wabash..... | 7 |
| 13—Northwestern... | 24 |
| 7—Indiana..... | 7 |

### STANFORD.

| | |
|---|---|
| 9—Olympic Club... | 27 |
| 7—Santa Clara..... | 0 |
| 9—St. Mary's..... | 0 |
| 6—O. A. C..... | 0 |
| 17—Nevada..... | 7 |
| 0—So. California... | 6 |
| 8—Washington..... | 12 |
| 0—California..... | 28 |

### SYRACUSE.

| | |
|---|---|
| 28—Hobart..... | 7 |
| 47—Muhlenberg..... | 0 |
| 32—N. Y. University. | 0 |
| 0—Brown..... | 0 |
| 14—Pittsburgh..... | 21 |
| 0—Penn State..... | 0 |
| 9—Nebraska..... | 6 |
| 32—McGill..... | 0 |
| 14—Colgate..... | 7 |

### VIRGINIA.

| | |
|---|---|
| 34—G. Washington.. | 0 |
| 0—Princeton..... | 5 |
| 14—Richmond..... | 6 |
| 0—V. M. I..... | 14 |
| 19—Johns Hopkins.. | 0 |
| 22—Wash. and Lee.. | 6 |
| 6—Georgia..... | 6 |
| 0—West Virginia... | 13 |
| 7—No. Carolina.... | 10 |

### WASHINGTON.

| | |
|---|---|
| 48—U. S. S. Idaho... | 0 |
| 26—Montana..... | 0 |
| 2—Idaho..... | 0 |
| 14—Oregon Aggies... | 3 |
| 17—Wash. State..... | 13 |
| 7—California..... | 57 |
| 12—Stanford..... | 8 |
| 0—Oklahoma..... | 0 |

### WASH. AND JEFF.

| | |
|---|---|
| 14—Geneva..... | 0 |
| 35—Westminster..... | 0 |
| 19—Bethany..... | 7 |
| 7—Carnegie Tech... | 7 |
| 14—W.Va.Wesleyan.. | 0 |
| 14—Lafayette..... | 13 |
| 32—Wabash..... | 6 |
| 0—Pittsburgh..... | 19 |
| 9—Detroit..... | 20 |
| 0—W. Virginia..... | 14 |

FOOTBALL—*Continued.*

| WEST VIRGINIA. | | WILLIAMS. | | WISCONSIN. | | YALE. | |
|---|---|---|---|---|---|---|---|
| 20—W.Va.Wesleyan | 3 | 41—Hamilton | 0 | 41—Carleton | 0 | 48—Bates | 0 |
| 55—Marietta | 0 | 14—Middlebury | 7 | 20—S. Dak. Aggies | 5 | 13—Carnegie Tech | 0 |
| 9—Pittsburgh | 6 | 0—Tufts | 6 | 20—Indiana | 0 | 18—North Carolina | 0 |
| 12—Wash. and Lee | 12 | 0—Yale | 38 | 14—Minnesota | 0 | 0—Iowa | 6 |
| 28—Rutgers | 0 | 13—Columbia | 10 | 0—Illinois | 3 | 38—Williams | 0 |
| 34—Cincinnati | 0 | 27—Rensselaer | 7 | 6—Michigan | 13 | 7—Army | 7 |
| 33—Indiana | 0 | 22—Wesleyan | 7 | 0—Chicago | 0 | 20—Brown | 0 |
| 13—Virginia | 0 | 27—Amherst | 0 | | | 45—Maryland | 3 |
| 28—Ohio Univ | 0 | | | | | 0—Princeton | 3 |
| 14—Wash. & Jeff | 0 | | | | | 3—Harvard | 10 |

## WESTERN INTERCOLLEGIATE CONFERENCE.

Iowa and Michigan completed their Conference season without defeat and as they did not meet the question of supremacy was undecided. The record of the "Big Ten" colleges in Conference play for the 1922 season is appended:

| College. | Won. | Lost. | Tied. | Pts. | Op. Pts. | College. | Won. | Lost. | Tied. | Pts. | Op. Pts. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Iowa | 5 | 0 | 0 | 141 | 33 | Illinois | 2 | 4 | 0 | 19 | 50 |
| Michigan | 4 | 0 | 0 | 70 | 13 | Northwestern | 0 | 3 | 1 | 44 | 78 |
| Chicago | 4 | 0 | 1 | 50 | 16 | Ohio State | 1 | 4 | 0 | 24 | 55 |
| Wisconsin | 2 | 2 | 1 | 40 | 16 | Indiana | 0 | 2 | 1 | 7 | 47 |
| Minnesota | 2 | 3 | 1 | 57 | 65 | Purdue | 0 | 3 | 1 | 20 | 99 |

## RECORDS OF CHIEF FOOTBALL GAMES IN PAST YEARS.

(During America's participation in the World War most of the big college teams did not play.)

| | Army vs. Navy | | Army vs. Yale | | Cornell vs. Penna. | | Harvard vs. Yale | | Harvard vs. Princeton | | Lafayette vs. Penna. | | Princeton vs. Yale | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1883 | | | | | | | 2 | 23 | 7 | 20 | | | 0 | 6 |
| 1884 | | | | | | | 0 | 48 | 6 | 34 | | | 0 | 0 |
| 1885 | | | | | | | | | | | | | 6 | 5 |
| 1886 | | | | | | | 4 | 29 | 0 | 12 | | | 0 | 0 |
| 1887 | | | | | | | 8 | 17 | 12 | 0 | | | 0 | 12 |
| 1888 | | | | | | | | | 6 | 18 | | | 0 | 10 |
| 1889 | | | | | | | 0 | 6 | 15 | 41 | | | 10 | 0 |
| 1890 | 0 | 24 | | | | | 12 | 6 | | | | | 0 | 32 |
| 1891 | 32 | 16 | | | | | 0 | 10 | | | | | 0 | 19 |
| 1892 | 4 | 12 | | | | | 0 | 6 | | | | | 0 | 12 |
| 1893 | 4 | 6 | 0 | 28 | 0 | 50 | 0 | 6 | | | 0 | 82 | 6 | 0 |
| 1894 | | | 5 | 12 | 0 | 6 | 4 | 12 | | | 0 | 26 | 0 | 24 |
| 1895 | | | 8 | 28 | 2 | 46 | | | 4 | 12 | 0 | 30 | 10 | 20 |
| 1896 | | | 2 | 16 | 10 | 32 | | | 0 | 12 | 6 | 4 | 24 | 6 |
| 1897 | | | 6 | 6 | 0 | 4 | 0 | 0 | | | 0 | 46 | 0 | 6 |
| 1898 | | | 0 | 10 | 6 | 12 | 17 | 0 | | | 0 | 32 | 6 | 0 |
| 1899 | 17 | 5 | 0 | 24 | 0 | 29 | 0 | 0 | | | 6 | 0 | 11 | 10 |
| 1900 | 7 | 11 | 0 | 18 | 0 | 27 | 0 | 28 | | | 5 | 12 | 5 | 29 |
| 1901 | 11 | 5 | 5 | 5 | 23 | 6 | 22 | 0 | | | | | 0 | 12 |
| 1902 | 22 | 8 | 6 | 6 | 11 | 12 | 0 | 23 | | | | | 5 | 12 |
| 1903 | 40 | 5 | 5 | 17 | 0 | 42 | 0 | 16 | | | | | 11 | 6 |
| 1904 | 11 | 0 | 11 | 6 | 0 | 34 | 0 | 12 | | | 0 | 22 | 0 | 12 |
| 1905 | 6 | 6 | 0 | 20 | 5 | 6 | 0 | 6 | | | 6 | 6 | 4 | 23 |
| 1906 | 0 | 10 | 6 | 10 | 0 | 0 | 0 | 6 | | | 0 | 0 | 0 | 0 |
| 1907 | 0 | 6 | 0 | 0 | 4 | 12 | 0 | 12 | | | 0 | 15 | 10 | 12 |
| 1908 | 6 | 4 | 0 | 6 | 4 | 17 | 4 | 0 | | | 4 | 34 | 5 | 11 |
| 1909 | | | 0 | 17 | 6 | 17 | 0 | 8 | | | 6 | 6 | 0 | 17 |
| 1910 | 0 | 3 | 9 | 3 | 6 | 12 | 0 | 0 | | | 0 | 18 | 3 | 5 |
| 1911 | 0 | 3 | 6 | 0 | 9 | 21 | 0 | 0 | 6 | 8 | 6 | 23 | 6 | 3 |
| 1912 | 0 | 6 | 0 | 6 | 2 | 7 | 20 | 0 | 16 | 6 | 7 | 3 | 6 | 6 |
| 1913 | 22 | 9 | | | 21 | 0 | 15 | 5 | 3 | 0 | 0 | 10 | 3 | 3 |
| 1914 | 20 | 0 | | | 24 | 12 | 36 | 0 | 20 | 0 | 0 | 0 | 14 | 19 |
| 1915 | 14 | 0 | | | 24 | 9 | 41 | 0 | 10 | 6 | 17 | 0 | 7 | 13 |
| 1916 | 15 | 7 | | | 3 | 23 | 3 | 6 | 3 | 0 | 0 | 19 | 0 | 10 |
| 1917 | | | | | | | | | | | | | | |
| 1918 | | | | | | | | | | | 0 | 34 | | |
| 1919 | 0 | 6 | | | 0 | 24 | 10 | 2 | 10 | 10 | 0 | 23 | 13 | 6 |
| 1920 | 0 | 7 | | | 0 | 28 | 9 | 0 | 14 | 14 | 0 | 2 | 20 | 0 |
| 1921 | 0 | 7 | 7 | 14 | 41 | 0 | 10 | 3 | 3 | 10 | 38 | 6 | 7 | 13 |
| 1922 | 17 | 14 | 7 | 7 | 9 | 0 | 10 | 3 | 3 | 10 | | | 3 | 0 |

## LACROSSE.

Lacrosse gained further popularity as a college sport during the season of 1922, due in part to the tour of the Oxford-Cambridge University combination from England. The northern section championship of the Intercollegiate League was won by the Syracuse University team without a defeat. The southern section play resulted in a tie, the University of Pennsylvania team winning in the play-off. The record of the leading college twelves, including non-league games, follows:

| Team. | Won. | Lost. | Per Cent. |
|---|---|---|---|
| Syracuse | 17 | 0 | 1.000 |
| Navy | 7 | 0 | 1.000 |
| Maryland | 7 | 1 | .875 |
| Princeton | 6 | 2 | .750 |
| Army | 5 | 2 | .714 |
| Rutgers | 5 | 2 | .714 |
| Hopkins | 7 | 3 | .700 |
| Hobart | 5 | 3 | .625 |
| Cornell | 5 | 4 | .555 |
| Pennsylvania | 5 | 5 | .500 |
| Lehigh | 5 | 5 | .500 |

The Oxford-Cambridge combination played twelve games with the United States college teams for possession of the International Lacrosse Cup, winning seven and losing 5. The results follow:

| | | | |
|---|---|---|---|
| Oxford-Cambridge | 8 | Lehigh Univ | 2 |
| Oxford-Cambridge | 6 | Penn State College | 0 |
| Oxford-Cambridge | 8 | U. of Pennsylvania | 0 |
| Oxford-Cambridge | 2 | Johns Hopkins U | 11 |
| Oxford-Cambridge | 8 | Swarthmore Univ | 9 |
| Oxford-Cambridge | 3 | Hobart College | 8 |
| Oxford-Cambridge | 5 | Cornell Univ | 2 |
| Oxford-Cambridge | 8 | Colgate Univ | 4 |
| Oxford-Cambridge | 3 | Syracuse Univ | 4 |
| Oxford-Cambridge | 5 | Harvard Univ | 2 |
| Oxford-Cambridge | 8 | Stevens Inst. Tech | 4 |
| Oxford-Cambridge | 4 | Princeton Univ | 6 |
| England | 68 | United States | 52 |

## WOMEN'S ATHLETICS.

Athletics for women received a great impetus throughout the country during the season of 1922 when a team of schoolgirl athletes representing the United States competed in the first international meet held in Paris, August 20, and won second place. Development of track and field sports for women is progressing in all parts of the country and it is expected that the Amateur Athletic Union will assume jurisdiction of women's athletics in the United States before 1923 and that the country will be represented by a women's team in the Olympic Games of 1928 at Amsterdam when events for women are planned for the program at those games.

### INTERNATIONAL MEET.

First international games for women held at Paris, Aug. 20. Point scores: England 50; United States 31; France 29, Czechoslovakia 12; Switzerland 6. Results of events:

*60-Metre Dash*—Won by Mlle. B. Mejzlikova, Czechoslovakia; Miss Lines, England, second; Miss Callebout, England, third; Mlle. Maugars, France, fourth. Time—7 3-5s. (World's record.)

*100-Yard Dash*—Won by Miss Callebout, England; Mlle. A. Mejzlikova, Czechoslovakia, second; Miss Lines, England, third; Mlle. Prost, France, fourth. Time—12s.

*300-Metre Run*—Won by Miss Lines, England; Miss Cast, England, second; Mlle. A. Darreau, France, third; Miss Lucille Godbold, United States, fourth. Time—44 4-5s.

*100-Yard Hurdles*—Won by Miss Camelia Sabie, United States; Miss Carrie Hatt, England, second; Mlle. Therese Laloz, France, third; Miss Flora Batson, United States, fourth. Time—14 2-5s.

*1,000-Metre Run*—Won by Mlle. Breard, France; Mlle. Lenoir, France, second; Miss Hall, England, third; Miss Godbold, United States, fourth. Time—3m. 12s. (World's record.)

*440-Yard Relay*—Won by England; France, second; Czechoslovakia, third; United States, fourth. Time—51 4-5s.

*Standing Broad Jump*—Won by Miss Camelia Sabie, United States; Miss Hughes, England, second; Mlle. Comte, France, third; Miss Birchenough, England, fourth. Distance—2 metres 4.85 centimetres.

*Running Broad Jump*—Won by Miss Lines, England; Miss Elizabeth Stine, United States, second; Miss Camelia Sabie, United States, third; Miss Carrie Hatt, England, fourth. Distance—5.06 metres.

*Running High Jump*—Miss Nancy Voorhees, United States, and Miss Carrie Hatt, England, tied for first place at 1.45 metres; Miss Lowman, England, third; Mlle. Gerner, France, fourth.

*Putting 8-Pound Shot*—Won by Miss Lucille Godbold, United States; Mme. Gouraud Morris, France, second; Miss Maud Rosenbaum, United States, third; Mlle. A. Mejzlikova, Czechoslovakia, fourth. Distance—20 metres 22 centimetres.

*Throwing the Javelin*—Won by Mlle. Paianzola, Switzerland; Mlle. Gancel, France, second; Miss Flora Batson, United States, third; Mlle. Groslimond, Switzerland, fourth. Distance—43 metres 25 centimetres.

### WOMEN'S WORLD ATHLETIC RECORDS.

Recognized by the International Women's Sports Federation to September 1, 1922.

| Event. | Time. | Holder. | Nation. | Yr. |
|---|---|---|---|---|
| 50 yards | 6 sec. | E. Macbeth | America | 1920 |
| 50 metres | 6 2-5 sec. | Mejzlikova, II | Czecho-Slov. | 1922 |
| 60 metres | 7 3-5 sec. | Mejzlikova, II | Cczcho-Slov. | 1922 |
| 75 yards | 8 3-5 sec. | L. Haydock | America | 1913 |
| 80 Metres | 10 sec. | Mejzlikova, II | Czecho-Slov. | 1922 |
| 100 yards | 11 2-5 sec. | Mejzlikova, II | Czecho-Slov. | 1922 |
| 100 metres | 12 4-5 sec. | Lines | England | 1922 |
| 200 metres | 27 4-5 sec. | Cast | England | 1922 |
| 220 yards | 28 sec. | Cast | England | 1922 |
| 250 metres | 35 4-5 sec. | Cast | England | 1922 |
| 300 metres | 43 3-5 sec. | Mary McCune | America | 1922 |
| 400 metres | 1 min. 4 sec. | Lines | England | 1922 |
| 440 yards | 1 min. 4 2-5 sec. | Lines | England | 1922 |
| 500 metres | 1 min. 29 1-5 sec. | Lenoir | France | 1922 |
| 800 metres | 2 min. 30 2-5 sec. | Lenoir | France | 1922 |
| 880 yards | 2 min. 31 1-5 sec. | Lenoir | France | 1922 |
| 1,000 metres | 3 min. 12 sec. | L. Breard | France | 1922 |
| RELAY RACES. | | | | |
| 220 yards (4x55) | 28 2-5 sec. | Oakesmere School | America | 1921 |
| 300 metres (4x75) | 42 2-5 sec. | Czecho lov | Czecho lov. | 1922 |
| 400 metres (4x100) | 51 2-5 sec. | English Team | England | 1922 |
| 440 yards (4x110) | 51 4-5 sec. | English Team | England | 1922 |
| 880 yards (4x220) | 1 min. 53 sec. | English Team | England | 1922 |
| 1,000 metres (4x250) | 2 min. 33 2-5 sec. | French Team | France | 1922 |
| 1,000 metres (10x100) | 2 min. 23 1-5 sec. | French Team | France | 1921 |
| HURDLE RACES. | | | | |
| 60 yards (4 hurdles, 29.5 in. high) | 9 sec. | M. Batson | America | 1921 |
| 60 yards (4 hurdles, 24 in. high) | 8 3-5 sec. | A. Smith | America | 1921 |
| 83 metres (7 hurdles, 29.5 in. high) | 10 3-5 sec. | G. Delapierre | France | 1921 |
| 100 yards (8 hurdles, 24 in. high) | 14 2-5 sec. | F. Batson | America | 1922 |
| 100 yards (8 hurdles, 29.5 in. high) | 14 2-5 sec. | Camelia Sabie | America | 1922 |

| Event. | Distance. | Holder. | Nation. | Yr. |
|---|---|---|---|---|
| JUMPS. | | | | |
| Running high jump | 1.46 metres. | N. Voorhees | America | 1922 |
| Standing high jump | 1.117 metres. | N. Wilson | America | 1914 |
| Running broad jump | 5.16 metres. | Mejzlikova II | Czechoslov. | 1922 |
| Standing broad jump | 2.50 metres. | C. Rice | America | 1916 |
| WEIGHT THROWING. | | | | |
| Putting 8-lb. (3.628 kilo.) shot, one hand | 11.27 metres. | L. Godbold | America | 1922 |
| Putting 8-lb. (3.628 kilo.) shot, two hands | 20.22 metres. | L. Godbold | America | 1922 |
| Putting 5 kilo. shot, one hand | 8.20 metres. | Mejzlikova, I | Czechoslov. | 1922 |
| JAVELIN THROWING. | | | | |
| Javelin (.800 kilo.) one hand | 29.931 metres. | R. Reidel | America | 1919 |
| Javelin (.800 kilo.) two hands | 46.04 metres. | Gouraud-Morris | France | 1921 |
| Javelin (.600 kilo.) two hands | 46.785 metres. | B. Srumkova | Czechoslov. | 1922 |
| OTHER EVENTS. | | | | |
| Pole vault | 2.209 metres. | M. Carl | America | 1919 |
| Hop, Step and jump | 10.323 metres. | E. Stine | America | 1920 |
| Puttin · 6-pound shot | 13.106 metres. | L. Perkins | America | 1919 |
| Putting 12-pound shot | 8.635 metres. | M. Mitchell | America | 1917 |
| Putting 6-kilogram shot | 7.250 metres. | N. Nystrom | Finland | 1914 |
| Throwing basketball | 28.70 metres. | Rosenbaum | America | 1919 |
| Throwing baseball | 66.570 metres. | B. Hall | America | 1920 |
| Hurlball (1.814 kilo.) with sling | 26.019 metres. | M. Scattergood | America | 1922 |
| Hurlball ( .300 kilo.) without sling | 26.60 metres. | B. Komestikova | Czechoslov. | 1920 |
| Hurlball (2 kilograms) with sling | 31.97 metres. | L. Schmorancova | Czechoslov. | 1921 |
| GERMAN WORLD'S RECORDS. | | | | |
| 100 metre run | 12 4-5 sec. | M. Kiessling | Germany | 1921 |
| 1,000 metre relay (10x100) | 2 min. 17 sec. | Frankfort Turnverein | Germany | 1921 |
| Running broad jump | 5.54 metres. | M. Kiessling | Germany | 1921 |
| Putting shot (5 kilograms) | 9.30 metres. | F. Grasse | Germany | 1921 |
| Throwing javelin (.800 kilo.), one hand | 32.42 metres. | Grehl | Germany | 1922 |

NOTE—Several of these records have been bettered but not yet officially recognized.

## RIFLE SHOOTING.

### NATIONAL RIFLE ASSOCIATION OF AMERICA.

In co-operation with the National Board for the Promotion of Rifle Practice in the United States.

Headquarters—1108 Woodward Building, Washington, D. C.

The annual matches of the National Rifle Association were held on the Ohio State Rifle Range, Camp Perry, Ohio, in connection with the national rifle matches, September 2-28, 1922, inclusive.

Winners of the principal events:

*National Rifle Team Match*—Winner of the match and high Service Team, United States Marine Corps, awarded the National Trophy. High National Guard Team, Massachusetts, awarded the Hilton Trophy, finished sixth among all teams. High Civilian Team, Illinois, awarded the Soldier of Marathon Trophy, finished seventh among all teams. This is the highest a civilian team has yet finished in the national team match.

*National Pistol Team Match*—Winners, U. S. Marine Corps, 2d U. S. Infantry, 3d U. S. Cavalry-Engineers.

*National Individual Rifle Match*—Sergt. Otto Bentz, C. A. C. Sergt. Anton Kothlarczyk, U. S. Infantry and Captain M. H. Parsons, C. A. C. made the same total score as the winner but were outranked by his higher scores at the longer ranges.

*National Individual Pistol Match*—Lieut. E. G. Andino, U. S. Infantry. Lieut. S. R. Hinds, U. S. Infantry, made the same total score as the winner but was outranked.

*Leech Cup Match*—Mr. Loren M. Felt, Illinois, 105 with 10 V's. Sergt. S. J. Dickerson, U. S. M. C. had the same total score but was outranked.

*Wimbledon Cup Match*—Special Rifle Class: Mr. Guy H. Emerson, Ohio, 100-15V's. Captain H. C. Barnes, C. A. C., had the same total score but with only 13V's.

*Wimbledon Cup Match*—Service Rifle Class. Private Louis Klinger, U. S. Cavalry, 100-8V's.

*Marine Corps Cup Match*—Private Joseph Dyba, C. A. C., 196. Major Carroll Bagby, U. S. Infantry and Sergt. John Schricker, D. C. National Guard had the same total scores but were outranked.

*President's Match*—Capt. Edgar W. King, C. A. C., 191. Private Joseph Crockett, D. C. National Guard, Lieut. H. I. Borden, C. A. C., and Capt. L. S. Spooner, U. S. Infantry, with same total score, were outranked into places as indicated.

*Members' Match*—Sergt. John Velenage, U. S. Infantry, 50-9V's. 18 competitors made total scores of 50.

*Offhand Match*—Capt. John Knuebel, U. S. Infantry, 94. Seaman 1st class, W. H. Pittman, same score, outranked into second place.

*200-Yard Rapid Fire Match*—Capt. Theo. Wessels, U. S. Infantry, 50-50-49-48. This match required three shoot-offs to decide. 145 competitors made the possible score of 50.

*300-Yard Rapid Fire Match*—Capt. G. T. Shank, 50-50. One shoot-off was required. 78 competitors made the possible score of 50.

*600-Yard Rapid Fire Match*—Capt. W. W. Ashurst, U. S. M. C., 50-49. One shoot-off was required. 25 competitors making the possible score of 50.

*Camp Perry Instructors' Trophy Match*—Sergt. J. B. Jensen, U. S. Cavalry, 138. Major Paul Newgarden, U. S. Infantry, with same score, outranked into second place.

*Adjutant Generals' Match*—Col. L. A. Toombs, Louisiana, 89.

*600-Yard Free Rifle Match*—Capt. G. T. Shank, U. S. Infantry, 100.

*200-Yard Free Rifle Match*—J. W. Hession, New York.

*Civilian Club Members' Match*—Capt. G. R. Gawehn, Indiana, 97. J. P. Becker, Minnesota, with same total, outranked into second place.

*Herrick Trophy Team Match*—Massachusetts National Guard, 1,775. A new world's record for this shooting classic.

*A. E. F. Roumanian Trophy Team Match*—U. S. Marine Corps, 849.

*Championship Regimental Team Match*—121st Engineers, D. C. National Guard, 529.

*C. M. T. C. Team Match*—8th Corps Area, C. M. T. C.

*Civilian Interclub Championship*—National Capitol Rifle Club, Washington, D. C., 364.

*Enlisted Men's Team Match*—U. S. Marine Corps, 553.

### PISTOL MATCHES.

*N. R. A. Individual Pistol Championship*—Dr. J. H. Snook, Ohio, 272.

*Slow Fire Re-entry Pistol Match*—Herman Thomas, Pa., 461.

*Timed Fire Re-entry Pistol Match*—G. F. Hoffman, N. Y., 484.

*Rapid Fire Re-entry Pistol Match*—Capt. W. A. Hedden, U. S. Infantry, 477.

Lieut. W. J. Whaling, U. S. M. C., same score, outranked into second place.

*.22 Calibre Slow Fire Re-entry Pistol Match*—Lieut. W. J. Whaling, U. S. M. C., 478.

*Slow Fire Pistol Match*—Dr. J. H. Snook, Ohio, 184.

*Timed Fire Pistol Match*—Dr. J. H. Snook, Ohio, 198.

*Rapid Fire Pistol Match*—Major Paul Newgarden, U. S. Infantry, 187.

*.22 Calibre Slow Fire Pistol Match*—Lieut. W. J. Whaling, U. S. M. C., 186. I. W. Wagner, same score, outranked into second place.

*Police Team Match*—Toledo, Ohio Police Team, 898.

*.22 Calibre Pistol Team Match*—U. S. Infantry, 865.

*N. R. A. Pistol Team Match*—U. S. Infantry, 1,231.

N. R. A. GALLERY RIFLE MATCHES.

*50-Ft. Prone Championship*—R. J. McGrath, Col., and Harry Palmer, Wyoming, tie after two shoot-offs, 1,000-1,000-2,500.

*75-Ft. Prone Championship*—J. R. Byerly, Ohio, 1,000-2,500.

*50-Ft. Offhand Championship*—C. T. Westergaard, Iowa, 974.

*75-Ft. Offhand Championship*—H. M. Thomas, Connecticut, 962.

*50-Ft. Sitting Championship*—A. L. Beale, W. Va., 1,000.

*75-Ft. Sitting Championship*—P. A. Shepherd, N. Y., 999.

*50-Ft. Kneeling Championship*—J. C. Logsdon, Wyoming, 995.

*75-Ft. Kneeling Championship*—P. A. Shepherd, N. Y., 989. L. J. Corsa, same score, but outranked to second place.

*50-Ft. N. R. A. Championship*—T. K. Lee, Ala., 590.

*75-Ft. N. R. A. Championship*—J. H. Ladd, Wyoming, 589.

*75-Ft. Civilian Interclub Championship*—Quinnipiac Rifle and Revolver Club, New Haven, Connecticut, 5,799; Manhattan Rifle and Revolver Club, N. Y. City, same score, outranked to second place.

*50-Ft. Civilian Interclub Championship*—Sheridan, Wyoming Rifle Club, 5,816.

*Intercollegiate Championship*—University of Pennsylvania, 5,544.

*High School Championship*—Central High School, Washington, D. C., 5,781.

*Military School Championship*—St. John's Military Academy, Wisconsin, 5,827.

N. R. A. OUTDOOR SMALL BORE MATCHES.

*50-Yard Championship*—H. W. Gerrans, Canal Zone, 500.

*100-Yard Championship*—E. F. Burkins, Delaware, 495.

*200-Yard Championship*—H. W. Gerrans, Canal Zone, 100.

*N. R. A. Championship*—E. F. Burkins, Wilmington, Del., 400-400-600.

*International Small Bore Match*—Dewar Trophy. United States, 7,685; Great Britain, 7,645.

*International Free Rifle Matches*—Milan, Italy, Sept. 12. United States: W. R. Stokes, Washington, 1,067; Lieut. Com. C. T. Osborne, U. S. N., 1,041; Major J. K. Boles, U. S. F. A., 1,026; Sergt. M. Fisher, U. S. M. C., 1,011; Sergt. C. A. Lloyd, U. S. M. C., 987. Total, 5,132. Switzerland, 5,120; Denmark, 4,965; Sweden, 4,916; Holland, 4,868; France, 4,780; Italy, 4,688; Monaco, 4,094.

*Individual Championship of the World*—Walter R. Stokes, Washington, D. C.

*Individual Kneeling Championship of the World*—Walter R. Stokes, Washington, D. C.

*Team Captain*—Major L. W. T. Waller, U. S. M. C Team Coach, Lieut. Com. C. T. Osborne, U. S. N. Alternates, Capt. Jos. Jackson, U. S. M. C., Lieut. Com. A. D. Denny, U. S. N. Team Adjutant, Lieut. Com. E. E. Wilson, U. S. N.

## HANDBALL.

NATIONAL Amateur Athletic Union Championships, held at Milwaukee, Wis., March 25—Singles, final round—Won by A. J. Schinner, Milwaukee, defeating William Sackman, New York. Scores: 10—21, 21—18, 21—9. Doubles, final round—Won by M. Gold and M. Laswell, Los Angeles, defeating W. Sackman and E. Groden, New York. Scores: 21—12, 18—21, 21—16. Junior Championships—Singles—Won by M. Laswell who defeated H. Bell. Scores: 21—13, 21—16. Doubles—Won by Micus and Byrnes, defeating Serenberg and Cannon. Scores: 21—18, 21—10.

## CHESS.

(Compiled by H. Helms.)

RECORDS FOR 1922.

Twenty-ninth Intercollegiate Tourney, Brooklyn, December 27-29—Won by Columbia, total of 9½-2½. Other scores: Princeton, 5½-6½; Harvard, 5-7; Yale, 4-8. The winning team: Columbia—1, M. A. Schapiro, '23; 2, O. Frink, Jr., '22; 3, P. Wolfson, '22; and 4, B. Rosenberg, '22. The record: Columbia, 16 wins; Harvard, 9; Yale, 2; Princeton, 1. In addition, Harvard and Yale tied in 1909. It was not played off.

Twenty-third Triangular College Chess League Tourney, New York, December 26-28—Won by the Massachusetts Institute of Technology, total of 11-5. Other scores: City College, 8-8; New York University, 7½-8½; Cornell, 7-9; Pennsylvania, 6½-9½. The winning team: M. I. T., 1, W. W. Adams, '23; 2, S. Nelson, '22; 3, A. R. Fry, '23; 4, I. Brimberg, '24. The record: Pennsylvania, 11 wins; Cornell, 8; City College, 1; Massachusetts Institute Technology, 1. In addition, Pennsylvania tied once with Cornell and once with Brown.

New Record at Simultaneous Play—January 7, at the National Athletic Club, Montreal, F. J. Marshall of New York, U. S. champion, played against 155 opponents in seven hours and fifty minutes with a score of 126 wins, 21 draws and 8 losses. At the Cleveland Athletic Club, Cleveland, O., February 4, Jose R. Capablanca, world's champion, played against 103 opponents, with a score of 102 wins and 1 draw. On March 23, at the Amakassin Club, Yonkers, N. Y., Samuel Rzeschewski, boy chess prodigy, played against 20 opponents, winning all the games.

Interborough High School League—Won by the High School of Commerce, after a tie with Morris High at 31½-12½. Other scores: Boys, 30½-13½; Commercial, 30-14; Manual Training, 25-19; Stuyvesant, 24½-19½; Evander Childs, 23½-20½; Erasmus Hall, 21-23; Curtis, 15-29; New Utrecht and Richmond Hill, each 13-31. The annual individual championship was won by Leon Brown of Commerce High.

Rhode Island Championship, Providence, February 22—Won by Joseph C. Cook of the Providence Chess Club.

Manhattan C. C. Championship—Won by Morris A. Schapiro, score of 9-1. Other leading scores: R. T. Black, 7½-2½; J. Rosenthal, 7-3; J. Liebling, 6½-3½; S. Katz, 5½-4½.

New Jersey State Championship, Newark, February 22—Won by John W. Brunnemer of Hillsdale; W. J. Vandervoort, Newark, second; H. E. Holbrook, Newark, third; Otto G. Horster, Newark, fourth.

Pan-American Cable Match—Between the Manhattan C. C., New York and Argentine Chess Club, Buenos Ayres, April 23—Won by New York by 3½-2½.

International Tournament at Pistyan, Czechoslovakia, April 7-29—Won by E. D. Bogoljubow, score of 15-3. Other leading scores: A. Aljechin and R. Spielmann, each 14½-3½; E. Gruenfeld, 11-7; R. Reti, 10½-7½.

International Congress in London, July 31-August 19—Won by Jose R. Capablanca, score of 13-2. Other leading scores: A. Aljechin, 11½-3½; Dr. M. Vidmar, 11-4; A. Rubinstein, 10½-4½; E. D. Bogoljubow, 9-6; R. Reti and Dr. S. Tartakower, each 8½-6½.

Metropolitan Chess League—Won by the Marshall Chess Club with ten matches out of eleven and a total score of 62½ games; Rice-Progressive C. C., second, with 9½ matches and 62 games; Manhattan C. C., third, with 8½ matches and 56 games; Newark C. C., fourth, with 8½ matches and 52½ games; Brooklyn C. C., fifth, with 7 matches and 46½ games; Staten Island C. C., sixth, with 6½ matches and 43 games.

Western Championship Tournament, Louisville, Ky., August 28-September 5—Won by Samuel Factor, Chicago, total of 9½-1½; second, N. T. Whitaker, Washington, 9-2; third, Edward Lasker, Chicago, 8½-2½; fourth, J. W. Showalter, Georgetown, Ky., 8-3.

Hastings International Tournament, Hastings, England, September 10-21—Won by A. Aljechin, score of 7½-2½; second, A. Rubinstein, 7-3; third and fourth, E. D. Bogoljubow and Sir George Thomas, each 4½-5½.

New York Masters' Tournament, Chess Club International, October 7-16—Won by Edward Lasker, Chicago, score of 4-1; second, C. Jaffe, New York, 3-2; tie for third prize between J. Bernstein, H. R. Bigelow, D. Janowski and S. Rzeschewski, each 2-3.

New York vs. Chicago by Printing Telegraph, April 1, between Western Electric Co. engineers in New York and the Hawthorne Station in Chicago. Result—a tie with a score of 5-5.

Masters' Tournament at Teplitz, Schoenau, Czechoslovakia, September. Won by R. Reti and R. Spielmann (tie), each 9-4; second and third, E. Gruenfeld and Dr. S. Tartakower, each 8½-4½; fourth, A. Rubinstein, 8-5.

## ARCHERY.

The 42d Annual Championship Tournament of the National Archery Association of the United States, was held in Cooperstown, New York, August 22 to 25 and was known as "The Robin Hood Tournament." Chief among the new trophies was the Douglas Fairbanks' Robin Hood Trophy. Other new trophies were the Maid Marion Cup presented by Wallace Bryant of Washington, D. C., the Leatherstocking Cup presented by James Fenimore Cooper of Cooperstown, New York, and a cup also presented by Wallace Bryant for the best score at 80 yards.

Competition for the men's championship narrowed down to the 1921 champion, James S. Jiles of Pittsburgh, Pa. and Dr. Robert P. Elmer of Wayne, Pa., who had held the championship for a number of years previous to 1921. Dr. Elmer finally winning. Among the ladies Miss Dorothy D. Smith of Newton Center, Mass., was successful in defending her championship title.

In connection with Dr. Elmer's shooting he won the Double York Round with a score of 1,039. In two previous championship tournaments Dr. Elmer had made over 1,000 in the Double York Round, the present tournament being the third at which he had accomplished this feat. H. A. Ford, of England, is the only other archer who ever made over 1,000 in the Double York Round at three championship meets.

The only records which were broken were in the team shoots. The Robin Hood Team from the Wayne Archers, and composed of Dr. R. P. Elmer, W. H. Palmer Jr., J. M. Mauser and W. H. Palmer 3d, not only won the championship for the men's team shoot, but broke the previous record of 1,680 by making a total of 1,691. The ladies' team from the Newton Archers, of Newton, Mass., composed of Miss Dorothy D. Smith, Mrs. L. C. Smith, Miss Norma Pierce and Mrs. E. W. Frentz, also broke the women's team record of 1,517 by making a new score of 1,525.

A special contest for the Douglas Fairbanks' Robin Hood Trophy was staged, consisting of a long-range wand shoot. A band two inches wide was placed vertically across each target and the contestants each shot 48 arrows at a distance of 100 yards. Only the arrows which lodged in the narrow band counted. This event was won by Dr. R. P. Elmer with three hits in the band.

A special event was also staged for the Leatherstocking Cup. This event was participated in by both men and women, the men shooting 48 arrows at 60 yards and the women 48 arrows at 40 yards. The cup was won by W. H. Palmer Jr., of Wayne, Pa., with a total of 273 points. Miss Dorothy D. Smith was a close second with 266 points.

The winners in the various events are as follows:

*Men's Championship*—Dr. R. P Elmer, Wayne, Pa., 2,488 points.

*Women's Championship*—Miss Dorothy D. Smith, Newton Center, Mass., 1,616 points.

*Double York Round*—Dr. R. P. Elmer, 219 hits, score, 1,039.

*Double American Round*—Dr. R. P. Elmer, 178 hits, score, 1,052.

*Double National Round*—Miss Dorothy D. Smith, 120 hits, score, 552.

*Double Columbia Round*—Miss Dorothy D. Smith, 140 hits, score, 804.

WINNING MEN'S TEAM.

*Robin Hood Team From Wayne Archers*—R. P. Elmer, 93 hits, score, 523; W. H. Palmer Jr., 92 hits, score, 476; J. M. Mauser, 89 hits, score, 463; W. H. Palmer 3d, 53 hits, score, 229.

WINNING WOMEN'S TEAM.

*Newton Archers*—Miss Dorothy D. Smith, 90 hits, score, 400; Miss Norma Pierce, 82 hits, score, 416; Mrs. E. W. Frentz, 81 hits, score, 403; Mrs. L. C. Smith, 72 hits, score, 306.

*Robin Hood Contest for Douglas Fairbanks' Robin Hood Trophy*—Won by Dr. R. P. Elmer with 3 hits in the wand.

*Leatherstocking Cup Contest*—Won by W. H. Palmer Jr., Wayne, Pa., with 47 hits, score, 273.

GARLAND CONTEST.

*For Leatherstocking Spoons Donated by James Fenimore Cooper*—Won by Miss Dorothy D. Smith.

*Clout Shoot*—Won by Dr. R. P. Elmer with score of 36.

## SIX-DAY BICYCLE RACE.

Held at Madison Square Garden, New York City, Dec. 3 to 9, 1922. Final standing end of 143 hours riding:

| Team. | Points. | Miles. | Laps. | Team. | Points. | Miles. | Laps. |
|---|---|---|---|---|---|---|---|
| Goullet-Belloni | 487 | 2,457 | 8 | Madden-Kaiser | 449 | 2,457 | 6 |
| Brocco-Coburn | 292 | 2,457 | 8 | Horan-Fitzsimmons | 341 | 2,457 | 6 |
| Egg-Eaton | 439 | 2,457 | 7 | Grimm-Gastman | 63 | 2,457 | 6 |
| Grenda-McNamara | 882 | 2,457 | 6 | | | | |

Record is 2,625 miles and no laps, made by Egg and Dupuy in 1916.

## BICYCLING.

(Compiled by National Cycling Association Board of Control.)

### AMATEUR COMPETITION—UNPACED.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| 1-6 | 0.20 4-5 | Lawrence | Vailsburg | Sept. 5,1909 | 3 | 5.57 1-5 | Carter | Ogden | Aug. 3,1905 |
| ¼ | 0.28 1-5 | McDougall. | Newark | May30,1913 | 3 | 6.07 | Lawrence | Salt Lake | Aug. 4,1906 |
| ¼ | 0.29 3-5 | Hurley | Vailsburg | May30,1902 | 5 | 10.11 1-5 | Mayer | Salt Lake | Aug.12,1909 |
| ⅓ | 0.36 1-5 | McDougall. | Newark | Sept. 9,1914 | 5 | 10.26 | Hume | Salt Lake | Aug.16,1908 |
| ½ | 0.55 | McDougall. | Newark | July 15,1914 | 10 | 21.33 | Lindley | New Haven | May30,1902 |
| ½ | 0.55 | Spencer | Newark | Sep.12,1915 | 15 | 35.32 | Collett | New York | May30,1900 |
| ½ | 0.55 | Staehle | Newark | June24,1917 | 20 | 45.40 2-5 | Stauder | New Haven | Aug. 5,1900 |
| ½ | 0.55 | Lang | Newark | May17,1918 | 25 | 1.00.39 | Forrest | Vailsburg | July 28,1901 |
| ⅔ | 1.14 4-5 | McDougall. | Newark | Aug.17,1913 | 30 | 1.13.36 | Jacobson | New York | Aug.25,1899 |
| ¾ | 1.24 4-5 | DeMara | Ogden | July 21,1907 | 40 | 1.39.56 3-5 | Jacobson | New York | Aug.25,1899 |
| 1 | 1.55 | Mobeck | Newark | July 2,1922 | 50 | 2.05.00 4-5 | Jacobson | New York | Aug.25,1899 |
| 2 | 3.51 | McCormack | Salt Lake | Aug.13,1909 | 75 | 3.30.36 1-5 | Torrence | New York | Aug.25,1899 |
| 2 | 3.54 | Young | Newark | Sep.26,1920 | 100 | 4.57.24 2-5 | Torrence | New York | Aug.25,1899 |

1 hour, 24 miles, 1,472 yards, G. H. Collett, New York City, May 30, 1900.

### AMATEUR AGAINST TIME—UNPACED.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| 1-6 | 0.16 1-5 | Cavanagh | Vailsburg | July 2,1911 | 1 | 1.55 | Giles | Saltair | July 28,1908 |
| ¼ | 0.24 4-5 | Crebs | Saltair | Aug. 1,1908 | 2 | 4.09 | Giles | Saltair | Aug.19,1908 |
| ⅓ | 0.33 2-5 | Simons | Deming | May26,1896 | 3 | 6.25 3-5 | Giles | Salt Lake | Aug. 4,1908 |
| ½ | 0.53 1-5 | Lawrence | Salt Lake | Aug. 8,1908 | 4 | 8.51 2-5 | Giles | Ogden | Aug.20,1908 |
| ⅔ | 1.21 1-5 | Heil | Denver | July 31,1897 | 5 | 11.00 | Giles | Ogden | Aug.20,1908 |
| ¾ | 1.23 3-5 | Lawrence | Saltair | Aug.19,1908 | | | | | |

### AMATEUR COMPETITION—TANDEM.

| M | Time. | Holder. | Place. | Date. | M | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.51 4-5 | Smith-Clayton | Salt Lake | July 28,1901 | 3 | 5.47 2-5 | Wilcox-McCorm. | Salt Lake | July 27,1905 |
| 2 | 3.51 4-5 | Brodbeck-Wright | Salt Lake | June18,1909 | 5 | 9.54 | Redman-Redman | Salt Lake | Aug. 4,1903 |

### AMERICAN ROAD RECORDS UNPACED—AMATEUR.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| ¼ | 0.32 1-5 | Beckman | Ridgef'dPk | Apr 9.1922 | 10 | 25.46 4-5 | Laux | New York | Sep.14,1919 |
| ¼ | 0.32 1-5 | Menzer | Ridgef'dPk | Apr. 9,1922 | 15 | 41.25 | Jones | Stockton | Aug.17,1919 |
| ⅓ | 0.43 1-5 | Thompson. | S. Antonio | May18,1917 | 20 | 55.45 | Jones | Stockton | Aug.17,1919 |
| ½ | 1.00 1-5 | Thompson. | S. Antonio | May18,1917 | 25 | 1.09.10 | Jones | Stockton | Aug.17,1919 |
| ⅔ | 1.28 | Thompson. | S. Antonio | May27,1917 | 35 | 1.35.50 | Jones | Stockton | Aug.17,1919 |
| ¾ | 1.37 | Thompson. | S. Antonio | May27,1917 | 40 | 1.48.50 | Jones | Stockton | Aug.17,1919 |
| 1 | 2.07 1-5 | Thompson. | S. Antonio | May27,1917 | 45 | 2.02.15 | Jones | Stockton | Aug.17,1919 |
| 2 | 4.00 3-5 | Thompson. | S. Antonio | May27,1917 | 50 | 2.16.00 | Jones | Stockton | Aug.17,1919 |
| 3 | 7.13 | Beckman | Ridgef'dPk | Apr. 9,1922 | 60 | 2.57.15 | Jones | Stockton | Aug.17,1919 |
| 4 | 10.11 2-5 | Thompson. | S. Antonio | May27,1917 | 75 | 3.35.40 | Jones | Stockton | Aug.17,1919 |
| 5 | 12.07 2-5 | Aickelin | New York | Sep.14,1919 | 80 | 3.56.00 | Jones | Stockton | Aug.17,1919 |
| 6 | 14.38 2-5 | Thompson. | S. Antonio | May31,1917 | 100 | 4.52.00 | Nogara | Wash'gton | July 3,1921 |
| 7 | 17.12 | Thompson. | S. Antonio | May31,1917 | 200 | 12.20.00 | Evans | N.Bruns'k. | Aug.18,1895 |
| 8 | 21.34 1-5 | Thompson. | S. Antonio | May31,1917 | 500 | 39.10.00 | Brown | Val. Stream | Oct.15, 1900 |
| 9 | 22.59 2-5 | Beckman | Ridgefield. | Sep.12,1920 | | | | | |

| Hrs. | Miles. | Holder. | Place. | Date. | Hrs. | Miles. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 22, 5,206 ft. | Rogow | Hartford. | Oct.21,1920 | 4 | 82.7 | Jones .. | Stockton. | Aug.17,1919 |
| 2 | 44.3 | Jones | Stockton. | Aug.17,1919 | 5 | 102.5 | Nogara | Wash'ton | July 3,1921 |
| 3 | 64.2 | Jones | Stockton. | Aug.17,1919 | | | | | |

In a time trial at Los Angeles, Cal., Jan. 8, 1911, Fred T. Keefe, the Australian, made the following professional marks: 25 miles, 1h.10m.0 3-5s; 50 miles, 2h. 24m. 0 3-5s.; 75 miles, 3h. 44m.; 100 miles, 5h. 2m.

### AMERICAN ROAD RECORDS COMPETITION—AMATEUR.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| ½ | 0.29 2-5 | King | Atl'ntic Cy | Sep.16,1922 | 10 | 23.08 | Bello | Floral Park | Sep.12,1915 |
| ⅓ | 0.40 3-5 | Peer | Plainfield | Sept. 7,1908 | 15 | 36.47 2-5 | Gerwing | Santa Ana | May25,1918 |
| | | Surman | | | 25 | 1.00.39 3-5 | Beckman | Brooklyn | May30,1922 |
| 1 | 2.02 | Guthridge | Westfield | Aug. 8,1908 | 50 | 2.14.00 4-5 | Jensen | Floral Park | June20,1915 |
| | | Haberle | | | 60 | 2.44.30 | Beckman | Atl'ntic Cy | May 7,1922 |
| ½ | 1.13 | Nieminsky | Wash'gton | Oct. 9,1921 | 90 | 4.32.30 | Brakevelt | Rochester | Sep.25,1920 |
| 3 | 6.57 | Lange | Davenport. | Sep.18,1921 | 95 | 4.49.30 | Brakevelt | Rochester | Sep. 25,1920 |
| 5 | 11.22 | Hopkins | Davenport. | Sep.18,1921 | 100 | 4.36.30 | Nolen | Milw.-Chi. | May30,1922 |
| 20 | 45.22 | Wahl | Buffalo | July 4,1921 | 150 | 8.26.27 | Kopsky | Floral Park | May 5,1912 |
| 2 | 4.56 1-5 | Steinert | Hicksville | Sept. 3,1911 | | | | | |

AMATEUR INDOOR (FLAT FLOOR) COMPETITION.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| ½ | 1.05 2-5 | Gronkowski. | Buffalo..... | Mar. 6,1920 | 1½ | 3.16 1-5 | Gronkowski. | Buffalo..... | Feb. 18,1922 |
| ¾ | 1.35 3-5 | Gronkowski. | Buffalo..... | Mar 18,1922 | 2 | 4.22 1-5 | Gronkowski. | Buffalo..... | Mar 19,1921 |
| 1 | 2.05 3-5 | Gronkowski. | Buffalo..... | Mar 18,1922 | 5 | 11.52 | Bundt..... | Buffalo..... | Dec. 17,1921 |

AMATEUR AGAINST TIME—MOTOR-PACED.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| ¼ | 0.20 1-5 | Holzel..... | Spokane.... | Sept. 4,1899 | 9 | 14.43 2-5 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| ½ | 0.29 2-5 | Holzel..... | Spokane.... | Sept.26,1899 | 10 | 16.21 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| ⅔ | 0.44 2-5 | Leander.... | Indian'polis | Sept.29,1900 | 11 | 17.58 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| 1 | 1.13 | Sulkins..... | Chas.Riv.Pk | July 25,1903 | 12 | 19.34 4-5 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| 2 | 2.35 4-5 | Peterson.... | Buffalo..... | Aug.18,1915 | 13 | 21.12 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| 3 | 4.28 | Smith..... | Vailsburg... | July 27,1902 | 14 | 22.50 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| 4 | 5.52 3-5 | Smith..... | Vailsburg... | July 27,1902 | 15 | 24.26 4-5 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| 5 | 7.07 2-5 | Peterson.... | Buffalo..... | Sept.19,1915 | 20 | 33.05 1-5 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| 6 | 9.51 2-5 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 | 25 | 41.27 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| 7 | 11.28 4-5 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 | 30 | 50.23 3-5 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |
| 8 | 13.05 3-5 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 | 35 | 59.00 | Joe Nelson.. | Vailsburg... | Oct. 5,1901 |

One hour, 35 miles, 1,055 yards.

AMATEUR COMPETITION—MOTOR-PACED.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.24 2-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 12 | 19.55 | Joe Nelson.. | Vailsburg.. | Oct.20,1901 |
| 2 | 2.47 2-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 13 | 21.36 3-5 | Joe Nelson.. | Vailsburg.. | Oct.20,1901 |
| 3 | 4.18 3-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 14 | 23.18 4-5 | Joe Nelson.. | Vailsburg.. | Oct.20,1901 |
| 4 | 5.43 1-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 15 | 24.55 2-5 | Joe Nelson.. | Vailsburg.. | Oct.20,1901 |
| 5 | 7.07 2-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 20 | 34.02 4-5 | Duer..... | Berk. Ov.. | Sept. 9,1899 |
| 6 | 8.31 4-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 25 | 47.37 | John Nelson | Montreal.. | Aug.10,1899 |
| 7 | 9.56 1-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 30 | 57.28 2-5 | John Nelson | Montreal.. | Aug.10,1899 |
| 8 | 11.20 1-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 40 | 1.17.31 1-5 | John Nelson | Montreal.. | Aug.10,1899 |
| 9 | 12.44 1-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 50 | 1.38.26 2-5 | John Nelson | Montreal.. | Aug.10,1899 |
| 10 | 14.08 1-5 | Sulkins .... | Provide'ce. | Aug.22,1903 | 60 | 1.59 35 4-5 | John Nelson | Montreal.. | Aug.10,1899 |
| 11 | 18.14 | Joe Nelson.. | Vailsburg.. | Oct.20,1901 | 62 | 2.03.57 1-5 | John Nelson | Montreal.. | Aug.10,1899 |

One hour, 31 miles, 460 yards, John Nelson, Montreal, Aug. 10, 1899.
Two hours, 50 miles, 430 yards, John Nelson, Montreal, Aug. 10, 1899.

PROFESSIONAL COMPETITION—UNPACED.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| ¼ | 0.27 2-5 | Kramer.... | Newark.... | July 4,1915 | 3 | 5.46 | Goullet..... | Newark.... | June 17,1917 |
| ½ | 0.28 2-5 | Kramer.... | Vailsburg... | Sept. 5,1904 | 4 | 7.42 2-5 | Hanley..... | Newark.... | July 7,1915 |
| ¾ | 0.36 3-5 | Kramer.... | Newark.... | May 23,1915 | 5 | 9.30 | McNamara. | Newark. | July 23,1919 |
| 1 | 0.53 | Kramer.... | Newark.... | July 4,1917 | 5 | 10.15 | Fenn..... | Vailsburg... | Aug.25,1901 |
| 2 | 1.10 4-5 | Grenda..... | Newark.... | Aug.11,1915 | 10 | 20.07 1-5 | McNamara. | Newark.... | Sept.17,1916 |
| ¾ | 1.21 | Kramer.... | Salt L'ke Cy | July 5,1915 | 15 | 31.28 2-5 | McNamara. | Newark.... | Aug.20,1916 |
| 1 | 1.45 | McNamara. | Newark.... | Sept.17,1916 | 20 | 42.23 2-5 | Drobach.... | Newark.... | Aug. 8,1917 |
| 2 | 3.38 1-5 | Clark..... | Salt L'ke Cy | Aug. 2,1910 | 25 | 53.38 3-5 | McNamara. | Newark.... | Sept.22,1915 |
| 3 | 5.35 3-5 | Lawson.... | Salt L'ke Cy | July 25,1906 | | | | | |

PROFESSIONAL AGAINST TIME—UNPACED.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| 1-6 | 0.15 2-5 | Crebs..... | Salt L'ke Cy | July 4,1911 | 3 | 6.09 1-5 | Pye..... | Salt L'ke Cy | Aug.28,1908 |
| ¼ | 0.23 4-5 | Lawson.... | Salt L'ke Cy | July 4,1906 | 4 | 8.34 3-5 | Williams .. | Salt L'ke Cy | July 30,1909 |
| ⅓ | 0.33 | Clark..... | Salt L'ke Cy | July 24,1912 | 5 | 10.38 | Williams .. | Salt L'ke Cy | July 30,1909 |
| ½ | 0.50 2-5 | Clark..... | Saltair, Ut. | Aug.24,1908 | 10 | 23.09 2-5 | Hamilton... | Denver..... | July 9,1898 |
| ⅔ | 1.11 2-5 | Goullet..... | Salt L'ke Cy | June 17,1912 | 15 | 35.03 | Hamilton... | Denver..... | July 9,1898 |
| ¾ | 1.24 3-5 | Goullet..... | Salt L'ke Cy | July 1,1912 | 20 | 47.08 2-5 | Hamilton... | Denver..... | July 9,1898 |
| 1 | 1.51 | Goullet..... | Salt L'ke Cy | July 1,1912 | 25 | 59.13 2-5 | Hamilton... | Denver..... | July 9,1898 |
| 2 | 4.01 3-5 | Pye..... | Salt L'ke Cy | Aug.28,1910 | | | | | |

1 hour, 25 miles, 600 yards, W. W. Hamilton, Denver, July 9, 1898.

PROFESSIONAL COMPETITION—TANDEM.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.40 1-5 | Grenda-Walker.. | Newark.. | Sept. 6,1914 | 3 | 5.19 | Grenda-Hill.... | Newark.. | June 9,1915 |
| 2 | 3.35 | Grenda-Walker.. | Newark... | Aug. 2,1914 | 5 | 9.44 | Chapm'n-Lawson | S't L'e Cy | July 3,1901 |

PROFESSIONAL COMPETITION—HUMAN-PACED.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 19.25 2-5 | Goullet..... | Newark... | Aug.31,1922 | 50 | 1.49.08 | Goullet..... | Newark... | Aug.19,1920 |
| 25 | 51.18 2-5 | Grenda..... | Newark... | Aug.19,1921 | | | | | |

1 hour, 28 miles, 19 yards, "Woody" Hedspath, Dayton, Ohio, July 31, 1902.

PROFESSIONAL COMPETITION—TANDEM (HUMAN-PACED).

| Miles. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|
| 2..... | 3m. 33s..... | Kramer-Egg..... | Newark, N. J..... | July 7, 1920. |

PROFESSIONAL AGAINST TIME—MOTOR-PACED.

| M. | Time. | Holder. | Place. | Date. | M. | Time. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|
| ¼ | 0.18 4-5 | Wilcox..... | Salt L'ke Cy | June 18,1913 | 4 | 4.16 4-5 | Bedell..... | Philad'phia. | June 30,1917 |
| ⅓ | 0.27 4-5 | Johnson.... | Nashville... | Oct. 29,1896 | 5 | 5.18 2-5 | Bedell..... | Philad'phia. | June 30,1917 |
| ½ | 0.37 3-5 | Wilcox..... | Salt L'ke Cy | June 8,1913 | 6 | 6.28 1-5 | Duer..... | Los Angeles | June 27,1909 |
| ¾ | 0.55 | Duer..... | Salt L'ke Cy | Aug. 28,1910 | 7 | 7.33 3-5 | Duer..... | Los Angeles | June 27,1909 |
| 1 | 1.04 1-5 | Bedell..... | Philad'phia. | June 30,1917 | 8 | 8.38 1-5 | Bedell..... | Los Angeles | June 27,1909 |
| 2 | 2.09 4-5 | Duer..... | Los Angeles | June 27,1909 | 9 | 9.45 4-5 | Duer..... | Los Angeles | June 27,1909 |
| 3 | 3.13 2-5 | Bedell..... | Philad'phia. | June 30,1917 | 10 | 10.59 3-5 | Bedell..... | Philad'phia. | July 7,1917 |

PROFESSIONAL HOUR—MOTOR-PACED.

| Hrs. | Miles | Yards. | Holder. | Place. | Date. | Hrs. | Miles | Yards. | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.. | 50.. | 3 | Caldwell.. | Boston .. | Sep. 1,1903 | 13.. | 335.. | 1,540 | King..... | S. L. City | Sep. 15,1901 |
| 2.. | 77.. | 440 | Moran... | Revere... | Aug. 8,1903 | 14.. | 355.. | ..... | King..... | S. L. City | Sep. 15,1901 |
| 3.. | 106.. | 900 | Caldwell.. | Revere... | Sep. 5,1904 | 15.. | 372.. | ..... | King..... | S. L. City | Sep. 15,1901 |
| 4.. | 137.. | 275 | McLean.. | Revere... | Sep. 5,1904 | 16.. | 397.. | 220 | King..... | S. L. City | Sep. 15,1901 |
| 5.. | 168.. | 910 | Moran... | Revere... | Sep. 5,1904 | 17.. | 403.. | 440 | King..... | S. L. City | Sep. 15,1901 |
| 6.. | 197.. | 220 | Moran... | Revere... | Sep. 5,1904 | 18.. | 416.. | ..... | Lawson... | L'sAng'l's | June10,1900 |
| 7.. | 199.. | 220 | Turville.. | S. L. City | Sep. 15,1901 | 19.. | 432.. | ..... | Lawson... | L'sAng'l's | June10,1900 |
| 8.. | 218.. | 440 | King..... | S. L. City | Sep. 15,1901 | 20.. | 450.. | 1,540 | Lawson... | L'sAng'l's | June10,1900 |
| 9.. | 246.. | 440 | King..... | S. L. City | Sep. 15,1901 | 21.. | 466.. | 660 | Lawson... | L'sAng'l's | June10,1900 |
| 10.. | 265.. | ..... | King..... | S. L. City | Sep. 15,1901 | 22.. | 485.. | 220 | Lawson... | L'sAng'l's | June10,1900 |
| 11.. | 289.. | ..... | King..... | S. L. City | Sep. 15,1901 | 23.. | 507.. | 1,320 | Lawson... | L'sAng'l's | June10,1900 |
| 12.. | 312.. | 880 | Pierce.... | Waltham. | July 3,1899 | 24.. | 528.. | 925 | Lawson... | L'sAng'l's | June10,1900 |

## 1922 AMERICAN CHAMPIONSHIPS.

N. C. A. PROFESSIONAL SPRINT CHAMPIONSHIP, 1921.

| Name. | 1st. | 2d. | 3d. | 4th. | Pts. | Name. | 1st. | 2d. | 3d. | 4th. | Pts. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Willie Spencer..... | 3 | 5 | 2 | 1 | 35 | Frank L. Kramer... | 0 | 2 | 1 | 4 | 12 |
| Ray Eaton ..... | 5 | 0 | 2 | 2 | 31 | Orlando Piani..... | 0 | 0 | 1 | 4 | 6 |
| Arthur Spencer..... | 1 | 4 | 3 | 1 | 24 | Francesco Verri..... | 0 | 0 | 1 | 0 | 2 |
| Alfred Goullet..... | 3 | 1 | 2 | 0 | 23 | | | | | | |

Points—First, 5; second, 3; third, 2; fourth, 1.
Middle Distance Championship: 10 miles, Alfred Goullet; 25 miles, Alfred Grenda.

N. C. A. AMATEUR CHAMPIONSHIP, 1922.

| Name. | 1st. | 2d. | 3d. | 4th. | Pts. | Name. | 1st. | 2d. | 3d. | 4th. | Pts. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Willie Grimm..... | 1 | 3 | 1 | 0 | 16 | Roy Mobeck..... | 0 | 0 | 1 | 0 | 2 |
| Elmer Bundt..... | 2 | 1 | 0 | 1 | 14 | Larry Seuffert..... | 0 | 0 | 1 | 0 | 2 |
| Fred Spencer..... | 2 | 1 | 0 | 0 | 13 | Burton Fenn..... | 0 | 0 | 1 | 0 | 2 |
| E. C. Bendl..... | 0 | 1 | 2 | 1 | 8 | Sam Gastman..... | 0 | 0 | 0 | 1 | 1 |
| Carl Hambacher.... | 1 | 0 | 0 | 2 | 7 | Earl Adams..... | 0 | 0 | 0 | 1 | 1 |

Points—First, 5; second, 3; third, 2; fourth, 1.

PROFESSIONAL PACED CHAMPIONSHIP, 1922.

| Name. | 1st. | 2d. | 3d. | 4th. | Pts. | Name. | 1st. | 2d. | 3d. | 4th. | Pts. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| George Chapman... | 28 | 12 | 12 | 1 | 201 | Manuel Nunes..... | 5 | 1 | 1 | 0 | 30 |
| Clarence Carman... | 23 | 15½ | 11 | 9 | 192½ | Willie Appelhaus.... | 1 | 5 | 2 | 5 | 29 |
| Vincent Madonna... | 19 | 17½ | 7 | 5 | 167½ | Jackie Clark..... | 0 | 5 | 4 | 2 | 25 |
| Victor Linart..... | 15½ | 14 | 8 | 6 | 143 | Percy Lawrence.... | 2 | 2 | 2 | 0 | 20 |
| Frank Corry..... | 9½ | 21 | 8 | 1 | 128 | Willie Keller..... | 2 | 1 | 1 | 2 | 17 |
| Jules Miquel..... | 11 | 9 | 10 | 9 | 111 | Worth Mitten..... | 0 | 2 | 3 | 3 | 15 |
| Charles Verkeyn.... | 7 | 8 | 14 | 7 | 94 | Joe Reeber..... | 1 | 2 | 0 | 0 | 11 |
| George Wiley..... | 7 | 9 | 29 | 6 | 86 | Luigi Marcella..... | 1 | 1 | 0 | 2 | 10 |
| Frank Keenan..... | 8 | 4 | 5 | 3 | 65 | Ralph Spiers..... | 0 | 2 | 1 | 2 | 10 |
| Vincent Markey.... | 5 | 4 | 5 | 2 | 49 | Archie Villa..... | 0 | 2 | 2 | 0 | 10 |
| Larry Gaffney..... | 4 | 3 | 2 | 4 | 37 | Willie Upton..... | 0 | 0 | 1 | 0 | 2 |
| George Colombatto. | 1 | 5 | 4 | 6 | 34 | H. Norantonio..... | 0 | 0 | 1 | 0 | 2 |
| George Seres..... | 2 | 5 | 3 | 1 | 32 | Rudolph Blomstrom. | 0 | 0 | 0 | 1 | 1 |
| Brask Anderson.... | 2 | 3 | 4 | 4 | 31 | Felix Patti..... | 0 | 0 | 0 | 1 | 1 |

Points—First, 5; second, 3; third, 2; fourth 1.
Linart and Corry rode to a tie at New Bedford, May 29. Points for first and second (8) were divided between them.
Carman and Madonna rode to a tie for second place at New York, Aug. 18. Points for second and third (5) were divided between them.

FORMER PROFESSIONAL SPRINT WINNERS.

1895-1897—E. C. Bald
1898—Tom Butler
1899—Tom Cooper
1900—Major Taylor
1901-1916—Frank L. Kramer
1917—Arthur Spencer
1918—Frank L. Kramer
1919—Ray Eaton
1920—Arthur Spencer
1921—Frank L. Kramer
1922—Willie Spencer

FORMER PROFESSIONAL PACED WINNERS.

1900-1901—Harry D. Elkes
1902-1903—Bobby Walthour Sr.
1904—Harry Caldwell
1905-1908—Hugh McLean
1909-1911—Elmer Collins
1912-1913—George E. Wiley
1914—Clarence Carman
1915—George E. Wiley
1916—Clarence Carman
1917-1918—George E. Wiley
1919—Clarence Carman
1920-1921—George Chapman
1922—George Chapman

FORMER AMATEUR SPRINT WINNERS.

1899—Frank L. Kramer
1900—Willie Fenn
1901-1904—Marcus L. Hurley
1905—Matt Downey
1906—Charles Sherwood
1907—Willie Van den Dries
1908—Charles Stein
1909—Percy Lawrence
1910-1911—Frank Blatz
1912-1913—Donald McDougal
1914—Harry Kaiser
1915—Hans Ohrt
1916-1917—John L. Staehle
1918—Gus Lang
1919—Charles A. Osterritter
1920—Fred Taylor
1921—Bobby Walthour Jr.
1922—Willie Grimm

FORMER AMATEUR PACED CHAMPIONSHIP WINNERS.

1900-1901—Joe Nelson | 1902-1903—Samuel Sulkins | 1904—Discontinued

WORLD'S MOTOR-PACED HOUR RECORDS.

| Hr. | Dist'nce. | | Holder. | Place. | Date. | Hr. | Dist'nce. | | Holder. | Place. | Date. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | Yards | | | | | M. | Yards | | | |
| 1 | 63 | 189.8 | P. Guignard | Munich.. | Sept.15,1909 | ½ | 31 | 1,198 | P. Guignard | Munich.. | July 23,1909 |
| 1 | 63 | 1,037 | P. Nettlebeck | Munich.. | Mar.31,1914 | 2 | 106 | 1,498 | Vanderst'yft.. | Leipsic... | Oct. 11,1908 |
| 1 | 61 | 1,590 | Vanderst'yft.. | Sh'psh'd.. | Nov.16,1919 | *1 | 56 | 1,128 | F. Cuzin.... | Munich.. | Sept.30,1909 |

*Amateur.

CHAMPIONSHIPS OF THE WORLD.
PROFESSIONAL SPRINT.

| YR. | Where Held | 1st. | 2d. | 3d. | YR. | Where Held | 1st. | 2d. | 3d. |
|---|---|---|---|---|---|---|---|---|---|
| 1895 | Cologne | *Protin | Banker | Huet | 1906 | Geneva | Ellegaard | Poulain | Friol |
| 1896 | Copenhag | Bourrillon | Jacquelin | Barden | 1907 | Paris | Friol | Mayer | Rutt |
| 1897 | Glasgow | Arend | Barden | Nossam | 1908 | Berlin | Ellegaard | Poulain | Vand. Born |
| 1898 | Vienna | Banker | Vehreyen | Jacquelin | 1909 | Copenhag | Dupre | Poulain | Rutt |
| 1899 | Montreal | Taylor | Butler | Courbe | 1910 | Brussels | Friol | Ellegaard | †Rutt |
| 1900 | Paris | Jacquelin | Meyers | Arend | 1911 | Rome | Ellegaard | Pouchois | Hourlier |
| 1901 | Berlin | Ellegaard | Jacquelin | Schilling | 1912 | Newark | Kramer | Grenda | Perchicot |
| 1902 | Rome | Ellegaard | Meyers | Bixlo | 1913 | Leipsic | Rutt | Ellegaard | Perchicot |
| 1903 | Copenhag | Ellegaard | Arend | Meyers | 1920 | Antwerp | Spears | Kaufmann | Bailey |
| 1904 | London | Lawson | Ellegaard | Mayer | 1921 | Copenhag | Moeskops | Spears | Sergent |
| 1905 | Antwerp | Poulain | Ellegaard | Mayer | 1922 | Paris | Moeskops | Spears | Degraeve |

*Banker protested Protin starting in the final, and his protest was allowed. Race was thrown out and ordered re-run in Paris. Banker won in a walk-over.
†Rutt qualified for final, but was ordered not to start by the German cycling officials.

AMATEUR SPRINT.

| YR. | Where Held | 1st. | 2d. | 3d. | YR. | Where Held | 1st. | 2d. | 3d. |
|---|---|---|---|---|---|---|---|---|---|
| 1893 | Chicago | | | | 1903 | Copenhag | Reed | Benyon | |
| | (1 mile) | Zim'rman | Johnson | Bliss | 1904 | London | Hurley | Reed | Benyon |
| | (10 mi.) | Zim'rman | Bliss | Johnson | 1905 | Antwerp | Benyon | Buck | Debongnies |
| 1894 | Antwerp | | | | 1906 | Geneva | Verri | Delage | Rondelli |
| | (1 mile) | Lehr | Eden | Br'dbridge | 1907 | Paris | Devoissoux | Auffray | Avrillon |
| | (10 kil.) | Eden | Green | Osborne | 1908 | Leipsic | Johnson | Jones | Demangel |
| 1895 | Cologne | Eden | Peterson | Schaff | 1909 | Copenhag | Bailey | Neumer | Schilles |
| 1896 | Copenhag | Reynolds | Schrader | Guillaumet | 1910 | Brussels | Bailey | Neumer | Texier |
| 1897 | Glasgow | Schrader | Fawcett | Reynolds | 1911 | Rome | Bailey | Feroci | Gasparinetti |
| 1898 | Vienna | Albert | Opel | Sum'rsgill | | | | | |
| 1899 | Montreal | Sum'rsgill | Peabody | Caldow | 1912 | Newark | McDougall | Kaiser | Diver |
| 1900 | Paris | Didier-Nauts | Lake | Vasserot | 1913 | Berlin | Bailey | Ryan | Rode |
| | | | | | 1920 | Antwerp | Peeters | Johnson | Halpin |
| 1901 | Berlin | Maitrot | Veitruba | Struth | 1921 | Copenhag | Andersen | Kjeldsen | Hansen |
| 1902 | Rome | Piard | Delaborde | Nord | 1922 | Liverpool | Johnson | Peeters | Ormston |

PROFESSIONAL PACED.
100 Kilometres (62.13 Miles).

| YR. | Where Held | 1st. | 2d. | 3d. | YR. | Where Held | 1st. | 2d. | 3d. |
|---|---|---|---|---|---|---|---|---|---|
| 1895 | Cologne | Michaels | Luyten | Hofmann | 1906 | Geneva | Darragon | V'nd'stuyft | Schwitzg'bl |
| 1896 | Copenhag | Chase | Stocks | Luyten | 1907 | Paris | Darragon | Verbist | Parent |
| 1897 | Glasgow | Stocks | Chase | Armstrong | 1908 | Berlin | Ryser | Bruni | V'nd'stuyft |
| 1898 | Vienna | Palmer (in a walkover) | | | 1909 | Copenhag | Parent | Darragon | Butler |
| 1899 | Montreal | Gibson | McLean | Boake | 1910 | Brussels | Parent | Walthour | V'nd'stuyft |
| 1900 | Paris | Huret | Taylor | Bouhours | 1911 | Rome | Parent | Darragon | Moran |
| 1901 | Berlin | Robl | Dick'ntm'n | Ruyter | 1912 | Newark | Wiley | Collins | Moran |
| 1902 | Berlin | Robl | Bouhours | Taylor | 1913 | Berlin | Guignard | Miquel | Schuerm'n |
| 1903 | Copenhag | Dick'ntm'n | Robl | Go'rnem'n | 1920 | Antwerp | Seres | Linart | Suter |
| 1904 | London | Walthour | Simar | V'nd'stuyft | 1921 | Copenhag | Linart | Suter | Guignard |
| 1905 | Antwerp | Walthour | Guignard | Dick'ntm'n | 1922 | | L V'd'rst'ft | Suter | Ganay |

AMATEUR PACED.

| YR. | Where Held | 1st. | 2d. | 3d. | YR. | Where Held | 1st. | 2d. | 3d. |
|---|---|---|---|---|---|---|---|---|---|
| 1893 | Chicago | Meintjes | Albrecht | Ulbricht | 1904 | London | Meredith | Pett | Olley |
| 1894 | Antwerp | Henie | Green | Van Doles | 1905 | Antwerp | Meredith | Metz | Carremans |
| 1895 | Cologne | Cordang | Witteween | Henie | 1906 | Geneva | Bard'neau | Tubbax | Eigeldinger |
| 1896 | Copenhag | Ponscarme | Djakoff | Hansen | 1907 | Paris | Meredith | Tubbax | Brocco |
| 1897 | Glasgow | Gould | Ouzou | Tjoerby | 1908 | Leipsic | Meredith | Janke | V'nd'stuyft |
| 1898 | Vienna | Cherry | Graben | Huneck | 1909 | Copenhag | Meredith | Cuzin | Patou |
| 1899 | Montreal | Nelson | Goodson | Riddle | 1910 | Brussels | Hens | Delbo | Bailey |
| 1900 | Paris | Bastien | Heine | Hildebrand | 1911 | Rome | Meredith | Muhckinze | Lori |
| 1901 | Berlin | Sievers | Salzmann | Gornem'n | 1912 | Newark | Amateur (ti | tular race | not run) |
| 1902 | Berlin | Gornem'n | Keller | Diehle | 1913 | Berlin | Meredith | Beyer | Blekemolen |
| 1903 | Copenhag | Audemars | Carlevaro | Herzog | 1914 | *Copenh'g | Blekemolen | | |

*The only title race run at the 1914 world's championship meeting at Copenhagen, Denmark, was the 100-kilometre amateur paced race. The other events were curtailed on account of the breaking out of the war.

Motor-paced championship for amateurs not run at Antwerp in 1920. A 190-kilometre (118 miles) road race was substituted at Copenhagen in 1921. G. Skold, Sweden, won from W. Nielsen, Denmark, and C. F. Davey, England, in 6h. 18m. 17s.

Motor-paced championships for amateurs were discontinued after the 1914 races.

## FENCING.

*National Senior Championship*—Foils, Major H. Raynor, U. S. A. and Washington F. C.; sabre, L. Nunes, New York A. C.; epee, L. Nunes, New York A. C. *National Junior Championship*—Foils, A. P. Walker, Jr., Yale University; sabre, J. G. Bartol, New York A. C.; epee, N. Murray, W. S. F. C. *National Senior Team Championship*—Foils, New York Fencers' Club; sabre, New York A. C.; epee, New York Fencers' Club. *National Junior Team Championship*—Foils, New York French Y. M. C. A.; sabre, New York A. C.; epee, New York Washington Square F. C.

*National Outdoor Epee Championship*—Won by Albert Strauss, New York French Y. M. C. A.

*National Women's Championship*—Won by Miss Alice Gehrig.

*Intercollegiate Championships*—Final standing, foil teams, bouts won and lost: Navy, 45–9; Harvard, 33–21; Columbia, 30–24; Dartmouth, 28–26; Yale, 28–26; Mass. Tech., 16–38; Pennsylvania, 9–45. Navy also won the team sabre and epee championship. Individual winners: foils, Shears, Navy, 17–1; sabre, Guider, Navy, 10–1; epee, Calloway, Navy, 10–1.

*International Amateur Foils Championship*—Special match between M. Goudin, France, and N. Nadi, Italy, held at Paris, France. Won by Goudin, 20 points to 11. The match was for a 50,000 francs purse which the winner contributed to charity. Many thousands of francs were wagered by the adherents of the two contestants.

## OFFICIAL MOTORCYCLE RECORDS.

(To November 15, 1922).

### OFFICIAL STRAIGHTAWAY WORLD MOTORCYCLE RECORDS.

(Daytona Beach, Fla., April 14-15, 1920.)

The kilometre eight-valve record stands officially as the greatest speed ever attained by a motorcycle —115.79 miles per hour.

| Motor. | Rider. | Machine. | Class. | Time. | Miles Per Hour. |
|---|---|---|---|---|---|
| 61 cu. in. 8-valve | Walker | Indian | Pro | 19.32 | 115.79 |
| 61 cu. in. 8-valve | McBride | Indian | Am | 21.43 | 104.40 |
| 61 cu. in. stock | Walker | Indian | Pro | 21.15 | 105.78 |
| 61 cu. in. stock | McBride | Indian | Am | 22.85 | 97.90 |
| 30.50 cu. in. 4-valve | Walker | Indian | Pro | 25.08 | 89.19 |
| 30.50 cu. in. 4-valve | McBride | Indian | Am | 28.71 | 77.92 |
| **One Mile.** | | | | | |
| 61 cu. in. 8-valve | Walker | Indian | Pro | 31.53 | 114.17 |
| 61 cu. in. 8-valve | McBride | Indian | Am | 34.63 | 103.95 |
| 61 cu. in. stock | Walker | Indian | Pro | 34.20 | 105.26 |
| 61 cu. in. stock | McBride | Indian | Am | 36.27 | 99.25 |
| 30.50 cu. in. 4-valve | Walker | Indian | Pro | 40.98 | 87.84 |
| 30.50 cu. in. 4-valve | McBride | Indian | Am | 45.88 | 78.46 |
| **Two Miles.** | | | | | |
| 61 cu. in 8-valve | Walker | Indian | Pro | 1.04.45 | 111.71 |
| 61 cu. in. 8-valve | McBride | Indian | Am | 1.11.19 | 101.13 |
| 61 cu. in stock | Walker | Indian | Pro | 1.09.71 | 103.28 |
| 61 cu. in. stock | McBride | Indian | Am | 1.12.87 | 98.80 |
| 30.50 cu. in. 4-valve | Walker | Indian | Pro | 1.23.03 | 86.71 |
| 30.50 cu. in. 4-valve | McBride | Indian | Am | 1.32.25 | 78.04 |
| **Five Miles.** | | | | | |
| 61 cu. in. 8-valve | Walker | Indian | Pro | 2.45.62 | 108.71 |
| 61 cu. in. 8-valve | McBride | Indian | Am | 2.59.67 | 100.18 |
| 61 cu. in. stock | Walker | Indian | Pro | 3.04.70 | 97.45 |
| 61 cu. in. stock | McBride | Indian | Am | 3.08.31 | 95.08 |
| 30.50 cu. in. 4-valve | Walker | Indian | Pro | 3.30.11 | 85.66 |
| 30.50 cu. in. 4-valve | McBride | Indian | Am | 3.51.68 | 77.69 |

### INTERNATIONAL BOTH WAY RECORDS.

(Made by Walker both ways of course.)

| Distance. | Motor. | Time | Miles P. Hr. | Distance. | Motor. | Time. | Miles P. Hr. |
|---|---|---|---|---|---|---|---|
| Kilometre | 61 cu. in. 8-valve | 21.60 | 103.56 | One Mile | 61 cu. in. 8-valve | 34.70 | 103.74 |
| Kilometre | 30.50 cu. in. 4-valve | 27.21 | 82.21 | One Mile | 30.50 cu. in. 4-valve | 43.86 | 82.08 |

### OFFICIAL STRAIGHTAWAY WORLD'S SIDECAR RECORDS.

In the list below, records made by 8-valve machines were made by Leslie "Red" Parkhurst, on a Harley-Davidson, at Daytona Beach, Fla., on February 17, 1920. Those made by a stock machine were made by H. LeVack on an Indian at Brooklands Track, England, on November 10, 1920.

| Distance. | Motor. | Time. | Miles P. Hr. | Distance. | Motor. | Time. | Miles P. Hr. |
|---|---|---|---|---|---|---|---|
| One Mile | Stock | 48.40 | 74.38 | Two Miles | 8-valve | 1.25.69 | 84.02 |
| Kilometre | 8-valve | 26.54 | 84.28 | Five Miles | 8-valve | 3.34.52 | 83.90 |
| Kilometre | Stock | 29.00 | 77.14 | Five Miles | Stock | 4.16.10 | 70.28 |
| One Mile | 8-valve | 42.81 | 84.09 | | | | |

**International Both Way Records.**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Kilometre | 8-valve | 26.54 | 28.06 | 27.30 | One Mile | 8-valve | 42.81 | 44.88 | 43.85 |
| Kilometre | Stock | | | 29.90 | One Mile | Stock | | | 50.70 |

### 1922 NATIONAL CHAMPIONSHIPS.

| Distance. | Time. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|
| 5 Miles | 5.08 1-5 | Gene Walker | Ind. (30.50) | South Bend, Ind. | Sept. 3, 1922 |
| 5 Miles | 3.56 1-5 | Gene Walker | Ind. (61 cu. in.) | Syracuse, N. Y. | Sept. 16, 1922 |
| 5 Miles | 4.35 | Floyd Dreyer | Ind. (Scar) | Atlanta, Ga. | May 20, 1922 |
| 10 Miles | 8.34 2-5 | Hammond Springs | Ind. (30.50) | Atlanta, Ga. | May 20, 1922 |
| 10 Miles | 7.43 1-5 | Gene Walker | Ind. (61 cu. in.) | Milwaukee, Wis. | Aug. 6, 1922 |
| 10 Miles | 9.08 | Ed. Buzzell | Exc. (Scar) | Syracuse, N. Y. | Sept. 16, 1922 |
| 25 Miles | 21.27 4-5 | Gene Walker | Ind. (30.50) | Milwaukee, Wis. | Aug. 6, 1922 |
| 25 Miles | 19.45 4-5 | John Seymour | Ind. (61 cu. in.) | Syracuse, N. Y. | Sept. 16, 1922 |
| 25 Miles | 23.35 3-5 | Ralph Hepburn | Ind. (Scar) | Milwaukee, Wis. | Aug. 6, 1922 |
| 300 Miles | 4 19.29 | Ralph Hepburn | Ind. (61 cu. in.) | Wichita, Kan. | July 4, 1922 |

### OFFICIAL WORLD'S MOTORCYCLE TRACK RECORDS.

Records made with 61 cu. in. motors, best official times regardless of nature of course.

| Distance. | Time. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|
| 1 Mile | 0.32.53 | Jim Davis | Indian | Los Angeles | April 20, 1922 |
| 5 Miles | 2.48.62 | Otto Walker | H. D. | Los Angeles | Jan. 23, 1922 |
| 10 Miles | 5.38.18 | Otto Walker | H. D. | Los Angeles | Jan. 23, 1922 |
| 25 Miles | 14.08.32 | Otto Walker | H. D. | Los Angeles | Jan. 23, 1922 |
| 50 Miles | 29.22.94 | Otto Walker | H. D. | Los Angeles | Jan. 23, 1922 |
| 100 Miles | 1.00.35.87 | Otto Walker | H. D. | Los Angeles | Jan. 23, 1922 |
| 200 Miles | 2.17.54.00 | Ralph Hepburn | H. D. | Dodge City, Kan. | July 4, 1921 |
| 300 Miles | 3.30.03.00 | Ralph Hepburn | H. D. | Dodge City, Kan. | July 4, 1921 |
| 500 Miles | 6.59.15.00 | E. G. Baker | Indian | Cincinnati, Ohio. | Aug. 14, 1917 |
| 1,000 Miles | 16.14.15.00 | E. G. Baker | Indian | Cincinnati, Ohio. | Aug. 15, 1917 |

RECORD BY HOURS.

| TIME. | Miles. | Yards. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|---|
| 1 Hour. | 98.94 | | Otto Walker | H. D. | Los Angeles | Jan. 23, 1922 |
| 2 Hours. | 146 | 1,514 | H. LeVack | Indian | England | Nov. 4, 1920 |
| 3 Hours. | 218 | 697 | H. LeVack | Indian | England | Nov. 4, 1920 |
| 4 Hours. | 286 | 232 | H. LeVack | Indian | England | July 2, 1921 |
| 5 Hours. | 358 | 27 | H. LeVack | Indian | England | July 2, 1921 |
| 6 Hours. | 431 | 1,181 | H. Levack | Indian | England | July 2, 1921 |
| 8 Hours. | 388 | 1,174 | C. Gustavson | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 9 Hours. | 441 | | C. Gustavson | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 10 Hours. | 482 | | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 11 Hours. | 512 | | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 12 Hours. | 821½ | | E. G. Baker | Indian | Cincinnati, Ohio | Aug. 14, 1917 |
| 13 Hours. | 585 | | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 14 Hours. | 641 | 587 | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 15 Hours. | 677 | 587 | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 16 Hours. | 730 | | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 17 Hours. | 767 | 587 | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 18 Hours. | 812 | 587 | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 19 Hours. | 862 | 587 | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 20 Hours. | 911 | | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 21 Hours. | 945 | 587 | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 22 Hours. | 986 | 1,174 | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 23 Hours. | 1,035 | 1,174 | Chas. Spencer | Indian | Springfield, Mass. | Oct. 2, 1909 |
| 24 Hours. | 1,534¾ | | E. G. Baker | Indian | Cincinnati, Ohio | Aug. 14, 1917 |

OFFICIAL WORLD'S SIDECAR TRACK RECORDS.

| DISTANCE. | Time. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|
| 1 Mile. | 0.51 3-5 | F. H. Dreyer | Indian | Toledo, Ohio | Aug. 14, 1921 |
| 2 Miles | 1.42 3-5 | F. H. Dreyer | Indian | Toledo, Ohio | Aug. 14, 1921 |
| 5 Miles | 4.20 2-5 | F. H. Dreyer | Indian | Toledo, Ohio | Aug. 14, 1921 |
| 10 Miles | 7.54.81 | H. LeVack | Indian | England | Nov. 18, 1921 |
| 25 Miles | 20.36 2-5 | Ted Carroll | Indian | Sheepshead Bay | Oct. 11, 1919 |
| 50 Miles | 40.47.88 | H. LeVack | Indian | England | Nov. 18, 1921 |
| 100 Miles | 1.25.33.24 | H. LeVack | Indian | England | Nov. 18, 1921 |
| 200 Miles | 3.13.03.60 | H. LeVack | Indian | England | Nov. 25, 1920 |
| 300 Miles | 4.48.13.80 | H. LeVack | Indian | England | Nov. 25, 1920 |
| 400 Miles | 7.37.19.20 | H. H. Beach | Norton | England | Aug. 16, 1921 |
| 500 Miles | 8.56.00 | Ted Carroll | Indian | Cincinnati, Ohio | Aug. 14, 1917 |
| 1,000 Miles | 18.48.30 | Ted Carroll | Indian | Cincinnati, Ohio | Aug. 15, 1917 |

SIDECAR RECORDS, BY HOURS.

| TIME. | Miles. | Yards. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|---|
| 1 Hour | 69 | 150 | H. LeVack | Indian | England | Nov. 18, 1921 |
| 2 Hours. | 125 | 1,669 | H. LeVack | Indian | England | Nov. 25, 1920 |
| 3 Hours. | 185 | 146 | H. LeVack | Indian | England | Nov. 25, 1920 |
| 4 Hours. | 247 | 928 | H. LeVack | Indian | England | Oct. 25, 1920 |
| 5 Hours. | 308 | 1,433 | H. LeVack | Indian | England | Nov. 25, 1920 |
| 6 Hours. | 363 | 688 | H. LeVack | Indian | England | Nov. 25, 1920 |
| 12 Hours. | 661½ | | Ted Carroll | Indian | Cincinnati, Ohio | Aug. 14, 1917 |
| 24 Hours. | 1,275 7-8 | | Ted Carroll | Indian | Cincinnati, Ohio | Aug. 15, 1917 |

OFFICIAL MOTORCYCLE ROAD RECORDS.

| DISTANCE. | Time. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|
| 1 Mile | 35 sec | Jack Booth | Indian | Australia | Oct. 7, 1916 |
| 25 Miles | 21.56 | L. G. Buckner | Indian | Savannah, Ga | April 26, 1920 |
| 50 Miles | 40.01 | Gene Walker | Indian | Savannah, Ga | April 26, 1920 |
| 100 Miles | 1.22.11.98 | Albert Burns | Indian | Marion, Ind. | Sept. 6, 1920 |
| 200 Miles | 2.48.37.12 | Ray Weishaar | H. D. | Marion, Ind. | Sept. 6, 1920 |
| 300 Miles | 5.02.32 | Lee Taylor | Indian | Savannah, Ga. | Nov. 26, 1914 |
| 500 Miles | 9.58.00 | E. G. Baker | Indian | Australia | Feb. 1919 |
| 1,000 Miles | 21.03.00 | E. G. Baker | Indian | Australia | Feb. 1916 |

RECORD BY HOURS.

| TIME. | Distance. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|
| 3 Hours... | 163 Miles | E. G. Baker | Indian | Australia | Feb. 1919 |
| 4 Hours... | 215 Miles | E. G. Baker | Indian | Australia | Feb. 1916 |
| 5 Hours... | 266 Miles | E. G. Baker | Indian | Australia | Feb. 1916 |
| 6 Hours... | 316 Miles | E. G. Baker | Indian | Australia | Feb. 1916 |
| 12 Hours... | 579 Miles | H. A. Parson | Indian Scout | Australia | Aug. 27, 1920 |
| 18 Hours... | 876 Miles | E. G. Baker | Indian | Australia | Feb. 1916 |
| 24 Hours... | 1,114½ Miles | H. A. Parson | Indian Scout | Australia | Aug. 27, 1920 |

AMERICAN ONE-MILE DIRT TRACK MOTORCYCLE RECORDS.

| DISTANCE. | Time. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|
| 1 Mile | 0.39.6 | Ralph Hepburn | Indian | San Luis, Cal | Nov. 5, 1922 |
| 5 Miles | 3.26.2 | Ralph Hepburn | Indian | San Luis, Cal | Nov. 5, 1922 |
| 10 Miles | 6.59.8 | Ralph Hepburn | Indian | San Luis, Cal | Nov. 5, 1922 |
| 25 Miles | 18.02.0 | Ralph Hepburn | Indian | San Luis, Cal | Nov. 5, 1922 |
| 50 Miles | 38.52.13 | Fred Ludlow | H. D. | Syracuse, N. Y. | Sept. 19, 1921 |
| 100 Miles | 1.28.06 2-5 | Jim Davis | Indian | Detroit, Mich | June 13, 1915 |

AMERICAN ONE-MILE DIRT TRACK SIDECAR RECORDS.

| DISTANCE. | Time. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|
| 1 Mile | 0.51 3-5 | Floyd Dreyer | Indian | Toledo, Ohio | Aug. 14, 1921 |
| 2 Miles | 1.42 3-5 | Floyd Dreyer | Indian | Toledo, Ohio | Aug. 14, 1921 |
| 5 Miles | 4.20 2-5 | Floyd Dreyer | Indian | Toledo, Ohio | Aug. 14, 1921 |
| 10 Miles | 8.39 | Floyd Dreyer | Indian | Toledo, Ohio | Aug. 14, 1921 |
| 25 Miles | 21.47 | Floyd Dreyer | Indian | Toledo, Ohio | Aug. 14, 1921 |

AMERICAN HALF-MILE DIRT TRACK MOTORCYCLE RECORDS.

| Distance. | Time. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|
| 1 Mile | 1.00 2-5 | Gene Walker | Indian | Springfield, Mass. | Oct. 12, 1922 |
| 2 Miles | 2.07 1-5 | Paul Anderson | Excelsior | South Bend, Ind. | Sept. 25, 1921 |
| 5 Miles | 5.07 3-5 | Gene Walker | Indian | South Bend, Ind. | Sept. 4, 1922 |
| 10 Miles | 10.37 | Paul Anderson | Excelsior | South Bend, Ind. | Sept. 25, 1921 |
| 25 Miles | 27.00 4-5 | Don Marks | Indian | South Bend, Ind. | July 11, 1921 |

AMERICAN HALF-MILE DIRT TRACK SIDECAR RECORDS.

| Distance. | Time. | Rider. | Machine. | Place. | Date. |
|---|---|---|---|---|---|
| 1 Mile | 1.12 | "Dynamite" Scott | Indian | Toronto, Can. | June 24, 1922 |
| 2 Miles | 2.24 | "Dynamite" Scott | Indian | Toronto, Can. | June 24, 1922 |
| 5 Miles | 5.37 | Floyd Dreyer | Indian | Pittsburgh, Pa. | Oct. 10, 1921 |
| 10 Miles | 11.01 1-5 | Wm. Minnick | Indian | Frederick, Md. | Nov. 11, 1921 |

## AUTOMOBILE RACE AND TRACK RECORDS.

COMPETITIVE SPEEDWAY RECORDS, REGARDLESS OF CLASS, NON-STOCK.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 mile | 0 40.23 | De Palma | Mercedes | Des Moines, Ia. | June 24, 1916 |
| 2 miles | 1 09.57 | Louis Chevrolet | Frontenac | Chicago, Ill. | Sept. 3, 1917 |
| 3 miles | 1 54.81 | Resta | Peugot | Des Moines, Ia. | June 24, 1916 |
| 4 miles | 2 14.22 | Louis Chevrolet | Frontenac | Chicago, Ill. | Sept. 3, 1917 |
| 5 miles | 2 56.35 | Resta | Peugot | Omaha, Neb. | July 15, 1916 |
| 10 miles | 5 20.20 | Milton | Duesenberg | Sheepshead Bay, N.Y. | June 14, 1919 |
| 15 miles | 8 18.90 | De Palma | Packard Special | Chicago, Ill. | Sept. 3, 1917 |
| 20 miles | 10 50.20 | De Palma | Packard Special | Chicago, Ill. | July 28, 1918 |
| 25 miles | 14 12.72 | De Palma | Packard Special | Chicago, Ill. | Sept. 3, 1917 |
| 50 miles | 26 23.40 | De Palma | Packard | Sheepshead Bay, N.Y. | June 14, 1919 |
| 75 miles | 40 31.00 | Hearne | Disteel-Duesenberg | Cotati, Cal. | Aug. 14, 1921 |
| 100 miles | 54 05.80 | Hearne | Disteel-Duesenberg | Cotati, Cal. | Aug. 14, 1921 |
| 150 miles | 1 21 19.20 | Hearne | Disteel-Duesenberg | Cotati, Cal. | Aug. 14, 1921 |
| 200 miles | 1 55 11.05 | Mulford | Hudson | Chicago, Ill. | June 16, 1917 |
| 250 miles | 2 10 53.10 | Murphy | Durant | Los Angeles | Dec. 3, 1922 |
| 300 miles | 2 55 32.23 | Anderson | Stutz | Sheepshead Bay, N.Y. | Oct. 9, 1915 |
| 350 miles | 3 24 42.99 | Anderson | Stutz | Sheepshead Bay, N.Y. | Oct. 9, 1915 |
| 400 miles | 4 04 48.98 | Resta | Peugot | Chicago, Ill. | June 26, 1915 |
| 450 miles | 4 35 05.78 | Resta | Peugot | Chicago, Ill. | June 26, 1915 |
| 500 miles | 5 07 26.00 | Resta | Peugot | Chicago, Ill. | June 26, 1915 |

COMPETITIVE ONE MILE CIRCULAR DIRT TRACK RECORDS, NON-STOCK.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 10 miles | 7 47.24 | De Palma | Ballot | Syracuse, N. Y. | Sept. 18, 1920 |
| 15 miles | 12 23.20 | Burman | Peugot | Bakersfield, Cal. | Jan. 3, 1915 |
| 20 miles | 16 09.97 | De Palma | Ballot | Syracuse, N. Y. | Sept. 18, 1920 |
| 25 miles | 20 28.80 | Burman | Peugot | Bakersfield, Cal. | Jan. 3, 1915 |
| 50 miles | 40 49.68 | De Palma | Ballot | Syracuse, N. Y. | Sept. 18, 1920 |
| 75 miles | 1 08 56.00 | Burman | Peugot | Galesburg, Ill. | Oct. 22, 1914 |
| 100 miles | 1 29 09.00 | Hearne | Chevrolet Special | Phoenix, Ariz. | Nov. 8, 1919 |
| 150 miles | 2 30 51.00 | Wishart | Mercer | Columbus, O. | Aug. 25, 1912 |
| 200 miles | 3 21 48.00 | Mulford | Mason Special | Columbus, O. | July 4, 1913 |

NON-COMPETITIVE SPEEDWAY RECORDS, CLASS "C," NON-STOCK.

(Piston Displacement.)

300 TO 450 CUBIC INCHES.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| Kilometre | 21.56 | Goodspeed | Roamer | Daytona | April 22, 1921 |
| 1 mile | 34.25 | Goodspeed | Roamer | Daytona | April 22, 1921 |
| 2 miles | 1 08.86 | Goodspeed | Roamer | Daytona | April 22, 1921 |
| 3 miles | 1 43.69 | Goodspeed | Roamer | Daytona | April 22, 1921 |
| 4 miles | 2 18.08 | Goodspeed | Roamer | Daytona | April 22, 1921 |
| 5 miles | 2 53.48 | Goodspeed | Roamer | Daytona | April 22, 1921 |

301 TO 450 CUBIC INCHES.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 kilo | 0 26.75 | Merz | National | Jacksonville | Mar. 29, 1911 |
| 1 mile | 0 40.32 | Wilcox | National | Jacksonville | Mar. 30, 1911 |

NON-COMPETITIVE RECORDS.

SPEEDWAY RECORDS, CLASS "B" STOCK CAR.

(Piston Displacement.)

231 TO 300 CUBIC INCHES.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 10 miles | 7 54.40 | Mulford | Hudson | Sheepshead Bay | Nov. 25, 1915 |
| 20 miles | 15 45.80 | Mulford | Hudson | Sheepshead Bay | Nov. 25, 1915 |
| 50 miles | 39 30.80 | Mulford | Hudson | Sheepshead Bay | Nov. 25, 1915 |
| 100 miles | 1 20 21.40 | Mulford | Hudson | Sheepshead Bay | Nov. 25, 1915 |

CLASS "B" STOCK CHASSIS—183 TO 230 CUBIC INCHES.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 mile | 0 44.37 | Dawson | Chalmers | Sheepshead Bay | July 28, 1917 |
| 2 miles | 1 27.44 | Dawson | Chalmers | Sheepshead Bay | Aug. 1, 1917 |
| 3 miles | 2 11.80 | Dawson | Chalmers | Sheepshead Bay | July 28, 1917 |
| 4 miles | 2 54.61 | Dawson | Chalmers | Sheepshead Bay | Aug. 1, 1917 |
| 5 miles | 3 39.83 | Dawson | Chalmers | Sheepshead Bay | July 28, 1917 |
| 10 miles | 7 16.80 | Dawson | Chalmers | Sheepshead Bay | Aug. 1, 1917 |
| 15 miles | 10 58.55 | Dawson | Chalmers | Sheepshead Bay | July 28, 1917 |
| 20 miles | 14 30.30 | Dawson | Chalmers | Sheepshead Bay | Aug. 1, 1917 |
| 25 miles | 18 15.67 | Dawson | Chalmers | Sheepshead Bay | July 28, 1917 |
| 50 miles | 36 12.93 | Dawson | Chalmers | Sheepshead Bay | Aug. 1, 1917 |
| 75 miles | 54 32.45 | Dawson | Chalmers | Sheepshead Bay | July 28, 1917 |
| 100 miles | 1 12 10.17 | Dawson | Chalmers | Sheepshead Bay | Aug. 1, 1917 |

### 300 TO 450 CUBIC INCHES.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 5 miles | 3 15.88 | Mulford | Paige | Uniontown | May 20, 1921 |
| 10 miles | 6 31.48 | Mulford | Paige | Uniontown | May 20, 1921 |
| 15 miles | 9 45.96 | Mulford | Paige | Uniontown | May 20, 1921 |
| 20 miles | 13 01.48 | Mulford | Paige | Uniontown | May 20, 1921 |
| 25 miles | 16 37.94 | Mulford | Paige | Uniontown | May 20, 1921 |
| 50 miles | 33 16.43 | Mulford | Paige | Uniontown | May 20, 1921 |
| 75 miles | 50 00.80 | Mulford | Paige | Uniontown | May 20, 1921 |
| 100 miles | 1 06 53.26 | Mulford | Paige | Uniontown | May 20, 1921 |

### STRAIGHTAWAY RECORDS, CLASS "C," NON-STOCK.
(Piston Displacement.)
231 TO 300 CUBIC INCHES.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1–2 mile | 0 14.86 | Murphy | Meteor-Duesenberg | Daytona | April 27, 1920 |
| 1 kilo | 0 18.22 | Murphy | Meteor-Duesenberg | Daytona | April 27, 1920 |
| 1 mile | 0 29.36 | Murphy | Meteor-Duesenberg | Daytona | April 27, 1920 |
| 2 miles | 0 59.81 | Murphy | Meteor-Duesenberg | Daytona | April 27, 1920 |
| 3 miles | 1 29.33 | Murphy | Meteor-Duesenberg | Daytona | April 27, 1920 |
| 4 miles | 1 59.24 | Murphy | Meteor-Duesenberg | Daytona | April 27, 1920 |
| 5 miles | 2 29.14 | Murphy | Meteor-Duesenberg | Daytona | April 27, 1920 |
| 10 miles | 5 15.00 | Murphy | Meteor-Duesenberg | Daytona | April 27, 1920 |

### STRAIGHTAWAY RECORDS REGARDLESS OF CLASS, NON-STOCK.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1–2 mile | 0 11.57 | Milton | Duesenberg | Daytona | April 27, 1920 |
| 1 kilo | 0 14.40 | Milton | Duesenberg | Daytona | April 27, 1920 |
| 1 mile | 0 23.07 | Milton | Duesenberg | Daytona | April 27, 1920 |
| 2 miles | 0 46.24 | Milton | Duesenberg | Daytona | April 27, 1920 |
| 3 miles | 1 12.18 | Milton | Duesenberg | Daytona | April 25, 1920 |
| 4 miles | 1 36.14 | Milton | Duesenberg | Daytona | April 25, 1920 |
| 5 miles | 2 00.04 | Milton | Duesenberg | Daytona | April 25, 1920 |
| 10 miles | 4 09.31 | De Palma | Packard Special | Daytona | Feb. 16, 1919 |
| 15 miles | 6 48.75 | De Palma | Packard Special | Daytona | Feb. 17, 1919 |
| 20 miles | 8 54.20 | De Palma | Packard Special | Daytona | Feb. 17, 1919 |

(Standing Start.)

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 mile | 0 38.83 | De Palma | Packard Special | Daytona | Feb. 17, 1919 |

### HOUR RECORDS.
SPEEDWAY, CLASS "C," NON-STOCK.
(Piston Displacement.)
161 TO 183 CUBIC INCHES.

| Time. | Distance. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 hour | 98 miles | Murphy | Duesenberg | Sheepshead Bay | Nov. 18, 1919 |
| 2 hours | 182 miles | Murphy | Duesenberg | Sheepshead Bay | Nov. 18, 1919 |
| 3 hours | 276 miles | Murphy | Duesenberg | Sheepshead Bay | Nov. 18, 1919 |

231 TO 300 CUBIC INCHES.

| Time. | Distance. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 hour | 113 miles | Milton | Duesenberg | Sheepshead Bay | Nov. 25, 1919 |
| 2 hours | 222 miles | Milton | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |
| 3 hours | 323 miles | Milton | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |
| 4 hours | 428 miles | De Palma | Packard Special | Sheesphead Bay | Nov. 16, 1917 |
| 5 hours | 522 miles | De Palma | Packard Special | Sheepshead Bay | Nov. 16, 1917 |
| 6 hours | 616 miles | De Palma | Packard Special | Sheepshead Bay | Nov. 16, 1917 |

301 TO 450 CUBIC INCHES.

| Time. | Distance. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 hour | 111 miles | Lewis | Duesenberg | Sheepshead Bay | Nov. 18, 1919 |

### SPEEDWAY, CLASS "B" STOCK CHASSIS.
(Piston Displacement.)
161 TO 183 CUBIC INCHES.

| Time. | Distance. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 hour | 69 miles | Lewis | Essex | Cincinnati, O | Dec. 4, 1919 |
| 12 hours | 818 miles | Lewis & Milton | Essex | Cincinnati, O. | Dec. 4, 1919 |
| 24 hours | 1,539 miles | Lewis, Milton & Thompson | Essex | Cincinnati, O. | Dec. 4-5, 1919 |
| 36 hours | 2,329 miles | Lewis, Milton & Thompson | Essex | Cincinnati, O. | Dec. 11-12, 1919 |
| 48 hours | 2,912 miles | Lewis, Milton & Thompson | Essex | Cincinnati, O. | Dec. 10-11-12, 1919 |
| 50 hours | 3,037 miles | Lewis, Milton & Thompson | Essex | Cincinnati, O. | Dec. 10-11-12, 1919 |

183 TO 230 CUBIC INCHES.

| Time. | Distance. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 hour | 83 miles | Dawson | Chalmers | Sheepshead Bay | Aug. 1-2, 1917 |
| 12 hours | 957 miles | Dawson | Chalmers | Sheepshead Bay | Aug. 1-2, 1917 |
| 24 hours | 1,898 miles | Dawson | Chalmers | Sheepshead Bay | Aug. 1-2, 1917 |

231 TO 300 CUBIC INCHES.

| Time. | Distance. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 12 hours | 924 miles | Mulford | Hudson | Sheepshead Bay | May 1-2, 1916 |
| 24 hours | 1,819 miles | Mulford | Hudson | Sheepshead Bay | May 1-2, 1916 |

300 TO 450 CUBIC INCHES

| Time. | Distance. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 hour | 89 miles | Mulford | Paige | Uniontown | May 20, 1921 |

231 TO 300 CUBIC INCHES.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 mile | 0 30.78 | Milton | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 2 miles | 1 01.40 | Milton | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 3 miles | 1 31.93 | Milton | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 4 miles | 2 02.37 | Milton | Duesenberg | Spechshead Bay | Nov. 10, 1919 |
| 5 miles | 2 32.78 | Milton | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 10 miles | 5 04.78 | Milton | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 15 miles | 7 39.58 | Milton | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 20 miles | 10 14.18 | Milton | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 25 miles | 12 55.74 | Milton | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 30 miles | 15 41.60 | Milton | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |
| 40 miles | 21 02.00 | Milton | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |
| 50 miles | 26 21.80 | Milton | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |
| 100 miles | 52 41.40 | Lewis | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |
| 150 miles | 1 19 38.20 | Milton | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |
| 200 miles | 1 48 38.40 | Milton | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |
| 250 miles | 2 14 49.80 | Milton | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |
| 300 miles | 2 44 15.40 | Milton | Duesenberg | Sheepshead Bay | Nov. 24, 1919 |

301 TO 450 CUBIC INCHES.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 mile | 0 32.49 | Lewis | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 2 miles | 1 04.66 | Lewis | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 3 miles | 1 37.11 | Lewis | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 4 miles | 2 09.46 | Lewis | Duesenberg | Sheepshead Bay | Nov. 10 1919 |
| 5 miles | 2 42.23 | Lewis | Duesenberg | Sheepshead Bay | Nov. 10, 1919 |
| 10 miles | 5 14.00 | Lewis | Duesenberg | Sheepshead Bay | Nov. 18, 1919 |
| 20 miles | 10 31.40 | Lewis | Duesenberg | Sheepshead Bay | Nov. 18, 1919 |
| 30 miles | 15 50.20 | Lewis | Duesenberg | Sheepsnead Bay | Nov. 18, 1919 |
| 40 miles | 21 12.20 | Lewis | Duesenberg | Sheepshead Bay | Nov. 18, 1919 |
| 50 miles | 26 30.60 | Lewis | Duesenberg | Sheepshead Bay | Nov. 18, 1919 |
| 100 miles | 53 25.40 | Lewis | Duesenberg | Sheepshead Bay | Nov. 18, 1919 |

SPEEDWAY RECORDS REGARDLESS OF CLASS, STOCK.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 6 miles | 3 57.80 | De Palma | Cunningham | Sheepshead Bay | Nov. 17, 1919 |
| 8 miles | 5 16.60 | De Palma | Cunningham | Sheepshead Bay | Nov. 17, 1919 |
| 10 miles | 6 35.40 | De Palma | Cunningham | Sheepshead Bay | Nov. 17, 1919 |

SPEEDWAY RECORDS REGARDLESS OF CLASS, NON-STOCK.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1–4 mile | 0 06.91 | Rader | Packard Special | Sheepshead Bay | July 28, 1917 |
| 1–2 mile | 0 13.94 | Rader | Packard Special | Sheepshead Bay | July 28, 1917 |
| 1 kilo | 0 17.35 | Rader | Packard Special | Sheepshead Bay | July 28, 1917 |
| 1 mile | 0 28.76 | Rader | Packard Special | Sheepshead Bay | July 27, 1917 |
| 2 miles | 0 57.81 | Rader | Packard Special | Sheepshead Bay | July 27, 1917 |
| 3 miles | 1 26.61 | Rader | Packard Special | Sheepshead Bay | July 27, 1917 |
| 4 miles | 1 55.74 | Rader | Packard Special | Sheepshead Bay | July 27, 1917 |
| 5 miles | 2 24.65 | Rader | Packard Special | Sheepshead Bay | July 27, 1917 |
| 10 miles | 4 50.88 | Rader | Packard Special | Sheepshead Bay | July 27, 1917 |

ONE MILE CIRCULAR DIRT TRACK RECORDS, NON-STOCK.

| Distance. | Time. | Driver. | Car. | Place. | Date. |
|---|---|---|---|---|---|
| 1 mile | 0 45.00 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |
| 2 miles | 1 30.40 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |
| 3 miles | 2 17.60 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |
| 4 miles | 3 05.60 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |
| 5 miles | 3 53.60 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |
| 10 miles | 7 56.20 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |
| 15 miles | 12 00.80 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |
| 20 miles | 15 52.20 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |
| 25 miles | 19 57.60 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |
| 50 miles | 40 47.60 | Oldfield | Oldfield Special | St. Louis | Aug. 9, 1917 |

IMPORTANT SPEEDWAY RACES, 1922.

| Date. | Place. | Winner. | Car. | Miles. | Time. |
|---|---|---|---|---|---|
| March 5 | Los Angeles, Cal. | Milton | Durant | 250 | 2 15 29.95 |
| April 2 | Los Angeles, Cal. | Milton | Durant | 50 | 26 01.92 |
| April 16 | San Carlos, Cal. | Hartz | Duesenberg | 150 | 1 21 58.80 |
| April 27 | Fresno, Cal. | Murphy | Duesenberg | 150 | 1 27 30.47 |
| May 7 | Santa Rosa, Cal. | Bordino | Fiat | 50 | 26 13.35 |
| May 7 | Santa Rosa, Cal. | Murphy | Duesenberg | 100 | 52 01.83 |
| May 30 | Indianapolis, Ind. | Murphy | Murphy | 500 | 5 17 30.79 |
| June 14 | San Carlos, Cal. | Thomas | Duesenberg | 150 | 1 23 34.20 |
| June 17 | Uniontown, Pa. | Murphy | Murphy | 225 | 2 12 15.13 |
| July 4 | Tacoma, Wash. | Murphy | Murphy | 250 | 2 33 55.40 |
| Aug. 6 | Santa Rosa, Cal. | Elliott | Leach | 50 | 25 49.72 |
| Aug. 6 | Santa Rosa, Cal. | Elliott | Leach | 100 | 53 00.10 |
| Sept. 17 | Kansas City, Mo. | Milton | Leach | 300 | 2 46 52.96 |
| Sept. 30 | Fresno, Cal. | Hill | Miller | 150 | 1 27 46.15 |
| Oct. 29 | Santa Rosa, Cal. | Hill | McDonald | 100 | 52 38.04 |

AMERICAN AUTOMOBILE ASSOCIATION POINT STANDING OF AUTO RACE DRIVERS.

| Driver. | Place and Date. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Los Angeles, 3-5-22. | Los Angeles, 4-2-22. | San Francisco, 4-16-22. | Fresno, 4-27-22. | Cotati, 5-7-22. | Indianapolis, 5-30-22. | Uniontown, 6-17-22. | Tacoma, 7-4-22. | Cotati, 8-6-22. | Kansas City, 9-17-22. | Fresno, 9-30-22. | Total. |
| | Distances and Heats. | | | | | | | | | | | |
| | 250 | Heats. | 150 | 150 | Heats. | 500 | 225 | 250 | Heats. | 300 | 150 | |
| Murphy | 260 | 100 | 160 | 300 | 230 | 1,000 | 300 | 500 | 60 | ..... | 10 | 2,920 |
| Milton | 500 | 180 | ..... | ..... | ..... | ..... | ..... | 260 | 160 | 600 | 160 | 1,860 |
| Hartz | 140 | 35 | 300 | 90 | 115 | 520 | ..... | 35 | 3 | 320 | 90 | 1,648 |
| Elliott | 80 | 20 | ..... | 160 | 115 | ..... | ..... | ..... | 300 | 170 | 30 | 875 |
| Hearne | 50 | ..... | ..... | ..... | ..... | 270 | ..... | ..... | 43 | ..... | 20 | 383 |
| Hill | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 44 | 35 | 300 | 379 |
| Wonderlich | ..... | ..... | 20 | 20 | 3 | 41 | 90 | 80 | 16 | 55 | 50 | 375 |
| Sarles | ..... | ..... | 90 | ..... | 50 | ..... | ..... | 140 | ..... | ..... | ..... | 280 |
| Mulford | ..... | ..... | ..... | ..... | ..... | ..... | 160 | ..... | ..... | 95 | ..... | 255 |
| Bordino | ..... | 65 | ..... | 30 | 100 | ..... | ..... | ..... | ..... | ..... | ..... | 195 |
| Klein | ..... | ..... | 50 | 50 | 27 | ..... | ..... | 25 | 27 | ..... | 15 | 194 |
| De Palma | ..... | ..... | ..... | ..... | 15 | 140 | ..... | ..... | ..... | ..... | ..... | 155 |
| Haibe | ..... | ..... | ..... | ..... | ..... | 79 | 30 | ..... | ..... | ..... | ..... | 109 |
| Fetterman | ..... | ..... | ..... | ..... | ..... | 33 | 50 | ..... | ..... | 25 | ..... | 108 |
| Thomas | 35 | ..... | 30 | 10 | 7 | 2 | ..... | 15 | ..... | ..... | ..... | 99 |
| Wilcox | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 50 | ..... | ..... | ..... | 50 |
| Alley | ..... | ..... | ..... | ..... | ..... | 35 | ..... | ..... | ..... | ..... | ..... | 35 |
| De Paolo | ..... | ..... | ..... | 15 | 13 | ..... | ..... | ..... | ..... | ..... | ..... | 28 |
| Miller | 25 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 25 |
| Vail | ..... | ..... | ..... | ..... | ..... | 21 | ..... | ..... | ..... | ..... | ..... | 21 |
| Koetzla | ..... | ..... | ..... | ..... | ..... | 19 | ..... | ..... | ..... | ..... | ..... | 19 |
| Shafer | ..... | ..... | ..... | ..... | ..... | 17 | ..... | ..... | ..... | ..... | ..... | 17 |
| Morton | ..... | ..... | ..... | ..... | ..... | 15 | ..... | ..... | ..... | ..... | ..... | 15 |
| Melcher | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 5 | ..... | ..... | 5 |

## ROQUE.

Eastern Division, American Roque Association Championship, held at Norwich, Conn., ending Aug. 24—Won by Gerald Brassil, with 11 victories and 1 defeat; George Hiott was second, and C. G. Williams, third. Officers elected for ensuing year: President, Y. B. Crowell, Brattleboro, Vt.; Vice Presidents, V. R. Beasley of Wilmington, Del.; A. D. Spellman, Willimantic, Conn., and George Hiott of Chicopee Falls, Mass.; Secretary, Arthur L. Peale, Norwich, Conn.; Treasurer, James L. Case, Norwich, Conn.; Official Editor, E. D. Rodman, Philadelphia.

## SWIMMING.

Amateur Athletic Union National Championships were held by events in various sections of the country, one or more events being allotted to a club. The events, dates, places and results follow:

### MEN'S SENIOR INDOOR CONTESTS.

*50 Yards*—Held under the auspices of Hui Makani Club in the Elizabeth Waterhouse Memorial pool, at Honolulu, Hawaii, on May 26, 1922.—Won by Warren Kealoha, Hui Makani Club; John Weismuller, Illinois A. C., second; W. W. Harris, Outrigger Canoe Club, third. Time—23 3-5s. *100 Yards*—Held under the auspices of Brookline Swimming Club, in the Brookline Municipal pool, at Brookline, Mass., on March 9, 1922—Won by John Weismuller, Illinois A. C.; D. E. Jones, Illinois A. C., second; Stuart B. Damon, Brookline Club, third. Time—54s. *220 Yards*—Held under the auspices of Detroit A. C., in the Detroit A. C. pool, at Detroit, Mich., on April 1, 1922—Won by John Weismuller, Illinois A. C.; Ferdinand Ehrlich, Detroit A. C., second; John Moore, Univ. of Indiana, third. Time—2m. 17 2-5s. *500 Yards*—Held under the auspices of Illinois A. C., in the Illinois A. C. pool, at Chicago, Ill., on April 6, 1922—Won by John Weismuller, Illinois A. C.; Norman Ross, Illinois A. C., second; Ranger T. Mills, Great Lakes A. A., third. Time—5m. 46 4-5s. *150 Yards Back Stroke*—Held under the auspices of Los Angeles A. C., in the Los Angeles A. C. pool, at Los Angeles, Cal., on April 6, 1922—Won by Ray Kegeris, Los Angeles A. C.; Holmes Bowers, Los Angeles A. C., second; K. Carraher, Los Angeles A. C., third; Chas. Shields, San Diego Rowing Club, fourth. Time—1m. 59 3-5s. *220 Yards Breast Stroke*—Held under the auspices of Allegheny Mt. Assn., in the Pittsburgh Natatorium pool, at Pittsburgh, Pa., on April 22, 1922. Won by Donald McClellan, Detroit. Mich.; Steven Ruddy, Jr., New York A. C., second; E. Brodie, Pittsburgh Aquatic Club, third; Lester Kerns, Pittsburgh A. A., fourth. Time—3m. 10 2-5s. *Fancy Dive*—Held under the auspices of Olympic Club, in the Olympic Club pool, at San Francisco, Cal., on April 7, 1922.—Won by Albert C. White, Stanford Univ.; Walter Krisel, Los Angeles A. C., second; Al deFerrari, San Francisco, third; Clarence Pinkston, Olympic Club, fourth. 145 points. *Plunge for Distance*—Held under the auspices of Culver Military Academy, in the Culver Military Academy pool, at Culver, Ind., on March 11, 1922—Won by Fred Schwedt, Detroit Y. M. C. A.; John F. Dillon, Culver Military Academy, second; E. Morine, Culver Military Academy, third. Distance—79 ft. 10 in. *200 Yards Relay*—Held under the auspices of Brooklyn Central Y. M. C. A., in the Brooklyn Central pool, at Brooklyn, N. Y., on April 1, 1922—Won by Illinois A. C. (A. Seigel, D. Jones, P. McGillivray, and J. Weismuller); Brookline S. C. (C. Woods, S. Williams, G. Algar and S. Damon), second; Brooklyn C. Y. M. C. A. (H. Lewis, H. Belin, J. Arnold and L. Helwig), third. Time—1m. 39 1-5s. *400 Yards Relay*—Held under the auspices of New York A. C., in the New York A. C. pool, at New York, N. Y., on March 29, 1922—Won by Illinois A. C. (J. Weismuller, P. McGillivray, B. Wallen and H. Hebner); New York A. C. (P. Genther, T. Cann, H. Vollmer and J. Smith), second; Brooklyn Central Y. M. C. A. (H. Belin, L. Helwig, V. Kiffe and H. Lewis), third. Time—3m. 43 3-5s. *Water Polo*—Held under the auspices of New York A. C., in the New York A. C. pool, at New York, N. Y., on March 30, 1922—Won by New York A. C. (Hill, Ruddy, Cattus, Curran, Cann, Vollmer and Ritter); Illinois A. C. (Jensen, Hebner, McGillivray, Wallen, Vosberg, Handy and Towne). Score—4—3. *Pentathlon*—Held under the auspices of Brooklyn Central Y. M. C. A., in the Brooklyn Central pool, at Brooklyn, N. Y., on April 11, 1922—Won by John Weismuller, Illinois A. C., 8 points; Leo Giebel, New York A. C., 9 points, second; Henry Giebel, New York A. C., 16 points, third; Victor Kiffe, Brooklyn Central Y. M. C. A., 17 points, fourth. *Senior Indoor Medley—Men*—Not awarded.

### JUNIOR INDOOR CHAMPIONSHIPS.

*50 Yards*—Held under the auspices of Philadelphia Turngemeinde in the club pool, at Philadelphia, Pa.,

on March 4, 1922—Won by H. F. Van Syckle, unattached; Albert Berman, Hygeia S. C., second; William H. Stoecker, unattached, third. Time—26 2-5s. *100 Yards*—Held under the auspices of Syracuse Univ. A. A., in the Syracuse pool, at Syracuse, N. Y., on March 11, 1922—Won by E. L. Pratt, unattached; A. Waterman, Syracuse Univ., second; J. E. Burchard, Syracuse Univ., third; R. Bamford, Trinity House, fourth. Time—1m. 2 2-5s. *220 Yards*—Held under the auspices of Omaha A. C. in the club pool, at Omaha, Neb., on March 30, 1922—Won by A. L. Anderson, Omaha A. C.; B. E. Colburn, Kansas Aggies, second; Jack McQuade, Omaha A. C., third. Time—2m. 44 4-5s. *500 Yards*—Held under the auspices of Cleveland A. C., in the Club pool, at Cleveland, Ohio, on Feb. 18, 1922—Won by Holister Fergus, unattached, Cleveland; Melvin Morse, Cleveland Central Y. M., second; William Stulgis, unattached, Pittsburgh, third. Time—6m. 58 3-5s. *150 Yards Back Stroke*—Held under the auspices of Crystal Swimming Club in the club pool at Seattle, Wash., on April 28, 1922. Results not furnished. *220 Yards Breast Stroke*—Held under the auspices of Shriners, at the Sutro Baths pool, at San Francisco, Cal., on June 14, 1922—Won by Phil Wallach, Pacific Swim. Club; Don Salvador, Pacific Swim. Club, second; Reginald Tumulty, Neptune Club, third. Time—3m. 27 4-5s. *440 Yards Breast Stroke*—Held under the auspices of the Cincinnati Y. M. C. A., in the club pool, at Cincinnati, Ohio, on April 29, 1922—Won by Elliot Brodie, Pittsburgh Aquatic Club; H. Altheimer, Central Y. M. C. A., Cincinnati, second; Wade Fowler, Hoosier A. C., Indianapolis, third. Time—7m. 5 2-5s. *Fancy Dive*—Held under the auspices of West Branch Y. M. C. A., in the W. B. Y. M. C. A. pool, at Philadelphia, Pa., on March 29, 1922—Won by Ed. Subin, Hygeia Swim. Club; M. Armstrong, Philadelphia Turn., second; J. Boyle, Girard College, third; O. Blue, Hygeia Swim. Club, fourth. Points omitted. *Plunge for Distance*—Held under the auspices of Brookline Swimming Club, in the Brookline Municipal pool, at Brookline, Mass., on March 9, 1922—Won by C. F. Byrd, Brookline Swim. Club; William Mahar, Columbia Univ., second; E. Gorman, Brookline Swim. Club, third. Distance—73 ft. 6 in. *200 Yards Relay*—Not awarded. *400 Yards Relay*—Held under the auspices of Detroit Amateur Athletic Assn., at Detroit, Mich., on Feb. 16, 1922. Won by Detroit A. C., first team; Y. M. C. A., of Erie, Pa., second; Detroit A. C., second team, third. Time—3m. 59 2-5s. *Water Polo—Men*—Awarded to the Pacific Northwest Assn. Re-awarded to the Pacific Assn. Held Nov. 11-18. Results not furnished. *Medley*—Not awarded. *Pentathlon—Men*—Not awarded.

## WOMEN'S SENIOR INDOOR CHAMPIONSHIPS.

*50 Yards*—Held under the auspices of Baltimore Athletic Club, in the Baltimore A. C. pool, at Baltimore, Md., on March 11, 1922—Won by Helen Wainwright, W. S. A., N. Y.; Gertrude Artelt, Philadelphia Turn., second; Elizabeth Becker, Philadelphia Turn., third. Time—29s. *100 Yards*—Held under the auspices of Women's Swimming Assn., in the Y. W. H. A. pool, at New York, N. Y., on April 22, 1922—Won by Ethelda Bleibtrey, Ambassador Swimming Club; Helen Wainwright, Women's Swimming Assn., second; Gertrude Ederle, Women's Swimming Assn., third; Frances Clark, Philadelphia Turn., fourth. Time—1m. 7s. *220 Yards*—Held under the auspices of Detroit Y. M. C. A., in the Y. M. C. A. pool, at Detroit, Mich., on April 25, 1922—Won by Helen Wainwright, W. S. A.; Charlotte Boyle Clune, W. S. A., second; Barbara Ross, Detroit Athletic Club, third. Time—2m. 54 1-5s. *500 Yards*—Held under the auspices of Women's Swimming Assn., in the 110th Street Y. W. H. A. pool, at New York, N. Y., on May 13, 1922—Won by Helen Wainwright, W. S. A.; Ethel McGary, W. S. A., second; Aileen Riggin, W. S. A., third. Time—7m. 4 3-5s. *150 Yards Back Stroke*—Held under the auspices of the Milwaukee Athletic Club, in the club pool, at Milwaukee, Wis., on March 24, 1922—Results not furnished. *100 Yards Breast Stroke*—Held under the auspices of Athletic Club of Columbus, in the club pool, at Columbus, Ohio, on April 21, 1922—Won by Ruth Smith, Ohio State Univ.; Eleanor Smith, Ohio State Univ., second; Essie Harrison, Physical Ed. of Boston, third. Time—1m. 23 4-5s. *Fancy Dive*—Held under the auspices of Women's Swimming Assn., in the Brighton Beach pool, at Brighton Beach, N. Y., on May 30, 1922. Won by Elizabeth Becker, Philadelphia Turn.; Aileen Riggin, N. Y. W. S. A., second; Florence Briscoe, unattached, third. 131.75 points. *Plunge for Distance*—Held under the auspices of Detroit Y. M. C. A., in the Y. M. C. A. pool, at Detroit, Mich., on April 25, 1922—Won by Dorothy McWood, Northern High School; Helen Nolan, unattached, second; Mrs. Helen Mitchell, Detroit A. C., third. Time—1m. Distance—66 ft. 10 in. *200 Yards Relay*—Held under the auspices of Venice Swimming Association, in the Venice Plunge at Venice, Cal., on June 8, 1922—Won by Los Angeles Athletic Club (T. Finn, V. Hartman, H. Vernon and T. Hall); Los Angeles Athletic Club second team (K. Van Buren, D. Waters, M. Wheeler and B. Middlemas), second. Time—2m. 8s. *400 Yards Relay*—Held under the auspices of N. Y. Women's Swimming Assn., in the Brighton Beach pool, at Brighton Beach, N. Y., May 30, 1922—Won by W. S. A. (G. Ederle, Charlotte Boyle Clune, Aileen Riggin and Helen Wainwright); Philadelphia Turn. (E. Becker, F. Clark, M. Ravior and G. Artelt), second; W. S. A. (D. O'Mara, F. Cooney, E. McGary and Ethel Baker), third. Time—4m. 38 3-5s. *Pentathlon*—Not awarded. *Medley*—Not awarded.

## JUNIOR INDOOR CHAMPIONSHIPS.

*50 Yards*—Held under the auspices of Buffalo High School, in the Lafayette H. S. pool, at Buffalo, N. Y., on April 28, 1922—Won by Gertrude Ederle, W. S. A.; Edwardina Kranich, Detroit A. C., second; Doris O'Mara, W. S. A., third. Time—30 4-5s. *100 Yards*—Held under the auspices of Shriners in the Sutro Baths pool, at San Francisco, Cal., on June 14, 1922—Won by Telma Finn, Los Angeles A. C.; Dorothy Lineer, Pacific Swimming Club, second; Helen Vernon, Los Angeles A. C., third. Time—1m. 9 2-5s. *220 Yards*—Held under the auspices of Nicholas Senn Hospital, in the Omaha A. C., pool, at Omaha, Neb., on Mar. 29, 1922—Won by Ethel Baker, Women's S. A.; Ethel McGary, W. S. A., second; Helen Condon, Omaha, third. Time—3m. 2 1-5s. *500 Yards*—Held under the auspices of Women's Swimming Assn., in the Brighton Beach pool, at Brighton Beach, N. Y., on July 22, 1922—Won by Ethel McGary, W. S. A.; Doris O'Mara, W. S. A., second; Frances Cooney, W. S. A., third; Kathryn Brown, W. S. A., fourth. Time—7m. 31 2-5s. *100 Yards Back Stroke*—Held under the auspices of Hoosier Athletic Club, in the Hoosier A. C. pool, at Indianapolis, Ind., on March 18, 1922—Won by Thelma Darby, Hoosier A. C.; Marcell Miller, Illinois A. C., second; Euphrasia Donnelly, Hoosier A. C., third. Time—1m. 26 4-5s. *100 Yards Breast Stroke*—Held under the auspices of the Shriners, in the Sutro Baths pool, at San Francisco, Cal., on June 14, 1922—Won by Florence Freisenhausen, unattached; Eleanor O'Brien, Idora Park Swimming Club, second; Nadine Stewart, Pacific Swimming Club, third. Time—1m. 39 1-5s. *Fancy Dive*—Held under the auspices of Ambassador Swimming Club, in the Ambassador S. C. pool, at Atlantic City, N. J., on April 7, 1922—Won by Elizabeth Becker, Philadelphia Turn.; Gertrude Edson, Philadelphia Turn., second; Dorothy Hucknall, Ambassador Swimming Club, third. 349 points. *Plunge for Distance*—Held under the auspices of Women's S. A. of N. Y., in the Y. W. H. A. pool, at New York, N. Y., on April 22, 1922—Won by Margaret Ravior, Philadelphia Turn.; Lonnie Crittenden, W. S. A., second; Dorothy Delaney, W. S. A., third. Distance—53 ft. *200 Yards Relay*—Not awarded. *400 Yards Relay*—Held under the auspices of the Hui Makani Club, in the Elizabeth Watehouse Memorial Tank, at Honolulu, Hawaii, on May 27, 1922—Won by Outrigger Canoe Club (Constance Davis, Leilehua Judd, Dolley Mooney and Ruth Scudder); Outrigger Canoe Club (Eleanor Bukerton, Lillie Bowmer, Helen Moses and M. Wehselau), second; Hui Makani (Molly Akana, Thelma Kenn, Hilda Miller and Hazel Westcoatt), third. Time—5m. 10 2-5s. *Pentathlon*—Not awarded. *Medley*—Held under the auspices of the Metropolitan Association in Madison Square Garden Swimming Pool, at New York, N. Y., on Aug. 17, 1922—Won by Florence Briscoe, unattached; Louise Davidson, People's Palace, second; Helen Briscoe, disqualified. Time—5m. 35 1-5s.

## MEN'S SENIOR OUTDOOR CHAMPIONSHIPS.

*50 Yards*—Held under the auspices of Atlanta A. C., at East Lake pool, at Atlanta, Ga., Sept. 9, 1922—Won by John Weismuller, Illinois A. C.; William Noyes, Atlanta A. C., second; I. Hatcher, Atlanta A. C., third. Time—23s. *100 Yards*—Held under the auspices of Hawaiian Assn., A. A. U., in the Naval Slip Pier pool, at Honolulu, Hawaii, on June 23, 1922—Won by John Weismuller, Illinois A. C.; Pua Kealoha, unattached, second; Warren Kealoha, Hui Makani, third. Time—52 4-5s. *220 Yards*—Held under the auspices of Indianapolis A. C., in the Broad Ripple pool, at Indianapolis, Ind., on Aug. 12, 1922—Won by John Weismuller, I. A. C., Tom E. Blake, L. A. A. C., second; John Moore,

Hoosier A. C., third. Time—2m. 22 2-5s. *440 Yards*—Held under the auspices of Brighton Beach Baths, in the Brighton Beach pool, at Brighton Beach, N. Y., on July 22, 1922—Won by John Weismuller, I. A. C.; Tom E. Blake, L. A. A. C., second; Lee Jarvis, unattached, third; James Hall, Central Swimming Club, fourth. Time—5m. 16 2-5s. *880 Yards*—Awarded Central Association. No report. *One Mile*—Held under the auspices of Southern Pacific Assn. of A. A. U., at Coronado Tent City, at Coronado, Cal., Sept. 4, 1922—Won by Clyde Goldwater, Neptune Club of Stockton; W. O'Connor, Venice Swimming Assn., second; Edward Herzog, San Diego Rowing Club, third. Time—25m. 2s. *10 Miles*—Held under the auspices of the Riverton Yacht Club, at Riverton, N. J., on July 15, 1922—Won by Thomas E. Blake, Los Angeles A. C., 2h. 24m. 30s.; E. F. Keating, the Boys' Club, N. Y., 2h. 28m. 30s., second; V. A. Levand, Philadelphia Swimming Club, 2h. 33m. 57s., third; V. H. Kiffe, C. Y. M. C. A., 2h. 35m. 15s., fourth; Geo. R. Bell, Riverton Yacht Club, 2h. 36m. 53s., fifth. *High Diving*—Held under the auspices of So. Pacific Assn. A. A. U., at Coronado, Cal., on Aug. 20, 1922—Won by Clarence Pinkston, Olympic Club; Haig Prieste, L. A. A. C., second; B. Thrash, Coronado Tent City A. C., third; R. J. Finner, Y. M. C. A., fourth. 164.47 points. *Fancy Dive*—Held under the auspices of the Chicago Aquatic Club, at Municipal Pier, Chicago, on Aug. 13, 1922—Results not furnished. *220 Yards Breast Stroke*—Held under the auspices of Pittsburgh Press, at Lake Elizabeth, at Pittsburgh, Pa., on July 15, 1922—Won by R. Skelton, Illinois A. C.; E. Brodie, Pittsburgh Aquatic Club, second; Louis Hecht, Falk Memorial Club, third; Geo. Taylor, Pittsburgh A. A., fourth. Time—3m. 22 4-5s. *150 Yards Back Stroke*—Awarded to Central Association. No report. *400 Yards Relay*. Awarded to Central Association. No report. *Pentathlon*—Not awarded. *Medley*—Not awarded.

## MEN'S JUNIOR CHAMPIONSHIPS.

*50 Yards*—Awarded to Southeastern Association. No report. *100 Yards*—Held under the auspices of Buffalo Launch Club, at Buffalo, N. Y., on July 22, 1922—Won by Chauncey C. Croll, Buffalo, Central Y. M. C. A.; William Wright, Erie Central H. S., second; Dan Wurzbach, Erie Central H. S., third. Time—1m. 1s. *220 Yards*—Held under the auspices of Ideal Swimming Club, at Johnstown, Pa., on Sept. 17, 1922—Won by J. E. Weaver, Pittsburgh A. A.; Homer Butts, Pittsburgh A. A., second; Joseph Pentek, Carnegie Library, Homestead, Pa., third; J. E. Bryant, unattached, Pittsburgh, Pa., fourth. Time—2m. 56s. *440 Yards*—Held under the auspices of United Labor League of Pittsburgh, West View Park, at Pittsburgh, Pa., on Sept. 4, 1922—Won by Geo. F. Pawling, Philadelphia Swimming Club; Homer Butts, Pittsburgh A. A., second; J. Pentek, Carnegie Library Club, of Homestead, Pa., third. Time—6m. 25s. *880 Yards*—Held under the auspices of Southern Assn., A. A. U., in the Audubon Park pool, at New Orleans, La., on July 29, 1922—Won by Gaines Fincher, Audubon Swimming Club; Harry Groh, Audubon Swimming Club, second; Harvey W. Smith, Jr., Y. M. C. A., third. Time—14m. 29 3-5s. *One Mile*—Held under the auspices of Indianapolis A. C., in the Broad Ripple pool, at Indianapolis, Ind., on Aug. 10, 1922—Won by Victor Kiffe, Central Swimming Club; Sam Greller, Chicago, Ill., second; John Moore, Indianapolis, Ind., third. Time—27m. 2 2-5s. *Long Distance Swim*—Awarded to Southeastern Association. Not held. *High Diving*—Held under the auspices of Hawaiian Assn., A. A. U., in the Naval Slip Piers, at Honolulu, T. H., on June 24, 1922—Won by Jas. L. Foley, Hui Makani Club; R. K. Fuller, Hui Makani Club, second; Jas. Rodgers, unattached, third. 75 points. *Fancy Dive*—Awarded Central Association. No report. *220 Yards Breast Stroke*—Held under the auspices of Hawaiian Assn., A. A. U., in the Naval Slip Pier, at Honolulu, Hawaii, on June 23, 1922—Won by Sam Kahanamoku, Hui Nalu Club; Ah Kong Pang, Hui Nalu Club, second; Lukelai Kaupiko, Hui Nalu Club, third. Time—3m. 14 3-5s. *150 Yards Back Stroke*—Held under the auspices of Hoosier A. C., in the Broad Ripple pool, at Indianapolis, Ind., on July 20, 1922—Won by James Hall, Jr., Central Swimming Club; Charles Stephens, Jr., 138th Inf., St. Louis, second; Rendle Willis, Hoosier A. C., third. *400 Yards Relay*—Awarded to Southern Assn. Not held. *Pentathlon*—Not awarded. *Medley*—Not awarded.

## WOMEN'S SENIOR OUTDOOR CHAMPIONSHIPS.

*50 Yards*—Held under the auspices of Indianapolis A. C., in the Broad Ripple pool, at Indianapolis, Ind., on Aug. 10, 1922—Won by Helen Wainwright, N. Y. W. S. A.; Euphrasia Donnelly, Indianapolis, second; Aileen Riggin, N. Y. W. S. A., third; Hilda James, Liverpool, Eng., fourth. Time—29 4-5s. *100 Yards*—Held under the auspices of the Chicago Aquatic Club, at Municipal Pier, Chicago, Ill., on Aug. 8, 1922—Won by Helen Wainwright, W. S. A.; Aileen Riggin, W. S. A., second; Helen Meany, W. S. A., third. Time—1m. 8 2-5s. *220 Yards*—Held under the auspices of U. S. Volunteer L. S. C., at Bridgeport, Conn., on Aug. 27, 1922—Won by Gertrude Ederle, W. S. A.; Hilda James, Garston, S. E., second; Frances Cooney, W. S. A., third. Time—2m. 49 1-5s. *440 Yards*—Held under the auspices of New Brunswick, B. C., at New Brunswick, N. J., on Sept. 2, 1922. Won by Gertrude Ederle, W. S. A.; Helen Wainwright, W. S. A., second; Hilda James, Liverpool, Eng., third. Time—6m. 1 1-5s. *880 Yards*—Held at Santa Barbara, Cal., on July 4, 1922—Won by Helen Wainwright, W. S. A.; Ethel McGary, W. S. A., second; Marie Curtis, L. A. A. C., third. Time—13m. 5s. *One Mile*—Held under the auspices of Women's Swimming Assn., at Manhattan Beach, N. Y., on Aug. 14, 1922—Won by Helen Wainwright, W. S. A.; Hilda James, Liverpool, Eng., second; Lillian Stoddard, W. S. A., third. Time—26m. 44 4-5s. *Long Distance*—Awarded to Central Association. Not held. *High Diving*—Held under the auspices of Women's Swimming Assn., in the Manhattan Beach Lagoon, at Manhattan Beach, N. Y., on Sept. 16, 1922—Won by Helen Meany, W. S. A.; Josephine Meany, W. S. A., second; Katherine Brown, W. S. A., third. 81.3 ponts. *Fancy Diving*—Held under the auspices of the Chicago Aquatic Club, at Municipal Pier, Chicago, Ill., on Aug. 9, 1922—Won by Helen Meany, W. S. A.; Aileen Riggin, W. S. A., second; Helen Wainwright, W. S. A., third. *100 Yards Breast Stroke*—Held under the auspices of Detroit A. A. A., at Detroit, Mich.—Won by Edna O'Connell, I. A. C.; Dorothy Andre, So. East H. S. of Detroit, second; Ruth Wild, So. East H. S. of Detroit, third. Time—1m. 34 1-5s. *100 Yards Back Stroke*—Held under the auspices of Indianapolis A. C., in the Broad Ripple pool, at Indianapolis, Ind. Won by Sybil Bauer, Illinois A. C.; Helen Wainwright, W. S. A. of N. Y., second; Aileen Riggin, W. S. A. of N. Y., third; Thelma Darby, Indianapolis, fourth. Time—1m. 17 3-5s. *400 Yards Relay*—Held under the auspices of Women's Swimming Assn., in the Manhattan Beach Lagoon, at Manhattan Beach, N. Y., on Sept. 16, 1922—Won by W. S. A. (H. Wainwright, A. Riggin, E. McGary and G. Ederle); W. S. A. (D. O'Mara, E. Baker, H. Meany and F. Cooney), second; W. S. A. (E. Ursprung, M. MacFarlane, D. Wesley and D. Donohue), third. Time—4m. 32 3-5s. *Pentathlon*—Not awarded. *Medley*—Held under the auspices of Indianapolis A. C., in the Broad Ripple pool, at Indianapolis, Ind., on Aug. 12, 1922—Won by Hilda James, Liverpool, Eng.; Sybil Bauer, Illinois A. C., second; Helen Wainwright, N. Y. W. S. A., third. Time—4m. 40 4-5s.

## JUNIOR CHAMPIONSHIPS.

*50 Yards*—Awarded to Niagara Assn. Not held. *100 Yards*—Awarded to Southeastern Assn.—No report. *220 Yards*—Held under the auspices of Hoosier Athletic Club, in the Broad Ripple pool, at Indianapolis, Ind., on July 20, 1922—Won by Euphrasia Donnelly, Hoosier A. C.; Minnie DeVry, Illinois A. C., second; Dorothy Moore, Hoosier A. C., third. Time—3m. 7 4-5s. *440 Yards*—Held under the auspices of Hawaiian Assn., A. A. U., in the Naval Slip Piers pool, at Honolulu, T. H., on June 24, 1922—Won by Hen Moses, Outrigger Canoe Club; L. Boomer, Outrigger Canoe Club, second. Time—6m. 37 1-5s. *880 Yards*—Held under the auspices of N. Y. Women's Swimming Assn., at the Woodmere C. C., Woodmere, L. I., on Aug. 17, 1922.—Won by Doris O'Mara, N. Y. W. S. A.; Virginia Whitmach, N. Y. W. S. A., second; Francis Cooney, N. Y. W. S. A., third. Time—14m. 43s. *One Mile*—Awarded to Southern Pacific Assn.—No report. *Long Distance*—Awarded to Southeastern Assn.—Not held. *High Diving*—Awarded to Metropolitan Assn.—Not held. *Fancy Diving*—Awarded to Pacific Northwest Assn.—Not held. *100 Yards Back Stroke*—Held under the auspices of Indianapolis A. C., in the Broad Ripple pool, at Indianapolis, Ind., Aug. 10, 1922—Won by Helen Wainwright, N. Y. W. S. A.; Aileen Riggin, N. Y. W. S. A., second; Hilda James, Liverpool, Eng., third; Bessie Ryan, Ambassador S. C., fourth. Time—1m. 26 2-5s. *100 Yards Breast Stroke*—Awarded to Central Assn.—No report. *400 Yards Relay*—Held under the auspices of Hawaiian Assn., A. A. U., in the Naval Slip Pier, at Honolulu, Hawaii, on June 24, 1922—Won by Outrigger C. C. (Lillie Bowmer, E. Cassidy, Helen Moses and M. Wehselau); Hui Makani Club (M. Akana, K. Kahanamoku, H. Miller and H. Westcoatt), second. Time—4m. 38s. *Pentathlon*—Not awarded. *Medley*—Not awarded.

## WORLD AND AMERICAN SWIMMING RECORDS.

World swimming records must be officially recognized by the International Amateur Swimming Federation. The Federation meets annually and records are frequently recognized a year or more after being made. Many American records made in 1922 are also world records as yet unsanctioned. American records are based upon short courses, from 60 feet to 220 yards, and long courses, from 220 feet to 220 yards.

### WORLD'S RECORDS TO JANUARY 1, 1921.

| Distance. | Name. | Country. | Time. | Date. | Place. | Length of Course. |
|---|---|---|---|---|---|---|
| 100 yds. | D. P. Kahanamoku. | United States.... | 53s..... | Sept 5 1917 | Honolulu..... | 100 yds. |
| 100 met. | D. P. Kahanamoku. | United States.... | 60 2-5s.. | Aug. 24, 1920 | Antwerp..... | 100 met. |
| 150 yds. | H. E. Vollmer..... | United States.... | 1m. 29 4-5s.. | Jan. 10, 1916 | New York.... | 25 yds. |
| 200 met. | Norman Ross..... | United States.... | 2m. 21 3-5s.. | Nov. 24 1916 | San Francisco. | 33 1-3 yds |
| 220 yds. | Norman Ross..... | United States.... | 2m. 21 3-5s.. | Nov. 24, 1916 | San Francisco. | 33 1-3 yds |
| 300 yds. | Norman Ross..... | United States.... | 3m. 2 4-5s.. | Sept. 7, 1920 | Exeter..... | 25 yds. |
| 300 met. | Norman Ross..... | United States.... | 3m. 45 2-5s.. | Jan. 1, 1920 | Brisbane..... | 25 yds. |
| 400 met. | Norman Ross..... | United States.... | 5m. 14 3-5s.. | Oct. 9, 1919 | Los Angeles... | 33 1-3 yds |
| 440 yds. | Norman Ross..... | United States.... | 5m. 14 3-5s.. | Oct. 9, 1919 | Los Angeles... | 33 1-3 yds |
| 500 yds. | Norman Ross..... | United States.... | 5m 58 4-5s.. | Oct. 9, 1919 | Los Angeles... | 33 1-3 yds |
| 500 met. | Norman Ross..... | United States.... | 6m. 55 4-5s.. | Feb. 26, 1920 | Sydney..... | 110 yds. |
| 880 yds. (half mile) | Norman Ross..... | United States.... | 11m. 24 1-5s.. | Jan. 10, 1920 | Sydney..... | 110 yds. |
| 1,000 yds.. | D. Billington..... | Great Britain.... | 13m. 34 4-5s.. | July 22, 1905 | Liverpool..... | 125 yds. |
| 1,000 met. | F. E. Beaurepaire... | Australia..... | 14m. 31s..... | Feb. 14, 1920 | Adelaide..... | 110 yds. |
| 1,500 met. | G. R. Hodgson..... | Canada..... | 22m. | July 10, 1912 | Stockholm.... | 100 met. |
| 1,760 yds. (one mile) | G. R. Hodgson..... | Canada..... | 23m. 34 1-2s. | July 10, 1912 | Stockholm.... | 100 met. |

### AMERICAN RECORDS.

| Distance. | Time. | Winner. | Place. | Date. | Kind of Course. |
|---|---|---|---|---|---|
| 100 yards..... | 52 4-5s. | J. Weismuller..... | Honolulu, Hawaii... | June 23, 1922 | Long |
| 100 metres..... | 58 3-5s. | J. Weismuller..... | Alameda, Cal..... | July 9, 1922 | Long |
| 200 metres..... | 2m. 17 2-5s. | J. Weismuller..... | Honolulu, Hawaii... | June 24, 1922 | Long |
| 150 yards..... | 1m. 27 2-5s. | J. Weismuller..... | New York..... | Sept. 27, 1921 | Short |
| 220 metres..... | 2m. 15 3-5s. | J. Weismuller..... | Honolulu, Hawaii... | May 26, 1922 | Short |
| 300 yards..... | 3m. 16 3-5s. | Norman Ross..... | Chicago, Ill..... | April 4, 1918 | Short |
| 300 metres..... | 3m. 45 2-5s. | Norman Ross..... | Brisbane, Australia. | Jan. 1, 1920 | Short |
| 400 metres..... | 5m. 6 2-5s. | J. Weismuller..... | Honolulu, Hawaii... | June 22, 1922 | Long |
| 440 yards..... | 5m. 7 3-5s. | J. Weismuller..... | Honolulu, Hawaii... | June 22, 1922 | Long |
| 500 yards..... | 5m. 47 2-5s. | J. Weismuller..... | Honolulu, Hawaii... | June 22, 1922 | Long |
| 500 metres..... | 6m. 42 3-5s. | J. Weismuller..... | Sacramento, Cal.... | July 10, 1922 | Short |
| 880 yds (½ mile). | 11m. 13 3-5s. | Norman Ross..... | Honolulu, Hawaii.. | Nov 1, 1919 | Long |
| 1,000 yards..... | 12m. 44 3-5s. | Norman Ross..... | Honolulu, Hawaii.. | Nov. 1, 1919 | Long |
| 1,000 metres..... | 14m. 28s..... | F. E. Beaurepaire | Honolulu, Hawaii.. | May 26, 1921 | Long |
| 1,500 metres..... | 21m. 54s..... | F. E. Beaurepaire | Honolulu, Hawaii.. | May 26, 1921 | Long |
| 1,760 yds. (1 mile). | 23m. 30 4-5s. | F. E. Beaurepaire | Honolulu, Hawaii.. | May 26, 1921 | Long |

### BREAST STROKE SWIMMING.

| Distance. | Name. | Country. | Time. | Date. | Place. | Length of Course. |
|---|---|---|---|---|---|---|
| 100 metres | W. Lutzow..... | Germany ..... | 1m. 16 4-5s. | May 24, 1914 | Magdeburg .. | 25 met. |
| 200 yards. | E. Toldi ..... | Hungary..... | 2m. 39 3-5s. | Aug. 20, 1911 | Budapest .... | 33 1-3 met |
| 200 metres | P. Courtman..... | Great Britain.... | 2m. 56 3-5s.. | July 28, 1914 | Garston..... | 25 yds. |
| 400 metres | P. Courtman..... | Great Britain.... | 6m. 14 2-5s.. | Dec. 11, 1912 | Manchester... | 25 yds. |
| 500 metres | P. Courtman..... | Great Britain.... | 7m. 51s..... | Dec. 11, 1912 | Manchester... | 25 yds. |

The American record for 200 yards is 2m. 38 2-5s., made by M. McDermott, at Chicago, Feb. 4, 1915 (short course).

### BACK STROKE SWIMMING.

| Distance. | Name. | Country. | Time. | Date. | Place. | Length of Course. |
|---|---|---|---|---|---|---|
| 100 metres | W. Kealoha..... | United States.... | 1m. 14 4-5s.. | Aug. 22, 1920 | Antwerp..... | 100 met. |
| 150 yards. | P. McGillivray..... | United States.... | 1m. 48 4-5s.. | Mar. 30, 1918 | Detroit..... | |
| 200 metres | Otto Fahr..... | Germany..... | 2m. 48 2-5s.. | April 30, 1912 | Magdeburg... | 25 met. |
| 400 metres | H. Pentz..... | Germany..... | 6m. 6s..... | Nov. 10, 1913 | Magdeburg... | 25 met. |

The American record for 100 metres is 1m. 16 4-5s., made by H. Kruger, at Honolulu, April 29, 1920 (short course). The American record for 150 yards is that of P. McGillivray, in the above table.

### WOMEN'S RECORDS.

| Distance. | Name. | Country. | Time. | Date. | Place. | Length of Course. |
|---|---|---|---|---|---|---|
| 100 yds. | Miss F. Durack.... | Australia..... | 1m. 6s..... | Mar. 16, 1912 | Sydney..... | 100 feet. |
| 100 met. | Miss E. Bleibtrey... | United States.... | 1m. 13 3-5s.. | Aug. 25, 1920 | Antwerp..... | 100 met. |
| 150 yds. | Miss H. James..... | Great Britain.... | 1m. 53 3-5s.. | Dec. 8, 1920 | Seacombe..... | 25 yds. |
| 200 met. | Miss Olga Dorfner.. | United States.... | 2m. 56 2-5s.. | July 21, 1918 | Alameda..... | 100 yds. |
| 220 yds. | Miss F. Durack..... | Australia..... | 2m. 56s..... | Mar. 4, 1915 | Manley..... | 50 yds. |
| 300 yds. | Miss H. James..... | Great Britain.... | 4m. 20s..... | Sept. 15, 1920 | Manchester... | 50 yds. |
| 300 met. | Miss E. Bleibtrey... | United States.... | 4m. 34s..... | Aug. 28, 1920 | Antwerp..... | 100 met |
| 400 met. | Miss E. Bleibtrey... | United States.... | 6m. 30 1-5s.. | Aug. 16, 1919 | New York.... | 110 yds. |
| 440 yds. | Miss E. Bleibtrey... | United States.... | 6m. 30 1-5s.. | Aug. 16, 1919 | New York.... | 110 yds. |
| 500 yds. | Miss F. Durack.... | Australia..... | 7m. 8 1-5s.. | April 3, 1918 | Adelaide..... | 110 yds. |
| 800 yds. | Miss C. Galligan... | United States.... | 13m. 31 4-5s.. | Aug. 17, 1918 | Belmar..... | 100 yds. |
| 1,760 yds. (1 mile). | Miss F. Durack.... | Australia..... | 24m. 8s..... | Feb. 23, 1914 | Sydney..... | 110 yds. |

BREAST STROKE SWIMMING.

| Distance. | Name. | Country. | Time. | Date. | Place. | Length of Course. |
|---|---|---|---|---|---|---|
| 200 yds. | Miss L. Morton | Great Britain | 3m. 6s. | Oct. 13, 1920 | Blackpool | 27 yds. |

The American record is 3m. 10 3-5s., by E. Smith, at Columbus, Ohio, March 12, 1919 (short course).

BACK STROKE SWIMMING.

| Distance. | Name. | Country. | Time. | Date. | Place. | Length of Course. |
|---|---|---|---|---|---|---|
| 150 yds. | Miss M. Spencer | Great Britain | 2m. 13 2-5s. | Dec. 8, 1920 | Seacombe | 25 yds. |

The American record is 2m. 6 1-5s., by E. Bleibtrey, at Jersey City, Feb. 28, 1920 (short course).

WOMEN'S AMERICAN RECORDS.

| Distance. | Time. | Winner. | Place. | Date. | Kind of Course. |
|---|---|---|---|---|---|
| 100 yards | 1m. 6 1-5s. | E. Smith | Columbus, Ohio | Jan. 27, 1922 | Short |
| 100 metres | 1m. 12 4-5s. | E. Bleibtrey | New York, N. Y. | July 10, 1922 | Straightaway |
| 150 yards | 1m. 49 3-5s. | H. Wainwright | New York, N. Y. | May 30, 1922 | Short |
| 220 yards | 2m. 49 1-5s. | G. Ederle | Bridgeport, Conn. | Aug. 27, 1922 | Long |
| 300 yards | 4m. 11s. | E. McGary | New York, N. Y. | April 22, 1922 | Short |
| 300 metres | 4m. 29 4-5s. | H. Wainwright | Indianapolis, Ind. | Aug. 11, 1922 | Long |
| 400 metres | 5m. 53 1-5s. | G. Ederle | New York, N. Y. | Sept. 4, 1922 | Short |
| 440 yards | 6m. 00 1-5s. | G. Ederle | N. Brunswick, N. J. | Sept. 2, 1922 | Open water |
| 500 yards | 7m. 9 2-5s. | H. Wainwright | Indianapolis, Ind. | Aug. 12, 1922 | Long |
| 800 yards | 13m. 31 4-5s. | C. Galligan | Belmar, N. J. | Aug. 17, 1918 | Long |
| 1,760 yds. (1 mile) | 31m. 19 3-5s. | C. Galligan | Rye, N. Y. | Sept. 2, 1916 | Long |

OLYMPIC RECORDS MADE AT OLYMPIC GAMES.

| Distance. | Style of Swimming. | Name. | Nationality. | Time. | Date. | Place. |
|---|---|---|---|---|---|---|
| 100 metres | Free style | D. P. Kahanamoku | United States | 60 2-5s. | Aug. 24, 1920 | Antwerp |
| 400 metres | Free style | G. R. Hodgson | Canada | 5m. 24 2-5s. | July 13, 1912 | Stockholm |
| 1,500 metres | Free style | G. R. Hodgson | Canada | 22m. | July 10, 1912 | Stockholm |
| 200 metres | Breast | W. Bathe | Germany | 3m. 1 4-5s. | July 10, 1912 | Stockholm |
| 400 metres | Breast | W. Bathe | Germany | 6m. 29 3-5s. | July 12, 1912 | Stockholm |
| 100 metres | Back | W. Kealoha | United States | 1m. 14 4-5s. | Aug. 22, 1920 | Antwerp |
| 800 metres (4 men) | Free style | United States | | 10m. 4 2-5s. | Aug. 29, 1920 | Antwerp |
| 100 metres | Ladies, Free style | Miss E. Bleibtrey | United States | 1m. 13 3-5s. | Aug. 25, 1920 | Antwerp |
| 300 metres | Ladies | Miss E. Bleibtrey | United States | 4m. 34s. | Aug. 28, 1920 | Antwerp |
| 400 metres (4 ladies) | Free style. Ladies | United States | | 5m. 11 3-5s. | Aug. 29, 1920 | Antwerp |

## AMERICAN AMATEUR TRACK AND FIELD RECORDS.

### RELAY RACING.

440 yards relay (outdoor—4 men, each ran 110 yards)—42 2-5s., New York A. C. team (B. J. Wefers, Jr., F. K. Lovejoy, H. Ray Edward Farrell), Pasadena, Cal., July 5, 1921.

880 yards relay (outdoor—4 men, each ran 220 yards)—1m. 27 2-5s., New York A. C. team (B. J. Wefers, Jr., F. K. Lovejoy, H. Ray, Edward Farrell), Pasadena, Cal., July 5, 1921.

880 yards relay (indoor, with baton—4 men, each man ran 220 yards)—1m. 35 2-5s., Xavier A. A. team (C. B. Clark, H. Heiland, E. Lohse, W. J. Keating), New York City, Feb. 21, 1912; (outdoor) 1m. 29 2-5s., University of Chicago team (F. T. Ward, B. Dismond, M. Baranak, D. Knight), Chicago, Ill., June 12, 1915.

1 mile (outdoor, with baton—4 men, each man ran 440 yards)—3m. 16 2-5s., American Legion, State of Pennsylvania, team (C. D. Rogers, Earl Eby, Larry Brown, R. S. Maxam), Philadelphia, June 11, 1921; (indoor) 3m. 21s., All-Buffalo team (J. W. Habberfield, W. F. Koppish, M. J. Sutton, C. H. Brandt), Buffalo, N. Y., April 17, 1920.

2 miles (4 men, each man ran 880 yards)—7m. 49 2-5s., University of Pennsylvania team (Meredith, Holden, McMullen, Brown), Philadelphia, April 29, 1922; (indoor) 7m. 54 4-5s., Penn State College team, New York, February 1, 1922.

4 miles (outdoor—4 men, each man ran 1 mile)—17m. 51 1-5s., Boston A. A. team (Mahoney, Marceau, Powers, Hedlund), Easton, Pa., June 17, 1913; (with baton), 17m. 51 1-5s., Cornell University team (G. Taylor, J. Hoffmire, L. Windnagel, D. Potter), Philadelphia, Pa., April 29, 1916.

4 miles (indoor—4 men, each man ran 1 mile)—17m. 43 2-5s., Cornell University team (H. N. Putnam, L. Finch, T. S. Berna, J. P. Jones), Buffalo, N. Y., March 1, 1912.

Medley relay—(outdoor) 7m. 44 2-5s., Irish-American A. C. team (J. J. Archer, 220 yards; J. M. Rosenberger, 440 yards; A. R. Kiviat, 880 yards; J. Bromilow, 1 mile), Boston, Mass., July 24, 1909; (indoor) 7m. 38 2-5s., All-New York team (F. P. McNally, 220 yards; J. M. Rosenberger, 440 yards; J. P. Sullivan, 880 yards; A. R. Kiviat, 1 mile), Buffalo, N. Y., April 7, 1911.

### HURDLE RACING.

70 yards (indoor)—6 hurdles, 3 ft. 6 in. high, 10 yards apart, 10 yards to first hurdle, 10 yards to finish—9 1-5s., E. F. Smalley, Univ. of Pennsylvania, at Buffalo, N. Y., Feb. 21, 1920; Walker Smith, Cornell Univ., at New York City, March 13, 1920; (indoor) 5 hurdles, 3 ft. 6 in. high, 10 yards apart, first hurdle 15 yards from starting point and last hurdle 15 yards before finishing line—8 4-5s., Waldo Ames, Chicago A. A., Chicago, March 26, 1921.

120 yards high hurdles (outdoor)—10 hurdles, 3 ft. 6 in. high, 10 yards apart, first hurdle 15 yards from starting point and last hurdle 15 yards before finishing line—14 2-5s., Earl J. Thomson, Dartmouth College, Philadelphia, Pa., May 29, 1920.

220 yards—10 hurdles, 2 ft. 6 in. high (straightaway), 23 3-5s. (outdoor), A. C. Kraenzlein, New York City, May 28, 1898; J. I. Wendell, Cambridge, Mass., May 31, 1913. 10 hurdles, 2 ft. 6 in. high, 20 yards apart, first hurdle 20 yards from starting mark and the last hurdle 20 yards before the finishing line, Robert Simpson, University of Missouri, Columbia, Mo., May 27, 1916. 10 hurdles, 2 ft. 6 in. high, 24 4-5s, (outdoor, around a turn), John J. Eller, Irish-American A. C., Travers Island, Sept. 19, 1908; John J. Eller, Pittsburgh, Pa., July 1, 1911; John J. Eller, Celtic Park, L. I., Sept. 16, 1911; F. W. Kelly, University of Southern California, Los Angeles, Cal., May 21, 1915.

440 yards (outdoor)—10 hurdles, 3 ft. high, first hurdle 40 yards from start, 40 yards between each hurdle and 40 yards to finish—54 1-5s., J. K. Norton, Olympic Club, San Francisco, at Pasadena, Cal., June 26, 1920.

### JUMPING.

Standing high jump, without weights (outdoor)—5 ft. 3-5 4 in., Leo Goehring, Travers Island, N. Y., June 14, 1913; (indoor), 5 ft. 4 1-8 in., Platt Adams, New York City, Jan. 25, 1913.

Running high jump, without weights—6 ft. 7 5-16 in., (outdoor)—E. Beeson, Olympic Club, Berkeley, Cal., May 2, 1914.

Running high jump (indoor), without weights—6 ft. 4 3-4 in., J. L. Murphy, New York, Feb. 1, 1922.

One standing broad jump, without weights—11 ft. 4 7-8 in., Ray C. Ewry, St. Louis, Aug. 29, 1904.

Running broad jump, without weights—25 ft. 3 in., Edward O. Gourdin, Cambridge, Mass., July 23, 1921.

Running hop, step and jump, without weights—50 ft. 11 in., D. F. Ahearn, Celtic Park, L. I., May 30, 1911.

### THROWING THE DISCUS.

Throwing the discus, Olympic style, weight 4 lbs. 6 1-2 oz. (8 ft. 2 1-2 in. circle)—156 ft. 1 3-8 in., James Duncan, Celtic Park, L. I., May 27, 1912.

Throwing the discus from 7-ft. circle—145 ft., 9 1-2 in., James Duncan, Celtic Park, L. I., June 2, 1912.

Throwing the discus (8 ft. 2 1-2 in. circle, right and left hand), 252 ft. 8 7-8 in., James Duncan, Celtic Park, L. I., May 27, 1912. Right hand, 156 ft. 1 3-8 in.; left hand, 96 ft. 7 1-2 in.

### THROWING WEIGHTS.

56-lb. weight, thrown with both hands from a 7-ft. circle, without follow—40 ft. 6 3-8 in., M. J. McGrath, Montreal, Canada, Sept. 23, 1911.

56-lb. weight for height—16 ft. 11 1-4 in., P. Donovan, Pastime A. C., San Francisco, Cal., Feb. 20, 1914.

### THROWING THE JAVELIN.

197 ft. 5 1-4 in., James C. Lincoln, Jr., New York A. C., at New York City, Sept. 25, 1920.

## AMERICAN AMATEUR TRACK AND FIELD RECORDS.

In many cases these records are also world's records which have or have not been passed upon by the International Amateur Athletic Federation. For list of officially sanctioned world's records see International Amateur Athletic Federation list.

| Distance and Time. | Holder. | Made at. | Date. |
|---|---|---|---|
| 100 yards—9 3-5s. | Dan. J. Kelly | Spokane, Wash. | June 23, 1906 |
| | H. P. Drew | Berkeley, Cal. | Mar. 28, 1914 |
| | C. W. Paddock and three additional times in 1921. | Berkeley, Cal. | Mar. 26, 1921 |
| 100 metres—10 2-5s. | C. W. Paddock | Redlands, Cal | April 23, 1921 |
| 200 metres—21 1-5s. | C. W. Paddock | Redlands, Cal | April 23, 1921 |
| 220 yards—20 4-5s. | C. W. Paddock | Berkeley, Cal. | Mar. 26, 1921 |
| 220 yards—21 1-5s. | Dan. J. Kelly | Spokane, Wash. | June 23, 1906 |
| | H. P. Drew | Claremont, Cal. | Feb. 28, 1914 |
| | George Parker | Fresno, Cal. | Oct. 2, 1914 |
| 220 yards—21 3-5s. | P. J. Walsh | Montreal, Can. | Sept. 21, 1902 |
| 220 yards—21 4-5s. | J. H. Mabury | Madison, Wis. | May 9, 1896 |
| 220 yards—21 4-5s. | B. J. Wefers | Travers Is., N. Y. | June 13, 1896 |
| 220 yards—21 95-100s. | H. Jewett | Montreal, Can. | Sept. 24, 1892 |
| 220 yards—22 3-5s* | Loren Murchison | Brooklyn, N. Y. | April 28, 1919 |
| 300 yards—30 1-5s. | C. W. Paddock | Redlands, Cal. | April 23, 1921 |
| 300 yards—31 1-5s *. | A. Woodring | Buffalo, N. Y. | Feb. 11, 1922 |
| 300 metres—33 1-5s. | C. W. Paddock | Redlands, Cal | April 23, 1921 |
| 440 yards—47s. (straightaway) | M. W. Long | Guttenberg, N. J. | Oct. 4, 1900 |
| 440 yards—47 2-5s. | J. E. Meredith | Cambridge, Mass. | May 27, 1916 |
| 440 yards—49 3-5s. *. | T. J. Halpin | Buffalo, N. Y. | Mar. 15, 1913 |
| 600 yards—1m. 10 4-5s. | M. W. Sheppard | Celtic Park, N. Y. | Aug. 14, 1910 |
| 600 yards—1m 13 2-5s. *. | T. J. Halpin | New York City | Mar. 2, 1914 |
| 880 yards—1m. 52 1-5s. | J. L. Meredith | Philadelphia, Pa. | May 13, 1916 |
| 880 yards—1m. 54 3-5s. *. | E. B. Parson | Buffalo, N. Y. | Mar. 19, 1904 |
| 1,000 yards—2m. 12 1-5s. | Larry Brown | Philadelphia, Pa. | June 11, 1921 |
| 1,000 yards—2m. 13 2-5s. *. | J. W. Ray | Brooklyn, N. Y. | April 28, 1919 |
| 1,320 yards—3m. 2 4-5s. | T. P. Conneff | Travers Is., N. Y. | Aug. 21, 1895 |
| 1,320 yards—3m. 5s. | J. W. Ray | New York City | Mar. 20, 1918 |
| 1,500 metres—3m. 55 4-5s. | A. R. Kiviat | Cambridge, Mass. | June 8, 1912 |
| 1 mile—4m. 12 3-5s. | N. S. Taber | Cambridge, Mass. | July 16, 1915 |
| 1 mile—4m. 14 3-5s. *. | J. W. Ray | Chicago, Ill. | April 12, 1919 |
| 3,000 metres—8m. 31 2-5s. *. | J. W. Ray | New York City | Feb. 18, 1922 |
| 2 miles—9m. 11 2-5s. *. | J. W. Ray | New York City | Feb. 13, 1917 |
| 2 miles—9m. 17 4-5s. | T. S. Berna | Ithaca, N. Y. | May 4, 1912 |
| 3 miles—14m. 18 1-5s. *. | H. Kolehmainen | Brooklyn, N. Y. | Feb. 12, 1913 |
| 3 miles—14m. 22 3-5s. | H. Kolehmainen | Celtic Park, N. Y. | Aug. 17, 1913 |
| 5,000 metres—15m. 5 4-5s. *. | G. V. Bonhag | New York City | Jan. 25, 1912 |
| 5,000 metres—14m. 45s. | C. F. Hunter | Pasadena, Cal. | June 26, 1920 |
| 4 miles—19m. 39 4-5s. *. | G. V. Bonhag | New York City | Feb. 5, 1910 |
| 4 miles—20m. 2s. | H. Kolehmainen | New York City | Nov. 1, 1913 |
| 5 miles—24m. 20 1-5s. *. | H. Kolehmainen | New York City | Feb. 12, 1913 |
| 5 miles—24m. 36 4-5s. | Charles Pores | Great Lakes, Ill. | Sept. 21, 1918 |
| 8,000 metres—25m. 44s. | W. J. Kramer | Celtic Park, N. Y. | June 2, 1912 |
| 6 miles—30m. 20 2-5s. | H. Kolehmainen | New York City | Nov. 1, 1913 |
| 6 miles—30m. 24s. *. | H. Kolehmainen | Buffalo, N. Y. | Feb. 1, 1913 |
| 10,000 metres—31m. 43 3-5s. | W. J. Kramer | Cambridge, Mass. | June 8, 1912 |
| 7 miles—35m. 35 4-5s. | H. Kolehmainen | New York City | Nov. 1, 1913 |
| 7 miles—35m. 36 2-5s. *. | H. Kolehmainen | Buffalo, N. Y. | Feb. 1, 1913 |
| 8 miles—40m. 48 4-5s. | H. Kolehmainen | New York City | Nov. 1, 1913 |
| 8 miles—40m. 47 4-5s. *. | H. Kolehmainen | Buffalo, N. Y. | Feb. 1, 1913 |
| 9 miles—46m. 3-5s. *. | H. Kolehmainen | Buffalo, N. Y. | Feb. 1, 1913 |
| 9 miles—46m. | H. Kolehmainen | New York City | Nov. 1, 1913 |
| 10 miles—51m. 3 2-5s. | H. Kolehmainen | New York City | Nov. 1, 1913 |
| 10 miles—51m. 6 3-5s. *. | H. Kolehmainen | Buffalo, N. Y. | Feb. 1, 1913 |
| 1 h.—10 miles 1,492 yards. | Charles Pores | New York City | June 1, 1919 |
| 15 miles—1h. 23m. 24 1-5s. | Charles Pores | New York City | June 1, 1919 |
| 20 miles—1h. 58m. 27 3-5s. | James Clark | Celtic Park, N. Y. | Nov. 14, 1909 |
| 25 miles—2hrs. 44m. 50s. *. | M. Maloney | New York City | Jan. 8, 1909 |

### WALKING.

| Distance and Time. | Holder. | Made at. | Date. |
|---|---|---|---|
| 1 mile—6m. 28s. *. | G. H. Goulding | Buffalo, N. Y. | Dec. 16, 1911 |
| 1 mile—6m. 29 3-5s. | F. P. Murray | New York City | Oct. 27, 1883 |
| 3,000 metres—12m. 54s. *. | William Plant | New York City | Feb. 18, 1922 |
| 2 miles—13m. 37s. | G. H. Goulding | New York City | Mar. 18, 1916 |
| 2 miles—13m. 38 3-5s. *. | G. H. Goulding | Brooklyn, N. Y. | Mar. 30, 1912 |
| 3 miles—20m. 49 4-5s. *. | G. H. Goulding | Brooklyn, N. Y. | Mar. 30, 1912 |
| 3 miles—21m. 9 1-5s. | F. P. Murray | New York City | Nov. 6, 1883 |
| 4 miles—28m. 6 1-5s. *. | G. H. Goulding | Brooklyn, N. Y. | Mar. 30, 1912 |
| 5 miles—36m. 10s. | G. H. Goulding | New Brunswick, N. J. | Oct. 23, 1915 |
| 6 miles—43m. 28 2-5s. | G. H. Goulding | New Brunswick, N. J. | Oct. 23, 1915 |
| 7 miles—50m. 40 4-5s. | G. H. Goulding | New Brunswick, N. J. | Oct. 23, 1915 |
| 1 h.—7 miles 1,437 yds. 4in. | R. F. Remer | New York City | Nov. 24, 1918 |
| 8 miles—1h. 1m. 34s. | R. F. Remer | New York City | Nov. 24, 1918 |
| 9 miles—1h. 10m. 8s. | E. E. Merrill | Boston, Mass. | Oct. 5, 1880 |
| 10 miles—1h. 17m. 40 3-4s. | E. E. Merrill | Boston, Mass. | Oct. 5, 1880 |
| 2h.—14 miles 1,115 yards. | William Plant | New York City | Nov. 13, 1921 |
| 15 miles—2h. 2m. 57 3-5s. | William Plant | New York City | Nov. 13, 1921 |
| 20 miles—3h. 8m. 10s. | J. B. Clark | New York City | Dec. 5, 1879 |
| 25 miles—4h. 3m. 35s. | J. B. Clark | New York City | Dec. 5, 1879 |

* Indoor record.

### VAULTING.

Pole vault for height (outdoor)—13 ft. 3 9-16 in., Frank K. Foss, Chicago A. A., Chicago, Ill., Aug. 23, 1919; (indoor), 12 ft. 8 1-4 in., E. E. Myers, Chicago, March 11, 1922.

Pole vault for distance (indoor)—28 ft 2 in., Platt Adams, New York City, Oct. 31, 1910.

### THROWING THE HAMMER.

Regulation hammer, A. A. U. rules, weight (including handle) 16 lbs., entire length 4 feet, thrown from 7-foot circle.

16-lb. hammer—189 ft. 6 1-2 in., P. Ryan, Celtic Park, L. I., Aug. 17, 1913.

### SHOT PUTTING.

16-lb. shot—51 ft., Ralph Rose, San Francisco, Aug. 21, 1909.

16-lb. shot, right and left hand, with toe board —91 ft. 10 1-2 in. (right hand, 50 ft.,6 in.; left hand, 41 ft. 4 1-2 in.), Ralph Rose, Oakland, Cal., June 2, 1912; right and left hand, without toe board—91 ft. 10 in. (right hand, 49 ft. 10 in.; left hand, 42 ft.), Ralph Rose, American League Park, New York City, June 12, 1912.

### CROSS-COUNTRY, MARATHON, DISTANCE RUNS AND WALKS.

National Amateur Athletic Union senior six-mile cross-country championship, held at Van Cortlandt Park, New York, November 25. Order of finish, first ten runners: W. Ritola, Finnish-American A. C., 34m. 37s.; first; R. Earl Johnson, Edgar Thomson Steel Co., Pittsburgh, Pa., 35m. 41s., second; J. Prim, Finnish-American A. C., 36m. 21s., third; M. Rick, New York A. C., 36m. 23s., fourth; J. Henigan, Dorchester (Mass.) Club, 36m. 28s., fifth; J. Doherty, Dorchester (Mass.) Club, 36m. 37s., sixth; W. Rittler, Jr., Meadowbrook Club, Philadelphia, 36m. 38s., seventh; J. Phillips, Paulist A. C., 36m. 45s., eighth; F. A. Tobaten, Meadowbrook Club, Philadelphia, 36m. 57s., ninth; R. Dalrymple, Dorchester (Mass.) Club, 37m. 5s., tenth.

*Team Scores*—Finnish-American A. C., 42; Dorchester Club, 49; Meadowbrook Club, 51; Paulist A. C., 87; Millrose A. A., 96.

National A. A. U. junior cross-country championship, six miles, held at Van Cortlandt Park, New York, November 18. Order of finish, first ten runners: John Phillips, Paulist A. C., 36m. 35s., first; W. Rittler, Meadowbrook Club, Philadelphia, 36m. 44s., second; M. Rick, New York A. C., 36m. 51s., third; A. Studenroth, Meadowbrook Club, Philadelphia, 36m. 52s., fourth; A. Fager, Finnish-American A. C., 37m. 13s., fifth; G. Ramsay, Meadowbrook Club, Philadelphia, 37m. 16s., sixth; M. Dwyer, Mohawk A. C., 37m. 18s., seventh; F. Tobaten, Meadowbrook Club, Philadelphia, 37m. 24s., eighth; G. Caughey, Pittsburgh A. A., 37m. 27s., ninth; N. Erickson, Finnish-American A. C., 37m. 35s., tenth.

*Team Scores*—Meadowbrook Club, 21; Finnish-American A. C., 59; Mohawk A. C., 69; Knights of St. Anthony, 85; Cygnet A. C., 91.

National A. A. U. ten mile run and seven mile walk championships, held at New York, October 28. Results, 10 miles run: W. Ritola, Finnish-American A. C., 52m. 3 4-5s., first; R. Earl Johnson, Edgar Thomson SteelA. A., Pittsburgh, 54m. 17 2-5s., second; A. Michelsen, Cygnet A. C., Port Chester, N. Y., 54m. 50s., third; M. J. Dwyer, Mohawk A. C., 57m. 10s., fourth; H. Parkinson, Morningside A. C., 58m. 1 1-5s., fifth; W. Kennedy, Cygnet A. C., Port Chester, N. Y., 58m. 16 2-5s., sixth; O. Phillipson, Pastime A. C., 58m. 24 2-5s., seventh.

Seven mile walk: W. Plant, Morningside A. C., 54m. 46 4-5s., first; J. Pearman, New York A. C., 55m. 6 3-5s., second; R. Remer, American Walkers' Association, 57m. 11 1-5s., third; C. Foster, Detroit Y. M. C. A., 57m. 37 1-5s., fourth; M. Greenberg, Pastime A. C., 58m. 33 4-5s., fifth.

A. A. U. fifteen mile walk, held at New York, November 12. Results: M. Greenberg, Pastime A. C., 2h. 16m. 24s., first; W. Martin, Pastime, A. C., 2h. 22m. 55s., second; M. Krinsky, Pastime A. C., 2h. 24m. 7s., third; P. Anthony, Pastime A. C., 2h. 27m. 17 1-5s., fourth; W. Dunne, Walkers' Club, 2h. 37m. 19s., fifth; G. Brumlich, Pastime A. C., 2h. 38m. 32s., sixth.

Boston A. A. Marathon Race, twenty-five miles, held at Boston, April 19. Results, first ten to finish: C. De Mar, Melrose Highlands, Mass., 2h. 18m. 10s., first; W. Ritola, Finnish-American A. C., New York, 2h. 21m. 44 4-5s., second; A. Smoke, Peterboro A. A., Peterboro, Ont., 2h. 22m. 49 3-5s., third; V. Maculey, Windsor, N. S., 2h. 24m. 2 2-5s., fourth; W. Kyronen, Millrose A. A., New York, 2h. 24m. 42s., fifth; O. Laakso, Millrose A. A., New York, 2h. 24m. 45 3-5s., sixth; C. Linder, Boston A. A., Boston, 2h. 25m. 29 2-5s., seventh; F. Zuna, Paulist A. C., New York, 2h. 26m. 26s., eighth; H. Frick, Glencoe A. C., New York, 2h. 28m. 16 4-5s., ninth; E. Fabre, National A. C., Montreal, P. Q., 2h. 29m. 3-5s., tenth.

Brooklyn Sea Gate Fifteen Mile Marathon, held at Brooklyn, February 12. Results, first five to finish: W. Ritola, Finnish-American A. C., 1h. 25m. 2-5s.' first; H. Parkinson, Morningside A. C., 1h. 28m. 27 2-5s., second; J. McNeil, Paulist A. C., 1h. 29m. 29 2-5s., third; W. Kennedy, unattached, 1h. 29m. 43s., fourth; F. Zuna, Paulist A. C., 1h. 30m. 39 4-5s., fifth.

American Legion Fourteen Mile Marathon, held at Philadelphia, June 10. Results, first five to finish: I. Prim, unattached, New York, 1h. 11m. 55s., first; A. Fager, unattached, New York, 1h. 17m. 27s., second; J. Gaughan, Morningside A. C., 1h. 18m. 7s., third; L. H. Hill, Meadowbrook Club, 1h. 18m. 20s., fourth; G. Williams, Shanahan C. C., 1h. 18m. 40s., fifth.

Il Popolo Sixteen Mile Marathon, held at New York, October 12. Results, first five to finish: W. Ritola, Finnish-American A. C., 1h. 20m. 52s., first; A. Michelson, Cygnet A. C., Port Chester, N. Y., 1h. 22m. 35s., second; F. Titterton, Glencoe A. C., 1h. 23m. 56s., third; F. Zuna, unattached, 1h. 24m. 11s., fourth; M. Dwyer, Mohawk A. C., 1h. 25m. 7s., fifth.

Chicago Marathon, twenty miles, held February 22. Won by C. L. Mellor, time 1h. 58m. 47s.

Hamilton, Ont., Marathon, twenty miles, held November 6. Won by F. Zuna, time 1h. 51m. 16s.

International Cross-Country Race, held at London, England, April 2, distance ten miles. Won by J. Guillemot, France, time 1h. 3m. 59s.

France vs. England cross-country race, held at Paris, March 19. Won by France, 45; England, 44. Individual winner, G. Heuet, France.

International Intercollegiate Relay Race, held at London, April 8. Won by Cambridge University team; second, University of Pennsylvania; third, Oxford University. Times for four miles, each man to run one mile, Cambridge, 18m. 7 2-5s.; Pennsylvania, 18m. 20s; Oxford, 18m. 23 3-5s. Time by miles: Cambridge—Mountain, 4m. 32s.; Tatham, 4m. 36s.; Seagrove, 4m. 32s.; Stallard, 4m. 27 2-5s. Pennsylvania—Herr, 4m. 36s.; Kerr, 4m. 36 2-5s.; McLane, 4m. 34s.; Brown, 4m. 33 1-5s. Oxford—Hewetson, 4m. 35s.; Weekley, 4m. 40s.; Bruxner, 4m. 36s.; Milligan, 4m. 32s.

Annual I. C. A. A. A. A. Cross-Country Championships, held at Van Cortlandt Park, New York, November 27. Results, six-mile varsity race, first ten to finish: W. Higgins, Columbia, 32m. 21 4-5s., first; R. E. Hendrie, M. I. T., 32m. 32s., second; H. Smith, Syracuse, 32m. 43s., third; H. E. Dykeman, Carnegie, 32m. 46s., fourth; E. O. McLane, Pennsylvania, 33m. 5s., fifth; M. J. Douglas, Yale, 33m. 12s., sixth; J. C. Young, Dartmouth, 33m. 16s., seventh; R. A. Lutz, Harvard, 33m. 18s., eighth; M. Treadwell, Yale, 33m. 31s., ninth; E. M. Case, Syracuse, 33m. 33s., tenth.

| TEAM SCORES. | | | | | | Total. |
|---|---|---|---|---|---|---|
| Syracuse | 3 | 9 | 16 | 22 | 25 | 75 |
| Yale | 5 | 8 | 23 | 34 | 38 | 108 |
| M. I. T. | 2 | 10 | 11 | 31 | 59 | 113 |
| Columbia | 1 | 17 | 21 | 39 | 40 | 118 |
| Cornell | 13 | 20 | 24 | 29 | 33 | 119 |
| Maine | 14 | 19 | 26 | 37 | 49 | 145 |
| Dartmouth | 6 | 27 | 32 | 46 | 47 | 158 |
| Princeton | 15 | 18 | 41 | 42 | 53 | 169 |
| Harvard | 7 | 28 | 35 | 55 | 57 | 182 |
| Penn State | 12 | 36 | 50 | 51 | 62 | 211 |
| Penn | 4 | 44 | 56 | 58 | 65 | 227 |
| C. C. N. Y. | 67 | 69 | 70 | 76 | 77 | 359 |
| N. Y. U. | 63 | 71 | 73 | 80 | 81 | 368 |

Freshman race, three miles, first five to finish: W. E. Shipley, Penn. State, 16m. 11 1-10s., first; K. Barclay, Penn. State, 16m. 22s., second; J. W. Mooney, Pennsylvania, 16m. 23s., third; A. S. Hillman, Maine, 16m. 24s., fourth; A. Ziegler, Syracuse, 16m. 29s., fifth.

| TEAM SCORES. | | | | | | Total. |
|---|---|---|---|---|---|---|
| Penn State | 1 | 2 | 10 | 12 | 15 | 40 |
| Princeton | 6 | 7 | 9 | 17 | 32 | 71 |
| Yale | 8 | 13 | 19 | 24 | 26 | 90 |
| Syracuse | 5 | 11 | 18 | 21 | 36 | 91 |
| Cornell | 16 | 20 | 22 | 27 | 33 | 118 |
| Pennsylvania | 3 | 25 | 29 | 46 | 52 | 155 |
| Maine | 4 | 14 | 47 | 50 | 62 | 177 |
| M. I. T. | 35 | 37 | 39 | 49 | 55 | 215 |
| Rutgers | 34 | 45 | 48 | 51 | 54 | 232 |
| N. Y. U. | 31 | 38 | 57 | 58 | 61 | 245 |

## RACQUETS.

World's professional racquet championship match between Jock Soutar, defender, of Philadelphia, and Charles Williams, challenger, of England. Match played in two series at Philadelphia, Dec. 2 and New York, Dec. 9. Won by Soutar, 7 games to 4. Scores, 15-18; 6-15; 15-6; 15-12; 14-17; 15-11; 7-15; 15-9; 15-0; 15-8; 15-5. Total points: Soutar, 147; Williams, 116.

## LATE SPORTS.

Billiards: William Hoppe regained his world's championship title in the International 18.2 balk line professional championship tournament which closed at New York on Nov. 21, defeating Jacob Schaefer, former titleholder, 500 to 283 points in the final match. The complete standing follows:

| Name. | W. | L. | High Run. | High Ave. | Name. | W. | L. | High Run. | High Ave. |
|---|---|---|---|---|---|---|---|---|---|
| Hoppe | 5 | 0 | 192 | 55 5-9 | Conti | 3 | 2 | 204 | 41 8-12 |
| Schaefer | 3 | 2 | 195 | 55 5-9 | Cochran | 1 | 4 | 140 | 33 5-15 |
| Horemans | 3 | 2 | 244 | 35 10-14 | Hagenlacher | 0 | 5 | 178 | 31 6-15 |

Bowling: Jimmy Blouin retained his world's professional bowling championship at Chicago, Nov. 13, defeating Mort. Lindsey, of Stamford, Conn. 280 28-50 points to 259 22-50 points.

## MAYORS OF AMERICAN CITIES.

(Cities in italics have commission government.)

| City. | Mayor. | Term Exp. | City. | Mayor. | Term Exp. |
|---|---|---|---|---|---|
| Albany, N. Y. | W. S. Hackett, D. | 1923, Dec. | Milwaukee, Wis. | D. W. Hoan, S. | 1924, Apr. |
| Albuquerque, N.M | W. R. Walton, N.P. | ..... | Minneapolis, Minn | G. E. Leach, R. | 1923, June |
| Amsterdam, N. Y. | T. Akin, F. | 1923, Dec. | *Mobile, Ala.* | R. V. Taylor, D. | 1923, Sept. |
| Annapolis, Md. | Samuel Jones, R. | 1923, July | Moline, Ill. | C. P. Skinner, R. | 1923, Apr. |
| Atlanta, Ga. | Walter Sims, D. | ..... | *Montgomery, Ala.* | W. A. Gunter, Jr., D. | 1923, Oct. |
| *Atlantic City, N.J.* | Edw. L. Bader, R. | 1924, May | Muskegon, Mich. | Commission-Mgr., N.P | ..... |
| Auburn, N. Y. | H. P. Burkhart, R. | ..... | Nashville, Tenn. | F. Z. Wilson, D. | Indefinite. |
| Augusta, Me. | E. L. McLean, D. | 1924, Dec. | *Newark, N. J.* | F.C.Breidenbach, N.P. | 1925, May |
| *Austin, Tex.* | W. D. Yett, D. | 1923, Apr. | *NewBrunsw'k, N.J* | J. J. Morrison, N. P. | 1923, May |
| Baltimore, Md. | W. F. Broening | 1923, May | NewHaven, Conn. | D. E. FitzGerald, D. | 1923, Dec. |
| Bangor, Me. | A. R. Day, R. | 1924, Jan. | NewLondon, Conn | Council of Seven, N.P. | ..... |
| Battle Creek, Mich | C. C. Green, N. P. | ..... | *New Orleans, La.* | A. J. McShane, D. | 1925, May |
| *Bayonne, N. J.* | W. H. Axford, D. | 1923, May | New York, N. Y. | J. F. Hylan, D. | 1925, Dec. |
| *Beaumont, Tex.* | B. A. Steinhagen, D. | 1924, Apr. | Newport, R. I. | P. J. Boyle, N. P. | 1925, Jan. |
| Binghamton, N.Y. | T. A. Wilson, R. | 1923, Dec. | Norwich, Conn. | M. R. Waters, D. | 1924, June |
| *Birmingham, Ala.* | D. E. McLenden, D. | 1925, Nov. | *Oakland, Cal.* | J. L. Davis, N. P. | 1923, June |
| *Bloomington, Ill.* | Commission, N. P. | 1923, May | *Ogden, Utah* | Frank Francis, N. P. | 1923, Dec. |
| Boston, Mass. | J. M. Curley, N. P. | 1926, Feb. | *Omaha, Neb.* | J. C. Dahlman, N. P. | 1924, Apr. |
| Bridgeport, Conn | F. Atwater, D. | 1923, Nov. | Oswego, N. Y. | M. P. Neal, R. | 1923, Dec. |
| *Buffalo, N. Y.* | F. X. Schwab, R. | 1925, Dec. | Pasadena, Cal. | SevenCityDirect., N.P. | 1923, May |
| *Burlington, Vt.* | J. H. Jackson, D. | 1923, Apr. | *Passaic, N. J.* | J. H. McGuire, N. P. | ..... |
| Cambridge, Mass | E. W. Quinn, N. P. | 1924, Jan. | Paterson, N. J. | F. J. Van Noort, D. | 1923, Dec. |
| Camden, N. J. | F. S. Van Hart, R. | 1925, Dec. | Pensacola, Fla. | J. H. Bayliss, D. | 1925, June |
| Canton, Ohio | C. C. Curtis, R. | 1923, Dec. | Peoria, Ill. | V. P. Michel, R. | 1923, May |
| Charleston, S. C. | John P. Grace | 1923, Dec. | Philadelphia, Pa. | J. H. Moore, R. | 1924, Jan. |
| Clarkston, W. Va. | Grant P. Hall, R. | 1923, May | *Phoenix, Ariz.* | City Manager, N. P. | ..... |
| *Chattanooga, Tenn* | A. W. Chamliss, D. | 1923, May | Pittsburgh, Pa. | W. A. Magee, R. | 1925, Dec. |
| *Cheyenne, Wyo.* | Ed. P. Taylor, I. | 1923, Dec. | Port Huron, Mich | J. V. French, N. P. | ..... |
| Chicopee, Mass. | J. M. Grise, R. | 1923, Dec. | *Portland, Ore.* | Geo. L. Baker, N. P. | 1925, June |
| Chicago, Ill. | W. H. Thompson | 1923, Apr | Providence, R. I. | J. A. Gainer, D. | 1925, Jan. |
| Cincinnati, Ohio. | G. P. Carrell | 1925, Dec. | *Raleigh, N. C.* | T. B. Eldridge, N. P. | 1923, May |
| Clarksburg, W. Va | Council, N. P. | 1923, July | *Reading, Pa.* | J. K. Stauffer, R. | 1924, Jan. |
| Cleveland, Ohio. | Fred Kohler, Ind. R. | 1923, Dec. | Richmond, Va. | G. Ainslie, D. | 1924, Sept. |
| Columbus, Ohio. | J. J. Thomas, R. | 1924, Dec. | Rochester, N. Y. | C. D. Van Zandt, R. | 1923, Dec. |
| Concord, N. H. | H.E.Chamberlain, N.P. | 1924, Jan. | Rock Island, Ill. | H. M. Schriver, N. P. | 1923, Apr. |
| *Dallas, Tex.* | S. R. Aldredge, N. P. | 1923, May | Rome, N. Y. | W. B. Reid | 1923, Dec. |
| *Dayton, Ohio* | F. B. Hale, R. | 1925, Dec. | Sacramento, Cal. | City Council, N. P. | ..... |
| Denver, Col. | D. C. Bailey, R. | 1923, June | St. Louis, Mo. | H. W. Kiel, R. | 1925, Apr. |
| *Des Moines, Iowa.* | C. M. Garver, N. P. | 1924, Mar. | St. Paul, Minn. | A. E. Nelson, R. | 1923, June |
| Detroit, Mich. | ..... | 1923, Dec. | *Saginaw, Mich.* | B. N. Mercer, N. P. | 1923, Apr. |
| Dubuque, Iowa. | O. E. Carr, N. P. | Indefinite. | Salem, Mass. | D. J. Sullivan, C. | 1924, Jan. |
| *Duluth, Minn.* | S. G. Sniveley | 1925, Apr. | *Salt Lake City* | C. C. Neslen, N. P. | 1923, Dec. |
| East Cleveland, O | Commission, N. P. | ..... | *San Antonio, Tex.* | O. B. Black, D. | 1923, May |
| Elgin, Ill. | A. E. Price, C. | 1923, May | *San Francisco, Cal* | J. S. Rolph, Jr, N. P. | 1924, Jan. |
| Elmira, N. Y. | J. N. Wood, R. | 1923, Dec. | San Diego, Cal. | J. L. Bacon, N. P. | 1923, May |
| El Paso, Tex. | Chas. Davis, D. | 1923, Apr. | San Jose, Cal. | Council of Seven, N.P. | ..... |
| *Erie, Pa.* | M. B. Kitts, D. | 1924, Jan. | Scranton, Pa. | John Durkan, D. | 1926, Jan. |
| Evanston, Ill. | H. F. Pearsons, R. | 1923, May | Seattle, Wash. | E. J. Brown, N. P. | 1924, May |
| Fall River, Mass. | E. P. Talbot, N. P. | 1925, Jan. | Somerville, Mass. | J. M. Webster, R. | 1924, Jan. |
| Flint, Mich. | W. H. McKeighan, R. | ..... | *Spokane, Wash.* | C. A. Fleming, N. P. | 1923, May |
| Fort Wayne, Ind. | W. W. Hosey, D. | ..... | Springfield, Mass. | E. F. Leonard, R. | 1925, Jan. |
| Fort Worth, Tex. | E. R. Cockrell, D. | 1923, Apr. | *Springfield, Ohio.* | City Commission, N.P | ..... |
| *Galveston, Tex.* | Chas. A. Keenan, N. P | ..... | *Stockton, Cal.* | D. P. Eicke, N. P. | 1924, Dec. |
| *GrandRapids, Mich* | Wm. Oltman, N. P. | 1923, Apr. | Syracuse, N. Y. | J. h. Walrath, D. | 1923, Dec. |
| *Hackensack, N. J.* | Spencer Baldwin, R. | 1923, Dec. | *Tacoma, Wash.* | A. V. Fawcett, N. P. | 1926, June |
| *Harrisburg, Pa.* | G. A. Hoverter, R. | 1923, Dec. | *Tampa, Fla.* | Chas. H. Brown, D. | ..... |
| Hartford, Conn. | R. J. Kinsella, D. | ..... | Toledo, Ohio | B. F. Brough, N. P. | 1923, Dec. |
| *Haverhill, Mass.* | Dr. Wm. McFee, N. P. | 1925, Dec. | *Topeka, Kan.* | H. J. Corwine, D. | 1923, Apr. |
| *Helena, Mont.* | Percy Witmer, N. P. | ..... | *Trenton, N. J.* | F. W. Donnelly, N. P | 1923, May |
| Highl'ndPk., Mich | Commission, N. P. | 1924, Apr. | Troy, N. Y. | J. W. Fleming, D. | 1923, Dec. |
| *Hoboken, N. J.* | P. R. Griffins, D. | 1923, May | Utica, N. Y. | F. J. Douglas, R. | 1923, Dec. |
| *Houston, Tex.* | O. F. Holcombe, D. | 1923, Apr. | Waltham, Mass | G. R. Beal, N. P. | 1924, Jan. |
| Indianapolis, Ind. | Samuel L. Shank, R. | 1926, Jan. | Washington, D. C | Federal Com'n, N. P. | ..... |
| Jackson, Mich. | Commission, N. P. | ..... | Waterbury, Conn. | F. P. Gullfoile, D. | 1923, Dec. |
| Jacksonville, Fla. | J. W. Martin, D. | 1923, June | *Watertown, N. Y.* | R. E. Cahill, Fus. | 1923, Dec. |
| *Jersey City, N. J.* | Frank Hague, D. | 1925, June | W. Hoboken, N. J. | W. G. Weller, R. | 1923, Dec. |
| *Kansas City, Kan* | H. B. Burton, D. | 1923, Apr. | W. New York, N. J. | J. V. McNeil, D. | ..... |
| Kansas City, Mo. | F. H. Cromwell, D. | 1924, Apr. | West Orange, N. J. | S. H. Rollinson, N. P. | 1926, May |
| Lansing, Mich. | J. W. Ferle, N. P. | 1924, Apr. | Wheeling, W. Va. | Council of Eleven, N.P. | 1923, June |
| Little Rock, Ark. | B. D. Dickhouse, D. | 1923, Apr. | *Wichita, Kan.* | Committee of Five, N.P | ..... |
| Los Angeles, Cal. | G. E. Cryer, R. | 1923, July | Wichita Falls, Tex. | F. Collier, N. P. | 1924, Mar. |
| Louisville, Ky. | H. Quin, R. | 1925, Nov. | *Wilkes-Barre, Pa.* | D. L. Hart, D. | ..... |
| Lynchburg, Va. | F. Haipen, D. | 1924, Aug. | Wilmington, Del | LeRoy Harvey, R. | 1923, June |
| Lynn, Mass. | H. A. McPhetras, N.P | 1923, Dec. | Wins'n-Sal'm, N.C | J. G. Janes, D. | 1923, Apr. |
| Madison, Wis. | I. Milo Kittelson, N.P. | ..... | Yonkers, N. Y. | W. M. Taussig, D. | 1923, Dec. |
| *Manchester, N. H.* | Geo. E. Trudel, R. | 1924, Dec. | Youngstown, O. | G. L. Oles, I. | 1923, Dec. |

## STATISTICS OF THE CHIEF CITIES IN THE UNITED STATES.

| Name. | Incorp. | Population. | Square Miles. | Debt. | Realty Ass'd Valuation. | Tax Levy. | Budget. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| Akron, Ohio | 1836 | 208,435 | 25.0 | 7,280,596 | 350,196,260 | 1,439,550 | 2,000,000 |
| Alameda, Cal | 1854 | 28,806 | 25.05 | 926,275 | 25,901,831 | 433,584 | 524,118 |
| Albany, N. Y. | 1686 | 113,334 | 19.10 | 8,633 228 | 210,648,000 | 3.44 per 1,000 | 4,782,321 |
| Albuquerque, N. M. | 1885 | 15,157 | 2.34 | 405,000 | 16,445,423 | .012 per 1,000 | 218,000 |
| Allentown, Pa. | 1867 | 73,502 | 10.0 | 968,899 | 70,091,325 | 560,731 | 750,499 |
| Amsterdam, N. Y. | 1830 | 33,524 | 6.04 | 1,172,638 | 21,744,190 | 541,945 | 541,945 |
| Annapolis, Md. | 1708 | 11,214 | 1.0 | 161,081 | 5,500,000 | 67,891 | 103,890 |
| Asheville, N. C. | 1797 | 28,504 | 11.5 | 2,292,647 | 57,580,000 | 575,800 | 985,000 |
| Atlanta, Ga. | 1847 | 200,616 | 27.0 | ..... | ..... | ..... | ..... |
| Atlantic City, N. J. | 1854 | 50,707 | 16.6 | 9,715,712 | 141,181,448 | 4,325,216 | 5,378,590 |
| Auburn, N. Y. | 1848 | 36,192 | 8.5 | 1,302,623 | 26,687,918 | 46.27 per 1,000 | 893,507 |
| Austin, Tex. | 1839 | 34,876 | 18.0 | 2,091,500 | 34,482,641 | 596,882 | 1,247,241 |
| Baltimore, Md. | 1796 | 733,826 | 91.93 | 70,933,170 | 597,938,892 | 153,829,843 | 56,088,760 |
| Bangor, Me. | 1820 | 25,978 | 32.9 | 1,055,359 | 19,465,217 | 939,513 | 952,908 |
| Battle Creek, Mich. | 1859 | 36,164 | 9.0 | 1,100,000 | 38,000,000 | 485,000 | 587,000 |
| Beaumont, Tex. | 1881 | 40,422 | 10.4 | 1,959,821 | 45,056,810 | 900,000 | 945,000 |
| Bay City, Mich. | 1871 | 47,554 | 12.0 | 1,423,875 | 41,404,256 | 1,300,000 | 1,700,000 |
| Bayonne, N. J. | 1869 | 76,754 | 3.75 | 2,216,806 | 121,371,617 | 3,775,879 | 2,941,717 |
| Bellingham, Wash. | 1903 | 25,585 | 20.7 | 435,000 | 15,600,000 | 14 mills | 155,000 |
| Berkeley, Cal. | 1878 | 56,036 | 17.0 | 13,794 | 56,741,060 | 1.60 per 1,000 | 844,104 |
| Bethlehem, Pa. | 1918 | 50,358 | 17.8 | 3,530,180 | 62,932,684 | 881,700 | 881,700 |
| Binghamton, N. Y. | 1867 | 66,800 | 10.0 | 2,417 051 | 60,721,588 | 2,254,088 | 2,866,832 |
| Birmingham, Ala. | 1871 | 178,806 | 50.0 | 9,251,758 | 145,000,000 | 2,200,000 | ..... |
| Bloomington, Ill. | 1850 | 28,725 | 4.67 | 242,744 | 15,000,000 | 386,000 | 865,000 |
| Boise, Idaho | 1863 | 21,393 | 5.25 | 346,117 | 18,953,753 | 284,306 | 284,306 |
| Boston, Mass. | 1822 | 748,060 | 47.81 | 84,462,603 | 1,450,000,000 | 39,000,000 | 47,000,000 |
| Bridgeport, Conn. | 1836 | 143,555 | 14.6 | 10,901,475 | 240,149,209 | 30.80 per 1,000 | 6,843,529 |
| Brookline, Mass. | 1705 | 37,748 | 6.81 | 1,103,060 | 109,480,800 | 2,007,758 | 3,743,891 |
| Buffalo, N. Y. | 1832 | 506,775 | 42.161 | 48,146,349 | 674,846,570 | 18,720,244 | 26,893,783 |
| Butte, Mont. | 1879 | 41,611 | 5.2 | 1,646,000 | 91,720,000 | .21 per 1,000 | ..... |
| Cambridge, Mass. | 1846 | 109,694 | 6.535 | 5,202,872 | 127,274,600 | 29.10 per 1,000 | 4,716,805 |
| Camden, N. J | 1828 | 116,309 | 5.03 | 5,606,590 | 108,713,440 | 2,545,775 | 3,755,775 |
| Canton, Ohio | 1853 | 87,091 | 12.6 | 5,262,602 | 90,704,240 | 1,384,680 | 1,600,000 |
| Cedar Rapids, Iowa | 1850 | 45,566 | 13.13 | ..... | ..... | ..... | ..... |
| Charleston, S. C. | 1783 | 67,957 | 5.85 | 8,049,017 | 28,522,107 | 2,511,134 | 2,511,134 |
| Charleston, W. Va. | 1863 | 39,608 | 6.0 | 1,602,398 | 96,447,152 | 548,097 | 581,805 |
| Chattanooga, Tenn. | 1839 | 57,895 | 6.87 | 5,892,469 | 87,628,275 | 1,250,000 | 1,250,000 |
| Cheyenne, Wyo. | 1869 | 13,829 | 4.0 | 1,115,000 | 13,575,027 | .0131 per 1,000 | 280,000 |
| Chicago, Ill. | 1837 | 2,701,705 | 200.37 | 62,331,670 | 3,415,635,240 | 35,267,798 | 39,582,437 |
| Chicopee, Mass. | 1890 | 36,214 | 32.0 | ..... | ..... | 26.50 per 1,000 | 1,234,245 |
| Cincinnati, Ohio | 1802 | 401,247 | 72.0 | 42,324,763 | 760,000,000 | 21.84 per 1,000 | 9,905,000 |
| Clarksburg, W. Va. | 1793 | 27,869 | 4.69 | 1,090,000 | 36,830,000 | 245,000 | 300,000 |
| Cleveland, Ohio | 1836 | 796,841 | 56.65 | 83,492,677 | 973,505,860 | 10,424,160 | 12,739,165 |
| Clifton, N. J. | 1917 | 26,470 | 11.7 | 468,732 | 23,000,000 | 320,803 | 397,703 |
| Colorado Springs, Colo. | 1872 | 30,105 | 9.21 | 1,739,735 | 7,154,458 | 514,741 | 771,761 |
| Columbia, S. C. | 1786 | 37,524 | 9.0 | 2,019,000 | 120,000,000 | 26 mills | 1,290,000 |
| Columbus, Ohio | 1816 | 237,031 | 23.92 | 20,929,871 | 380,000,000 | .26 per 1,000 | 2,715,000 |
| Concord, N. H. | 1853 | 22,167 | 64.0 | 689,476 | 17,721,835 | 673,192 | 800,000 |
| Council Bluffs, Iowa | 1853 | 36,162 | 16.4 | 904,000 | 25,304,348 | 417,138 | 400,000 |
| Covington, Ky. | 1834 | 57,121 | 5.96 | 2,652,409 | 36,125,394 | 800,000 | 1,400,000 |
| Cumberland, Md. | 1816 | 29,837 | 3.68 | 2,406,935 | 29,000,000 | 338,600 | 338,600 |
| Dallas, Tex. | 1856 | 158,976 | 23.5 | ..... | ..... | ..... | ..... |
| Davenport, Iowa | 1839 | 56,727 | 16.24 | 1,689,000 | 56,139,000 | 925,000 | 1,000,000 |
| Dayton, Ohio | 1841 | 152,559 | 16.62 | 7,916,302 | 141,813,580 | 29.60 per 1,000 | 2,158,755 |
| Denver, Colo. | 1859 | 256,491 | 59.25 | 135,000 | 239,126,000 | 27½ mills | 4,800,000 |
| Des Moines, Iowa | 1851 | 126,468 | 54.0 | 9,586,310 | 172,706,840 | 1.64 | 3,535,968 |
| Detroit, Mich. | 1824 | 993,678 | 81.0 | 102,145,000 | 1,954,000,000 | 43,000,000 | 68,000,000 |
| Dubuque, Iowa | 1837 | 39,141 | 9.5 | 956,000 | 39,000,000 | 580,000 | 608,000 |
| Duluth, Minn | 1887 | 98,917 | 67.37 | 2,416,142 | 53,230,703 | 1,601,164 | 1,601,050 |
| East Cleveland, Ohio | 1908 | 27,292 | 3.0 | 1,252,635 | 40,747,808 | 253,000 | 253,000 |
| East Orange, N. J. | 1899 | 50,710 | 4.0 | 2,949,322 | 70,658,934 | 2,300,000 | 1,304,430 |
| East St. Louis, Ill. | 1865 | 66,767 | 13.55 | 1,173,000 | 24,409,469 | 535,241 | 622,723 |
| Easton, Pa. | 1887 | 33,813 | 3.49 | 553,619 | 33,138,992 | 16½ mills | 425,000 |
| Elgin, Ill. | 1854 | 27,454 | 7.25 | None. | 19,857,798 | 175,000 | 372,000 |
| Elizabeth, N. J. | 1855 | 95,783 | 9.79 | 3,272,698 | 87,956,773 | 3,276,555 | 3,733,969 |
| Elmira, N. Y | 1864 | 45,393 | 7.41 | 2,684,500 | 50,000,000 | 585,304 | 585,102 |
| El Paso, Tex. | 1873 | 77,560 | 13.64 | 6,249,000 | 97,504,560 | 1,940,340 | 2,254,778 |
| Erie, Pa. | 1851 | 93,372 | 20.0 | 3,147,697 | 115,454,613 | 33 mills | 1,429,542 |
| Evanston, Ill. | 1892 | 37,234 | 7.57 | 258,100 | 22,114,631 | 589,401 | 989,901 |
| Evansville, Ind. | 1847 | 85,264 | 10.5 | 1,979,100 | 122,850,050 | 79 per 100 | 855,425 |
| Everett, Mass. | 1892 | 40,120 | 3.61 | 1,211,319 | 44,285,575 | 1,406,129 | 1,004,064 |
| Everett, Wash. | 1893 | 27,644 | 10.0 | 717,235 | 15,402,906 | 18.6 mills | 244,349 |
| Fall River, Mass. | 1854 | 120,485 | 41.89 | 6,386,905 | 192,158,798 | ..... | 4,950,814 |
| Fitchburg, Mass. | 1872 | 41,029 | 28.18 | 1,947,552 | 37,325,750 | 1,715,602 | 1,777,371 |
| Flint, Mich. | 1855 | 91,599 | 30.0 | 5,697,700 | 135,500,000 | 5,000,000 | 3,700,000 |
| Fort Wayne, Ind. | 1839 | 86,549 | 15.8 | 873,000 | 155,000,000 | .665 per 1,000 | 850,000 |
| Fort Worth, Tex. | 1873 | 106,482 | 32.0 | 8,471,000 | 89,000,000 | 2.14 per 1,000 | 1,000,000 |
| Galveston, Tex. | 1839 | 44,255 | 7.79 | ..... | 55,000,000 | ..... | ..... |
| Geneva, N. Y. | 1897 | 14,648 | 5.31 | 612,344 | 14,218,834 | 142,188 | 202,000 |
| Gloversville, N. Y. | 1890 | 22,075 | 4.3 | 984,418 | 21,147,612 | 673,091 | 673,091 |
| Grand Rapids, Mich. | 1850 | 137,634 | 18.0 | 3,277,668 | 210,556,986 | 27.34 | 2,249,537 |
| Hackensack, N. J. | 1868 | 17,667 | 4.17 | 1,071,414 | 19,749,097 | 960,676 | 705,228 |
| Harrisburg, Pa. | 1860 | 75,917 | 6.25 | 2,506,850 | 65,993,570 | †857,969 | 1,245,928 |
| Hartford, Conn. | 1784 | 138,036 | 17.43 | 6,246,178 | 233,334,419 | 5,510,482 | 7,033,565 |
| Haverhill, Mass. | 1870 | 53,884 | 34.35 | 1,162,729 | 51,457,525 | 1,950,000 | 2,016,000 |
| Hazleton, Pa. | 1892 | 32,277 | 6.0 | 848,500 | 21,941,439 | 336,800 | 533,565 |
| Helena, Mont. | 1881 | 12,037 | 9.0 | ..... | 7,825,000 | 22 mills | ..... |
| Highland Park, Mich. | 1918 | 46,499 | 4.0 | 2,200,000 | 136,000,000 | 1,000,000 | 1,000,000 |
| Hoboken, N. J. | 1855 | 68,166 | 1.0 | 8,543,489 | *94,802,224 | 3,850,280 | 2,931,034 |
| Holyoke, Mass. | 1873 | 60,203 | 22.79 | 1,794,000 | 78,897,220 | 2,425,701 | 2,629,440 |
| Houston, Tex. | 1837 | 138,276 | 36.0 | 12,000,000 | 187,000,000 | 4,635,000 | 4,000,000 |
| Hudson, N. Y. | 1785 | 11,745 | 4.0 | 523,083 | 5,230,831 | 238,592 | 231,000 |
| Huntington, W. Va. | 1871 | 50,177 | 12.75 | 620,000 | 90,000,000 | .30 per 100 | 600,000 |
| Indianapolis, Ind. | 1831 | 314,194 | 44.34 | 7,161,500 | 597,900,000 | .976 per 100 | 6,045,780 |
| Ithaca, N. Y. | 1888 | 17,004 | 5.0 | 1,050,973 | 19,562,850 | 585,544 | 771,224 |

*Includes Personal. †Exclusive of School Tax.

STATISTICS OF THE CHIEF CITIES IN THE UNITED STATES—*Continued.*

| NAME. | Incorp. | Population. | Square Miles. | Debt. | Realty Ass'd Valuation. | Tax Levy. | Budget. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars* | *Dollars.* | *Dollars.* |
| Jackson, Mich | 1857 | 48,374 | 9.0 | 1,907,104 | 60,219,485 | 749,581 | 1,091,841 |
| Jacksonville, Fla | 1832 | 91,558 | 15.35 | 6,731,651 | 59,686,820 | 1,411,063 | 2,271,770 |
| Jersey City, N. J. | 1870 | 298,103 | 19.2 | 27,071,626 | 412,715,131 | 16,060,102 | 17,318,565 |
| Johnstown, Pa. | 1889 | 67,327 | 5.76 | 2,262,141 | 71,639,710 | 32 mills | 694,617 |
| Joliet, Ill. | 1872 | 38,442 | 4.5 | 123,030 | 8,939,780 | 325,000 | 600,000 |
| Joplin, Mo. | 1873 | 29,902 | 14.16 | 340,012 | 35,000,000 | 1.20 per 1,000 | 260,800 |
| Kansas City, Kan. | 1886 | 101,177 | 20.25 | 8,611,656 | 118,930,426 | 1,412,811 | 1,412,811 |
| Kansas City, Mo. | 1853 | 324,410 | 60.0 | 7,480,129 | 240,474,730 | 3,760,000 | 5,365,000 |
| Knoxville, Tenn. | 1792 | 77,818 | 26.5 | 8,608,885 | 100,000,000 | 1,500,000 | 1,500,000 |
| La Crosse, Wis. | 1856 | 30,421 | 11.25 | 1,028,350 | 41,766,067 | ..... | ..... |
| Lakewood, Ohio | 1911 | 41,732 | 6.0 | 4,308 708 | 79,053,820 | 500,000 | 400,000 |
| Lancaster, Pa. | 1818 | 53,150 | 4.0 | 750,000 | 1,000,000 | 350,000 | 600,000 |
| Lansing, Mich | 1859 | 57,327 | 11.25 | 4,992,300 | 122,030,016 | 1,037,450 | 1,037,450 |
| Lawrence, Mass. | 1853 | 94,270 | 7.25 | 3,609,344 | 107,614,755 | 3,108,483 | 3,441,006 |
| Lima, Ohio | 1842 | 41,326 | 7.71 | 3,489,845 | 31,212,150 | 355,756 | 355,756 |
| Lincoln, Neb. | 1871 | 54,948 | 12.41 | 794,900 | 62,501,100 | 7 mills | 579,300 |
| Little Falls, N. Y. | 1895 | 13,029 | 4.0 | 635,000 | 7,590,507 | 228,095 | 228,095 |
| Little Rock, Ark. | 1837 | 65,142 | 17.0 | 1,125,000 | 38,255,195 | 5 mills | 724,559 |
| Lockport, N. Y. | 1865 | 21,308 | 7.0 | 1,126,630 | 14,203,237 | 690,162 | 909,545 |
| Los Angeles, Cal. | 1850 | 576,673 | 36.62 | 34,073,537 | 784,418,770 | 7,844,188 | 11,236,900 |
| Louisville, Ky. | 1828 | 234,891 | 40.0 | 12,971,900 | 264,000,000 | 2.00 per 1,000 | 5,000,000 |
| Lowell, Mass. | 1836 | 112,759 | 14.1 | 5,855,291 | 128,610,023 | 4,222,172 | 3,673,275 |
| Lynn, Mass. | 1850 | 99,148 | 11.33 | 4,361,257 | 87,434,880 | 3,576,018 | 4,665,000 |
| Lynchburg, Va. | 1786 | 30,070 | 7.5 | 2,835,893 | ..... | 1.95 per 1,000 | 1,000,000 |
| Macon, Ga. | 1823 | 52,995 | 10.0 | 1,600,000 | 30,000,000 | 650,000 | 760,000 |
| Madison, Wis. | 1856 | 38,378 | 6.42 | 2,804,136 | 85,128,085 | 2,553,842 | 3,350,000 |
| Malden, Mass. | 1882 | 49,103 | 4.8 | 812,900 | *46,126,279 | 33.7 per 1,000 | 1,408,000 |
| Manchester, N. H. | 1846 | 78,384 | 33.9 | 3,675,568 | 64,578,167 | 2,811,577 | 1,772,184 |
| Mansfield, Ohio | 1828 | 27,824 | 4.73 | 775,340 | 44,517,870 | 988,297 | 1,219,247 |
| Meriden, Conn. | 1867 | 29,867 | 16.0 | 805,000 | 43,536,624 | 23 per 1,000 | 1,089,698 |
| Miami, Fla. | 1896 | 29,571 | 15.0 | 4,500,000 | 61,000,000 | 1,100,000 | 735,000 |
| Middletown, N. Y. | 1888 | 18,420 | 3.63 | 664,703 | 21,898,683 | 404,050 | ..... |
| Milwaukee, Wis. | 1846 | 457,147 | 25.87 | 23,965,500 | 681,198,160 | 25,550,997 | 24,006,925 |
| Minneapolis, Minn. | 1867 | 380,582 | 53.29 | 38,000,000 | 208,178,035 | 17,000,000 | 15,000,000 |
| Mobile, Ala. | 1814 | 60,777 | 17.93 | 3,525,000 | 46,609,624 | 350,000 | 350,000 |
| Moline, Ill. | 1872 | 30,734 | 7.84 | 171,500 | 12,000,000 | 350,000 | 500,000 |
| Montclair, N. J. | 1894 | 28,810 | 6.16 | 4,546,308 | 5,725,851 | 1,990,871 | 1,986,553 |
| Mount Vernon, N. Y. | 1892 | 42,726 | 4.5 | ..... | 76,860,765 | 2,169,264 | 2,169,464 |
| Muskegon, Mich. | 1873 | 36,570 | 6.65 | 1,870,000 | 40,223,950 | 611,000 | 611,000 |
| Nashua, N. H. | 1853 | 28,379 | 32.02 | 1,048,943 | 38,000,000 | 960,000 | 1,000,000 |
| Nashville, Tenn. | 1848 | 118,342 | 18.0 | 10,881,000 | 86,900,970 | 1,933,598 | 2,410,000 |
| Newark, N. J. | 1836 | 414,524 | 24.0 | 34,586,578 | 542,419,578 | 19,654,326 | 22,104,716 |
| Newark, Ohio | 1860 | 26,718 | 4.0 | 1,206,935 | 40,000,000 | 275,000 | 315,000 |
| New Bedford, Mass. | 1847 | 121,217 | 19.39 | 11,220,281 | 112,839,725 | 5,334,190 | 5,919,000 |
| New Britain, Conn. | 1871 | 59,316 | 12.0 | 3,970,598 | 91,000,000 | 1,962,536 | 1,955,665 |
| New Brunswick, N. J. | 1863 | 32,779 | 4.5 | 1,251,833 | 24,909,270 | 1,372,398 | 853,131 |
| Newburgh, N. Y. | 1865 | 30,366 | 4.0 | 987,371 | 26,578,976 | 512,000 | 555,469 |
| New Castle, Pa. | 1869 | 44,938 | 8.2 | 525,587 | 29,157,550 | 307,700 | 339,150 |
| New Haven, Conn. | 1784 | 162,537 | 17.9 | 7,210,650 | 242,000,000 | 6,000,000 | 6,000,000 |
| New London, Conn. | 1784 | 25,688 | 6.0 | 2,259,542 | 33,686,841 | 926,393 | 1,202,380 |
| New Orleans, La. | 1805 | 387,219 | 264.56 | 38,594,954 | 295,873,805 | 31.20 per 1,000 | ..... |
| Newport, R. I. | 1784 | 30,255 | 7.3 | 1,680,444 | 47,598,250 | 1,241,006 | 1,422,578 |
| New Rochelle, N. Y. | 1899 | 36,213 | 10.2 | 2,945,335 | 81,350,123 | 2,334,748 | 3,045,844 |
| New York, N. Y. | 1653 | 5,620,048 | 318.0 | 1,067,082,137 | 10,249,991,835 | 286,077,228 | 350,601,570 |
| Norfolk, Va. | 1845 | 115,777 | 9.32 | 16,179,832 | 122,850,600 | 4,797,314 | 4,780,692 |
| North Adams, Mass. | 1895 | 22,282 | 21.0 | 836,645 | 15,332,376 | 806,275 | 700 000 |
| Oakland, Cal. | 1852 | 216,361 | 60.24 | 6,655,490 | 180,000,000 | 2.25 per 1,000 | 4,711,890 |
| Ogden, Utah | 1851 | 32,804 | 16.0 | 1,900,000 | 15,000,000 | 350,000 | 550,000 |
| Olean, N. Y. | 1893 | 20,506 | 5.5 | 961,892 | 14,386,551 | 372,855 | 372,855 |
| Omaha, Neb. | 1857 | 191,601 | 37.8 | 24,000,000 | 326,162,292 | 21.75 per 1,000 | 7,094,000 |
| Orange, N. J. | 1872 | 33,268 | 2.2 | 1,965,546 | 30,827,170 | 1,148,761 | 1,146,355 |
| Pasadena, Cal. | 1886 | 45,354 | 15.88 | 2,128,975 | 86,820,850 | 1.07 per 1,000 | 2,500,000 |
| Passaic, N. J. | 1873 | 63,841 | 3.0 | 3,818,217 | 71,255,009 | 1,737,678 | 2,042,262 |
| Paterson, N. J. | 1851 | 135,875 | 5.38 | 7,000,000 | 120,224,775 | 33.34 per 1,000 | 2,221,529 |
| Pawtucket, R. I. | 1886 | 64,248 | 8.94 | 5,686,188 | 60,916,700 | 2,034,858 | 2,178,371 |
| Pensacola, Fla. | 1832 | 31,035 | 9.75 | ..... | 17,018,841 | ..... | 482,289 |
| Peoria, Ill. | 1843 | 76,121 | 9.3 | 345,250 | 29,388,811 | 802,008 | 996,000 |
| Petersburg, Va. | 1784 | 31,012 | 4.0 | 1,884,000 | 28,000,000 | 600,000 | 850,000 |
| Philadelphia, Pa. | 1854 | 1,823,779 | 129.71 | 160,795,950 | 2,053,768,000 | 2.70 per 1,000 | 56,000,000 |
| Phoenix, Ariz. | 1881 | 29,053 | 5.16 | 3,643,000 | 46,289,885 | 689,664 | 965,414 |
| Pittsburgh, Pa. | 1816 | 588,343 | 45.65 | 40,523,947 | 868,117,930 | 12,648,412 | 18,558,099 |
| Port Huron, Mich. | 1857 | 25,944 | 7.9 | 1,307,230 | 29,124,750 | 496,752 | 495,000 |
| Portland, Me. | 1832 | 69,272 | 21.57 | 3,781,771 | 95,000,000 | 3,236,216 | 3,480,716 |
| Portland, Ore. | 1850 | 258,288 | 66.3 | 30,782,426 | 241,850,435 | 3,750,559 | 3,743,139 |
| Providence, R. I | 1832 | 237,595 | 18.28 | 13,486,723 | 299,789,210 | 9,484,091 | 10,561,151 |
| Pueblo, Colo. | 1870 | 43,050 | 14.43 | 855,337 | 33,132,112 | 457,570 | 471,570 |
| Quincy, Mass. | 1889 | 47,876 | 16.7 | 2,066,700 | ..... | 2,178,994 | 1,747,679 |
| Racine, Wis. | 1849 | 58,593 | 6.13 | ..... | 80,387,279 | 2,037,233 | 1,500,000 |
| Raleigh, N. C. | 1792 | 24,418 | 7.0 | 1,250,000 | 38,000,000 | 400,000 | 516,000 |
| Reading, Pa. | 1847 | 107,784 | 9.5 | 2,192,631 | 98,844,778 | 1,136,447 | 1,220,765 |
| Richmond, Ind. | 1840 | 26,765 | 2.0 | 454,500 | 36,000,000 | 310,500 | 307,946 |
| Richmond, Va. | 1782 | 171,667 | 26.0 | 13,384,867 | 173,351,000 | 4,459,780 | 7,225,917 |
| Rochester, N.Y. | 1834 | 295,750 | 32.0 | 26,609,460 | 359,180,248 | 6,599,083 | 14,051,083 |
| Rock Island, Ill. | 1841 | 35,177 | 10.5 | 173,884 | 12,746,133 | 215,752 | 756,461 |
| Rockford, Ill. | 1880 | 65,651 | 10.82 | 920,600 | 43,877,755 | 1,795,721 | 3,000,000 |
| Rome, N. Y. | 1870 | 26,341 | 74.0 | 941,394 | 21,055,442 | 372,460 | 372,460 |
| Sacramento, Cal. | 1849 | 65,908 | 13.92 | 6,034,290 | 76,974,188 | 1,351,148 | 1,663,559 |
| Saginaw, Mich. | 1857 | 61,903 | 16.0 | 2,650,000 | 65,850,000 | 1,054,650 | 1,400,000 |
| St. Joseph, Mo. | 1851 | 77,939 | 13.75 | 95,708 | 45,653,000 | 1.20 per 1,000 | 844,000 |
| St. Louis, Mo. | 1823 | 772,897 | 61.50 | 12,123,388 | 977,000,000 | $25 per $1,000 | 21,213,379 |
| St. Paul, Minn. | 1854 | 234,698 | 54.44 | 12,962,722 | 152,098,087 | 7,035,450 | 9,000,000 |
| Salem, Mass. | 1836 | 42,529 | 8.0 | 2,407,000 | 37,285,255 | 33.10 per 1,000 | 2,021,343 |
| Salt Lake City, Utah | 1860 | 118,110 | 51.9 | 6,258,500 | 187,847,149 | 2,141,457 | 2,887,363 |
| San Antonio, Tex. | 1837 | 161,379 | 36.0 | 6,500,000 | 170,000,000 | 2,961,000 | 2,300,000 |
| San Diego, Cal. | 1850 | 74,683 | 78.0 | 10,531,447 | 100,436,644 | 2.10 per 1,000 | 2,627,25 |

* Includes personal.

STATISTICS OF THE CHIEF CITIES IN THE UNITED STATES—*Continued.*

| NAME. | Incorp. | Population. | Square Miles. | Debt. | Realty Ass'd Valuation. | Tax Levy. | Budget. |
|---|---|---|---|---|---|---|---|
| | | | | *Dollars.* | *Dollars.* | *Dollars.* | *Dollars.* |
| San Francisco, Cal..... | 1850 | 506,676 | 46.5 | 71,117,200 | 855,139,105 | 3.45 per 1,000 | 24,892,678 |
| San Jose, Cal..... | 1851 | 39,642 | 8.75 | 590,000 | 24,864,950 | 450,000 | 544,111 |
| Savannah, Ga..... | 1789 | 83,252 | 6.8 | 3,784,231 | 51,899,696 | 1,682,972 | 1,850,000 |
| Schenectady, N. Y..... | 1798 | 88,723 | 8.07 | 6,599,269 | 74,133,596 | 3,059,024 | 3,957,844 |
| Scranton, Pa..... | 1866 | 137,783 | 20.3 | 1,519,277 | 102,691,420 | .0297 per 1,000 | 1,786,812 |
| Seattle, Wash..... | 1869 | 315,312 | 89.57 | 15,540,532 | 202,101,867 | 6,319,290 | 18,299,933 |
| Shreveport, La..... | 1839 | 43,874 | 13.25 | 3,693,000 | 50,423,110 | .00775 | 625,000 |
| Sioux City, Iowa..... | 1857 | 71,227 | 45.0 | 1,189,000 | 96,337,676 | 1,079,900 | 1,371,000 |
| Somerville, Mass..... | 1872 | 93,091 | 4.22 | 1,211,000 | 78,386,700 | 2,827,354 | 2,974,705 |
| South Bend, Ind..... | 1865 | 70,983 | 16.0 | 1,400,000 | 131,000,000 | 2.37 per 1,000 | 940,000 |
| Spokane, Wash..... | 1881 | 104,437 | 39.25 | 4,144,347 | 36,733,258 | 1,525,659 | 2,157,229 |
| Springfield, Ill..... | 1840 | 59,183 | 8.64 | ..... | ..... | ..... | ..... |
| Springfield, Mass..... | 1852 | 129,614 | 39.9 | 9,436,853 | 211,532,760 | 6,972,267 | 7,792,605 |
| Springfield, Mo..... | 1855 | 39,631 | 7.81 | 778,210 | 29,832,700 | 18.50 per 1,000 | 721,444 |
| Springfield, Ohio..... | 1850 | 60,840 | 11.7 | 2,402,000 | 93,457,477 | 385,000 | 722,000 |
| Stockton, Cal..... | 1852 | 40,296 | 9.0 | 2,000,000 | 59,000,000 | 1.30 per 1,000 | 1,000,000 |
| Syracuse, N. Y..... | 1847 | 171,717 | 20.0 | 14,631,452 | 149,000,000 | 5,233,785 | 5,181,966 |
| Tacoma, Wash..... | 1884 | 96,965 | 53.0 | 4,519,987 | 60,862,484 | 1,408,901 | 2,043,232 |
| Tampa, Fla..... | 1887 | 51,608 | 8.6 | 2,359,098 | 30,039,236 | 48,500 | 942,677 |
| Taunton, Mass..... | 1864 | 37,137 | 50.0 | 1,941,207 | 27,056,385 | 1,095,516 | 1,468,657 |
| Toledo, Ohio..... | 1837 | 243,164 | 31.74 | 24,305,050 | 468,316,000 | 7,912,233 | ..... |
| Topeka, Kan..... | 1857 | 50,022 | 16.0 | 2,425,178 | 71,350,167 | 1 06 per 1,000 | 805,603 |
| Trenton, N. J..... | 1745 | 119,289 | 10.0 | 4,711,605 | 111,223,625 | 4,316,912 | 4,846,796 |
| Troy, N. Y..... | 1816 | 72,013 | 9.0 | 4,865,427 | 63,658,050 | 1,841,000 | 2,621,000 |
| Utica, N. Y..... | 1832 | 94,156 | 18.5 | 4,495,124 | 93,394,730 | 2,621,003 | 3,432,766 |
| Waltham, Mass..... | 1884 | 30,915 | 13.56 | 772,135 | 30,446,900 | 1,058,437 | 1,300,000 |
| Washington, D. C..... | 1802 | 437,571 | 69.24 | 1,000,000 | 472,874,209 | ..... | 25,000,000 |
| Waterbury, Conn..... | 1853 | 91,715 | 29.0 | 6,396,000 | 131,247,165 | 4,000,000 | 4,652,205 |
| Watertown, N. Y..... | 1869 | 31,285 | 8.70 | 2,400,000 | 37,000,000 | 1,093,312 | 1,400,000 |
| Weehawken, N. J..... | 1855 | 14,485 | 1.5 | 389,303 | 28,391,831 | 765,867 | 470,445 |
| West Hoboken, N. J.... | 1855 | 70,074 | 1.5 | 1,500,000 | 100,000,000 | 1,262,000 | 1,078,927 |
| West New York, N. J... | 1898 | 29,926 | 1.08 | 1,256,548 | 31,438,314 | 961,301 | 1,119,301 |
| West Orange, N. J..... | 1922 | 15,573 | 10.0 | 713,442 | 19,267,548 | 864,090 | 455,129 |
| Wheeling, W.Va..... | 1836 | 56,208 | 11.8 | 4,134,936 | 85,007,830 | 750,000 | 950,000 |
| Wichita, Kan..... | 1870 | 72,217 | 10.0 | 2,100,717 | 81,506,602 | 1,000,000 | 1,000,000 |
| Wichita Falls, Tex..... | 1893 | 40,079 | 10.6 | 2,555,798 | 33,000,000 | 511,500 | 676,820 |
| Wilkes-Barre, Pa..... | 1871 | 73,833 | 4.6 | 1,732,583 | *82,000,000 | 10 mills | 892,166 |
| Wilmington, Del..... | 1832 | 110,168 | 11.33 | 7,381,650 | 114,591,250 | 2,170,762 | 2,642,212 |
| Woonsocket, R. I..... | 1888 | 43,496 | 8.8 | 5,424,934 | 56,255,450 | 1,106,697 | 1,461,317 |
| Worcester, Mass..... | 1848 | 179,754 | 38.41 | 6,904,900 | 203,881,800 | 6,385,817 | 9,622,903 |
| Yonkers, N. Y..... | 1872 | 100,176 | 21.0 | 13,997,460 | 180,281,818 | 5,769,184 | 8,301,624 |

*Includes personal.

## POSTMASTERS OF PRINCIPAL CITIES OF THE UNITED STATES.

(As of December 5, 1922).

| POST OFFICE. | Postmaster. | Date of Appointment. | POST OFFICE. | Postmaster. | Date of Appointment. |
|---|---|---|---|---|---|
| Seattle, Wash..... | Edgar Battle.... | Oct. 14, 1918 | Albany, New York.. | P. S. Kling..... | July 19, 1922 |
| New York, N. Y.... | E. M. Morgan.. | June 23, 1921 | Columbus, Ohio.... | S. A. Kinnear... | Aug. 5, 1919 |
| Chicago, Illinois.... | A. C. Lueder.... | Aug. 24, 1921 | Syracuse, N. Y..... | James McLusky. | April 18, 1922 |
| Brooklyn, N. Y..... | W. C. Burton... | June 4, 1920 | Worcester, Mass.... | J. F. Healy..... | June 27, 1918 |
| St. Louis, Mo..... | Louis Alt..... | Mar. 8, 1921 | Toledo, Ohio..... | E. W. Lathrop.. | June 4, 1920 |
| Boston, Mass..... | R. M. Baker.... | Mar. 9, 1920 | Richmond, Va..... | J. Stewart Act'g. | Nov. 1, 1922 |
| Baltimore, Md..... | B. Woelper, Jr.. | Jan. 25, 1922 | New Haven, Conn.. | C. W. Birely.... | June 30, 1922 |
| San Francisco, Cal.. | J. E. Power.... | July 29, 1922 | Nashville, Tenn.... | C. M. McCabe.. | Mar. 2, 1920 |
| Cincinnati, Ohio.... | A. L. Behymer.. | June 13, 1922 | Scranton, Pa..... | M. W. Lowry... | Aug. 23, 1922 |
| Cleveland, Ohio.... | Insp. Grant B. Miller act. as postmaster. | Sept. 19, 1922 | Fall River, Mass... | James H. Hoar.. | June 4, 1920 |
| | | | Memphis, Tenn.... | Solomon Seches.. | Mar. 29, 1922 |
| Buffalo, N. Y..... | R. W. Gallagher. | Nov. 18, 1921 | Dayton, Ohio..... | L. Weimer, Act'g | July 22, 1921 |
| Pittsburgh, Pa..... | G. A. Gosser.... | Aug. 24, 1921 | Troy, New York.... | Jas. H. Burns... | Nov 21, 1918 |
| Washington, D. C.. | M. O. Chance... | Jan. 23, 1920 | Grand Rapids, Mich | C. E. Hogadone. | July 28, 1919 |
| Detroit, Michigan... | J. W. Smith.... | Mar. 22, 1922 | Reading, Pa..... | H. H. Hammer.. | Sept. 11, 1922 |
| Milwaukee, Wis.... | F. B. Schutz.... | Sept. 5, 1918 | Camden, N. J..... | Chas. H. Ellis... | Mar. 18, 1922 |
| Newark, N. J..... | Frank J. Bock... | May 12, 1921 | Trenton, N. J..... | Chas. H. Updike | Aug. 12, 1922 |
| Minneapolis, Minn.. | Arch Coleman... | Aug. 24, 1922 | Lynn, Mass..... | H. S. Cummings | Mar. 2, 1922 |
| Jersey City, N. J... | Matthias C. Ely. | Oct. 29, 1919 | Atlanta, Georgia.... | Edwin K. Large. | June 26, 1922 |
| Louisville, Ky..... | L. F. Petty..... | Mar. 14, 1922 | Wilmington, Del.... | Jas. J. English.. | Jan. 27, 1919 |
| Omaha, Neb..... | C. E. Black..... | Nov. 23, 1921 | New Orleans, La.... | Chas. Janvier... | April 9, 1920 |
| Rochester, N. Y.... | John R. Mullan. | Mar. 7, 1922 | Kansas City, Mo... | Baylis Steele.... | June 5, 1920 |
| St. Paul, Minn..... | Charles J. Moos. | Aug. 28, 1921 | Philadelphia, Pa.... | Geo. E. Kemp... | Feb. 2, 1922 |
| Providence, R. I.... | W. A. Kilton.... | Aug. 5, 1921 | Charleston, S. C.... | E. H. Jennings.. | July 24, 1922 |
| Denver, Col..... | Frank L. Dodge. | Mar. 18, 1922 | Portland, Oregon... | John M. Jones.. | Dec. 22, 1921 |
| Indianapolis, Ind... | Robt. H. Bryson | Jan. 18, 1922 | Akron, Ohio..... | Chas. W. Sparks | Oct. 20, 1921 |

## CENTRE OF NEGRO POPULATION, 1920.

The United States Department of Commerce announces that the centre of Negro population as determined by the Bureau of the Census on the basis of the fourteenth census enumeration, taken Jan. 1, 1920, is located in latitude 34°46'52" and longitude 85°30'48", being in the extreme northwestern corner of Georgia, in Dade County, about 1¾ miles north-northeast of Rising Fawn town, and that for the first time in the history of the country this centre has moved northeast, being approximately 9.4 miles further east and 19.4 miles further north in 1920 than it was in 1910.

Its former movements have all been in a southwesterly direction. In 1790 it was located 25 miles west-southwest of Petersburg, Dinwiddie County, Virginia, and one hundred years later, in 1890, it had moved southwest 463 miles to a point 15.7 miles southwest of Lafayette, Walker County, Georgia, the same county in which it was located in 1880.

Between 1890 and 1900 it crossed the State line into Alabama, its location in 1900 and again in 1910 being in DeKalb County, Alabama. Its northeastward movement after 1910 has brought it back to the State of Georgia.

The northeasterly movement of the centre of Negro population between 1910 and 1920 is due principally to the great increase in the Negro population of Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, West Virginia, Ohio, Indiana, and Michigan.

The total increase in the Negro population of the United States was 635,368 and it will be noted that the increase in the northern States mentioned was 56 per cent. of the total increase.

# Election Returns by States.

The 1922 Congressional Election Returns are to be found following Wyoming table.

## ALABAMA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Autauga | 911 | 210 | 773 | 99 | Jackson | 2,513 | 1,483 | 1,909 | 567 |
| Baldwin | 1,127 | 556 | 767 | 216 | Jefferson | 24,982 | 7,124 | 10,679 | 2,052 |
| Barbour | 1,565 | 203 | 1,235 | 45 | Lamar | 1,627 | 576 | 1,299 | 303 |
| Bibb | 1,643 | 364 | 1,247 | 217 | Lauderdale | 2,644 | 1,161 | 1,678 | 369 |
| Blount | 3,533 | 3,465 | 1,488 | 1,229 | Lawrence | 934 | 831 | 995 | 43 |
| Bullock | 877 | 2 | 743 | 4 | Lee | 1,620 | 155 | 1,369 | 42 |
| Butler | 1,298 | 153 | 1,162 | 78 | Limestone | 1,812 | 285 | 1,450 | 92 |
| Calhoun | 3,422 | 1,139 | 2,232 | 442 | Lowndes | 727 | 6 | 540 | 9 |
| Chambers | 1,993 | 322 | 1,683 | 168 | Macon | 693 | 64 | 575 | 43 |
| Cherokee | 1,968 | 1,576 | 1,136 | 508 | Madison | 2,821 | 489 | 2,206 | 215 |
| Chilton | 960 | 2,273 | 884 | 1,363 | Marengo | 1,307 | 42 | 1,491 | 19 |
| Choctaw | 1,071 | 82 | 765 | 21 | Marion | 2,461 | 1,865 | 1,328 | 807 |
| Clarke | 1,253 | 43 | 1,397 | 25 | Marshall | 4,041 | 3,879 | 1,944 | 1,183 |
| Clay | 2,165 | 2,128 | 1,198 | 677 | Mobile | 6,157 | 2,681 | 3,026 | 832 |
| Cleburne | 684 | 971 | 762 | 576 | Monroe | 1,295 | 20 | 1,029 | 17 |
| Coffee | 1,721 | 673 | 2,029 | 426 | Montgomery | 6,411 | 314 | 3,316 | 106 |
| Colbert | 1,869 | 650 | 1,132 | 352 | Morgan | 4,057 | 1,201 | 2,120 | 364 |
| Conecuh | 1,315 | 189 | 1,032 | 42 | Perry | 1,195 | 32 | 897 | 20 |
| Coosa | 1,007 | 741 | 872 | 485 | Pickens | 1,419 | 263 | 1,179 | 218 |
| Covington | 2,038 | 548 | 1,747 | 305 | Pike | 1,586 | 204 | 1,794 | 50 |
| Crenshaw | 1,411 | 310 | 1,029 | 139 | Randolph | 1,357 | 1,113 | 1,328 | 652 |
| Cullman | 2,564 | 3,492 | 1,396 | 1,351 | Russell | 671 | 29 | 752 | 3 |
| Dale | 1,386 | 768 | 1,260 | 597 | Shelby | 2,523 | 3,235 | 1,311 | 1,428 |
| Dallas | 2,702 | 78 | 1,575 | 23 | St. Clair | 1,932 | 2,561 | 990 | 851 |
| De Kalb | 3,864 | 4,852 | 1,787 | 1,190 | Sumter | 1,088 | 15 | 770 | 8 |
| Elmore | 1,763 | 335 | 1,631 | ..... | Talladega | 2,136 | 930 | 1,541 | 447 |
| Escambia | 1,455 | 178 | 985 | 108 | Tallapoosa | 2,257 | 269 | 1,892 | 129 |
| Etowah | 5,917 | 3,218 | 1,887 | 862 | Tuscaloosa | 3,427 | 491 | 2,437 | 218 |
| Fayette | 1,413 | 1,865 | 1,031 | 697 | Walker | 4,703 | 4,488 | 2,314 | 1,860 |
| Franklin | 2,092 | 2,930 | 1,044 | 984 | Washington | 575 | 85 | 500 | 32 |
| Geneva | 1,487 | 1,088 | 1,265 | 713 | Wilcox | 1,099 | 2 | 866 | 1 |
| Greene | 520 | 10 | 383 | 9 | Winston | 1,037 | 2,307 | 726 | 1,107 |
| Hale | 953 | 18 | 795 | 15 | | | | | |
| Henry | 715 | 489 | 665 | 143 | Total | 163,254 | 74,690 | 99,546 | 28,662 |
| Houston | 2,045 | 571 | 1,678 | 466 | | | | | |

Governor (1922)—Brandon, Dem., 114,798; Street, Rep., 31,561; Barber, Soc., 14,274.

PAST VOTE OF ALABAMA.

1872 (Pres.) Dem., 79,444; Rep., 90,272.
1876 (Pres.), Dem., 102,002; Rep., 68,230
1880 (Pres.), Dem., 91,185; Rep., 56,221; Greenback, 4,642.
1884 (Pres.), Dem., 93,951; Rep., 59,591; Proh., 6,112; Greenback, 873.
1888 (Pres.), Dem., 117,320; Rep., 56,197; Proh., 583.
1900 (Pres.), Dem., 96,368; Rep., 53,669; Proh., 1,407; A. F. Peop., 3,796; Soc. Dem., 928.
1902 (Gov.), Dem., 67,763; Rep., 24,421.
1904 (Pres.), Dem., 79,857; Rep., 22,472; Soc., 853; Proh., 612; Soc. L., 839; Pop., 5,051.
1906 (Gov.), Dem., 62,771; Rep., 10,002; Soc., 389.
1908 (Pres.), Dem., 74,374; Rep., 25,308; Soc., 1,399; Proh., 662; Pop., 1,568; Ind., 495.
1910 (Gov.), Dem., 77,694; Rep., 20,097; Soc., 1,042; Prog., 837.
1912 (Pres.), Dem., 82,438; Rep., 9,732; Prog., 22,680; Soc., 2,309.
1914 (U. S. Sen.), Dem., 63,389; Rep., 12,320; Prog., 4,263; Soc., 1,159.
1914 (Gov.), Dem., 64,275; Rep., 13,695; Prog., 3,795; Soc., 1,196.
1916 (Pres.), Dem., 99,409; Rep., 22,809; Proh., 1,034; Soc., 1,916.
1918 (U. S. Sen.), Dem., 54,880 (unopposed).
1920 (Pres.), Dem., 163,254; Rep., 74,690; Soc., 2,369; Proh., 757.
1920 (U. S. Sen.), Dem., 154,664; Rep., 77,337; Soc., 1,984.

## ARIZONA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Apache | 679 | 618 | 648 | 311 | Navajo | 1,078 | 1,031 | 1,240 | 574 |
| Cochise | 5,341 | 4,430 | 6,115 | 3,203 | Pima | 3,392 | 2,455 | 2,079 | 2,616 |
| Coconino | 1,342 | 781 | 1,171 | 802 | Pinal | 1,493 | 1,264 | 1,232 | 855 |
| Gila | 3,311 | 2,894 | 3,686 | 1,495 | Santa Cruz | 850 | 706 | 726 | 666 |
| Graham | 1,062 | 1,261 | 1,597 | 497 | Yavapai | 3,625 | 2,251 | 2,893 | 1,716 |
| Greenlee | 1,131 | 905 | 1,492 | 672 | Yuma | 1,606 | 1,177 | 1,322 | 727 |
| Maricopa | 11,336 | 8,825 | 7,634 | 5,747 | | | | | |
| Mohave | 996 | 722 | 1,335 | 643 | Total | 37,016 | 29,546 | 33,170 | 20,524 |

Governor (1922)—Hunt, Dem., 37,210; Campbell, Rep., 30,599.
U. S. Senator (1922)—Ashurst, Dem., 39,722; McClintock, Rep., 21,358.

PAST VOTE OF ARIZONA.

1904 (Cong.), Dem., 10,494; Rep., 9,521; Pro., 108.
1906 (Cong.), Dem., 11,101; Rep., 8,909; Soc., 2,078.
1908 (Cong.), Dem., 11,727; Rep., 12,435; Soc., 1,912; Pro., 106.
1911 (Gov.), Dem., 11,123; Rep., 9,166.
1912 (Pres.), Dem., 10,324; Rep., 3,021; Prog., 6,949; Soc., 3,163; Pro., 265.
1912 (Cong.), Dem., 11,389; Rep., 3,110; Prog., 5,819; Soc., 3,034; Pro., 193.
1914 (Gov.), Dem., 25,226; Rep., 17,602; Prog., 5,206; Soc., 2,973.
1916 (Pres.), Dem., 33,170; Rep., 20,524; Soc., 3,174; Pro., 1,153.
1916 (Gov.), Dem., 27,946; Rep., 27,976.
1918 (Gov.), Dem., 25,588; Rep., 25,927; Soc., 444.
1920 (Pres.), Dem., 29,546; Rep., 37,016; Soc., 222; Proh., 4; Farm. Lab., 15.
1920 (U. S. Sen.), Dem., 29,169; Rep., 35,893.
1920 (Gov.), Dem., 31,682; Rep., 37,249.

## ARKANSAS.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Arkansas | 1,156 | 1,199 | 1,119 | 613 | Lincoln | 888 | 988 | 889 | 477 |
| Ashley | 1,317 | 725 | 1,519 | 463 | Little River | 852 | 618 | 842 | 364 |
| Baxter | 707 | 484 | 914 | 318 | Logan | 1,840 | 1,871 | 2,018 | 1,183 |
| Benton | 2,837 | 1,916 | 3,106 | 1,293 | Lonoke | 1,711 | 697 | 2,180 | 515 |
| Boone | 1,106 | 646 | 1,413 | 598 | Madison | 1,463 | 1,715 | 1,456 | 1,332 |
| Bradley | 1,146 | 540 | 1,159 | 314 | Marion | 744 | 371 | 781 | 274 |
| Calhoun | 736 | 337 | 933 | 275 | Miller | 1,544 | 836 | 1,418 | 402 |
| Carroll | 1,344 | 1,138 | 1,512 | 1,034 | Mississippi | 1,809 | 1,050 | 1,249 | 417 |
| Chicot | 887 | 489 | 570 | 474 | Monroe | 834 | 912 | 741 | 508 |
| Clark | 1,507 | 1,020 | 1,975 | 678 | Montgomery | 430 | 611 | 939 | 432 |
| Clay | 1,775 | 1,536 | 1,950 | 973 | Nevada | 1,220 | 1,292 | 1,376 | 657 |
| Cleburne | 678 | 459 | 865 | 271 | Newton | 486 | 328 | 550 | 675 |
| Cleveland | 809 | 475 | 1,128 | 230 | Ouachita | 1,307 | 1,141 | 1,405 | 970 |
| Columbia | 2,052 | 857 | 2,074 | 721 | Perry | 738 | 592 | 975 | 439 |
| Conway | 1,791 | 1,243 | 1,401 | 1,032 | Phillips | 1,965 | 868 | 1,466 | 552 |
| Craighead | 2,079 | 1,058 | 1,957 | 543 | Pike | 847 | 921 | 1,178 | 605 |
| Crawford | 1,861 | 1,497 | 1,622 | 1,195 | Poinsett | 1,201 | 663 | 1,174 | 511 |
| Crittenden | 905 | 167 | 563 | 91 | Polk | 1,208 | 1,173 | 1,242 | 448 |
| Cross | 845 | 457 | 927 | 252 | Pope | 2,080 | 1,117 | 2,148 | 783 |
| Dallas | 1,139 | 658 | 1,150 | 527 | Prairie | 962 | 841 | 1,061 | 655 |
| Desha | 931 | 360 | 960 | 369 | Pulaski | 6,505 | 3,711 | 6,008 | 2,593 |
| Drew | 1,397 | 773 | 1,627 | 838 | Randolph | 1,412 | 652 | 1,553 | 458 |
| Faulkner | 1,971 | 1,148 | 2,031 | 817 | Saline | 1,206 | 403 | 1,567 | 231 |
| Franklin | 1,502 | 769 | 1,679 | 582 | Scott | 771 | 751 | 1,369 | 514 |
| Fulton | 763 | 502 | 1,096 | 392 | Searcy | 594 | 1,070 | 629 | 919 |
| Garland | 1,614 | 1,419 | 1,678 | 1,057 | Sebastian | 3,852 | 2,492 | 3,719 | 1,366 |
| Grant | 619 | 230 | 957 | 190 | Sevier | 1,234 | 599 | 1,265 | 244 |
| Greene | 1,865 | 1,074 | 2,292 | 533 | Sharp | 995 | 400 | 972 | 251 |
| Hempstead | 2,259 | 1,752 | 2,103 | 1,238 | St. Francis | 1,252 | 903 | 960 | 395 |
| Hot Spring | 1,061 | 910 | 1,429 | 645 | Stone | 516 | 367 | 682 | 298 |
| Howard | 1,452 | 1,208 | 1,317 | 545 | Union | 1,763 | 491 | 1,691 | 273 |
| Independence | 1,546 | 1,076 | 1,987 | 762 | Van Buren | 1,440 | 1,381 | 1,272 | 743 |
| Izard | 838 | 495 | 1,267 | 285 | Washington | 2,637 | 2,118 | 2,922 | 1,625 |
| Jackson | 1,575 | 1,130 | 1,351 | 476 | White | 2,083 | 1,341 | 2,823 | 673 |
| Jefferson | 2,670 | 1,048 | 2,173 | 923 | Woodruff | 1,049 | 943 | 935 | 438 |
| Johnson | 1,579 | 992 | 1,479 | 571 | Yell | 1,925 | 1,042 | 2,099 | 781 |
| Lafayette | 953 | 501 | 891 | 365 | | | | | |
| Lawrence | 1,686 | 699 | 1,706 | 298 | Totals | 107,408 | 71,117 | 112,282 | 47,135 |
| Lee | 1,108 | 354 | 848 | 353 | | | | | |

Governor (1922)—McRae, Dem., 99,917; Grabiel, Rep., 28,055.

### PAST VOTE OF ARKANSAS.

1872 (Pres.), Dem., 37,927; Rep., 41,073.
1874 (Cong.), Dem., 40,938; Rep., 22,787.
1876 (Pres.), Dem., 58, 083; Rep., 38,669; Gr., 289.
1878 (Cong.), Dem., 32,652; Gr., 18,967.
1880 (Pres.), Dem., 60,865; Rep., 42,549; Gr., 4,079.
1882 (Gov.), Dem., 87,675; Rep., 49,352; Gr., 10,142.
1884 (Pres.), Dem., 72,927; Rep., 50,805; Gr., 1,847.
1886 (Gov.), Dem., 90,650; Rep., 54,070; Wheel., 19,169.
1888 (Gov.), Dem., 99,229; U. L., 84,223.
1888 (Pres.), Dem., 85,962; Rep., 58,752; U. L., 10,613; Proh., 641.
1889 (Sup. Ct.), Dem., 52,925; Rep., 41,615.
1890 (Gov.), Dem., 106 267; U. L., 85,181.
1892 (Pres.), Dem., 87,834; Rep., 46,884; Pop., 11,831; Proh., 113.
1894 (Gov.), Dem., 74,809; Rep., 26,055; Pop., 24,541; Proh., 1,551.
1896 (Gov.), Dem., 91,114; Rep., 35,836; Pop., 13,990; Proh., 851.
1896 (Pres.), Dem., 110,103; Rep., 37,512; Proh., 839; Nat., 893.
1900 (Gov.), Dem., 88,637; Rep, 44,701; Pop., 3,641
1900 (Pres.), Dem., 81,142; Rep., 44,800; Pop., 972; Proh., 584; Un. R., 341.
1902 (Gov.), Dem., 77,354; Rep., 29,251; Pop., 8.345; Proh., 4,791.
1904 (Gov.), Dem., 91,991; Rep., 53,898; Proh., 2,527; Soc., 1,364.
1904 (Pres.), Dem., 64,434; Rep., 46,860; Soc., 1,816; Proh., 993; Pop., 2,318
1906 (Gov.), Dem., 102,749; Rep., 40,965; Soc., 2,169; Proh., 3,274.
1908 (Pres.), Dem., 87,015; Rep., 56,760; Soc., 5,750; Proh., 1,121; Pop., 1,026; Ind., 313.
1910 (Gov.), Dem., 111,478; Rep., 45,409; Soc., 6,787.
1912 (Gov.), Dem., 109,826; Rep., 46,440; Soc., 13,384.
1912 (Pres.), Dem., 68,838; Rep., 24,297; Prog., 21,673; Proh., 898; Soc., 8,153.
1914 (Gov.), Dem., 94,096; Rep., 30,987; Soc., 10,434.
1914 (U. S. Sen.), Dem., 33,449; Rep., 11,222.
1916 (Pres.), Dem., 112,282; Rep., 47,135; Soc., 6,998; Proh., 2,015.
1916 (Gov.), Dem., 122,041; Rep., 43,963; Soc., 9,730.
1916 (U. S. Sen.), Dem., 110,293; Rep., 48,922.
1918 (Gov.), Dem., 68,192; Soc., 4,792.
1920 (Pres.), Dem., 107,408; Rep., 71,117; Soc., 5,111; U. S. Sen., 126,477; Rep., 65,381; Gov., Dem., 123,609; Rep., 46,339.

### PAST VOTE OF CALIFORNIA.

1894 (Gov.), Dem., 111,942; Rep., 110,738; Pop., 51,304; Proh., 10,561.
1894 (Sec.), Dem., 86,443; Rep., 126,541; Pop., 49,734; Proh., 8,262; Ind., 2,405.
1896 (Pres.), Dem., 121,629; Rep., 146,170; Pop., 21,744; N. D., 2,006; Proh., 2,573; Soc. L., 1,611; Gold D., 1,730.
1898 (Gov.), Dem., 129,261; Rep., 148,354; Soc. L., 5,143; Proh., 4,297.
1900 (Pres.), Dem., 124,985; Rep., 164,755; Soc. D., 7,554; Proh., 5,024.
1902 (Gov.), Dem., 143,782; Rep., 145,332; Soc. D. 9,582; Proh., 4,636.
1904 (Pres.), Dem., 89,404; Rep., 205,226; Soc. D., 29,535; Proh., 7,380.
1906 (Gov.), Dem., 117,590; Rep., 12,589; Soc. D., 16,030; Proh., 8,141; Ind. L., 45,008.
1908 (Pres.), Dem., 127,492; Rep., 214,398; Soc. D., 28,659; Proh., 11,740; Ind., 4,278.
1910 (Gov.), Dem., 154,835; Rep., 177,191; Soc., 47,819; Proh., 5,807.
1912 (Pres.), Dem., 283,436; Rep., 3,914; Prog., 283,610; Soc., 79,201; Proh., 23,366.
1914 (Gov.), Dem., 116,121; Rep., 271,990; Prog., 460,495; Soc., 50,806; Proh., 27,342.
1916 (Pres.), Dem., 466,289; Rep., 462,516; Soc., 43,263; Proh., 27,713.
1916 (U. S. Sen.), Dem., 277,852; Rep. and Prog., 574,667; Soc., 49,341; Proh., 38,797.
1918 (Gov.), Rep., Prog. and Proh., 387,647; Ind., 251,189; Soc., 29,003.
1918 (Lt. Gov.), Dem., 259,415; Rep. and Proh., 355,247; Soc., 42,161.
1918 (Sec. St.), Rep. and Dem., 478,989; Proh., 139,475.
1920 (Pres.), Dem., 229,191; Rep., 624,992; Soc., 64,076; Pro., 25,204; U. S. Sen., Dem., 371,580; Rep., 447,835; Proh., 57,768; Soc., 36,545.

## CALIFORNIA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Alameda | 73,177 | 21,468 | 43,748 | 51,417 | Placer | 2,894 | 1,559 | 3,375 | 1,954 |
| Alpine | 64 | 6 | 23 | 60 | Plumas | 999 | 403 | 1,025 | 663 |
| Amador | 1,350 | 639 | 1,766 | 1,209 | Riverside | 9,124 | 2,798 | 4,561 | 7,152 |
| Butte | 5,409 | 2,262 | 4,888 | 3,956 | Sacramento | 15,634 | 7,150 | 14,538 | 10,696 |
| Calaveras | 1,480 | 641 | 1,524 | 1,175 | San Benito | 1,965 | 900 | 1,688 | 1,440 |
| Colusa | 1,645 | 907 | 1,998 | 1,011 | San Bernardino | 12,518 | 5,620 | 9,398 | 11,932 |
| Contra Costa | 9,041 | 3,483 | 6,092 | 5,731 | San Diego | 19,826 | 8,478 | 16,815 | 16,978 |
| Del Norte | 596 | 279 | 471 | 499 | San Francisco | 96,105 | 32,637 | 78,225 | 63,093 |
| El Dorado | 1,636 | 726 | 1,755 | 1,068 | San Joaquin | 12,003 | 6,487 | 11,454 | 7,861 |
| Fresno | 14,621 | 9,613 | 14,241 | 11,707 | San Luis Obispo | 4,123 | 1,606 | 3,539 | 2,854 |
| Glenn | 1,916 | 902 | 1,797 | 1,342 | San Mateo | 7,205 | 1,958 | 4,485 | 5,207 |
| Humboldt | 6,528 | 1,778 | 4,103 | 5,786 | Santa Barbara | 6,970 | 2,586 | 5,198 | 4,453 |
| Imperial | 4,699 | 2,022 | 3,273 | 2,694 | Santa Clara | 19,565 | 6,485 | 14,185 | 16,592 |
| Inyo | 1,195 | 682 | 966 | 846 | Santa Cruz | 5,286 | 1,957 | 4,511 | 4,228 |
| Kern | 7,079 | 6,095 | 9,566 | 5,611 | Shasta | 2,108 | 1,028 | 2,828 | 2,008 |
| Kings | 2,806 | 1,604 | 2,905 | 2,221 | Sierra | 506 | 158 | 594 | 360 |
| Lake | 993 | 571 | 1,164 | 791 | Siskiyou | 2,909 | 1,502 | 3,447 | 2,059 |
| Lassen | 1,582 | 643 | 1,323 | 877 | Solano | 7,102 | 2,954 | 5,678 | 3,536 |
| Los Angeles | 178,117 | 55,661 | 114,070 | 135,554 | Sonoma | 10,377 | 4,070 | 8,377 | 9,733 |
| Madera | 1,779 | 1,145 | 1,880 | 1,323 | Stanislaus | 7,038 | 3,055 | 5,490 | 4,401 |
| Marin | 5,375 | 1,688 | 3,789 | 4,328 | Sutter | 1,862 | 636 | 1,543 | 1,211 |
| Mariposa | 484 | 320 | 802 | 451 | Tehama | 2,462 | 1,079 | 2,534 | 1,739 |
| Mendocino | 4,443 | 1,789 | 3,371 | 3,494 | Trinity | 622 | 285 | 661 | 124 |
| Merced | 3,457 | 1,537 | 2,637 | 2,132 | Tulare | 9,136 | 4,837 | 7,299 | 6,845 |
| Modoc | 992 | 555 | 1,222 | 768 | Tuolumne | 1,285 | 659 | 1,584 | 1,057 |
| Mono | 170 | 56 | 158 | 137 | Ventura | 5,231 | 1,305 | 2,835 | 3,980 |
| Monterey | 4,817 | 1,771 | 3,878 | 3,599 | Yolo | 3,375 | 1,787 | 2,922 | 2,334 |
| Napa | 4,448 | 1,444 | 3,088 | 3,914 | Yuba | 2,012 | 696 | 1,980 | 1,530 |
| Nevada | 2,055 | 747 | 2,548 | 1,586 | | | | | |
| Orange | 12,797 | 3,502 | 6,474 | 10,609 | Totals | 624,992 | 229,191 | 466,289 | 462,516 |

Governor (1922)—Woolwine, Dem., 347,603; Richardson, Rep., 576,297; Horr, Soc., 36,731.

U. S. Senator (1922)—Pearson, Dem., 215,688; Johnson, Rep., 564,356; Needham, Proh., 65,240; Sinclair, Soc., 50,323.

California, in 1922, voted to enforce the Prohibition Amendment and the Volstead act. The State also voted for a Soldier Bonus.

Osteopaths and chiropractors, in 1922, in California, won their fight to obtain separate examining boards.

## COLORADO.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Adams | 2,538 | 1,617 | 2,120 | 1,165 | La Plata | 1,687 | 1,458 | 2,590 | 1,029 |
| Alamosa | 1,090 | 953 | 1,308 | 488 | Larimer | 5,633 | 2,709 | 4,868 | 2,798 |
| Arapahoe | 2,805 | 1,697 | 2,652 | 1,444 | Las Animas | 4,757 | 4,217 | 5,300 | 3,511 |
| Archuleta | 704 | 390 | 830 | 473 | Lincoln | 1,828 | 983 | 1,702 | 1,129 |
| Baca | 1,594 | 107 | 1,294 | 826 | Logan | 3,150 | 1,916 | 2,679 | 1,422 |
| Bent | 1,528 | 905 | 1,473 | 833 | Mesa | 3,642 | 3,154 | 4,394 | 2,223 |
| Boulder | 6,483 | 4,226 | 7,419 | 3,986 | Mineral | 184 | 147 | 278 | 135 |
| Chaffee | 1,527 | 1,244 | 2,546 | 864 | Moffat | 1,287 | 597 | 740 | 512 |
| Cheyenne | 820 | 359 | 802 | 558 | Montezuma | 946 | 755 | 1,458 | 425 |
| Clear Creek | 771 | 517 | 1,289 | 474 | Montrose | 2,197 | 1,500 | 2,571 | 1,315 |
| Conejos | 1,587 | 892 | 1,721 | 928 | Morgan | 2,920 | 1,121 | 2,371 | 1,541 |
| Costilla | 780 | 787 | 1,028 | 579 | Otero | 2,733 | 2,700 | 3,963 | 2,678 |
| Crowley | 1,345 | 769 | 1,160 | 847 | Ouray | 706 | 443 | 961 | 399 |
| Custer | 540 | 290 | 539 | 403 | Park | 504 | 328 | 674 | 372 |
| Delta | 2,557 | 1,725 | 2,817 | 1,612 | Phillips | 1,175 | 468 | 795 | 532 |
| Denver | 42,742 | 21,551 | 43,029 | 23,185 | Pitkin | 474 | 407 | 915 | 263 |
| Dolores | 192 | 154 | 251 | 46 | Prowers | 2,659 | 1,247 | 2,168 | 1,683 |
| Douglas | 958 | 561 | 820 | 612 | Pueblo | 9,687 | 7,921 | 10,710 | 6,545 |
| Eagle | 854 | 667 | 1,136 | 397 | Rio Blanco | 777 | 456 | 702 | 468 |
| Elbert | 1,639 | 687 | 1,230 | 951 | Rio Grande | 1,696 | 996 | 1,756 | 886 |
| El Paso | 9,426 | 5,112 | 8,381 | 7,159 | Rout | 1,878 | 1,244 | 1,972 | 849 |
| Fremont | 2,952 | 2,259 | 3,395 | 2,257 | Saguache | 1,179 | 733 | 1,254 | 681 |
| Garfield | 1,914 | 1,472 | 2,479 | 1,139 | San Juan | 332 | 291 | 693 | 214 |
| Gilpin | 420 | 194 | 763 | 407 | San Miguel | 925 | 685 | 1,325 | 578 |
| Grand | 660 | 562 | 624 | 378 | Sedgwick | 834 | 385 | 519 | 529 |
| Gunnison | 1,064 | 1,024 | 1,618 | 736 | Summit | 400 | 389 | 717 | 268 |
| Hinsdale | 146 | 64 | 178 | 94 | Teller | 1,562 | 1,047 | 3,515 | 1,693 |
| Huerfano | 2,590 | 2,298 | 2,632 | 2,027 | Washington | 2,099 | 1,066 | 1,748 | 989 |
| Jackson | 388 | 120 | 331 | 157 | Weld | 10,347 | 5,226 | 8,600 | 5,395 |
| Jefferson | 3,632 | 1,983 | 3,368 | 2,040 | Yuma | 2,673 | 1,278 | 2,466 | 1,436 |
| Kioawa | 839 | 515 | 936 | 723 | | | | | |
| Kit Carson | 1,857 | 803 | 1,571 | 1,030 | Total | 173,248 | 104,936 | 178,816 | 102.308 |
| Lake | 1,295 | 950 | 2,672 | 993 | | | | | |

Governor (1922)—Sweet, Dem., 136,543; Griffith, Rep., 132,667.

### PAST VOTE OF COLORADO.

1912 (Pres.), Dem., 114,223; Rep., 58,386; Prog., 72,306; Soc., 16,418; Proh., 5,063; Soc. L., 475.

1912 (Gov.), Dem., 114,044; Rep., 63,061; Prog., 66,132; Soc., 16,194.

1912 (U. S. Sen.), Dem., 102,037; Rep., 98,728; Prog., 27,072; Soc., 13,943; Soc. L., 11,433.

1914 (Gov.), Dem., 95,640; Rep., 129,096; Prog., 33,320; Soc., 10,516.

1916 (Pres.), Dem., 178,816; Rep., 102,308; Soc., 10,049; Proh., 2,793; Prog., 409.

1916 (Gov.), Dem., 151,962; Rep., 117,723; Soc., 12,495; Lib., 3,025.

1918 (Gov.), Dem., 102,397; Rep., 112,693; Soc., 5,249.

1920 (Pres.), Dem., 104,936; Rep., 173,298; Proh., 2,807; F.-Lab., 3,016; Soc., 8,046.

1920 (Gov.), Dem., 108,738; Rep., 174,488; F.-Lab. and Soc., 9,702;

1920 (U. S. Sen.), Dem., 112,890; Rep., 156,577; F.-Lab., 9,041; Ind., 8,665.

## CONNECTICUT.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Hartford | 54,046 | 30,287 | 24,398 | 23,265 | Litchfield | 14,405 | 6,938 | 6,183 | 7,288 |
| New Haven | 65,938 | 37,977 | 30,416 | 30,175 | Middlesex | 8,447 | 4,170 | 3,765 | 4,524 |
| New London | 17,422 | 9,209 | 8,322 | 8,283 | Tolland | 5,135 | 2,308 | 2,032 | 2,758 |
| Fairfield | 55,251 | 24,761 | 20,873 | 25,962 | | | | | |
| Windham | 8,594 | 5,071 | 3,797 | 4,259 | Total | 229,238 | 120,721 | 99,786 | 106,514 |

Governor (1922)—Fitzgerald, Dem., 148,641; Templeton, Rep., 170,221.
U. S. Senator (1922)—Spellacy, Dem., 147,276; McLean, Rep., 169,524.

PAST VOTE OF CONNECTICUT.

1912 (Pres.), Dem., 74,561; Rep., 68,324; Soc., 10,056; Prog., 34,129; Proh., 2,068; Soc. L., 1,260.
1914 (Gov.) Dem., 73,888; Rep., 91,262; Soc., 5,914; Proh., 8,030; Soc. L., 633.
1916 (Pres.), Dem., 99,786; Rep., 106,514; Soc., 5,179; Proh., 1,789; Soc. L., 606.
1916 (Gov.), Dem., 96,787; Rep., 109,293; Soc., 5,300; Proh., 1,803; Soc. L., 621.
1916 (U. S. Sen.), Dem., 98,649; Rep., 107,020; Soc., 5,279; Proh., 1,768; Soc. L., 619.
1918 (Gov.), Dem., 76,773; Rep., 84,891.
1920 (Pres.), Dem., 120,721; Rep., 229,238; Soc., 10,350; Proh., 1,771; Soc. L., 1,491; F.-L., 1,947.
1920 (U. S. Sen.), 131,824; Rep., 216,792.
1920 (Gov.), Dem., 119,912; Rep., 230,732; Soc., 10,154; Soc. L., 1,517; F.-L., 1,896.

## DELAWARE.

| | PRESIDENTIAL VOTE, 1920. | | | | PRESIDENTIAL VOTE, 1916. | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | New Castle. | Kent. | Sussex. | Total. | | New Castle. | Kent. | Sussex. | Total. |
| Democratic | 24,252 | 7,211 | 8,548 | 39,911 | Democratic | 14,894 | 4,210 | 5,649 | 24,753 |
| Republican | 36,600 | 6,511 | 9,747 | 52,858 | Repub. & Prog. | 16,166 | 3,813 | 6,032 | 26,011 |

U. S. Senator (1922)—Bayard, Dem., 37,304; du Pont, Rep., 36,979; Stephens, Forward Party, 608.

PAST VOTE OF DELAWARE.

1910 (Treas.), Dem., 21,107; Rep., 21,686.
1912 (Pres.), Dem., 22,631; Rep., 15,997; Soc., 556; Prog., 8,886; Proh., 623.
1912 (Gov.), Dem., 21,460; Rep., 22,745; Soc., 556; Prog., 3,019; Proh., 623.
1916 (Pres.), Dem., 24,753; Rep., 26,011; Soc., 480; Proh., 566.
1916 (Gov.), Dem., 24,053; Rep., 26,648; Soc., 490.
1916 (U. S. Sen.), Dem., 25,434; Rep., 22,925; Prog., 2,361; Soc., 490.
1918 (U. S. Sen.), Dem., 20,113; Rep., 21,519.
1920 (Pres.), Dem., 39,911; Rep., 52,858; Soc., 988; Proh., 986; Ind., 93; Single Tax, 93.
1920 (Gov.), Dem., 41,038; Rep., 51,895.

## FLORIDA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Alachua | 3,318 | 1,118 | 2,030 | 440 | Liberty | 423 | 20 | 280 | 57 |
| Baker | 339 | 115 | 439 | 52 | Madison | 921 | 30 | 721 | 22 |
| Bay | 818 | 551 | 725 | 279 | Manatee | 1,793 | 884 | 1,033 | 289 |
| Bradford | 1,269 | 248 | 1,302 | 153 | Marion | 2,497 | 132 | 1,567 | 462 |
| Brevard | 894 | 659 | 599 | 174 | Monroe | 979 | 510 | 730 | 345 |
| Broward | 420 | 442 | 382 | 158 | Nassau | 965 | 281 | 420 | 94 |
| Calhoun | 898 | 99 | 539 | 209 | Okaloosa | 569 | 411 | 603 | 303 |
| Citrus | 651 | 94 | 601 | 46 | Okeechobee | 237 | 58 | ..... | ..... |
| Clay | 558 | 486 | 380 | 79 | Orange | 2,099 | 1,447 | 1,261 | 415 |
| Columbia | 1,248 | 162 | 861 | 226 | Osceola | 754 | 1,035 | 511 | 453 |
| Dade | 4,381 | 3,077 | 1,654 | 629 | Palm Beach | 1,543 | 1,898 | 725 | 312 |
| De Soto | 2,496 | 1,077 | 1,755 | 385 | Pasco | 1,117 | 630 | 779 | 223 |
| Duval | 13,390 | 6,628 | 5,456 | 1,339 | Pinellas | 3,604 | 2,529 | 1,503 | 555 |
| Escambia | 3,485 | 1,127 | 2,183 | 416 | Polk | 3,918 | 1,782 | 2,574 | 575 |
| Flagler | 210 | 74 | ..... | ..... | Putnam | 1,557 | 1,181 | 879 | 416 |
| Franklin | 587 | 276 | 312 | 81 | St. John's | 1,810 | 1,221 | 1,133 | 326 |
| Gadsden | 1,922 | 38 | 875 | 57 | St. Lucie | 1,167 | 707 | 703 | 134 |
| Hamilton | 706 | 151 | 675 | 113 | Santa Rosa | 813 | 333 | 896 | 111 |
| Hernando | 624 | 132 | 446 | 38 | Seminole | 1,451 | 767 | 706 | 155 |
| Hillsborough | 7,870 | 3,772 | 4,627 | 691 | Sumter | 926 | 219 | 599 | 70 |
| Holmes | 869 | 537 | 763 | 427 | Suwanee | 1,493 | 382 | 1,209 | 56 |
| Jackson | 2,421 | 508 | 1,975 | 410 | Taylor | 568 | 128 | 547 | 51 |
| Jefferson | 754 | 239 | 646 | 104 | Volusia | 530 | 119 | 1,541 | 886 |
| La Fayette | 629 | 64 | 849 | 45 | Wakulla | 2,767 | 2,175 | 387 | 121 |
| Lake | 1,720 | 734 | 886 | 330 | Walton | 1,322 | 619 | 753 | 549 |
| Lee | 1,721 | 736 | 751 | 167 | Washington | 750 | 307 | 626 | 159 |
| Leon | 1,460 | 452 | 875 | 191 | | | | | |
| Levy | 882 | 377 | 712 | 216 | Total | 90,515 | 44,853 | 55,948 | 14,594 |

U. S. Senator (1922)—Trammell, Dem., 45,707; Lawson, Ind. Rep., 6,074; Jeffries, 165.

PAST VOTE OF FLORIDA.

1916 (Pres.), Dem., 55,984; Rep., 14,611; Proh., 4,855; Soc., 5,353.
1916 (Gov.), Dem., 30,343; Proh., 39,546; Rep., 10,333; Soc., 2,470; Ind., 193.
1916 (U. S. Sen.), Dem., 58,391; Rep., 8,744; Soc., 3,304.
1920 (Pres.), Dem., 90,515; Rep., 44,853; Soc., 5,189; Proh., 5,124; White Rep., 10,118.
1920 (U. S. Sen.), Dem., 98,957; Rep., 37,065; Soc., 3,525; White Rep., 2,847.
1920 (Gov.), Dem., 103,407; Rep., 23,788; White Rep., 2,654; Soc., 2,823.

## GEORGIA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | |
|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Atkinson | 453 | 119 | ..... | ..... |
| Appling | 313 | 196 | 413 | 44 |
| Bacon | 307 | 219 | 287 | 46 |
| Baker | 141 | 80 | 435 | ..... |
| Baldwin | 554 | 92 | 579 | 65 |
| Banks | 479 | 342 | 989 | 126 |
| Barrow | 731 | 412 | 712 | 148 |
| Bartow | 922 | 754 | 1,325 | 92 |
| Ben Hill | 543 | 232 | 627 | 8 |
| Berrien | 623 | 58 | 2,102 | 32 |
| Bibb | 2,030 | 458 | 2,018 | 201 |
| Bleckley | 262 | ..... | 362 | 6 |
| Brooks | 597 | 76 | 969 | 103 |
| Bryan | 175 | 21 | 295 | 17 |
| Bullock | 1,098 | 248 | 1,410 | 29 |
| Burke | 387 | 39 | 673 | 19 |
| Butts | 502 | 141 | 595 | 52 |
| Calhoun | 449 | 5 | 265 | 9 |
| Camden | 152 | 14 | 251 | 4 |
| Campbell | 263 | 107 | 508 | 77 |
| Candler | 673 | 68 | 442 | ..... |
| Carroll | 1,632 | 1,227 | 1,621 | 118 |
| Catoosa | 55 | 33 | 624 | 32 |
| Charlton | 157 | 28 | 169 | 52 |
| Chatham | 4,243 | 995 | 3,797 | 368 |
| Chattahoochee | 87 | 5 | 156 | 5 |
| Chattooga | 887 | 514 | 1,006 | 20 |
| Cherokee | 544 | 1,138 | 855 | 292 |
| Clarke | 1,419 | 217 | 1,036 | 113 |
| Clay | 230 | 63 | 225 | 9 |
| Clayton | 475 | 34 | 517 | 3 |
| Clinch | 294 | 77 | 374 | 53 |
| Cobb | 1,208 | 1,095 | 1,750 | 137 |
| Coffee | 426 | 230 | 2,091 | 120 |
| Colquitt | 768 | 523 | 1,305 | 53 |
| Columbia | 476 | ..... | 521 | 6 |
| Cook | 280 | 303 | ..... | ..... |
| Coweta | 1,094 | 169 | 1,179 | 85 |
| Crawford | 235 | 65 | 111 | 2 |
| Crisp | 565 | 83 | 577 | 4 |
| Dade | 494 | 114 | 616 | 25 |
| Dawson | 254 | 354 | 440 | 273 |
| Decatur | 982 | 300 | 1,147 | 35 |
| De Kalb | 1,847 | 803 | 1,690 | 12 |
| Dodge | 627 | 177 | 788 | 64 |
| Dooly | 544 | 39 | 737 | ..... |
| Dougherty | 621 | 105 | 836 | 37 |
| Douglas | 427 | 475 | 416 | 61 |
| Early | 381 | 34 | 442 | 4 |
| Echols | ..... | ..... | 173 | ..... |
| Effingham | 726 | 118 | 450 | 8 |
| Elbert | 1,247 | 187 | 1,756 | ..... |
| Emanuel | 1,444 | 190 | 1,500 | 288 |
| Evans | 432 | 16 | 334 | 34 |
| Fannin | 549 | 1,083 | 720 | 166 |
| Fayette | 231 | 80 | 494 | 25 |
| Floyd | 1,923 | 667 | 2,137 | 50 |
| Forsyth | 813 | 741 | 1,146 | 166 |
| Franklin | 889 | 447 | 1,540 | 44 |
| Fulton | 6,635 | 3,336 | 8,945 | 1,311 |
| Gilmer | 546 | 662 | 742 | 258 |
| Glascock | 232 | 83 | 126 | 8 |
| Glynn | 422 | 132 | 477 | 45 |
| Gordon | 713 | 929 | 1,010 | 190 |
| Grady | 887 | 232 | 675 | 39 |
| Greene | 631 | 178 | 676 | 53 |
| Gwinnett | 1,645 | 1,140 | 1,528 | 222 |
| Habersham | 503 | 626 | 1,032 | 48 |
| Hall | 1,475 | 852 | 1,662 | 141 |
| Hancock | 498 | 53 | 562 | 30 |
| Haralson | 438 | 1,108 | 837 | 137 |
| Harris | 398 | 9 | 550 | 23 |
| Hart | 694 | 323 | 750 | 22 |
| Heard | 461 | 14 | 439 | 11 |
| Henry | 608 | ..... | 868 | 78 |
| Houston | 723 | 39 | 805 | 52 |
| Irwin | 525 | 114 | 503 | 31 |
| Jackson | 1,069 | 334 | 1,185 | 71 |
| Jasper | 429 | 42 | 537 | 14 |
| Jeff Davis | 260 | 303 | 299 | 14 |
| Jefferson | 837 | 82 | 588 | 63 |
| Jenkins | 331 | 49 | 402 | 7 |
| Johnson | 306 | 74 | 715 | 20 |
| Jones | 87 | 31 | 398 | 27 |
| Laurens | 1,167 | 350 | 1,269 | 64 |
| Lee | 251 | 19 | 316 | 3 |
| Liberty | 303 | 175 | 245 | 26 |
| Lincoln | 509 | 3 | 333 | 5 |
| Lowndes | 1,308 | 220 | 1,870 | 60 |
| Lumpkin | 155 | 205 | 455 | 55 |
| Macon | 483 | 68 | 440 | 21 |
| Madison | 693 | 281 | 1,241 | 19 |
| Marion | 236 | 180 | 330 | 42 |
| McDuffie | 382 | 109 | 466 | 70 |
| McIntosh | 119 | 39 | 114 | 20 |
| Meriwether | 1,059 | 186 | 1,118 | 36 |
| Miller | 155 | 30 | 464 | 15 |
| Milton | 278 | 231 | 462 | 11 |
| Mitchell | 930 | 144 | 921 | 41 |
| Monroe | 837 | 83 | 721 | 52 |
| Montgomery | 169 | 148 | 1,002 | 21 |
| Morgan | 450 | 176 | 643 | 59 |
| Murray | 728 | 851 | 1,162 | 301 |
| Muscogee | 1,372 | 101 | 1,833 | 110 |
| Newton | 753 | 349 | 943 | 102 |
| Oconee | 341 | 108 | 497 | ..... |
| Oglethorpe | 844 | 42 | 657 | 18 |
| Paulding | 340 | 954 | 670 | 10 |
| Pickens | 437 | 830 | 497 | 420 |
| Pierce | 407 | 122 | 489 | 85 |
| Pike | 1,277 | 280 | 766 | 65 |
| Polk | 658 | 1,004 | 1,172 | ..... |
| Pulaski | 338 | 57 | 383 | 13 |
| Putnam | 420 | 5 | 462 | 8 |
| Quitman | 135 | 4 | 125 | 2 |
| Rabun | 312 | 147 | 633 | 87 |
| Randolph | 534 | 51 | 645 | 43 |
| Richmond | 2,656 | 511 | 2,708 | 238 |
| Rockdale | 488 | 201 | 490 | 73 |
| Schley | 235 | 53 | 222 | 2 |
| Screven | 639 | 260 | 625 | 36 |
| Spalding | 830 | 181 | 835 | 41 |
| Stephens | 415 | 252 | 500 | 15 |
| Stewart | 344 | 31 | 471 | 23 |
| Sumter | 1,076 | 296 | 1,065 | 38 |
| Talbot | 379 | 43 | 511 | 17 |
| Taliaferro | 330 | 121 | 255 | 7 |
| Tattnall | 447 | 301 | 574 | 49 |
| Taylor | 491 | 211 | 405 | 57 |
| Telfair | 1,069 | 37 | 773 | 25 |
| Terrell | 500 | 48 | 677 | 10 |
| Thomas | 1,130 | 168 | 1,298 | 42 |
| Tift | 576 | 154 | 1,034 | 43 |
| Toombs | 397 | 246 | 425 | 33 |
| Towns | 256 | 398 | 358 | 481 |
| Troup | 1,451 | 342 | 1,227 | 38 |
| Turner | 393 | 182 | 400 | 145 |
| Twiggs | 273 | 44 | 365 | 20 |
| Union | 469 | 562 | 532 | 523 |
| Upson | 957 | 170 | 734 | 18 |
| Walker | 1,347 | 1,069 | 1,883 | 439 |
| Walton | 1,189 | 123 | 1,305 | 83 |
| Ware | 901 | 215 | 1,066 | 133 |
| Warren | 402 | 83 | 292 | 47 |
| Washington | 1,134 | 118 | 954 | 18 |
| Wayne | 407 | 25 | 460 | 29 |
| Webster | 185 | 24 | 248 | 20 |
| Wheeler | 350 | 101 | 372 | 31 |
| White | 209 | 264 | 639 | 6 |
| Whitfield | 762 | 1,073 | 1,093 | 16 |
| Wilcox | 481 | 106 | 590 | 12 |
| Wilkes | 876 | 12 | 785 | 17 |
| Wilkinson | 256 | 37 | 371 | 28 |
| Worth | 626 | 214 | 690 | 31 |
| Total | 107,162 | 43,720 | 127,763 | 11,294 |

Governor (1922)—Walker, Dem., 75,019. No opposition.
U. S. Senator (1922)—George, Dem., 76,374. No opposition.

### PAST VOTE OF GEORGIA.

1888 (Pres.), Dem., 100,472; Rep., 40,453; Proh., 1,808; U. L., 136.
1892 (Pres.), Dem., 129,386; Rep., 48,305; Peoples', 42,937; Proh., 988.
1896 (Pres.), Dem., 94,232; Rep., 60,091; N. D., 2,708; Proh., 5,613.
1900 (Pres.), Dem., 81,700; Rep., 35,035; Pop., 4,584; Proh., 1,396.
1904 (Pres.), Dem., 88,331; Rep., 25,335; Pop., 23,490; Soc., 1,917; Proh., 845.
1908 (Pres.), Dem., 72,413; Rep., 41,692; Soc., 584; Pop., 16,969.
1912 (Pres.), Dem., 93,076; Rep., 5,191; Prog., 22,010; Soc., 1,026; Proh., 147.
1916 (Pres.), Dem., 127,763; Rep., 11,294; Soc., 941; Prog., 20,692.
1918 (U. S. Sen.), Dem., 53,731; Rep., 7,078.
1918 (Gov.), Dem., 59,526—no opposition.
1920 (Pres.), Dem., 107,162; Rep., 43,720; Soc., 465.

## IDAHO.

(Presidential vote, 1920.)

| Counties. | Harding, Rep. | Cox, Dem. | Counties. | Harding, Rep. | Cox, Dem. | Counties. | Harding, Rep. | Cox, Dem. |
|---|---|---|---|---|---|---|---|---|
| Ada | 8,414 | 4,173 | Clark | 594 | 184 | Lincoln | 755 | 426 |
| Adams | 682 | 390 | Clearwater | 947 | 481 | Madison | 1,882 | 979 |
| Bannock | 4,879 | 2,986 | Custer | 807 | 394 | Minidoka | 1,622 | 1,107 |
| Bear Lake | 1,831 | 1,138 | Elmore | 1,065 | 867 | Nez Perce | 2,761 | 1,548 |
| Benewah | 1,326 | 794 | Franklin | 1,612 | 899 | Oneida | 1,500 | 752 |
| Bingham | 3,293 | 1,184 | Fremont | 1,994 | 1,061 | Owyhee | 970 | 514 |
| Blaine | 1,169 | 561 | Gem | 1,404 | 832 | Payette | 1,690 | 785 |
| Boise | 582 | 373 | Gooding | 1,878 | 788 | Power | 1,155 | 560 |
| Bonner | 2,217 | 1,468 | Idaho | 2,386 | 1,127 | Shoshone | 3,112 | 1,733 |
| Bonneville | 3,259 | 1,419 | Jefferson | 1,794 | 741 | Teton | 906 | 409 |
| Boundary | 885 | 750 | Jerome | 1,737 | 784 | Twin Falls | 5,894 | 2,882 |
| Butte | 646 | 316 | Kootenai | 3,518 | 1,818 | Valley | 492 | 322 |
| Camas | 400 | 276 | Latah | 3,855 | 1,567 | Washington | 1,864 | 1,414 |
| Canyon | 5,633 | 3,375 | Lemhi | 1,289 | 649 | | | |
| Caribou | 541 | 181 | Lewis | 1,012 | 712 | Total | 88,975 | 46,579 |
| Cassia | 2,690 | 1,178 | | | | | | |

(Presidential vote, 1916.)

| Counties. | Wilson, Dem. | Hughes, Rep. | Counties. | Wilson, Dem. | Hughes, Rep. | Counties. | Wilson, Dem. | Hughes, Rep. |
|---|---|---|---|---|---|---|---|---|
| Ada | 5,207 | 5,299 | Clearwater | 678 | 839 | Madison | 1,371 | 1,132 |
| Adams | 645 | 667 | Custer | 879 | 154 | Minidoka | 1,135 | 965 |
| Bannock | 4,084 | 2,950 | Elmore | 1,099 | 692 | Nez Perce | 2,675 | 1,753 |
| Bear Lake | 1,566 | 1,229 | Franklin | 1,432 | 1,089 | Oneida | 1,326 | 1,014 |
| Benewah | 1,374 | 935 | Fremont | 2,695 | 1,654 | Owyhee | 775 | 602 |
| Bingham | 2,306 | 1,885 | Gem | 990 | 750 | Payette | ..... | ..... |
| Blaine | 1,830 | 1,239 | Gooding | 1,089 | 1,093 | Power | 1,079 | 1,024 |
| Boise | 1,048 | 1,231 | Idaho | 2,265 | 1,892 | Shoshone | 4,239 | 2,431 |
| Bonner | 2,003 | 679 | Jefferson | 1,606 | 1,002 | Teton | 726 | 650 |
| Bonneville | 2,341 | 1,745 | Kootenai | 2,855 | 2,741 | Twin Falls | 3,974 | 3,083 |
| Boundary | 653 | 601 | Latah | 2,811 | 2,777 | Valley | ..... | ..... |
| Butte | ..... | ..... | Lemhi | 1,080 | 723 | Washington | 1,802 | 1,547 |
| Camas | ..... | ..... | Lewis | 1,255 | 901 | | | |
| Canyon | 4,478 | 3,570 | Lincoln | 1,084 | 1,139 | Total | 70,054 | 55,368 |
| Cassia | 1,629 | 1,331 | | | | | | |

Governor (1922)—Alexander, Dem., 36,810; Moore, Rep., 50,538; Samuels, Prog., 40,516.

### PAST VOTE OF IDAHO.

1880 (Cong.), Dem., 3,604; Rep., 2,090.
1884 (Cong.), Dem., 1,547; Rep., 741.
1886 (Cong.), Dem., 7,416; Rep., 7,842.
1888 (Cong.), Dem., 6,404; Rep., 9,609; Ind. Rep., 1,458.
1890 (Gov.), Dem., 7,948; Rep., 10,262.
1892 (Pres.), Dem., 2; Rep., 8,709; Peoples', 10,520; Proh., 288.
1892 (Gov.), Dem., 6,769; Rep., 8,178; Proh., 264; Pop., 4,865.
1894 (Gov.), Dem., 7,057; Rep., 10,208; Pop., 7,121.
1896 (Pres.), Dem. and Pop., 23,190; Rep., 6,324; Proh., 179.
1898 (Gov.), Dem., 19,407; Rep., 13,794; Proh. 1,175.
1900 (Gov.), Dem., 28,628; Rep., 26,468; Proh., 1,031; Pop., 246.
1900 (Pres.), Dem., 29,646; Rep., 27,198; Proh., 857; Pop., 213.
1902 (Gov.), Dem., 26,021; Rep., 31,874; Proh., 489; Soc., 1,320.
1904 (Gov.), Dem., 24,192; Rep., 41,877; Soc., 4,000; Proh., 990; Pop., 679.
1904 (Pres.), Dem., 18,480; Rep., 47,783; Proh., 1,013; Soc., 4,949; Pop., 353.
1906 (Gov.), Dem., 29,496; Rep., 38,386; Proh., 1,037; Soc., 4,650.
1908 (Pres.), Dem., 36,162; Rep., 52,621; Proh., 1,986; Soc., 6,400; Ind., 210.
1908 (Cong.), Dem., 36,605; Rep., 49,983; Proh., 2,099; Soc., 6,248; Ind., 99.
1910 (Gov.), Dem., 40,856; Rep., 39,961; Pop., 5,342.
1912 (Pres.), Dem., 33,921; Rep., 32,810; Prog., 25,527; Soc., 11,960; Proh., 1,537.
1912 (Gov.), Dem., 33,992; Rep., 35,056; Prog., 24,325; Soc., 11,094; Proh., 1,028.
1914 (Gov.), Dem., 47,618; Rep., 40,349; Prog., 10,583; Soc., 7,967; Proh., 1,396.
1914 (U. S. Sen.), Dem., 41,266; Rep., 47,486; Prog., 10,321; Soc., 7,882; Proh., 1,239.
1916 (Pres.), Dem., 70,054; Rep., 55,368; Soc., 8,066; Proh., 1,127.
1916 (Gov.), Dem., 63,877; Rep., 63,305; Soc., 7,321.
1918 (Gov.), Dem., 38,499; Rep., 57,626.
1918 (U. S. Sen.), Dem., 31,018; Rep., 63,587.
1920 (Pres.), Dem., 46,579; Rep., 88,975; Proh., 9; Soc., 38; F.-L., 6.
1920 (U. S. Sen.), Dem., 64,513; Rep., 75,985.
1920 (Gov.), Dem., 38,509; Rep., 75,748.

### PAST VOTE OF ILLINOIS.

1896 (Pres.), Dem., 464,523; Pop., 1,090; Rep., 607,130; Gold D., 6,390; Proh., 9,796; Nat., 793; Soc. L., 1,147.
1898 (Treas.), Dem., 405,490; Rep., 448,940; Pop., 7,886; Proh., 11,753.
1900 (Gov.), Dem., 518,966; Rep., 580,198; S. D., 8,617; Proh., 15,643; S. L., 1,319; Pop., 1,048.
1900 (Pres.), Dem., 503,061; Rep., 597,985; S. D., 9,687; Proh., 17,623; Pop., 1,141; Soc. L., 1,373; U. C., 352.
1902 (Treas.), Dem., 360,925; Rep., 450,695; Soc., 20,167; Proh., 18,434; S. L., 8,235; Peo., 1,518.
1904 (Gov.), Dem., 334,880; Rep., 634,029; Proh., 35,390; Soc. D., 59,062; Soc. L., 4,379; Peo., 14,364; Cont., 780.
1904 (Pres.), Dem., 327,606; Rep., 632,645; S. D., 69,225; Proh., 34,770; Soc. L., 4,698; Pop., 4,698; Cont., 830.
1906 (Treas.), Dem., 271,984; Rep., 417,544; S. D., 42,002; Proh., 88,393; S. L., 3,757.
1908 (Pres.), Dem., 450,795; Rep., 629,929; Soc., 34,691; Proh., 29,343; Soc. L., 1,675; Pop., 601; Ind., 7,648; U. C., 400.
1910 (S. Treas.), Dem., 376,046; Rep., 436,486; Prog., 20,113; Soc., 49,687; Soc. L., 2,943.
1912 (Pres.), Dem., 405,048; Rep., 253,613; Prog., 386,478; Soc., 81,278; Proh., 15,710; Soc. L., 4,066.
1912 (Gov.), Dem., 443,120; Rep., 318,469; Prog., 303,401; Soc., 78,679; Proh., 15,231; S. L., 3,980.
1914 (U. S. Sen.), Dem., 373,403; Rep., 390,661; Prog., 203,027; Soc., 39,889; Proh., 6,750; S. L., 2,078.
1916 (Pres.), Dem., 950,229; Rep., 1,152,549; Soc., 61,304; Proh., 26,047; S. L., 2,488.
1916 (Gov.), Dem., 556,654; Rep., 696,535; Soc., 52,316; Proh., 15,309; S. L., 1,739.
1918 (U. S. Sen.), Dem., 426 943; Rep., 479,967; Soc., 31,067; Proh., 3,151; Soc. L., 3,268.
1920 (Pres.), Dem., 534,395; Rep., 1,420,480; Soc., 74,747; Proh., 11,216; F.-L., 49,630; Single Tax, 775; Soc. Lab., 3,471.
1920 (Gov.), Dem., 731,551; Rep., 1,243,148; Soc., 58,998; Proh., 9,876; F.-L., 56,480; Single Tax, 930; Soc. Lab., 3,020; Ind. Rep., 5,985; Co-operative, 1,260; Liberal, 357.

## ILLINOIS.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Adams | 12,852 | 7,222 | 14,268 | 11,858 | Livingston | 10 382 | 3 101 | 6,462 | 9.801 |
| Alexander | 5,287 | 3,167 | 3,940 | 5,395 | Logan | 6.957 | 3,232 | 5,726 | 5,933 |
| Bond | 3,662 | 1,533 | 2,652 | 3,626 | Macon | 16 486 | 7,917 | 11,181 | 13.997 |
| Boone | 5,386 | 496 | 1,211 | 5,181 | Macoupin | 8.700 | 5,936 | 10.012 | 8,875 |
| Brown | 1,590 | 1,886 | 2,856 | 1,579 | Madison | 19.249 | 10,149 | 16,302 | 17,594 |
| Bureau | 9,968 | 2,354 | 5,793 | *8,213 | Marion | 6,620 | 4,351 | 7,892 | 6,438 |
| Calhoun | 1,367 | 703 | 1,181 | 1,168 | Marshall | 3,734 | 1,568 | 2,593 | 3,579 |
| Carroll | 5,194 | 606 | 1,980 | 4,496 | Mason | 3,842 | 2,595 | 3,886 | 3,629 |
| Cass | 3,956 | 2,861 | 4,485 | 3,193 | Massac | 3,731 | 688 | 1,236 | 3,926 |
| Champaign | 15,573 | 5,247 | 9,601 | 14,632 | McDonough | 7.221 | 3,930 | 5,740 | 7,192 |
| Christian | 7,535 | 5,398 | 7,982 | 6,923 | McHenry | 9,885 | 1,536 | 3,278 | 9,024 |
| Clark | 5,312 | 4,181 | 5,311 | 4,936 | McLean | 16,680 | 6,411 | 11,699 | 14,988 |
| Clay | 3,683 | 2,358 | 3,574 | 3,879 | Menard | 2,882 | 1,864 | 2,689 | 2,693 |
| Clinton | 4,564 | 1,661 | 4,201 | 3,423 | Mercer | 5,531 | 1,574 | 3,430 | 5,308 |
| Coles | 8,563 | 5,811 | 7,772 | 8,314 | Monroe | 2,955 | 932 | 2,104 | 2,825 |
| Cook | 635,197 | 197,499 | 379,438 | 435,695 | Montgomery | 7,429 | 4,756 | 7,903 | 7,065 |
| Crawford | 5,188 | 4,092 | 5,570 | 5,084 | Morgan | 8,169 | 4,447 | 7,104 | 7,536 |
| Cumberland | 3,095 | 2,162 | 2,960 | 2,879 | Moultrie | 3,279 | 2,518 | 3,370 | 2,933 |
| De Kalb | 10,374 | 1,700 | 3,386 | 9,764 | Ogle | 9,322 | 1,720 | 3,297 | 8,639 |
| Dewitt | 5,001 | 3,079 | 4,460 | 4,380 | Peoria | 24,541 | 3,230 | 18,719 | 18,615 |
| Douglas | 4,885 | 2,308 | 3,768 | 4,564 | Perry | 4,598 | 2,478 | 4,445 | 4,796 |
| Dupage | 12,280 | 2,084 | 4,816 | 9,610 | Piatt | 4,283 | 1,903 | 3,028 | 4,012 |
| Edgar | 6,750 | 5,094 | 6,710 | 6,099 | Pike | 5,564 | 4,279 | 7,005 | 5 293 |
| Edwards | 3,002 | 742 | 1,389 | 2,885 | Pope | 2,486 | 687 | 1,158 | 2 924 |
| Effingham | 4,176 | 2,950 | 4,529 | 3,207 | Pulaski | 4,002 | 2,276 | 2,159 | 3,863 |
| Fayette | 5,758 | 3,824 | 5,669 | 5,316 | Putnam | 1,623 | 362 | 785 | 1.444 |
| Ford | 4,995 | 958 | 2,054 | 4,670 | Randolph | 6,180 | 3,181 | 5,403 | 5.517 |
| Franklin | 7,608 | 4,894 | 6,419 | 6,371 | Richland | 3,026 | 2,174 | 3,431 | 2,992 |
| Fulton | 9,523 | 5,293 | 8,686 | 9,735 | Rock Island | 21,908 | 5,208 | 10,914 | 16,169 |
| Gallatin | 2,184 | 2,000 | 2,920 | 1,9 5 | Saline | 6,722 | 3,500 | 5,930 | 7,061 |
| Greene | 3,685 | 3,776 | 6,150 | 3,400 | Sangamon | 21,820 | 11,000 | 17,958 | 20,900 |
| Grundy | 4,647 | 803 | 2,241 | 4,811 | Schuyler | 2,800 | 2,258 | 3,392 | 2,595 |
| Hamilton | 3,220 | 2,591 | 3,644 | 3,239 | Scott | 2,075 | 1,786 | 2,457 | 2,126 |
| Hancock | 7,379 | 5,125 | 7,711 | 6,472 | Shelby | 6,351 | 5,113 | 7,515 | 5,911 |
| Harding | 1,555 | 948 | 1,264 | 1,419 | Stark | 2,750 | 661 | 1,390 | 2,887 |
| Henderson | 2,747 | 740 | 1,611 | 2,528 | St. Clair | 21,681 | 14,032 | 22,622 | 22,134 |
| Henry | 12,379 | 2,530 | 5,220 | 11,406 | Stephenson | 9,570 | 2,772 | 5,463 | 8,620 |
| Iroquois | 9,186 | 2,429 | 4,977 | 8,503 | Tazewell | 7,679 | 3,640 | 6,743 | 6,672 |
| Jackson | 8,003 | 4,575 | 6,780 | 8,356 | Union | 3,119 | 3,660 | 5,171 | 3,135 |
| Jasper | 3,279 | 2,971 | 3,884 | 3,110 | Vermilion | 18,175 | 8,634 | 13,864 | 16,330 |
| Jefferson | 5,711 | 4,772 | 6,685 | 6,628 | Wabash | 2,871 | 2,514 | 3,264 | 2,600 |
| Jersey | 2,873 | 1,999 | 3,052 | 2,644 | Warren | 6,309 | 2,236 | 4,498 | 5,294 |
| Jo Daviess | 6,098 | 1,604 | 3,505 | 5,775 | Washington | 4,519 | 1,102 | 2,794 | 4 657 |
| Johnson | 2,972 | 1,137 | 1,822 | 3,273 | Wayne | 4,908 | 3,137 | 4,934 | 5,383 |
| Kane | 26,832 | 4,233 | 9,875 | 23,868 | White | 4,494 | 4,148 | 5 066 | 4,137 |
| Kankakee | 12.853 | 2,828 | 6,096 | 10,594 | Whiteside | 10,923 | 1,927 | 3 839 | 10,045 |
| Kendall | 3,459 | 439 | 1,008 | 3,316 | Will | 21,746 | 5,410 | 11,378 | 19.881 |
| Knox | 12,559 | 2,852 | 6,785 | 10,918 | Williamson | 10,118 | 4,728 | 8,172 | 10,262 |
| Lake | 15,712 | 2,321 | 5,447 | 12,905 | Winnebago | 19,913 | 3,355 | 6,198 | 14,893 |
| La Salle | 23,751 | 6,626 | 14,625 | 20,662 | Woodford | ..... | ..... | 3,619 | 4,273 |
| Lawrence | 4,720 | 3,707 | 5,052 | 4,481 | | | | | |
| Lee | 7,615 | 1,715 | 4,087 | 7,985 | Total | 1,420,480 | 534,395 | 950,229 | 1,152,549 |

Illinois, in 1922, voted in favor of beer and light wines, and a soldier bonus, and rejected a new Constitution.

### PAST VOTE OF INDIANA.

1872 (Pres.), Dem., 163,632; Rep., 186,147; Dem. (O' C.), 1,417.

1874 (Sec. St.), Dem., 182,154; Rep., 164,902; Gr., 16,233.

1876 (Pres.), Dem., 213,526; Rep., 208,011; Gr., 9,533.

1878 (Sec. St.), Dem., 194,491; Rep., 180,755; Gr., 39,448.

1880 (Pres.), Dem., 225,528; Rep., 232,164; Gr., 12,986.

1882 (Sec. St.), Dem., 220,924; Rep., 210,000; Gr., 13,615.

1884 (Pres.), Dem., 244,992; Rep., 238,480; Gr., 8,293; Proh., 3,028.

1886 (Lt. Gov.), Dem., 228,598; Rep., 231,922; Gr., 4,640; Proh., 9,185.

1892 (Pres.), Dem., 262,740; Rep., 255,615; Pop., 22,208; Proh., 13,050.

1894 (Sec. St.), Dem., 238,732; Rep., 283,405; Pop., 29,338; Proh., 11,157.

1896 (Pres.), Dem., 305,573; Rep., 323,754; Gold D., 2,145; Proh., 3,056; Nat., 2,268; Soc. L., 329.

1898 (Sec. St.), Dem., 269,775; Rep., 287,070; Proh., 9,871; Pop., 6,057.

1900 (Gov.), Dem., 306,868; Rep., 331,531; Proh., 13,451; Soc. D., 2,240; S. L., 644; Peo., 1,504; U. Rep., 248.

1900 (Pres.), Dem., 309,584; Rep., 333,063; Proh., 13,718; Soc. D., 2,374; Pop., 1,438; Soc. L., 663; U. R., 254.

1902 (Sec. St.), Dem., 263,555; Rep., 298,819; Soc., 7,111; Proh., 17,765; S. L., 1,756; Pop., 1,350.

1904 (Pres.), Dem., 274,345; Rep., 368,289; Soc., 12,013; Proh., 23,496; Soc. L., 1,598; Pop., 2,444.

1904 (Gov.), Dem., 274,998; Rep., 359,362; Proh., 22,690; Peo., 2,065; Soc., 10,991; S. L., 1,437.

1906 (Sec. St.), Dem., 263,526; Rep., 294,351; Soc., 7,824; Proh., 20,785 and 972; Soc. L., 1,536.

1908 (Pres.), Dem., 338,262; Rep., 348,993; Soc., 13,476; Proh., 18,045; Soc. L., 643; Pop., 1,193; Ind., 514.

1908 (Gov.), Dem., 348,493; Rep., 334,040; Soc., 11,948; Proh., 15,926; Pop., 936; S. L., 578; Ind., 383.

1910 (Sec. St.), Dem., 299,935; Rep., 287,568; Proh., 17,024; Soc., 19,632; S. L., 2,974.

1912 (Pres.), Dem., 281,890; Rep., 151,267; Prog., 162,007; Soc., 36,931; Proh., 19,249; Soc. L., 3,130.

1912 (Gov.), Dem., 275,275; Rep., 142,803; Prog., 166,054; Proh., 18,454; Soc., 35,464; Soc. L., 2,884.

1914 (U. S. Sen.), Dem., 272,249; Rep., 226,766; Prog., 108,581; Proh., 13,860; Soc., 21,719; Soc. L., 2,884.

1916 (Pres.). Dem., 334,063; Rep., 341,005; Prog., 3,898; Soc., 21,855; Proh., 16,368; Soc. L., 1,659.

1918 (Gov.), Dem., 324,617; Rep., 339,255; Prog., 4,573; Soc., 22,156; Proh., 15,454.

1918 (Sec. St.), Dem., 251,694; Rep., 301,207; Proh., 8,409; Soc., 11,297.

1918 (State Auditor), Jones, Dem., 248,381; Klauss, Rep., 296,710; De Vore, Proh., 8,060; Marlow, Soc., 10,821.

1918 (State Treas.), McCarthy, Dem., 247,769; McMurtry, Rep., 296,607; Voorhees, Proh., 8,062; Wample, Soc., 10,741.

1920 (Pres.), Dem., 511,364; Rep., 696,370; Soc., 24,703; Proh., 13,462; Single Tax, 566; F.-L., 16,499.

1920 (Gov.), Dem., 515,253; Rep., 683,253; Soc., 23,228; Proh., 12,235; F.-L., 16,626.

## INDIANA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Adams | 4,144 | 3,653 | 2,875 | 1,796 | Madison | 15,704 | 13,325 | 8,106 | 7,449 |
| Allen | 24,208 | 13,804 | 9,470 | 10,169 | Marion | 79,957 | 61,460 | 35,043 | 40,699 |
| Bartholomew | 6,585 | 5,420 | 3,441 | 3,287 | Marshall | 5,708 | 4,631 | 3,221 | 2,855 |
| Benton | 3,900 | 2,098 | 1,502 | 1,872 | Martin | 2,747 | 2,443 | 1,549 | 1,534 |
| Blackford | 3,145 | 2,555 | 1,867 | 1,595 | Miami | 7,336 | 6,259 | 3,854 | 3,390 |
| Boone | 6,650 | 6,178 | 3,513 | 3,333 | Monroe | 5,633 | 4,751 | 2,796 | 3,033 |
| Brown | 788 | 1,316 | 1,016 | 506 | Montgomery | 8,792 | 7,159 | 4,107 | 4,300 |
| Carroll | 5,006 | 4,186 | 2,401 | 2,468 | Morgan | 5,634 | 4,254 | 2,616 | 2,860 |
| Cass | 9,545 | 8,194 | 5,140 | 4,879 | Newton | 3,129 | 1,664 | 1,278 | 1,377 |
| Clark | 6,466 | 6,729 | 3,572 | 3,173 | Noble | 6,820 | 4,148 | 3,069 | 3,417 |
| Clay | 6,129 | 5,612 | 3,435 | 3,102 | Ohio | 1,177 | 1,097 | 632 | 597 |
| Clinton | 7,739 | 6,721 | 3,662 | 3,638 | Orange | 4,726 | 3,222 | 2,091 | 2,481 |
| Crawford | 2,290 | 2,213 | 1,508 | 1,201 | Owen | 2,997 | 2,948 | 1,812 | 1,585 |
| Daviess | 6,748 | 5,587 | 3,143 | 3,191 | Parke | 4,989 | 3,543 | 2,329 | 2,598 |
| Dearborn | 5,159 | 4,884 | 3,010 | 2,318 | Perry | 3,864 | 3,560 | 2,089 | 1,762 |
| Decatur | 5,516 | 3,896 | 2,374 | 2,717 | Pike | 4,069 | 3,067 | 2,212 | 2,172 |
| De Kalb | 6,514 | 4,750 | 3,372 | 2,898 | Porter | 5,570 | 1,671 | 1,871 | 2,913 |
| Delaware | 14,845 | 8,329 | 5,046 | 6,919 | Posey | 4,802 | 4,695 | 2,722 | 2,291 |
| Dubois | 3,738 | 4,238 | 3,072 | 1,492 | Pulaski | 2,740 | 2,228 | 1,387 | 1,474 |
| Elkhart | 12,297 | 5,770 | 5,723 | 5,850 | Putnam | 5,140 | 5,417 | 2,965 | 2,453 |
| Fayette | 4,742 | 3,768 | 2,074 | 2,360 | Randolph | 8,773 | 4,198 | 2,682 | 4,045 |
| Floyd | 7,669 | 7,391 | 3,850 | 3,200 | Ripley | 5,372 | 3,976 | 2,549 | 2,686 |
| Fountain | 5,218 | 4,088 | 2,437 | 2,634 | Rush | 6,113 | 4,513 | 2,569 | 2,950 |
| Franklin | 3,137 | 3,671 | 2,426 | 1,495 | Scott | 1,709 | 1,848 | 1,068 | 802 |
| Fulton | 4,618 | 3,602 | 2,231 | 2,325 | Shelby | 6,336 | 6,845 | 3,900 | 3,201 |
| Gibson | 7,498 | 6,384 | 3,765 | 3,576 | Spencer | 5,270 | 3,855 | 2,335 | 2,560 |
| Grant | 12,349 | 7,900 | 5,827 | 6,059 | Starke | 2,683 | 1,467 | 1,334 | 1,550 |
| Greene | 7,486 | 6,335 | 3,990 | 3,878 | Steuben | 4,963 | 1,676 | 1,427 | 2,118 |
| Hamilton | 7,897 | 4,280 | 2,799 | 3,951 | St. Joseph | 17,675 | 12,355 | 9,709 | 7,961 |
| Hancock | 4,422 | 4,958 | 2,779 | 2,138 | Sullivan | 5,376 | 6,160 | 3,880 | 2,630 |
| Harrison | 4,271 | 3,898 | 2,373 | 2,086 | Switzerland | 2,525 | 2,412 | 1,446 | 1,214 |
| Hendricks | 6,293 | 4,192 | 2,453 | 3,046 | Tippecanoe | 12,730 | 7,562 | 4,918 | 6,386 |
| Henry | 8,742 | 5,824 | 3,560 | 4,386 | Tipton | 4,357 | 3,956 | 2,337 | 2,166 |
| Howard | 10,379 | 5,767 | 3,934 | 4,177 | Union | 1,984 | 1,375 | 826 | 997 |
| Huntington | 8,100 | 6,506 | 3,833 | 3,767 | Vanderburg | 19,357 | 13,904 | 10,028 | 9,966 |
| Jackson | 5,069 | 5,319 | 3,312 | 2,422 | Vermillion | 4,916 | 3,218 | 2,343 | 2,616 |
| Jasper | 3,942 | 1,872 | 1,488 | 1,995 | Vigo | 18,668 | 15,739 | 11,165 | 8,934 |
| Jay | 6,089 | 4,759 | 3,070 | 3,075 | Wabash | 8,018 | 4,827 | 3,168 | 3,849 |
| Jefferson | 5,732 | 4,000 | 2,518 | 2,675 | Warren | 3,337 | 1,311 | 1,011 | 1,823 |
| Jennings | 3,404 | 2,603 | 1,686 | 1,791 | Warrick | 4,675 | 3,915 | 2,244 | 2,396 |
| Johnson | 4,863 | 5,452 | 3,108 | 2,428 | Washington | 3,708 | 4,157 | 2,414 | 1,871 |
| Knox | 10,011 | 8,052 | 5,380 | 4,805 | Wayne | 12,631 | 8,015 | 5,007 | 6,112 |
| Kosclusko | 8,326 | 4,836 | 3,447 | 4,025 | Wells | 4,430 | 4,653 | 2,928 | 1,947 |
| La Grange | 3,852 | 1,687 | 1,512 | 1,958 | White | 4,871 | 3,375 | 2,262 | 2,442 |
| Lake | 26,296 | 7,136 | 9,946 | 13,263 | Whitley | 4,530 | 3,929 | 2,510 | 2,191 |
| Laporte | 11,204 | 5,459 | 5,276 | 5,726 | | | | | |
| Lawrence | 6,808 | 4,709 | 3,108 | 3,813 | Total | 696,370 | 511,364 | 334,063 | 341,005 |

U. S. Senator (1922)—Ralston, Dem., 558,169; Beveridge, Rep., 524,558; Henry, Soc., 14,635.

### PAST VOTE OF IOWA.

1872 (Pres.), Dem. and L., 71,179; Rep., 131,566.

1876 (Pres.), Dem., 112,121; Rep., 171,326.

1880 (Pres.), Dem., 105,845; Rep., 183,904; Gr., 32,327; Proh., 592.

1883 (Gov.), Dem., 139,093; Rep., 164,182; Gr., 23,089.

1884 (Pres.), Dem. and Gr., 177,286; Rep., 197,082; Proh., 1,564.

1885 (Gov.), Dem. and Gr., 168,525; Rep., 175,505; Gr., 302; Proh., 1,405.

1887 (Gov.), Dem., 153,526; Rep., 169,686; Lab., 14,499; Proh., 309.

1888 (Pres.), Dem., 179,887; Rep., 211,598; Lab., 9,105; Proh., 3,550.

1889 (Gov.), Dem., 180,111; Rep., 173,588; Lab., 5,579; Proh., 1,353.

1890 (Sec. St.), Dem., 188,240; Rep., 191,606; F. A. & L., 8,813; Proh., 1,646.

1891 (Gov.), Dem., 207,589; Rep., 199,378; F. A. & L., 12,271; Proh., 919.

1892 (Pres.), Dem., 196,367; Rep., 219,795; Pop., 20,595; Proh., 6,402.

1893 (Gov.), Dem., 174,879; Rep., 207,089; Pop., 23,888; Proh., 10,332.

1895 (Gov.), Dem., 149,433; Rep., 208,689; Pop., 32,118; Proh., 11,052.

1896 (Pres.), Dem. & Pop., 223,741; Rep., 289,293; Gold D., 4,516; Proh., 3,192; Nat., 352; Soc. L., 453.

1897 (Gov.), Dem. & Pop., 194,514; Rep., 224,501; N. D., 4,268; Proh., 8,357.

1899 (Gov.), Dem., 183,266; Rep., 239,543; Pop., 1,694; Proh., 7,650.

1900 (Pres.), Dem., 209,466; Rep., 307,785; Soc. D., 2,778; Proh., 9,479; Pop., 613; Soc. L., 259; U. C., 707.

1901 (Gov.), Dem., 143,685; Rep., 226,839; Soc. D., 3,460; Proh., 15,469; Peo., 778.

1903 (Gov.), Dem., 159,708; Rep., 238,798; Soc., 6,479; Proh., 12,378; Peo., 589.

1904 (Pres.), Dem., 149,141; Rep., 307,907; Soc., 14,847; Proh., 11,601; Pop., 3,207.

1906 (Gov.), Dem., 196,143; Rep., 216,968; Soc., 9,792; Proh., 8,901 and 346; Soc., 358.

1908 (Pres.), Dem., 200,771; Rep., 275,210; Soc., 8,287; Proh., 9,837; Pop., 251; Ind., 404.

1908 (Gov.), Dem., 195,855; Rep., 303,443.

1910 (Gov.), Dem., 187,163; Rep., 205,607.

1912 (Gov ), Dem., 182,441: Rep., 184,151; Prog., 71,182; Soc., 14,882; Proh., 7,741.

1914 (Gov.), Dem., 183,990; Rep., 214,851; Prog., 17,329; Proh., 7,094; Soc., 8,977.

1914 (U. S. Sen.), Dem., 167,251; Rep., 205,832; Prog., 15,058; Proh., 6,309; Soc., 8,462; Ind., 24,490.

1916 (Gov.), Dem., 312,100; Rep., 186,027; Soc., 8,200; Proh., 2,880; Prog., 2,035; Soc. L., 326.,

1916 (Pres.), Dem., 221,699; Rep., 280,449; Soc., 10,976; Proh., 3,371; Prog., 1,793.

1918 (Gov.), Dem., 161,451; Rep., 175,568.

1920 (Pres.), Dem., 227,921; Rep., 634,674; Soc., 16,981; F.-L., 10,321; S. L., 982; Proh., 4,197.

1920 (U. S. Sen.), Dem., 322,015; Rep., 528,499; F.-L., 9,020; S. L., 933.

1920 (Gov.), Dem., 338,108; Rep., 513,118; Soc., 13,671; F.-L., 9,153; Soc. L., 760.

## IOWA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Adair | 4,133 | 1,358 | 1,619 | 1,922 | Johnson | 5,696 | 5,032 | 3,650 | 2,704 |
| Adams | 2,845 | 1,670 | 1,365 | 1,401 | Jones | 5,962 | 2,436 | 1,966 | 2,848 |
| Allamakee | 5,192 | 1,833 | 1,714 | 2,411 | Keokuk | 6,207 | 2,800 | 2,486 | 2,822 |
| Appanoose | 6,382 | 2,952 | 2,510 | 3,327 | Kossuth | 6,018 | 1,682 | 1,748 | 2,647 |
| Audubon | 2,963 | 1,405 | 1,247 | 1,581 | Lee | 10,763 | 5,177 | 3,903 | 4,395 |
| Benton | 6,539 | 2,343 | 2,556 | 3,189 | Linn | 20,036 | 6,932 | 6,131 | 8,212 |
| Blackhawk | 16,920 | 4,000 | 4,270 | 6,742 | Louisa | 3,560 | 962 | 1,081 | 1,876 |
| Boone | 7,093 | 2,240 | 2,338 | 2,955 | Lucas | 3,775 | 1,463 | 1,536 | 1,672 |
| Bremer | 6,287 | 902 | 1,132 | 2,684 | Lyon | 3,633 | 729 | 1,137 | 1,760 |
| Buchanan | 6,334 | 1,690 | 1,808 | 3,000 | Madison | 4,465 | 1,899 | 1,711 | 1,871 |
| Buena Vista | 4,927 | 1,204 | 1,454 | 2,045 | Mahaska | 6,739 | 3,339 | 3,151 | 3,143 |
| Butler | 5,900 | 830 | 977 | 2,722 | Marion | 5,435 | 3,861 | 3,094 | 2,459 |
| Calhoun | 5,277 | 1,479 | 1,515 | 2,276 | Marshall | 9,334 | 2,166 | 2,414 | 4,172 |
| Carroll | 6,320 | 2,174 | 2,085 | 2,408 | Mills | 3,683 | 1,592 | 1,600 | 1,707 |
| Cass | 6,558 | 1,668 | 1,801 | 2,763 | Mitchell | 4,476 | 773 | 1,033 | 1,963 |
| Cedar | 5,697 | 1,420 | 1,595 | 2,862 | Monona | 4,569 | 1,960 | 1,910 | 1,777 |
| Cerro Gordo | 8,293 | 2,302 | 2,289 | 3,556 | Monroe | 4,500 | 2,081 | 2,095 | 2,144 |
| Cherokee | 4,544 | 1,211 | 1,646 | 1,578 | Montgomery | 4,980 | 1,404 | 1,431 | 2,333 |
| Chickasaw | 4,517 | 2,171 | 1,697 | 1,999 | Muscatine | 8,115 | 2,293 | 2,694 | 3,929 |
| Clarke | 3,150 | 1,257 | 1,175 | 1,507 | O'Brien | 5,137 | 1,468 | 1,787 | 2,021 |
| Clay | 4,471 | 1,001 | 1,234 | 1,649 | Osceola | 2,717 | 754 | 874 | 1,258 |
| Clayton | 6,747 | 1,808 | 2,379 | 3,347 | Page | 6,949 | 1,931 | 1,747 | 2,933 |
| Clinton | 11,746 | 3,152 | 3,903 | 5,576 | Palo Alto | 3,904 | 1,467 | 1,630 | 1,594 |
| Crawford | 5,473 | 2,151 | 1,919 | 2,756 | Plymouth | 6,090 | 1,801 | 2,258 | 2,666 |
| Dallas | 6,677 | 2,577 | 2,495 | 2,900 | Pocahontas | 4,046 | 1,639 | 1,658 | 1,808 |
| Davis | 3,117 | 2,353 | 1,811 | 1,476 | Polk | 36,073 | 16,281 | 12,327 | 11,295 |
| Decatur | 4,187 | 2,592 | 2,111 | 1,962 | Pottawattamie | 13,506 | 6,659 | 6,263 | 5,992 |
| Delaware | 5,880 | 1,111 | 1,332 | 2,837 | Poweshiek | 5,806 | 2,125 | 1,880 | 2,748 |
| Des Moines | 8,287 | 3,449 | 3,827 | 4,132 | Ringgold | 3,702 | 1,327 | 1,351 | 1,733 |
| Dickinson | 3,298 | 760 | 893 | 1,249 | Sac | 4,984 | 1,268 | 1,629 | 2,057 |
| Dubuque | 12,436 | 7,636 | 6,063 | 5,772 | Scott | 16,233 | 5,473 | 5,212 | 8,329 |
| Emmet | 3,360 | 991 | 809 | 1,409 | Shelby | 4,621 | 1,882 | 2,060 | 1,898 |
| Fayette | 8,265 | 1,941 | 2,311 | 3,872 | Sioux | 6,068 | 1,510 | 2,049 | 2,261 |
| Floyd | 6,106 | 933 | 1,250 | 2,691 | Story | 8,713 | 1,909 | 1,772 | 3,722 |
| Franklin | 4,397 | 601 | 691 | 2,464 | Tama | 6,352 | 2,552 | 2,572 | 3,061 |
| Fremont | 3,776 | 2,524 | 2,085 | 1,732 | Taylor | 4,997 | 1,757 | 1,775 | 2,219 |
| Greene | 5,102 | 1,303 | 1,455 | 2,345 | Union | 4,466 | 2,228 | 1,985 | 2,050 |
| Grundy | 4,662 | 714 | 1,015 | 2,127 | Van Buren | 4,321 | 1,682 | 1,735 | 1,994 |
| Guthrie | 5,338 | 1,647 | 1,805 | 2,316 | Wapello | 9,884 | 4,131 | 3,994 | 4,398 |
| Hamilton | 5,924 | 1,126 | 1,125 | 3,037 | Warren | 5,323 | 2,063 | 1,910 | 2,182 |
| Hancock | 3,617 | 725 | 913 | 1,726 | Washington | 5,813 | 2,257 | 2,139 | 2,745 |
| Hardin | 6,646 | 1,076 | 1,481 | 3,335 | Wayne | 4,234 | 2,434 | 1,935 | 1,936 |
| Harrison | 6,127 | 3,479 | 2,932 | 2,610 | Webster | 8,312 | 2,804 | 3,196 | 3,917 |
| Henry | 5,254 | 1,939 | 1,728 | 2,470 | Winnebago | 3,931 | 469 | 584 | 1,713 |
| Howard | 3,601 | 1,717 | 1,560 | 1,562 | Winneshiek | 6,684 | 1,933 | 1,956 | 2,876 |
| Humboldt | 3,577 | 681 | 809 | 1,676 | Woodbury | 17,603 | 9,815 | 8,819 | 5,735 |
| Ida | 3 547 | 1,090 | 1,244 | 1,412 | Worth | 3,401 | 516 | 566 | 1,463 |
| Iowa | 4,892 | 2,019 | 1,763 | 2,484 | Wright | 5,739 | 1,205 | 1,135 | 2,599 |
| Jackson | 4,763 | 1,954 | 2,186 | 2,533 | | | | | |
| Jasper | 7,417 | 3,390 | 3,382 | 2,093 | Total | 634,674 | 227,921 | 221,699 | 280,439 |
| Jefferson | 4,558 | 1,450 | 1,734 | 2,167 | | | | | |

Governor (1922)—Files, Dem., 175,013; Kendall, Rep., 419,396.
U. S. Senator (1922)—Herring, Dem., 227,833; Brookhart, Rep., 389,751.
Iowa, in 1922, voted for a Soldier Bonus.

## PAST VOTE OF KANSAS.

1872 (Pres.), Dem., 32,970; Rep., 66,805; Dem. (O'C.), 596.
1874 (Gov.), Dem., 35,301; Rep., 48,594.
1876 (Pres.), Dem., 37,002; Rep., 78,322; Gr., 7,772; Proh., 110.
1878 (Gov.), Dem., 37,308; Rep., 74,020; Gr., 27,057.
1880 (Pres.), Dem., 59,789; Rep., 121,520; Gr., 19,710; Proh., 25.
1882 (Gov.), Dem., 83,237; Rep., 75,158; Gr., 20,989.
1884 (Pres.), Dem., 90,132; Rep., 154,406; Gr., 16,341; Proh., 4,954.
1886 (Gov.), Dem., 115,687; Rep., 149,615; Proh., 8,094.
1888 (Pres.), Dem., 102,745; Rep., 182,904, U. L. 37,788; Proh., 6,779.
1890 (Gov.), Dem., 71,357; Rep., 115,025; F. A., 106,972; Proh., 1,230.
1892 (Pres.), Rep., 157,237; Pop., 163,111; Proh., 4,539.
1894 (Gov.), Dem., 26,709; Rep., 148,697; Pop., 118,329; Proh., 5,496.
1895 (Ch. J.), Rep., 124,272; Fr. Sil., 42,888.
1896 (Pres.), Dem., 126,660; Pop., 46,194; Rep., 159,541; Gold Dem., 1,209; Proh., 1,921; Nat., 620.
1898 (Gov.), Dem. and Pop., 134,158; Rep., 149,292; Soc. Lab., 642; Proh., 1,092.
1900 (Gov.), Dem. and Pop., 164,794; Rep., 181,893; Proh., 2,662; Soc. Dem., 1,258.
1900 (Pres.), Dem. and Pop., 162,601; Rep., 185,985; Soc. Dem., 1,258; Proh., 3,605.
1902 (Gov.), Dem. and Pop., 117,148; Rep., 159,242; Soc., 4,098; Proh., 6,065; Pop., 635.
1904 (Pres.), Dem. and Pop., 84,800; Rep., 210,893; Soc., 15,494; Proh., 7,245; Pop., 6,156.
1904 (Gov.), Dem., 116,991; Rep., 186,731; Soc., 12,101; Proh., 6,584.
1906 (Gov.), Dem. and Pop., 150,024; Rep., 152,147. Soc., 4,453; Proh., 7,621.
1908 (Pres.), Dem. and Pop., 161,209; Rep., 197,216; Soc., 12,420; Proh., 5,033; Ind., 301.
1908 (Gov.), Dem. and Pop., 162,385; Rep., 196,692; Soc., 11,721; Proh., 3,886; Ind., 68.
1910 (Gov.), Dem., 146,014; Rep., 162,181; Soc., 15,384; Proh., 2,373.
1912 (Pres.), Dem., 143,670; Rep., 74,844; Prog., 120,123; Soc., 26,807.
1912 (Gov.), Dem., 167,541; Rep., 167,509; Soc., 24,804.
1914 (U. S. Sen.), Dem., 176,929; Rep., 180,823; Prog., 116,755; Soc., 24,502; Proh., 9,885.
1914 (Gov.), Dem., 161,696; Rep., 209,543; Prog., 84,060; Soc., 20,360; Proh., 7,346; Ind., 47,201.
1916 (Pres.), Dem., 314,588; Rep., 277,658; Soc., 24,685; Proh., 12,882.
1916 (Gov.), Dem., 192,037; Rep., 354,519
1918 (Gov.), Dem., 132,444; Rep., 286,424.
1918 (U. S. Sen.), Dem., 149,300; Rep., 281,931; Soc., 11,429.
1920 (Pres.), Dem., 185,464; Rep., 369,268; Soc., 15,511.
1920 (U. S. Sen.), Dem., 170,443; Rep., 327,072; Soc., 13,417.
1920 (Gov.), Dem., 214,940; Rep., 319,914; Soc., 12,544.

## KANSAS.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. Cox, Dem. | 1920. Harding, Rep. | 1916. Wilson, Dem. | 1916. Hughes, Rep. |
|---|---|---|---|---|
| Allen | 2,272 | 5,091 | 4,043 | 4,120 |
| Anderson | 1,708 | 3,068 | 2,739 | 2,385 |
| Atchison | 3,082 | 5,867 | 4,634 | 4,624 |
| Barber | 1,097 | 2,400 | 2,061 | 1,632 |
| Barton | 1,688 | 3,993 | 3,281 | 2,883 |
| Bourbon | 3,632 | 4,193 | 5,209 | 3,370 |
| Brown | 1,937 | 549 | 3,503 | 4,282 |
| Butler | 4,112 | 6,821 | 4,248 | 3,614 |
| Chase | 903 | 1,659 | 1,583 | 1,356 |
| Chautauqua | 936 | 2,539 | 1,737 | 2,085 |
| Cherokee | 3,832 | 5,466 | 6,188 | 4,350 |
| Cheyenne | 471 | 1,079 | 787 | 498 |
| Clark | 610 | 923 | 1,102 | 653 |
| Clay | 1,154 | 3,519 | 2,631 | 2,691 |
| Cloud | 1,532 | 4,089 | 3,837 | 2,870 |
| Coffey | 1,784 | 3,370 | 3,121 | 2,799 |
| Comanche | 612 | 1,120 | 963 | 730 |
| Cowley | 4,733 | 7,352 | 5,943 | 5,282 |
| Crawford | 5,362 | 7,955 | 8,064 | 7,067 |
| Decatur | 1,221 | 1,448 | 2,431 | 1,007 |
| Dickinson | 2,387 | 5,760 | 4,971 | 4,322 |
| Doniphan | 978 | 3,365 | 1,916 | 2,826 |
| Douglas | 2,195 | 6,263 | 3,831 | 4,968 |
| Edwards | 681 | 1,782 | 1,431 | 1,157 |
| Elk | 1,110 | 2,253 | 2,051 | 1,769 |
| Ellis | 740 | 2,385 | 2,335 | 1,186 |
| Ellsworth | 1,090 | 2,264 | 1,936 | 1,944 |
| Finney | 619 | 1,573 | 1,370 | 1,234 |
| Ford | 1,879 | 3,301 | 3,043 | 2,336 |
| Franklin | 2,606 | 5,213 | 4,128 | 3,883 |
| Geary | 962 | 2,404 | 1,740 | 1,730 |
| Gove | 285 | 948 | 861 | 642 |
| Graham | 762 | 1,658 | 1,801 | 1,150 |
| Grant | 108 | 339 | 208 | 200 |
| Gray | 507 | 961 | 889 | 660 |
| Greeley | 93 | 273 | 168 | 210 |
| Greenwood | 1,478 | 3,420 | 2,945 | 2,957 |
| Hamilton | 371 | 591 | 522 | 511 |
| Harper | 1,486 | 2,593 | 2,648 | 1,797 |
| Harvey | 2,459 | 4,448 | 3,129 | 3,468 |
| Haskell | 150 | 444 | 349 | 248 |
| Hodgeman | 306 | 945 | 761 | 564 |
| Jackson | 1,562 | 3,752 | 2,896 | 3,439 |
| Jefferson | 1,535 | 3,459 | 2,904 | 3,162 |
| Jewell | 1,898 | 3,925 | 4,180 | 3,021 |
| Johnson | 2,303 | 4,325 | 3,928 | 3,767 |
| Kearny | 266 | 617 | 488 | 538 |
| Kingman | 1,557 | 2,818 | 2,626 | 1,891 |
| Kiowa | 587 | 1,411 | 956 | 901 |
| Labette | 4,328 | 6,594 | 6,421 | 5,327 |
| Lane | 298 | 656 | 659 | 363 |
| Leavenworth | 3,409 | 6,846 | 6,002 | 5,534 |
| Lincoln | 935 | 2,298 | 2,106 | 1,716 |
| Linn | 1,764 | 3,188 | 2,930 | 2,699 |
| Logan | 312 | 781 | 709 | 590 |
| Lyon | 3,303 | 5,491 | 4,581 | 4,210 |
| Marion | 1,713 | 3,840 | 2,789 | 3,453 |
| Marshall | 2,026 | 5,704 | 4,275 | 4,581 |
| McPherson | 1,926 | 4,870 | 3,730 | 3,791 |
| Meade | 483 | 1,236 | 977 | 972 |
| Miami | 2,450 | 4,060 | 4,047 | 3,086 |
| Mitchell | 1,409 | 3,310 | 3,197 | 2,413 |
| Montgomery | 5,657 | 10,041 | 8,053 | 6,359 |
| Morris | 1,467 | 3,001 | 2,577 | 2,288 |
| Morton | 266 | 783 | 457 | 405 |
| Nemaha | 1,731 | 4,654 | 3,579 | 3,591 |
| Neosho | 3,195 | 5,150 | 4,890 | 4,052 |
| Ness | 492 | 1,401 | 1,213 | 927 |
| Norton | 1,082 | 2,288 | 2,876 | 1,616 |
| Osage | 2,414 | 4,507 | 4,276 | 3,770 |
| Osborne | 979 | 3,060 | 2,621 | 2,149 |
| Ottawa | 1,358 | 2,512 | 2,691 | 2,003 |
| Pawnee | 1,138 | 2,128 | 2,124 | 1,484 |
| Phillips | 1,230 | 2,862 | 2,912 | 2,271 |
| Pottawatomie | 1,293 | 4,480 | 2,834 | 3,688 |
| Pratt | 1,433 | 2,722 | 2,607 | 1,820 |
| Rawlins | 495 | 1,236 | 1,271 | 803 |
| Reno | 4,385 | 9,649 | 6,649 | 6,832 |
| Republic | 1,672 | 3,661 | 3,805 | 2,882 |
| Rice | 1,532 | 3,651 | 2,800 | 2,493 |
| Riley | 1,610 | 4,875 | 2,637 | 3,320 |
| Rooks | 843 | 2,143 | 2,394 | 1,621 |
| Rush | 605 | 2,017 | 1,478 | 1,223 |
| Russell | 724 | 2,407 | 1,934 | 2,011 |
| Saline | 2,808 | 5,553 | 4,846 | 3,976 |
| Scott | 379 | 636 | 684 | 415 |
| Sedgwick | 10,998 | 16,637 | 13,368 | 10,871 |
| Seward | 722 | 1,290 | 1,103 | 678 |
| Shawnee | 7,214 | 14,809 | 9,452 | 12,597 |
| Sheridan | 477 | 1,194 | 1,189 | 760 |
| Sherman | 789 | 1,066 | 1,196 | 582 |
| Smith | 1,535 | 3,247 | 3,431 | 2,605 |
| Stafford | 1,057 | 2,779 | 2,148 | 1,811 |
| Stanton | 89 | 269 | 170 | 180 |
| Stevens | 346 | 876 | 646 | 391 |
| Sumner | 3,454 | 5,827 | 5,518 | 4,078 |
| Thomas | 747 | 1,046 | 1,299 | 641 |
| Trego | 393 | 1,299 | 1,094 | 867 |
| Wabaunsee | 782 | 2,859 | 1,706 | 2,640 |
| Wallace | 203 | 632 | 497 | 381 |
| Washington | 1,285 | 4,390 | 3,316 | 3,765 |
| Wichita | 127 | 422 | 333 | 318 |
| Wilson | 1,768 | 4,024 | 3,493 | 2,970 |
| Woodson | 944 | 2,253 | 1,794 | 1,861 |
| Wyandotte | 13,737 | 19,294 | 17,850 | 13,863 |
| Soldier vote | ..... | ..... | 235 | 286 |
| Total | 185,464 | 369,268 | 314,588 | 277,658 |

Governor (1922)—Davis, Dem., 271,658; Morgan, Rep., 252,602; Phillips, Soc., 9,138.

Davis, the new Governor, spoke in his campaign against the Industrial Court and promised a reduction of taxes.

Kansas, in 1922, voted for a Soldier Bonus.

### PAST VOTE OF KENTUCKY.

1872 (Pres.), Dem., 100,212; Rep., 88,816; Dem., (O'C.), 2,374; Lib. Rep., 217.

1875 (Gov.), Dem., 126,976; Rep., 90,795.

1876 (Pres.), Dem., 159,690; Rep., 97,156; Gr., 1,944; Proh., 818.

1879 (Gov.), Dem., 125,799; Rep., 81,882; Gr., 18,954.

1880 (Pres.), Dem., 147,999; Rep., 104,550; Gr., 11,498; Proh., 258.

1883 (Gov.), Dem., 133,615; Rep., 89,181.

1884 (Pres.), Dem., 152,961; Rep., 118,122; Gr., 1,691; Proh., 3,139.

1885 (Treas.), Dem., 106,214; Rep., 38,617.

1887 (Gov.), Dem., 144,619; Rep., 127,604; Lab., 4,487; Proh., 8,390.

1888 (Pres.), Dem., 183,800; Rep., 155,134; Lab., 622; Proh., 5,225.

1889 (Treas.), Dem., 147,982; Rep., 114,649; Proh., 3,351.

1891 (Gov.), Dem., 144,168; Rep., 116,087; Lab., 25,361; Proh., 3,293.

1892 (Pres.), Dem., 175,461; Rep., 135,491; Pop., 23,500; Proh., 6,442.

1895 (Gov.), Dem., 163,524; Rep., 172,436; Pop., 16,911; Proh., 4,186.

1896 (Pres.), Dem. 217,890; Rep., 218,171; Gold D., 5,114; Proh., 4,781.

1897 (Clerk), Dem., 187,482; Rep., 169,678; Gr., 7,274; N. D., 9,562; Proh., 1,734.

1899 (Gov.), Dem., 191,331; Rep., 193,714; Pop., 3,038; Proh., 2,346.

1900 (Gov.), Dem., 230,273; Rep., 226,755.

1900 (Pres.), Dem., 235,103; Rep., 227,128; Pop., 1,861; Proh., 3,780; Soc. D., 456; Soc. L., 408.

1903 (Gov.), Dem., 229,014; Rep., 202,764; Pop., 4,830; Soc., 2,044; S. L., 615.

1904 (Pres.), Dem., 217,171; Rep., 205,277; Pop., 2,511; Proh., 6,609; Soc., 3,602; Soc. L., 2,596.

1907 (Gov.), Dem., 196,428; Rep., 214,481; Proh., 3,652.

1908 (Pres.), Dem., 244,092; Rep. 235,711; S. L., 404; Soc., 4,060; Proh., 5,887; Pop., 324; Ind., 200.

1911 (Gov.), Dem., 226,771; Rep., 195,436; Proh., 3,673; Soc., 8,718; S. L., 800; Peo., 218.

1912 (Pres.), Dem., 219,584; Rep., 115,512; Prog., 102,766; Soc., 11,647; Proh., 3,233; S. L., 956.

1914 (U. S. Sen.), Dem., 176,605; Rep., 144,758; Soc., 4,890; Prog., 14,108.

1915 (Gov.), Dem., 219,991; Rep., 219,520; Prog., 1,371; Soc., 3,317; Proh., 4,201.

1916 (Pres.), Dem., 269,990; Rep., 241,854; Proh., 3,036; Soc., 4,734; Prog., 122; S. L., 333.

1918 (U. S. Sen.), Dem., 184,385; Rep., 178,797.

1920 (Pres.), Dem., 456,497; Rep., 452,480; Soc., 6,409; Proh., 3,325.

1920 (U. S. Sen.), Dem., 449,224; Rep., 454,226.

## KENTUCKY.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Adair | 3,526 | 2,725 | 1,675 | 1,863 | Larue | 1,838 | 2,661 | 1,350 | 936 |
| Allen | 3,476 | 2,255 | 1,647 | 2,147 | Laurel | 4,252 | 1,621 | 1,171 | 2,383 |
| Anderson | 1,819 | 2,499 | 1,521 | 1,065 | Lawrence | 2,849 | 2,558 | 1,910 | 1,928 |
| Ballard | 1,107 | 3,987 | 2,222 | 692 | Lee | 1,856 | 1,246 | 793 | 1,135 |
| Barren | 3,972 | 5,499 | 3,370 | 2,462 | Leslie | 2,576 | 142 | 133 | 1,516 |
| Bath | 1,997 | 2,440 | 1,796 | 1,360 | Letcher | 4,317 | 1,960 | 1,121 | 2,220 |
| Bell | 6,691 | 2,277 | 1,373 | 3,321 | Lewis | 4,186 | 1,550 | 1,276 | 2,324 |
| Boone | 973 | 3,472 | 2,008 | 531 | Lincoln | 3,710 | 3,787 | 2,212 | 1,868 |
| Bourbon | 4,029 | 5,452 | 2,715 | 2,167 | Livingston | 1,790 | 1,933 | 1,287 | 923 |
| Boyd | 6,334 | 5,103 | 2,738 | 2,883 | Logan | 3,948 | 6,111 | 3,373 | 2,501 |
| Boyle | 3,205 | 4,099 | 2,052 | 1,494 | Lyon | 1,275 | 1,968 | 1,191 | 748 |
| Bracken | 1,791 | 2,621 | 1,676 | 1,082 | Madison | 6,012 | 5,647 | 3,205 | 3,017 |
| Breathitt | 2,464 | 2,737 | 2,067 | 1,584 | Magoffin | 2,347 | 1,352 | 1,433 | 1,535 |
| Breckinridge | 4,369 | 3,702 | 2,172 | 2,549 | Marion | 2,431 | 3,807 | 2,063 | 1,396 |
| Bullitt | 1,393 | 2,548 | 1,508 | 826 | Marshall | 1,883 | 3,569 | 2,263 | 1,201 |
| Butler | 4,097 | 1,356 | 1,158 | 2,456 | Martin | 1,726 | 330 | 280 | 1,100 |
| Caldwell | 2,958 | 2,746 | 1,605 | 1,672 | Mason | 3,743 | 4,691 | 2,820 | 2,127 |
| Calloway | 1,520 | 4,574 | 3,334 | 1,026 | McCracken | 6,085 | 8,496 | 4,356 | 3,058 |
| Campbell | 12,210 | 10,597 | 7,290 | 5,696 | McCreary | 2,889 | 525 | 324 | 1,630 |
| Carlisle | 688 | 2,688 | 1,646 | 494 | McLean | 2,408 | 2,754 | 1,589 | 1,439 |
| Carroll | 906 | 3,209 | 1,757 | 535 | Meade | 1,468 | 2,995 | 1,317 | 803 |
| Carter | 4,595 | 2,757 | 1,954 | 2,818 | Menifee | 580 | 1,149 | 730 | 369 |
| Casey | 3,543 | 1,951 | 1,352 | 1,949 | Mercer | 2,786 | 3,623 | 2,093 | 1,531 |
| Christian | 8,743 | 7,209 | 3,644 | 4,594 | Metcalfe | 1,809 | 1,442 | 1,046 | 1,107 |
| Clark | 3,105 | 4,846 | 2,620 | 1,731 | Monroe | 3,426 | 1,108 | 882 | 2,008 |
| Clay | 4,015 | 960 | 820 | 2,271 | Montgomery | 2,163 | 3,069 | 1,705 | 1,195 |
| Clinton | 2,356 | 431 | 379 | 1,260 | Morgan | 1,802 | 3,347 | 2,319 | 1,123 |
| Crittenden | 3,149 | 2,138 | 1,455 | 1,794 | Muhlenberg | 6,667 | 4,824 | 2,900 | 3,533 |
| Cumberland | 2,380 | 931 | 653 | 1,394 | Nelson | 2,945 | 5,061 | 2,639 | 1,546 |
| Daviess | 7,584 | 9,669 | 5,396 | 4,078 | Nicholas | 1,496 | 2,953 | 1,829 | 964 |
| Edmonson | 2,348 | 1,171 | 935 | 1,339 | Ohio | 5,371 | 4,011 | 2,723 | 3,286 |
| Elliott | 860 | 1,764 | 1,151 | 525 | Oldham | 1,014 | 2,655 | 1,455 | 642 |
| Estill | 2,552 | 1,823 | 1,180 | 1,524 | Owen | 1,049 | 4,623 | 2,911 | 663 |
| Fayette | 11,032 | 12,926 | 6,348 | 5,472 | Owsley | 1,914 | 257 | 197 | 1,173 |
| Fleming | 2,990 | 3,892 | 2,240 | 1,836 | Pendleton | 2,105 | 2,598 | 1,528 | 1,206 |
| Floyd | 2,825 | 3,597 | 2,217 | 1,823 | Perry | 4,345 | 2,303 | 904 | 2,217 |
| Franklin | 2,710 | 5,878 | 3,345 | 1,426 | Pike | 7,911 | 5,619 | 3,414 | 4,212 |
| Fulton | 1,365 | 3,848 | 2,200 | 747 | Powell | 835 | 1,038 | 757 | 587 |
| Gallatin | 536 | 1,783 | 1,060 | 283 | Pulaski | 7,262 | 3,749 | 2,531 | 4,136 |
| Garrard | 2,994 | 2,434 | 1,375 | 1,628 | Robertson | 623 | 940 | 663 | 415 |
| Grant | 1,613 | 2,686 | 1,841 | 1,078 | Rockcastle | 3,561 | 1,438 | 968 | 1,932 |
| Graves | 3,241 | 9,018 | 5,197 | 1,930 | Rowan | 1,564 | 1,264 | 881 | 941 |
| Grayson | 4,174 | 2,830 | 1,953 | 2,368 | Russell | 2,587 | 1,157 | 859 | 1,298 |
| Green | 2,310 | 1,723 | 1,239 | 1,412 | Scott | 2,661 | 4,993 | 2,611 | 1,486 |
| Greenup | 3,111 | 2,754 | 1,820 | 1,821 | Shelby | 2,402 | 5,446 | 2,919 | 1,863 |
| Hancock | 1,146 | 1,384 | 833 | 918 | Simpson | 1,680 | 3,206 | 1,887 | 955 |
| Hardin | 3,334 | 5,382 | 3,272 | 1,887 | Spencer | 1,102 | 2,135 | 1,271 | 591 |
| Harlan | 7,493 | 1,805 | 690 | 2,670 | Taylor | 2,493 | 2,380 | 1,360 | 1,322 |
| Harrison | 2,378 | 4,804 | 2,778 | 1,409 | Todd | 2,663 | 3,292 | 2,051 | 1,671 |
| Hart | 3,264 | 2,972 | 2,048 | 2,031 | Trigg | 2,420 | 3,056 | 1,722 | 1,533 |
| Henderson | 4,161 | 7,272 | 3,699 | 2,218 | Trimble | 361 | 2,057 | 1,319 | 259 |
| Henry | 2,208 | 4,640 | 2,595 | 1,302 | Union | 1,943 | 4,919 | 2,754 | 1,184 |
| Hickman | 866 | 3,045 | 1,982 | 539 | Warren | 5,474 | 7,010 | 4,228 | 3,002 |
| Hopkins | 6,732 | 7,829 | 3,757 | 3,615 | Washington | 2,892 | 2,600 | 1,654 | 1,654 |
| Jackson | 3,174 | 260 | 252 | 1,968 | Wayne | 2,992 | 1,827 | 1,373 | 1,638 |
| Jefferson | 68,202 | 56,046 | 28,840 | 28,386 | Webster | 3,554 | 4,831 | 2,673 | 2,082 |
| Jessamine | 2,349 | 3,206 | 1,727 | 1,326 | Whitley | 7,235 | 1,556 | 1,171 | 3,919 |
| Johnson | 4,373 | 1,714 | 1,253 | 2,500 | Wolfe | 939 | 1,476 | 1,108 | 645 |
| Kenton | 11,411 | 16,300 | 10,402 | 5,267 | Woodford | 2,218 | 3,299 | 1,786 | 1,300 |
| Knott | 802 | 2,295 | 1,454 | 571 | | | | | |
| Knox | 5,228 | 1,534 | 1,126 | 3,192 | Total | 452,480 | 456,497 | 269,990 | 241,854 |

## LOUISIANA.

(Presidential vote, 1920, 1916.)

| Parishes. | 1920. | | 1916. | | Parishes. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Acadia | 1,066 | 1,141 | 1,165 | 202 | Grant | 674 | 109 | 640 | 31 |
| Allen | 1,011 | 242 | 708 | 81 | Iberia | 439 | 1,275 | 802 | 134 |
| Ascension | 627 | 496 | 531 | 106 | Iberville | 391 | 465 | 471 | 160 |
| Assumption | 204 | 725 | 489 | 221 | Jackson | 1,004 | 166 | 980 | 27 |
| Avoyelles | 1,353 | 724 | 1,253 | 44 | Jefferson | 1,242 | 192 | 1,041 | 56 |
| Beauregard | 1,151 | 202 | 968 | 59 | Jefferson Davis | 731 | 895 | 656 | 200 |
| Bienville | 1,385 | 257 | 1,229 | 20 | Lafayette | 823 | 1,045 | 1,066 | 73 |
| Bossier | 731 | 44 | 675 | 9 | Lafourche | 343 | 1,044 | 629 | 157 |
| Caddo | 4,256 | 401 | 3,109 | 151 | La Salle | 575 | 109 | 610 | 20 |
| Calcasieu | 2,486 | 483 | 1,798 | 165 | Lincoln | 992 | 183 | 932 | 42 |
| Caldwell | 538 | 128 | 554 | 20 | Livingston | 666 | 218 | 503 | 35 |
| Cameron | 146 | 11 | 163 | 10 | Madison | 331 | 4 | 187 | 1 |
| Catahoula | 522 | 176 | 459 | 20 | Morehouse | 625 | 38 | 564 | 3 |
| Claiborne | 1,216 | 48 | 1,276 | 15 | Natchitoches | 1,471 | 263 | 1,181 | 45 |
| Concordia | 380 | 12 | 264 | 10 | Orleans | 32,847 | 17,819 | 30,936 | 2,531 |
| De Soto | 1,219 | 56 | 1,104 | 17 | Ouachita | 1,493 | 164 | 1,215 | 35 |
| E. Baton Rouge | 2,336 | 442 | 1,482 | 130 | Plaquemines | 330 | 124 | 461 | 43 |
| E. Carroll | 247 | 8 | 219 | 3 | Pte. Coupee | 407 | 143 | 301 | 37 |
| E. Feliciana | 534 | 30 | 489 | 21 | Rapides | 2,767 | 445 | 2,184 | 134 |
| Evangeline | 545 | 587 | 808 | 26 | Red River | 766 | 187 | 567 | 4 |
| Franklin | 903 | 173 | 684 | 10 | Richland | 666 | 50 | 650 | 7 |

LOUISIANA—*Continued.*

| PARISHES. | 1920. | | 1916. | | PARISHES. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Sabine | 1,252 | 111 | 1,147 | 30 | Terrebonne | 484 | 713 | 606 | 113 |
| St. Bernard | 362 | 56 | 363 | 23 | Union | 1,226 | 98 | 1,106 | 22 |
| St. Charles | 185 | 92 | 297 | 30 | Vermilion | 555 | 1,420 | 1,310 | 78 |
| St. Helena | 366 | 36 | 319 | 9 | Vernon | 1,145 | 205 | ..... | ..... |
| St. James | 352 | 533 | 520 | 185 | Washington | 1,106 | 165 | 1,094 | 66 |
| St. John Baptist | 247 | 250 | 289 | 115 | Webster | 1,009 | 112 | 1,040 | 6 |
| St. Landry | 1,017 | 942 | 139 | 117 | W. Baton Rouge | 354 | 175 | 237 | 28 |
| St. Martin | 319 | 419 | 971 | 36 | W. Carroll | 341 | 104 | 311 | 14 |
| St. Mary | 543 | 788 | 652 | 162 | W. Feliciana | 354 | 34 | 261 | 8 |
| St. Tammany | 973 | 276 | 782 | 95 | Winn | 972 | 291 | 868 | 50 |
| Tangipahoa | 1,510 | 440 | 1,326 | 159 | | | | | |
| Tensas | 243 | 15 | 204 | 5 | Total | 87,519 | 38,538 | 79,875 | 6,466 |

PAST VOTE OF LOUISIANA.

1892 (Pres.), Dem., 87,922; Rep., 13,282; Pop., 13,281.
1896 (Pres.), Dem., 77,175; Rep., 22,037; Gold D., 1,834.
1900 (Pres.), Dem., 53,671; Rep., 14,233.
1904 (Pres.), Dem., 47,747; Rep., 5,205; Soc., 995.
1908 (Pres.), Dem., 63,568; Rep., 8,958; Soc., 2,538; Ind., 82.
1912 (Pres.), Dem., 60,966; Rep., 3,834; Prog., 9,323; Soc., 5,249.
1916 (Pres.), Dem., 79,875; Rep., 6,466; Prog., 6,349; Soc., 292.
1916 (Gov.), Dem., 80,807 Rep., 48,068.
1918 (U. S. Sen.), Dem., 44,224 (unopposed).
1920 (Pres.), Dem., 87,519; Rep., 38,538; Ind., 339.
1920 (U. S. Sen.), Dem., 93,944 (unopposed).

## MAINE.

(Presidential vote, 1920, 1916.)

| COUNTIES. | 1920. | | 1916. | | COUNTIES. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Androscoggin | 9,565 | 5,757 | 5,464 | 4,496 | Penobscot | 14,145 | 6,110 | 7,395 | 7,322 |
| Aroostook | 11,191 | 1,407 | 2,420 | 5,775 | Piscataquis | 4,049 | 1,788 | 1,763 | 2,141 |
| Cumberland | 24,623 | 10,484 | 9,795 | 11,768 | Sagadahoc | 3,857 | 1,709 | 1,791 | 1,828 |
| Franklin | 3,820 | 1,668 | 1,908 | 1,988 | Somerset | 6,533 | 2,770 | 3,134 | 3,567 |
| Hancock | 5,604 | 2,154 | 3,303 | 3,191 | Waldo | 4,383 | 1,666 | 2,539 | 2,418 |
| Kennebec | 12,333 | 5,466 | 5,527 | 6,731 | Washington | 6,768 | 2,997 | 3,459 | 3,890 |
| Knox | 4,979 | 2,971 | 3,434 | 2,211 | York | 13,536 | 6,852 | 6,853 | 6,373 |
| Lincoln | 3,668 | 1,256 | 1,718 | 1,781 | | | | | |
| Oxford | 7,301 | 3,906 | 3,615 | 4,026 | Total | 136,355 | 58,961 | 64,118 | 69,506 |

Governor (1922)—Pattangall, Dem., 75,256; Baxter, 103,713.
U. S. Senator (1922)—Curtis, Dem., 71,660; Hale, Rep., 101,026.

PAST VOTE OF MAINE.

1906 (Gov.), Dem., 61,477; Rep., 69,315; Soc. D., 1,553; Proh., 1,139.
1908 (Pres.), Dem., 35,403; Rep., 66,987; Soc. D., 1,758; Proh., 1,487; Ind., 652.
1908 (Gov.), Dem., 66,075; Rep., 73,728; Soc. D., 1,430; Proh., 1,425.
1910 (Gov.), Dem., 73,425; Rep., 64,672; Soc., 1,582; Proh., 1,352.
1912 (Pres.), Dem., 51,113; Rep., 26,545; Prog., 48,493; Soc., 2,541; Proh., 945.
1912 (Gov.), Dem., 67,748; Rep., 71,043; Soc., 2,110; Proh., 1,204.
1914 (Gov.), Dem., 62,039; Rep., 58,862; Prog., 18,225; Soc., 1,872; Proh., 594.
1916 (Pres.), Dem., 64,118; Rep., 69,506; Soc., 2,186; Proh., 595.
1916 (U. S. Sen.), Dem., 69,478; Rep., 79,572; Soc., 1,490; Proh., 279.
1916 (Gov.), Dem., 67,719; Rep., 81,317; Soc., 1,558; Proh., 249.
1918 (Gov.), Dem. 58,918; Rep., 64,069.
1918 (U. S. Sen.), Dem., 54,289; Rep., 67,431.
1920 (Pres.), Dem., 58,961; Rep., 136,355; Soc., 2,214; S. Tax, 310; Proh., 1.

## MARYLAND.

(Presidential vote, 1920, 1916.)

| COUNTIES. | 1920. | | 1916. | | COUNTIES. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Allegany | 5,643 | 9,595 | 4,859 | 5,760 | Howard | 2,397 | 2,608 | 1,913 | 1,346 |
| Anne Arundel | 5,053 | 6,199 | 4,121 | 2,705 | Kent | 3,034 | 2,838 | 1,886 | 1,673 |
| Baltimore | 9,365 | 12,432 | 15,226 | 12,633 | Montgomery | 6,277 | 5,948 | 3,805 | 2,913 |
| Baltimore City | 86,748 | 125,526 | 60,226 | 49,805 | Prince George's | 4,857 | 6,628 | 3,493 | 3,058 |
| Calvert | 1,230 | 1,741 | 910 | 975 | Queen Anne's | 3,519 | 2,157 | 2,206 | 1,242 |
| Caroline | 3,012 | 2,929 | 1,965 | 1,666 | St. Mary's | 1,861 | 2,175 | 1,443 | 1,064 |
| Carroll | 4,273 | 5,784 | 4,016 | 3,602 | Somerset | 2,634 | 3,658 | 1,885 | 2,364 |
| Cecil | 3,468 | 3,435 | 2,587 | 1,959 | Talbot | 3,130 | 3,050 | 2,180 | 1,753 |
| Charles | 1,642 | 2,585 | 1,363 | 1,374 | Washington | 6,852 | 8,757 | 5,642 | 5,093 |
| Dorchester | 3,950 | 4,218 | 2,750 | 2,468 | Wicomico | 5,054 | 4,225 | 3,285 | 2,539 |
| Frederick | 7,747 | 9,559 | 6,094 | 5,725 | Worcester | 3,676 | 3,090 | 2,138 | 1,520 |
| Garrett | 1,070 | 2,805 | 1,031 | 1,808 | | | | | |
| Harford | 4,134 | 4,175 | 3,345 | 2,302 | Total | 180,626 | 236,117 | 138,359 | 117,347 |

U. S. Senator (1922)—Bruce, Dem., 139,581; France, Rep., 101,947; Smiley, Soc., 2,479; Long, Lab., 2,900.

PAST VOTE OF MARYLAND.

1914 (U. S. Sen.), Dem., 110,204; Rep., 94,864; Prog., 3,697; Soc., 3,255; Proh., 3,144; Lab., 969.
1915 (Gov.), Dem., 119,317; Rep., 116,136; Proh., 2,244; Soc., 2,082; Lab., 852.
1916 (Pres.), Dem., 138,359; Rep., 117,347; Proh., 2,903; Soc., 2,674; Soc. L., 756.
1916 (U. S. Sen.), Dem., 109,740; Rep., 113,662; Proh., 3,325; Soc., 2,590; Lab., 1,143.
1917 (Comp.), Dem., 85,368; Rep., 84,449; Proh., 2,621.
1919 (Gov.), Dem., 112,240; Rep., 112,075.
1920 (Pres.), Dem., 180,626; Rep., 236,117; Soc., 8,876; F.-L., 1,645; Soc. L., 1,178.
1920 (U. S. Sen.), Dem., 169,200; Rep., 184,999; Soc., 6,559; Soc. L., 2,569; Ind., 21,345; Ind., 6,538.

## MASSACHUSETTS.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Barnstable | 1,125 | 6,383 | 1,892 | 2,836 | Middlesex | 61,661 | 156,636 | 49,844 | 60,802 |
| Berkshire | 10,956 | 20,138 | 8,357 | 9,787 | Nantucket | 205 | 608 | 307 | 249 |
| Bristol | 17,719 | 56,734 | 18,065 | 22,578 | Norfolk | 15,720 | 51,826 | 12,702 | 19,284 |
| Dukes | 150 | 1,013 | 309 | 464 | Plymouth | 9,373 | 33,582 | 11,009 | 13,515 |
| Essex | 30,560 | 95,057 | 32,489 | 35,909 | Suffolk | 67,552 | 108,089 | 61,047 | 42,492 |
| Franklin | 2,542 | 9,931 | 3,054 | 4,353 | Worcester | 34,667 | 81,241 | 27,540 | 32,541 |
| Hampden | 19,156 | 46,741 | 17,028 | 18,207 | | | | | |
| Hampshire | 5,305 | 13,174 | 4,202 | 5,748 | Total | 276,691 | 681,153 | 247,885 | 268,784 |

Governor (1922)—Fitzgerald, Dem., 404,192; Cox, Rep., 464,873; Hutchins, Soc., 9,205; Hess, Soc. Lab., 4,713; Lewis, Proh., 6,870.

U. S. Senator (1922)—Gaston, Dem., 406,776; Lodge, Rep., 414,130; Nicholls, Proh.-Prog., 24,866; Sherman, Soc., 11,678; Cook, Ind., 7,836; Weeks, Prog., 4,862.

Massachusetts voters, in 1922, rejected a measure providing for more stringent Prohibition enforcement.

The voters also rejected a proposal that the State regulate motion pictures.

### PAST VOTE OF MASSACHUSETTS.

1885 (Gov.), Dem., 90,346; Rep., 112,243; Gr., 2,227; Proh., 4,714.
1886 (Gov.), Dem., 112,883; Rep., 122,346; Proh., 8,251; Lab., 112 and 49.
1887 (Gov.), Dem., 118,394; Rep., 136,000; Lab., 595; Proh., 10,945.
1888 (Pres.), Dem., 151,855; Rep., 183,892; Proh., 8,701.
1889 (Gov.), Dem., 120,582; Rep., 127,357; Proh., 15,108.
1900 (Pres.), Dem. and Pop., 156,977; Rep., 238,866; Soc. L., 2,599; Proh., 6,202; Soc. D., 9,601.
1904 (Pres.), Dem. and Pop., 165,746; Rep., 257,822; Soc., 13,604; Proh., 4,279; Soc., 2,359; Pop., 1,294.
1908 (Pres.), Dem. and Pop., 155,543; Rep., 265,966; Soc., 10,781; Proh., 4,374; Soc. L., 952; Ind., 19,175.
1912 (Pres.), Dem., 173,408; Rep., 155,948; Prog., 142,228; Soc., 12,616; Proh., 2,754; Soc. L., 1,102.
1916 (Pres.), Dem., 247,885; Rep., 268,784; Soc., 11,058; Proh., 2,993; Soc. L., 1,097.
1916 (U. S. Sen.), Dem., 234,238; Rep., 267,177; Soc., 15,538.
1916 (Gov.), Dem., 228,883; Rep., 276,123; Soc.; 10,582; Proh., 5,938; Soc. L., 3,893.
1917 (Gov.), Dem., 135,666; Rep., 226,145; Soc., 16,496; Proh., 4,140.
1918 (Gov.), Dem., 197,828; Rep., 214,863; Soc., 7,757; Soc. L., 1,913.
1919 (Gov.), Dem., 192,673; Rep., 317,774; Proh., 679; Soc., 7,041; Soc. Lab., 2,321.
1920 (Pres.), Dem., 276,691; Rep., 681,153; Soc., 32,265; Soc. Lab., 3,583; Soc., 20,079.

## MICHIGAN.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Alcona | 1,048 | 267 | 453 | 573 | Lapeer | 5,558 | 1,307 | 1,937 | 3,345 |
| Alger | 1,272 | 471 | 650 | 687 | Leelanau | 2,185 | 415 | 763 | 984 |
| Allegan | 7,852 | 2,158 | 3,591 | 4,803 | Lenawee | 12,004 | 5,117 | 5,519 | 6,247 |
| Alpena | 3,490 | 1,907 | 1,392 | 2,020 | Livingston | 4,654 | 2,436 | 2,297 | 2,460 |
| Antrim | 2,255 | 519 | 932 | 1,336 | Luce | 717 | 193 | 257 | 527 |
| Arenac | 1,528 | 673 | 938 | 911 | Mackinac | 1,685 | 932 | 908 | 1,082 |
| Baraga | 1,378 | 307 | 462 | 748 | Macomb | 9,791 | 3,029 | 3,108 | 4,552 |
| Barry | 5,169 | 1,883 | 2,491 | 3,157 | Manistee | 3,274 | 2,196 | 2,177 | 2,360 |
| Bay | 13,933 | 7,011 | 5,996 | 6,708 | Marquette | 9,368 | 3,040 | 2,625 | 5,263 |
| Benzie | 1,522 | 423 | 770 | 900 | Mason | 3,705 | 1,360 | 1,689 | 2,198 |
| Berrien | 15,795 | 4,866 | 6,054 | 7,511 | Mecosta | 3,951 | 1,149 | 1,478 | 2,455 |
| Branch | 5,712 | 2,182 | 3,062 | 3,100 | Menominee | 5,089 | 1,568 | 1,854 | 2,671 |
| Calhoun | 16,780 | 6,314 | 8,037 | 6,484 | Midland | 4,161 | 967 | 1,454 | 2,104 |
| Cass | 4,515 | 2,186 | 2,666 | 2,518 | Missaukee | 1,812 | 347 | 917 | 1,160 |
| Charlevoix | 3,090 | 706 | 1,152 | 1,877 | Monroe | 8,671 | 5,229 | 4,202 | 3,787 |
| Cheboygan | 2,487 | 1,291 | 1,389 | 1,576 | Montcalm | 6,676 | 1,694 | 2,801 | 3,894 |
| Chippewa | 4,763 | 1,281 | 1,768 | 2,365 | Montmorency | 844 | 201 | 272 | 396 |
| Clare | 1,772 | 510 | 769 | 1,049 | Muskegon | 11,778 | 3,494 | 4,465 | 5,692 |
| Clinton | 6,039 | 1,468 | 2,094 | 3,381 | Newaygo | 4,200 | 931 | 1,625 | 2,417 |
| Crawford | 730 | 363 | 450 | 409 | Oakland | 19,349 | 6,449 | 6,659 | 7,730 |
| Delta | 4,975 | 2,029 | 1,781 | 3,088 | Oceana | 3,562 | 786 | 1,387 | 1,957 |
| Dickinson | 3,571 | 596 | 1,291 | 2,393 | Ogemaw | 1,695 | 448 | 743 | 878 |
| Eaton | 7,376 | 2,738 | 3,461 | 3,802 | Ontonagon | 1,996 | 660 | 888 | 1,235 |
| Emmet | 3,075 | 1,077 | 1,363 | 1,724 | Osceola | 3,612 | 772 | 1,285 | 2,193 |
| Genesee | 24,604 | 7,444 | 9,311 | 9,353 | Oscoda | 442 | 77 | 175 | 245 |
| Gladwin | 1,696 | 317 | 729 | 935 | Otsego | 875 | 468 | 519 | 531 |
| Gogebic | 5,569 | 839 | 1,510 | 2,204 | Ottawa | 10,566 | 2,396 | 3,941 | 5,484 |
| Grand Traverse | 4,097 | 1,163 | 1,848 | 1,917 | Presque Isle | 2,523 | 527 | 806 | 1,407 |
| Gratiot | 6,583 | 1,849 | 2,960 | 3,434 | Roscommon | 664 | 185 | 239 | 311 |
| Hillsdale | 6,717 | 2,478 | 3,424 | 3,463 | Saginaw | 20,529 | 8,522 | 8,434 | 9,544 |
| Houghton | 14,976 | 3,103 | 4,615 | 8,013 | Sanilac | 7,299 | 1,152 | 1,867 | 4,639 |
| Huron | 8,444 | 1,597 | 1,816 | 4,743 | Schoolcraft | 1,797 | 433 | 623 | 994 |
| Ingham | 18,524 | 7,093 | 7,664 | 7,846 | Shiawassee | 7,221 | 2,605 | 3,308 | 3,926 |
| Ionia | 8,001 | 3,405 | 3,911 | 3,950 | St. Clair | 14,967 | 4,568 | 4,617 | 6,538 |
| Iosco | 2,025 | 551 | 729 | 984 | St. Joseph | 6,052 | 2,723 | 3,567 | 3,132 |
| Iron | 3,548 | 504 | 877 | 2,139 | Tuscola | 7,310 | 1,276 | 2,329 | 4,461 |
| Isabella | 5,113 | 1,634 | 2,143 | 2,700 | Van Buren | 6,954 | 2,007 | 3,225 | 4,302 |
| Jackson | 16,020 | 7,810 | 8,058 | 6,938 | Washtenaw | 14,004 | 4,518 | 5,279 | 6,505 |
| Kalamazoo | 13,819 | 5,283 | 7,164 | 5,951 | Wayne | 224,122 | 52,529 | 60,935 | 70,056 |
| Kalkaska | 891 | 225 | 430 | 724 | Wexford | 3,440 | 1,108 | 1,683 | 2,333 |
| Kent | 40,802 | 14,763 | 20,364 | 16,095 | | | | | |
| Keweenaw | 1,274 | 89 | 194 | 860 | Total | 762,865 | 233,450 | 283,993 | 337,952 |
| Lake | 933 | 263 | 347 | 588 | | | | | |

Governor (1922)—Cummins, Dem., 218,252; Groesbeck, Rep., 356,933; Blumenberg, Soc., 4,452; Hoyt, Proh., 2,744; Markley, Soc.-Lab., 1,279.

U. S. Senator (1922)—Ferris, Dem., 294,932; Townsend, Rep., 281,843.

Michigan voters, in 1922, defeated the income tax proposal.

## PAST VOTE OF MICHIGAN.

1872 (Pres.), Dem., 77,020; Rep., 136,199; Dem. (O'C.), 2,861; Proh., 1,271.

1876 (Pres.), Dem., 141,095; Rep., 166,534; Gr., 9,060; Proh., 766; Anti-secret Soc., 75.

1878 (Gov.), Dem., 78,503; Rep., 126,280; Gr., 73,313.

1880 (Pres.), Dem., 131,301; Rep., 185,190; Gr., 34,895; Proh., 942; Lab., 312.

1882 (Gov.), Dem.-Gr., 154,269; Rep., 149,697; Str. Gr., 2,006; Proh., 5,854.

1883 (Sup. Ct.), Dem.-Gr., 127,326; Rep., 119,870; Str. Gr., 541; Proh., 13,467.

1884 (Pres.), Dem.-Gr., 189,361; Rep., 192,669; Str. Gr., 753; Proh., 18,403. (Dem. without Gr. vote, 149,835.)

1884 (Gov.), Dem.-Gr., 186,887; Rep., 190,840; Str. Gr., 414; Proh., 22,207.

1885 (Reg't.), Dem.-Gr., 155,743; Rep., 138,358; Proh., 14,708.

1886 (Gov.), Dem., 174,042; Rep., 181,474; Proh., 25,179.

1889 (Sup. Ct.), Dem., 122,955; Rep., 156,426; U. L., 2,681; Proh., 16,380.

1890 (Gov.), Dem., 183,725; Rep., 172,205; Indus., 13,198; Proh., 28,651.

1891 (Sup. Ct.), Dem., 148,271; Rep., 153,211; Indus., 9,121; Proh., 14,144.

1892 (Pres.), Dem., 202,296; Rep., 222,708; Peo., 19,931; Proh., 20,857; Scat., 925.

1893 (Sup. Ct.), Dem., 148,712; Rep., 164,754; Pop., 14,469; Proh., 14,526.

1894 (Gov.), Dem. and Pop., 221,022; Rep., 304,431; N. D., 9,738; Proh., 5,499.

1896 (Pres.), Dem. and Pop., 236,994; Rep., 293,072; Gold D., 6,905; Proh., 4,938; Nat., 1,815; Soc. L., 293; Scat., 585.

1897 (Sup. Ct.), Dem. and Pop., 139,307; Rep., 210,721; N. D., 30,729; Proh., 7,936.

1900 (Pres.), Dem. and Pop., 211,685; Rep., 316,269; Soc. D., 2,826; Proh., 11,859; Pop., 833; Soc. L., 903.

1902 (Gov.), Dem. and Pop., 174,077; Rep., 211,261; Soc. D., 4,271; Proh., 11,326; Soc. L., 1,264.

1904 (Pres.), Dem. and Pop., 135,392; Rep., 364,957; Soc., 9,042; Proh., 13,441; Soc. L., 1,036; Pop., 1,159.

1908 (Pres.), Dem. and Pop., 175,771; Rep., 335,580; Soc., 11,586; Proh., 16,974; Soc. L., 1,096; Ind., 760; Unattached, 63.

1910 (Gov.), Dem., 159,670; Rep., 202,863; Proh., 9,989.

1912 (Gov.), Dem., 194,017; Rep., 169,963; Prog., 155,372; Soc., 21,398; Proh., 7,811.

1912 (Pres.), Dem., 150,721; Rep., 152,244; Prog., 214,584; Soc., 23,211; Proh., 8,934; Soc. L., 1,252.

1914 (Gov.), Dem., 212,063; Rep., 176,254; Prog., 36,747; Soc., 11,056; Proh., 3,830; Soc. L., 497.

1916 (Pres.), Dem., 286,775; Rep., 339,097; Soc., 16,120; Proh., 8,139; Soc. L., 842.

1916 (Gov.), Dem., 264,441; Rep., 263,724; Soc., 15,040; Proh., 7,255; Soc. L., 963.

1918 (Gov.), Dem., 158,142; Rep., 266,738; Soc., 7,068; Proh., 1,637; Soc. L., 790.

1918 (U. S. Sen.), Dem., 212,487; Rep., 220,054; Soc., 4,763; Proh., 1,133.

1920 (Pres.), Dem., 233,450; Rep., 762,865; Soc., 28,947; Proh., 9,646; Soc. Lab., 2,539; Farm-Lab., 10,372.

1920 (Gov.), Dem., 310,566; Rep., 703,180; Soc., 23,542; Proh., 6,990; Soc. Lab., 2,097; Farm-Lab., 11,817.

## MINNESOTA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Aitkin | 2,933 | 613 | 877 | 1,122 | Martin | 5,142 | 1,221 | 1,756 | 1,741 |
| Anoka | 3,505 | 865 | 1,171 | 1,262 | Meeker | 4,693 | 878 | 1,475 | 1,780 |
| Becker | 4,311 | 901 | 1,453 | 1,761 | Mille Lacs | 3,521 | 526 | 1,113 | 1,127 |
| Beltrami | 4,518 | 1,427 | 1,912 | 1,331 | Morrison | 5,371 | 1,131 | 1,650 | 1,887 |
| Benton | 2,920 | 554 | 943 | 1,020 | Mower | 6,339 | 1,061 | 1,572 | 2,520 |
| Big Stone | 2,415 | 451 | 869 | 810 | Murray | 3,270 | 698 | 1,193 | 1,137 |
| Blue Earth | 8,894 | 1,974 | 2,211 | 2,864 | Nicollet | 4,115 | 556 | 814 | 1,288 |
| Brown | 5,841 | 796 | 1,101 | 2,078 | Nobles | 4,420 | 982 | 1,280 | 1,413 |
| Carlton | 2,833 | 1,152 | 1,115 | 1,096 | Norman | 3,451 | 481 | 1,076 | 1,046 |
| Carver | 5,073 | 562 | 960 | 1,950 | Olmsted | 7,130 | 1,756 | 1,926 | 2,101 |
| Cass | 3,242 | 710 | 1,260 | 982 | Otter Tail | 11,084 | 1,741 | 2,858 | 4,328 |
| Chippewa | 3,532 | 960 | 1,134 | 1,311 | Pennington | 2,320 | 768 | 1,004 | 868 |
| Chisago | 4,361 | 484 | 944 | 1,749 | Pine | 3,879 | 1,127 | 1,507 | 1,531 |
| Clay | 4,943 | 1,335 | 1,716 | 1,549 | Pipestone | 3,106 | 490 | 732 | 1,010 |
| Clearwater | 1,788 | 340 | 544 | 493 | Polk | 8,197 | 2,111 | 3,498 | 2,471 |
| Cook | 467 | 98 | 162 | 125 | Pope | 3,466 | 709 | 1,121 | 1,321 |
| Cottonwood | 3,882 | 451 | 762 | 1,425 | Ramsey | 40,204 | 21,110 | 22,291 | 13,317 |
| Crow Wing | 5,262 | 1,077 | 1,568 | 1,715 | Red Lake | 1,308 | 558 | 694 | 463 |
| Dakota | 5,373 | 2,190 | 2,373 | 1,881 | Redwood | 5,589 | 880 | 1,361 | 2,029 |
| Dodge | 3,386 | 516 | 895 | 1,260 | Renville | 5,995 | 1,253 | 1,660 | 2,432 |
| Douglas | 4,428 | 733 | 1,398 | 1,709 | Rice | 6,500 | 2,040 | 2,083 | 2,408 |
| Faribault | 6,687 | 869 | 1,123 | 2,184 | Rock | 3,121 | 442 | 705 | 1,196 |
| Fillmore | 7,341 | 899 | 1,313 | 2,945 | Roseau | 2,387 | 500 | 834 | 821 |
| Freeborn | 6,772 | 1,131 | 1,347 | 2,418 | St. Louis | 27,987 | 14,767 | 12,056 | 10,834 |
| Goodhue | 9,330 | 1,118 | 1,875 | 3,471 | Scott | 3,015 | 1,253 | 1,361 | 972 |
| Grant | 2,427 | 533 | 778 | 878 | Sherburne | 2,747 | 307 | 731 | 965 |
| Hennepin | 90,517 | 28,911 | 36,395 | 27,957 | Sibley | 4,198 | 502 | 973 | 1,737 |
| Houston | 4,101 | 598 | 744 | 1,783 | Stearns | 13,566 | 1,616 | 3,350 | 4,312 |
| Hubbard | 2,238 | 453 | 799 | 685 | Steele | 4,243 | 1,167 | 1,497 | 1,734 |
| Isanti | 3,007 | 405 | 935 | 1,123 | Stevens | 2,339 | 457 | 787 | 943 |
| Itasca | 3,973 | 1,930 | 1,504 | 1,163 | Swift | 3,553 | 985 | 1,181 | 1,335 |
| Jackson | 4,313 | 715 | 1,272 | 1,503 | Todd | 5,448 | 1,464 | 1,922 | 1,919 |
| Kanabec | 2,436 | 332 | 608 | 776 | Traverse | 1,759 | 550 | 779 | 774 |
| Kandiyohi | 4,759 | 1,282 | 1,968 | 1,612 | Wabasha | 4,907 | 1,275 | 1,449 | 1,787 |
| Kittson | 2,485 | 599 | 749 | 709 | Wadena | 2,635 | 503 | 651 | 938 |
| Koochiching | 1,786 | 859 | 1,089 | 474 | Waseca | 3,626 | 1,257 | 1,178 | 1,522 |
| Lac Qui Parle | 4,219 | 653 | 1,047 | 1,614 | Washington | 5,852 | 1,558 | 1,610 | 2,167 |
| Lake | 990 | 594 | 506 | 401 | Watonwan | 3,510 | 647 | 801 | 1,300 |
| Le Sueur | 4,059 | 1,853 | 1,723 | 1,430 | Wilkin | 2,106 | 561 | 808 | 690 |
| Lincoln | 2,548 | 673 | 1,174 | 777 | Winona | 7,888 | 2,896 | 2,907 | 2,916 |
| Lyon | 4,557 | 1,232 | 1,893 | 1,389 | Wright | 7,013 | 1,299 | 2,262 | 2,683 |
| McLeod | 5,430 | 1,139 | 1,305 | 1,772 | Yellow Medicine | 4,225 | 814 | 1,238 | 1,501 |
| Mahnomen | 1,076 | 215 | 411 | 262 | | | | | |
| Marshall | 4,738 | 885 | 1,513 | 1,461 | Total | 519,421 | 142,994 | 179,152 | 179,544 |

Governor (1922)—Indrehus, Dem., 79,899; Preus, Rep., 309,748; Johnson, Farm-Lab., 295,448.

U. S. Senator (1922)—Anna Oleson, Dem., 79,899; Kellogg, Rep., 241,925; Shipstead, Farm-Lab., 325,396.

Minnesota, in 1922, voted to loan the credit of the State to help farmers.

PAST VOTE OF MINNESOTA.

1881 (Gov.), Dem., 36,655; Rep., 64,485.
1883 (Gov.), Dem., 57,819; Rep., 72,404; Proh., 4,924.
1884 (Pres.), Dem., 70,065; Rep., 111,685; Gr., 3,583; Proh., 4,684.
1886 (Gov.), Dem., 104,464; Rep., 107,064; Proh., 8,966.
1888 (Pres.), Dem., 104,385; Rep., 142,492; Proh., 15,311; W. L., 1,094.
1890 (Gov.), Dem., 85,844; Rep., 88,111; For. Alli., 58,514; Proh., 8,424.
1892 (Pres.), Dem., 100,920; Rep., 122,823; Pop., 29,313; Proh., 14,182.
1894 (Gov.), Dem., 53,579; Rep., 147,944; Pop., 87,931; Proh., 6,879.
1896 (Pres.), Dem., 139,626; Rep., 193,501; Gold D., 3,202; Proh., 4,343; Soc. L., 915.
1898 (Gov.), Fus., 131,980; Rep., 111,796; Pop., 1,766; Proh., 5,299.
1900 (Pres.), Fus., 112,901; Rep., 190,461; Proh., 8,555; Soc. D., 3,065; Soc. L., 1,329.
1900 (Gov.), Fus., 150,651; Rep., 152,905.
1902 (Gov.), Fus., 99,375; Rep., 155,861; Proh., 5,735; Soc., 3,074; Peo., 5,347; Soc. L., 2,426; Nat., 2,393.
1904 (Gov.), Dem., 148,091; Rep., 141,847.
1904 (Pres.), Fus., 55,187; Rep., 216,651; Proh., 6,253; Soc., 11,692; Soc. L., 974; Pop., 2,103.
1906 (Gov.), Fus., 168,715; Rep., 92,082; Proh., 7,709; Soc., 5,006.
1908 (Gov.), Dem., 173,845; Rep., 155,667; Proh., 7,024; Soc., 6,516; Ind., 593.
1908 (Pres.), Fus., 109,594; Rep., 195,876; Proh., 8,658; Soc., 10,021; S. L., 843; Pop., 1,309; Ind., 420.
1910 (Gov.) Fus., 103,779; Rep., 164,185; Proh., 8,960; Soc., 6,510; S. L., 6,510; Pub. Own., 11,173.
1912 (Gov.), Dem., 99,659; Rep., 129,688; Prog., 33,455; Proh., 29,876; Pub. Own., 25,769.
1912 (Pres.), Dem., 106,426; Rep., 64,334; Prog., 125,856; Soc., 27,505; Proh., 7,886; S. L., 2,212.
1914 (Gov.), Dem., 156,304; Rep., 143,730; Prog., 3,553; Soc., 17,225; Indus. L., 3,861.
1916 (U. S. Sen.), Dem., 117,541; Rep., 185,159; Proh., 78,425.
1916 (Pres.), Dem., 179,152; Rep., 179,544; Prog., 290; Proh., 7,793; Soc., 20,117; S. L., 468.
1916 (Gov.), Dem., 93,112; Rep., 245,841; Soc., 26,306; Proh., 19,884; Indus. L., 5,476.
1918 (Gov.), Dem., 76,793; Rep., 166,515; Nat., 6,648; Farm-Lab., 111,948; Soc., 7,794.
1918 (U. S. Sen.), Rep., 206,555; Nat., 137,274.
1920 (Pres.), Dem., 142,994; Rep., 519,421; Soc., 56,106; Proh., 11,489; Soc. Lab., 5,828.
1920 (Gov.), Dem., 81,293; Rep., 415,805; Ind., 281,402; Soc., 5,124.

## MISSISSIPPI.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Adams | 642 | 114 | 671 | 42 | Lincoln | 774 | 421 | 1,282 | 105 |
| Alcorn | 1,336 | 354 | 1,452 | 125 | Lowndes | 928 | 51 | 1,028 | 29 |
| Amite | 578 | 90 | 1,024 | 16 | Madison | 831 | 57 | 782 | 36 |
| Attala | 1,187 | 270 | 1,267 | 110 | Marion | 613 | 143 | 792 | 51 |
| Benton | 405 | 124 | 718 | 38 | Marshall | 823 | 30 | 1,017 | 8 |
| Bolivar | 1,039 | 326 | ..... | ..... | Monroe | 1,881 | 139 | 1,684 | 82 |
| Calhoun | 875 | 160 | 1,225 | 45 | Montgomery | 846 | 57 | 997 | 35 |
| Carroll | 669 | 184 | 943 | 34 | Neshoba | 1,088 | 182 | 1,459 | 69 |
| Chickasaw | 944 | 194 | 1,215 | 47 | Newton | 1,208 | 108 | 1,341 | 19 |
| Choctaw | 779 | 191 | 873 | 53 | Noxubee | 701 | 24 | 656 | 10 |
| Claiborne | 401 | 14 | 435 | 5 | Oktibbeha | 778 | 70 | 911 | 48 |
| Clarke | 807 | 47 | 1,092 | 49 | Panola | 843 | 80 | 1,262 | 29 |
| Clay | 771 | 48 | 832 | 27 | Pearl River | 464 | 53 | 521 | 35 |
| Coahoma | 882 | 61 | 697 | 21 | Perry | 271 | 69 | 395 | 32 |
| Copiah | 1,300 | 60 | 1,486 | 20 | Pike | 1,114 | 153 | 1,451 | 53 |
| Covington | 649 | 257 | 836 | 63 | Pontotoc | 992 | 439 | 1,314 | 110 |
| De Soto | 806 | 27 | 861 | 12 | Prentiss | 992 | 496 | 1,342 | 164 |
| Forrest | 1,146 | 140 | 1,146 | 54 | Quitman | 377 | 39 | 272 | 12 |
| Franklin | 641 | 203 | 769 | 22 | Rankin | 905 | 43 | 1,104 | 8 |
| George | 263 | 56 | 341 | 32 | Scott | 1,055 | 64 | 1,106 | 25 |
| Greene | 337 | 24 | 399 | 32 | Sharkey | 228 | 7 | 246 | 6 |
| Grenada | 533 | 12 | 649 | 28 | Simpson | 902 | 109 | 966 | 34 |
| Hancock | 305 | 130 | 512 | 68 | Smith | 968 | 265 | 1,271 | 30 |
| Harrison | 1,270 | 314 | 1,395 | 197 | Stone | 299 | 16 | 451 | 31 |
| Hinds | 2,510 | 151 | 2,220 | 97 | Sunflower | 1,066 | 47 | 879 | 20 |
| Holmes | 917 | 69 | 1,070 | 21 | Tallahatchie | 1,092 | 69 | 1,061 | 6 |
| Humphreys | 316 | 21 | ..... | ..... | Tate | 876 | 117 | 1,074 | 18 |
| Issaquena | 83 | 13 | 94 | 8 | Tippah | 955 | 237 | 1,547 | 82 |
| Itawamba | 1,023 | 198 | 1,407 | 184 | Tishomingo | 841 | 387 | 1,031 | 175 |
| Jackson | 577 | 121 | 743 | 87 | Tunica | 256 | 2 | 173 | ..... |
| Jasper | 899 | 98 | 1,040 | 38 | Union | 1,224 | 429 | 1,666 | 89 |
| Jefferson | 430 | 14 | 456 | 3 | Walthall | 464 | 139 | 665 | 12 |
| Jeff. Davis | 485 | 179 | 634 | 45 | Warren | 1,082 | 161 | 1,204 | 73 |
| Jones | 1,396 | 419 | 1,664 | 196 | Washington | 776 | 60 | 836 | 47 |
| Kemper | 734 | 129 | 939 | 71 | Wayne | 547 | 112 | 787 | 47 |
| Lafayette | 873 | 321 | 1,370 | 47 | Webster | 576 | 299 | 944 | 143 |
| Lamar | 672 | 192 | 744 | 89 | Wilkinson | 416 | 15 | 460 | 8 |
| Lauderdale | 2,539 | 228 | 3,058 | 157 | Winston | 932 | 113 | 1,152 | 47 |
| Lawrence | 526 | 131 | 725 | 18 | Yalobusha | 892 | 82 | 1,175 | 49 |
| Leake | 1,082 | 121 | 1,434 | 31 | Yazoo | 948 | 46 | 1,146 | 25 |
| Lee | 1,652 | 302 | 1,683 | 91 | | | | | |
| Leflore | 969 | 39 | 853 | 28 | Total | 69,277 | 11,576 | 80,422 | 4,253 |

U. S. Senator (1922)—Stephens, Dem., 63,639; Cook, Rep., 3,362; Rose, 1,273.

PAST VOTE OF MISSISSIPPI.

1872 (Pres.), Dem. and L., 47,288; Rep., 82,175.
1876 (Pres.), Dem., 112,173; Rep., 52,605.
1880 (Pres.), Dem., 75,750; Rep., 34,854.
1884 (Pres.), Dem., 76,510; Rep., 43,509.
1888 (Pres.), Dem., 85,467; Rep., 31,120; Proh., 258.
1892 (Pres.), Dem., 40,288; Rep., 1,342; Peo., 10,-102; Proh., 995.
1896 (Pres.), Dem.-Peo., 63,793; Rep., 5,123; Nat. Dem., 1,071; Proh., 485; Soc. Lab., 35,454; Ind. Proh., 13,960.
1900 (Pres.), Dem., 51,706; Rep., 5,753; Pop., 1,644.
1903 (Gov.), Dem., 32,191; no opposition.
1904 (Pres.), Dem., 53,376; Rep., 3,189; Pop., 1,425; Soc., 393.
1908 (Pres.), Dem., 60,876; Rep., 4,505; Soc., 978; Pop., 1,165.
1911 (Gov.), Dem., 40,200; Soc., 3,822.
1911 (Lt. Gov.), Dem., 32,237; Soc., 8,922.
1912 (Pres.), Dem., 57,164; Rep., 1,511; Prog., 3,627; Soc., 2,017.
*1915 (Gov.), Dem., 50,541; Soc., 4,406.
*1916 (Pres.), Dem., 80,422; Rep., 4,253; Soc., 1,484; Prog., 520.
1916 (U. S. Sen.), Dem., 74,290.
1919 (Gov.), Dem., no opposition.
1920 (Pres.), Dem., 69,277; Rep., 11,576; Soc., 1,639.
*No returns received from Bolivar County.

## MISSOURI.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Adair | 2,534 | 4,861 | 2,275 | 2,681 | McDonald | 2,242 | 2,921 | 1,631 | 1,414 |
| Andrew | 2,466 | 3,913 | 1,853 | 2,087 | Macon | 5,626 | 6,009 | 3,805 | 3,034 |
| Atchison | 2,227 | 3,236 | 1,697 | 1,626 | Madison | 1,830 | 2,023 | 1,310 | 1,230 |
| Audrain | 5,514 | 3,827 | 3,572 | 1,741 | Maries | 1,677 | 1,445 | 1,319 | 725 |
| Barry | 3,729 | 5,162 | 2,752 | 2,683 | Marion | 6,719 | 4,660 | 4,534 | 2,759 |
| Barton | 3,040 | 3,480 | 2,217 | 1,597 | Mercer | 1,044 | 3,170 | 1,042 | 1,733 |
| Bates | 4,433 | 5,039 | 3,295 | 2,597 | Miller | 1,833 | 3,555 | 1,395 | 1,862 |
| Benton | 1,506 | 3,367 | 1,285 | 1,842 | Mississippi | 2,442 | 2,193 | 1,874 | 1,330 |
| Bollinger | 2,019 | 2,869 | 1,538 | 1,624 | Moniteau | 2,405 | 3,535 | 1,675 | 1,742 |
| Boone | 8,748 | 4,077 | 5,601 | 2,180 | Monroe | 6,136 | 1,406 | 3,738 | 748 |
| Buchanan | 16,188 | 1,719 | 10,973 | 7,761 | Montgomery | 3,103 | 3,910 | 1,988 | 2,079 |
| Butler | 2,662 | 4,601 | 2,135 | 2,717 | Morgan | 1,834 | 2,911 | 1,368 | 1,578 |
| Caldwell | 2,498 | 4,168 | 1,683 | 2,069 | New Madrid | 3,637 | 3,745 | 2,715 | 2,039 |
| Calloway | 6,035 | 3,274 | 3,882 | 2,009 | Newton | 4,078 | 5,541 | 3,158 | 2,929 |
| Camden | 1,034 | 2,276 | 930 | 1,261 | Nodaway | 5,504 | 6,671 | 3,874 | 3,540 |
| Cape Girardeau | 4,584 | 7,537 | 2,993 | 3,753 | Oregon | 1,961 | 1,319 | 1,799 | 660 |
| Carroll | 4,075 | 5,609 | 2,822 | 2,978 | Osage | 1,118 | 3,699 | 1,383 | 1,769 |
| Carter | 930 | 1,057 | 586 | 469 | Ozark | 569 | 2,457 | 651 | 1,331 |
| Cass | 5,030 | 4,055 | 3,337 | 2,104 | Pemiscot | 3,901 | 4,443 | 2,447 | 2,076 |
| Cedar | 1,936 | 3,488 | 1,410 | 1,874 | Perry | 1,504 | 3,652 | 1,396 | 1,988 |
| Chariton | 4,675 | 4,331 | 3,135 | 2,183 | Pettis | 6,561 | 8,595 | 4,665 | 4,319 |
| Christian | 919 | 3,795 | 938 | 1,978 | Phelps | 2,422 | 2,692 | 1,887 | 1,487 |
| Clark | 2,383 | 3,310 | 1,692 | 1,782 | Pike | 5,034 | 3,860 | 3,344 | 2,322 |
| Clay | 6,283 | 2,804 | 3,902 | 1,307 | Platte | 4,361 | 1,724 | 2,974 | 921 |
| Clinton | 3,304 | 3,165 | 2,153 | 1,551 | Polk | 2,847 | 4,967 | 2,149 | 2,613 |
| Cole | 4,167 | 5,878 | 2,915 | 2,746 | Pulaski | 1,978 | 1,853 | 1,339 | 1,003 |
| Cooper | 3,657 | 5,151 | 2,537 | 2,830 | Putnam | 1,315 | 3,880 | 1,035 | 2,106 |
| Crawford | 1,658 | 2,623 | 1,312 | 1,642 | Ralls | 2,803 | 1,362 | 1,994 | 826 |
| Dade | 1,892 | 3,540 | 1,618 | 1,941 | Randolph | 8,115 | 3,768 | 5,081 | 2,111 |
| Dallas | 1,100 | 2,665 | 1,022 | 1,428 | Ray | 4,865 | 3,228 | 3,380 | 1,718 |
| Daviess | 3,560 | 4,458 | 2,375 | 2,342 | Reynolds | 1,837 | 1,173 | 1,209 | 592 |
| De Kalb | 2,121 | 3,001 | 1,647 | 1,640 | Ripley | 1,735 | 1,752 | 1,325 | 1,053 |
| Dent | 1,907 | 2,204 | 1,457 | 1,252 | St. Charles | 2,472 | 6,645 | 1,914 | 3,518 |
| Douglas | 577 | 3,237 | 737 | 1,730 | St. Clair | 2,296 | 3,249 | 1,881 | 1,718 |
| Dunklin | 5,199 | 4,455 | 3,723 | 1,924 | St. Francois | 1,149 | 1,917 | 3,675 | 3,015 |
| Franklin | 2,814 | 8,712 | 2,468 | 4,325 | Ste. Genevieve | 5,300 | 5,502 | 1,218 | 1,137 |
| Gasconade | 454 | 4,481 | 510 | 2,513 | St. Louis | 12,438 | 25,008 | 7,587 | 12,485 |
| Gentry | 3,374 | 3,442 | 2,104 | 1,823 | Saline | 7,114 | 5,613 | 4,503 | 2,965 |
| Greene | 11,514 | 15,755 | 7,191 | 7,543 | Schuyler | 1,993 | 1,806 | 1,341 | 996 |
| Grundy | 2,721 | 5,123 | 1,739 | 2,481 | Scotland | 2,122 | 2,509 | 1,592 | 1,248 |
| Harrison | 2,502 | 5,151 | 2,295 | 2,741 | Scott | 4,257 | 4,204 | 2,816 | 2,285 |
| Henry | 5,367 | 5,313 | 3,653 | 2,727 | Shannon | 1,661 | 1,639 | 1,113 | 783 |
| Hickory | 532 | 2,131 | 552 | 1,144 | Shelby | 3,935 | 2,128 | 2,549 | 1,195 |
| Holt | 2,329 | 4,153 | 1,615 | 2,030 | Stoddard | 4,428 | 4,641 | 3,274 | 2,482 |
| Howard | 4,735 | 2,125 | 2,866 | 1,121 | Stone | 672 | 2,749 | 621 | 1,525 |
| Howell | 2,323 | 4,344 | 1,861 | 2,132 | Sullivan | 3,473 | 4,476 | 2,446 | 2,420 |
| Iron | 1,554 | 1,563 | 1,027 | 874 | Taney | 913 | 2,001 | 679 | 1,123 |
| Jackson | 76,791 | 78,875 | 44,556 | 32,943 | Texas | 2,965 | 3,552 | 2,291 | 1,809 |
| Jasper | 11,006 | 17,074 | 10,513 | 9,358 | Vernon | 5,419 | 4,645 | 3,776 | 2,211 |
| Jefferson | 4,684 | 5,730 | 3,021 | 3,310 | Warren | 545 | 3,512 | 487 | 1,752 |
| Johnson | 5,444 | 5,700 | 3,701 | 2,966 | Washington | 1,837 | 2,618 | 1,394 | 1,657 |
| Knox | 2,250 | 2,749 | 1,657 | 1,460 | Wayne | 2,072 | 2,380 | 1,594 | 1,528 |
| Laclede | 2,183 | 3,469 | 1,755 | 1,877 | Webster | 2,428 | 4,000 | 1,903 | 2,114 |
| Lafayette | 6,169 | 7,471 | 4,073 | 4,049 | Worth | 1,532 | 1,888 | 1,079 | 892 |
| Lawrence | 3,532 | 6,093 | 2,809 | 3,228 | Wright | 2,008 | 3,661 | 1,593 | 2,176 |
| Lewis | 3,542 | 2,810 | 2,357 | 1,429 | St. Louis City | 106,047 | 163,280 | ..... | ..... |
| Lincoln | 3,660 | 3,209 | 2,468 | 1,642 | | | | | |
| Linn | 5,184 | 5,557 | 3,441 | 2,801 | Total | 574,799 | 727,162 | 398,032 | 369,339 |
| Livingston | 3,666 | 5,093 | 2,609 | 2,424 | | | | | |

U. S. Senator (1922)—Reed, Dem., 506,264; Brewster, Rep., 462,009.

The Anti-Saloon League and other "drys" opposed Reed. Both Reed and Brewster attacked the Ku Klux Klan. The vote in St. Louis was: Reed, 104,680; Brewster, 60,878. Reed's total plurality in the State was 44,255, of which 43,802 was given to him in St. Louis. Every other large city in Missouri voted against him.

### PAST VOTE OF MISSOURI.

1884 (Pres.), Dem., 285,988; Rep. Gr., 202,929; Proh., 2,151.

1886 (Sup. Judge), Dem., 229,125; Rep., 178,490; Gr., 12,430; Proh., 3,504.

1888 (Gov.), Dem., 255,764; Rep., 242,533; U. L., 15,388; Proh., 4,387.

1888 (Pres.), Dem., 261,974; Rep., 236,257; U. L., 18,632; Proh., 4,539.

1892 (Pres.), Dem., 268,398; Rep., 226,918; Pop., 41,213; Proh., 4,331.

1894 (Sup. Ct.), Dem., 226,547; Rep., 229,691; Pop., 42,463; Proh., 3,099; Soc. L., 1,572.

1896 (Pres.), Dem., 363,667; Rep., 304,940; Gold D., 2,355; Proh., 2,169; Nat., 293; Soc. L., 595.

1898 (Sup. Ct.), Dem., 285,778; Rep., 255,428; Peo., 9,937; Proh., 2,933; Soc. D., 1,645; Soc. L., 1,063.

1900 (Gov.), Dem., 350,045; Rep., 317,905; Pop., 4,356; Proh., 5,195.

1900 (Pres.), Dem., 351,922; Rep., 314,092; Pop., 4,244; Proh., 5,965; Soc. D., 6,128; Soc. L., 1,294.

1902 (Sup. Ct.), Dem., 273,081; Rep., 228,397; Soc., 5,335; Proh., 4,995; Pub., 3,358; S. L., 969; Allied, 1,841.

1904 (Pres.), Dem., 296,312; Rep., 321,449; Soc., 13,009; Proh., 7,191; Soc. L., 1,674; Pop., 4,226.

1906 (Sec. St.), Dem., 292,421; Rep., 283,417.

1908 (Gov.), Dem., 340,053; Rep., 355,932; Soc., 14,505; Proh., 4,169; Pop., 1,058.

1908 (Pres.), Dem., 346,574; Rep., 347,203; Proh., 4,198; Soc., 15,391; S. L., 867; Ind., 397.

1912 (Pres.), Dem., 330,746; Rep., 207,821; Prog., 124,371; Soc., 28,466; Proh., 5,380; S. L., 1,778.

1912 (Gov.), Dem., 337,019; Rep., 217,817; Prog., 109,146; Soc., 28,145; Proh., 5,220; S. L., 1,861.

1914 (U. S. Sen.), Dem., 311,573; Rep., 257,056, Prog., 27,614; Proh., 3,847; Soc., 16,853; S. L. 1,251.

1916 (Pres.), Dem., 398,032; Rep., 369,339; Soc., 14,612; Proh., 3,884; S. L., 902.

1916 (Gov.), Dem., 382,355; Rep., 380,092; Soc., 14,555; Prog., 4,041; Proh., 4,009; S. L., 946.

1916 (U. S. Sen.), Dem., 396,166; Rep., 371,710; Soc., 14,659; S. L., 962.

1918 (U. S. Sen.), Dem., 267,397; Rep., 302,680.

1920 (Pres.), Dem., 574,799; Rep., 727,162; Soc., 20,242; Soc. Lab., 2,164; Farm.-Lab., 3,291; Proh., 5,142.

1920 (Gov.), Dem., 580,626; Rep., 722,024; Soc., 19,849; Soc. Lab., 1,620; Proh., 3,974; Farm.-Lab., 3,003.

1920 (U. S. Sen.), Dem., 589,498; Rep., 711,161; Soc. 20,002; Soc. Lab., 1,675; Farm.-Lab., 3,158.

## MONTANA.

(Presidential vote, 1920.)

| Counties. | Harding, Rep. | Cox, Dem. | Counties. | Harding, Rep. | Cox, Dem. | Counties. | Harding, Rep. | Cox, Dem. |
|---|---|---|---|---|---|---|---|---|
| Beaverhead | 2,049 | 833 | Hill | 2,230 | 1,388 | Richland | 1,759 | 744 |
| Big Horn | 1,062 | 475 | Jefferson | 969 | 688 | Rosebud | 1,624 | 555 |
| Blaine | 1,720 | 848 | Lewis & Clark | 4,348 | 2,413 | Roosevelt | 2,239 | 873 |
| Broadwater | 723 | 622 | Liberty | 757 | 331 | Sanders | 1,035 | 741 |
| Carbon | 2,700 | 1,107 | Lincoln | 1,187 | 683 | Sheridan | 1,335 | 610 |
| Carter | 782 | 342 | Madison | 1,672 | 877 | Silver Bow | 10,074 | 6,394 |
| Cascade | 6,808 | 3,938 | McCone | 1,177 | 537 | Stillwater | 1,721 | 664 |
| Chouteau | 2,646 | 1,436 | Meagher | 744 | 314 | Sweet Grass | 1,035 | 349 |
| Custer | 2,347 | 1,127 | Mineral | 347 | 362 | Teton | 1,319 | 671 |
| Daniels | 811 | 289 | Missoula | 4,374 | 3,292 | Toole | 861 | 405 |
| Dawson | 1,784 | 875 | Musselshell | 1,910 | 951 | Treasure | 517 | 174 |
| Deer Lodge | 3,130 | 1,567 | Park | 2,537 | 1,455 | Valley | 2,096 | 895 |
| Fallon | 1,064 | 381 | Phillips | 1,693 | 648 | Wheatland | 1,250 | 520 |
| Fergus | 5,858 | 3,371 | Pondera | 1,654 | 893 | Wibaux | 692 | 223 |
| Flathead | 3,900 | 2,241 | Powder River | 955 | 330 | Yellowstone | 5,714 | 2,782 |
| Gallatin | 3,238 | 2,370 | Powell | 1,345 | 787 | Golden Valley | 1,185 | 381 |
| Garfield | 1,226 | 1,484 | Prairie | 881 | 242 | | | |
| Glacier | 1,297 | 531 | Ravalli | 2,110 | 1,224 | Total | 109,430 | 57,372 |
| Granite | 949 | 439 | | | | | | |

(Presidential vote, 1916.)

| Counties. | Wilson, Dem. | Hughes, Rep. | Counties. | Wilson, Dem. | Hughes, Rep. | Counties. | Wilson, Dem. | Hughes, Rep. |
|---|---|---|---|---|---|---|---|---|
| Beaverhead | 1,463 | 1,455 | Hill | 3,241 | 1,709 | Richland | 1,947 | 1,223 |
| Big Horn | 740 | 497 | Jefferson | 1,124 | 712 | Rosebud | 1,608 | 1,337 |
| Blaine | 1,261 | 857 | Lewis & Clark | 4,337 | 3,423 | Sanders | 1,178 | 793 |
| Broadwater | 1,100 | 584 | Lincoln | 1,186 | 807 | Sheridan | 3,264 | 1,724 |
| Carbon | 1,926 | 1,708 | Madison | 1,672 | 1,379 | Silver Bow | 13,084 | 6,757 |
| Cascade | 6,612 | 3,253 | Meagher | 1,482 | 1,158 | Stillwater | 1,197 | 918 |
| Chouteaux | 2,738 | 1,486 | Mineral | 781 | 251 | Sweet Grass | 839 | 890 |
| Custer | 2,602 | 1,615 | Missoula | 4,060 | 2,926 | Teton | 2,273 | 1,603 |
| Dawson | 2,845 | 2,105 | Musselshell | 2,036 | 1,738 | Toole | 1,075 | 698 |
| Deer Lodge | 4,171 | 1,860 | Park | 2,050 | 1,957 | Valley | 2,102 | 1,111 |
| Fallon | 1,845 | 1,169 | Phillips | 1,252 | 999 | Wibaux | 585 | 466 |
| Fergus | 5,749 | 3,290 | Powell | 1,340 | 939 | Yellowstone | 4,259 | 3,281 |
| Flathead | 2,978 | 2,913 | Prairie | 622 | 535 | | | |
| Gallatin | 3,661 | 2,527 | Ravalli | 1,967 | 1,623 | Total | 101,063 | 66,750 |
| Granite | 812 | 574 | | | | | | |

U. S. Senator (1922)—Wheeler, Dem., 88,205; Riddick, Rep., 69,464; Ambrose, Soc., 1,068.
Montana, in 1922, voted for a Soldier Bonus.

### PAST VOTE OF MONTANA.

1880 (Cong.), Dem., 7,799; Rep., 6,371.
1882 (Cong.), Dem., 12,398; Rep., 10,914.
1884 (Cong.), Dem., 13,584; Rep., 13,385.
1886 (Cong.), Dem., 17,990; Rep., 14,272.
1888 (Cong.), Dem., 17,360; Rep., 22,486; Proh., 148.
1889 (Gov.), Dem., 19,564; Rep., 18,988.
1890 (Cong.), Dem., 15,411; Rep, 15,128.
1892 (Pres.), Dem., 17,581; Rep., 18,851; Pop., 7,334; Proh., 549.
1892 (Gov.), Dem., 17,650; Rep., 18,187; Pop., 7,794; Proh., 543.
1894 (Cong.), Dem., 10,369; Rep., 23,140; Pop., 15,240; Proh., 519.
1896 (Pres.), Dem., 42,537; Rep., 10,494; Proh., 186.
1898 (Cong.), Dem., 23,351; Rep., 14,823; Pop., 11,607.
1900 (Pres.), Fus., 37,146; Rep., 25,373; Soc. D., 708; Proh., 298; Pop., 110; Soc. L., 111.
1900 (Gov.), Fus., 31,119; Rep., 22,691; Ind. Dem., 9,188; Soc. D., 505.
1902 (Sup. Jus.), Fus., 21,204; Rep., 31,690; Soc., 2,466.
1904 (Pres.), Fus., 21,773; Rep., 34,932; Soc., 5,676; Proh., 335; Soc. L., 208; Pop., 1,520.
1904 (Gov.), Dem., 35,377; Rep., 26,957; Soc., 3,431.
1906 (Cong.), Dem., 22,874; Rep., 28,268; Soc., 4,638; Pop., 261.
1908 (Cong.), Dem., 29,032; Rep., 32,819; Soc., 5,318.
1908 (Pres.), Dem., 29,326; Rep., 32,333; Soc., 5,855; Proh., 827; Ind., 1,200.
1908 (Gov.), Dem., 32,282; Rep., 30,792; Soc., 5,112.
1910 (Cong.), Dem., 28,180; Rep., 32,525.
1912 (Pres.), Dem., 27,941; Rep., 18,512; Prog., 22,456; Soc., 10,885; Proh., 32.
1912 (Gov.), Dem., 25,381; Rep., 22,950; Prog., 18,881; Soc., 12,566.
1914 (Cong.), Dem., 37,012; Rep., 26,161; Prog., 6,694; Soc., 12,278.
1916 (Pres.), Dem., 101,063; Rep., 66,750; Prog., 302; Soc., 9,564.
1916 (Gov.), Dem., 85,683; Rep., 76,547; Soc., 11,342.
1916 (U. S. Sen.), Dem., 85,380; Rep., 72,758; Soc., 9,292.
1920 (Pres.), Dem., 57,372; Rep., 109,430; F.-L., 12,204.
1920 (Gov.), Dem., 74,875; Rep., 111,113.

## NEBRASKA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Adams | 4,549 | 1,932 | 2,657 | 2,041 | Cedar | 3,906 | 1,279 | 1,715 | 1,727 |
| Antelope | 3,322 | 1,154 | 1,881 | 1,495 | Chase | 976 | 414 | 551 | 369 |
| Arthur | 167 | 94 | 286 | 143 | Cherry | 1,636 | 711 | 1,734 | 1,091 |
| Banner | 258 | 69 | 166 | 142 | Cheyenne | 1,857 | 606 | 834 | 563 |
| Blaine | 328 | 176 | 246 | 184 | Clay | 3,390 | 1,466 | 1,975 | 1,737 |
| Boone | 3,108 | 1,461 | 2,005 | 1,225 | Colfax | 1,992 | 957 | 1,628 | 897 |
| Box Butte | 1,630 | 756 | 914 | 591 | Cuming | 3,177 | 764 | 1,424 | 1,551 |
| Boyd | 1,482 | 527 | 852 | 809 | Custer | 4,974 | 2,739 | 3,609 | 2,047 |
| Brown | 1,417 | 558 | 901 | 528 | Dakota | 1,525 | 873 | 1,032 | 612 |
| Buffalo | 4,954 | 2,258 | 2,877 | 2,216 | Dawes | 1,801 | 900 | 1,088 | 751 |
| Burt | 2,969 | 1,194 | 1,425 | 1,508 | Dawson | 3,384 | 1,444 | 1,989 | 1,444 |
| Butler | 2,478 | 1,918 | 2,332 | 1,120 | Deuel | 684 | 321 | 340 | 181 |
| Cass | 3,575 | 2,192 | 2,595 | 1,927 | Dixon | 2,435 | 911 | 1,550 | 1,208 |

NEBRASKA—*Continued.*

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Dodge | 4,832 | 1,799 | 2,644 | 2,446 | Morrill | 1,366 | 667 | 888 | 470 |
| Douglas | 28,543 | 18,439 | 24,796 | 14,557 | Nance | 1,877 | 746 | 1,165 | 930 |
| Dundy | 1,094 | 375 | 370 | 347 | Nemaha | 2,888 | 1,512 | 1,658 | 1,438 |
| Fillmore | 2,803 | 1,549 | 1,911 | 1,561 | Nuckolls | 2,367 | 1,337 | 1,732 | 1,411 |
| Franklin | 2,294 | 1,030 | 1,345 | 1,081 | Otoe | 3,869 | 1,671 | 2,344 | 2,121 |
| Frontier | 1,750 | 673 | 1,138 | 736 | Pawnee | 2,510 | 972 | 1,171 | 1,228 |
| Furnas | 2,445 | 1,371 | 1,607 | 1,163 | Perkins | 722 | 387 | 397 | 210 |
| Gage | 6,059 | 2,477 | 3,385 | 3,383 | Phelps | 2,324 | 1,169 | 1,425 | 971 |
| Garden | 924 | 421 | 598 | 306 | Pierce | 2,478 | 743 | 1,030 | 1,228 |
| Garfield | 611 | 252 | 426 | 302 | Platte | 4,058 | 1,367 | 2,412 | 1,918 |
| Gosper | 794 | 486 | 617 | 434 | Polk | 2,393 | 1,236 | 1,600 | 1,060 |
| Grant | 256 | 141 | 241 | 157 | Red Willow | 1,993 | 1,133 | 1,418 | 977 |
| Greeley | 1,345 | 1,180 | 1,289 | 627 | Richardson | 4,496 | 2,679 | 2,650 | 2,039 |
| Hall | 4,719 | 1,724 | 2,483 | 2,555 | Rock | 621 | 239 | 449 | 375 |
| Hamilton | 2,950 | 1,356 | 1,816 | 1,444 | Saline | 3,197 | 2,172 | 2,646 | 1,469 |
| Harlan | 1,756 | 974 | 1,267 | 834 | Sarpy | 1,662 | 1,027 | 1,320 | 885 |
| Hayes | 512 | 207 | 382 | 219 | Saunders | 3,733 | 2,296 | 2,671 | 1,957 |
| Hitchcock | 1,127 | 615 | 733 | 435 | Scott's Bluff | 3,189 | 969 | 1,587 | 1,144 |
| Holt | 3,163 | 1,577 | 2,213 | 1,568 | Seward | 3,690 | 1,477 | 1,797 | 1,855 |
| Hooker | 230 | 117 | 218 | 109 | Sheridan | 1,714 | 84 | 1,158 | 604 |
| Howard | 1,508 | 1,311 | 1,695 | 698 | Sherman | 1,582 | 848 | 1,208 | 706 |
| Jefferson | 3,488 | 1,408 | 1,841 | 1,813 | Sioux | 627 | 252 | 737 | 344 |
| Johnson | 2,416 | 909 | 1,117 | 1,373 | Stanton | 1,457 | 501 | 899 | 736 |
| Kearney | 1,683 | 1,273 | 1,396 | 760 | Thayer | 3,456 | 1,120 | 1,581 | 1,772 |
| Keith | 1,050 | 472 | 544 | 389 | Thomas | 305 | 207 | 261 | 242 |
| Keyapaha | 479 | 218 | 401 | 316 | Thurston | 1,167 | 925 | 1,255 | 717 |
| Kimball | 910 | 339 | 388 | 223 | Valley | 1,935 | 912 | 1,388 | 840 |
| Knox | 3,678 | 1,470 | 2,329 | 1,910 | Washington | 2,409 | 1,295 | 1,555 | 1,297 |
| Lancaster | 15,638 | 8,435 | 9,093 | 7,042 | Wayne | 2,312 | 681 | 1,006 | 1,208 |
| Lincoln | 3,342 | 1,896 | 2,192 | 1,309 | Webster | 2,599 | 913 | 1,469 | 1,191 |
| Logan | 312 | 180 | 283 | 173 | Wheeler | 352 | 165 | 270 | 163 |
| Loup | 343 | 117 | 219 | 164 | York | 4,265 | 1,857 | 2,206 | 2,011 |
| McPherson | 229 | 75 | 184 | 106 | | | | | |
| Madison | 5,171 | 1,716 | 2,358 | 2,428 | Total | 247,498 | 119,608 | 158,827 | 117,771 |
| Merrick | 2,384 | 1,076 | 1,349 | 1,178 | | | | | |

Governor (1922)—Bryan, Dem., 214,070; Randall, Rep., 167,735; Parmenter, Prog., 15,435.
U. S. Senator (1922)—Hitchcock, Dem., 148,265; Howell, Rep., 220,350; Beebe, Prog., 19,076.
The Non-Partisan League indorsed Bryan and Howell.
Nebraska voters, in 1922, indorsed an anti-picketing law.

PAST VOTE OF NEBRASKA.

1872 (Pres.), Dem., 7,705; Rep., 18,242; Lib. Rep., 107.
1876 (Pres.), Dem., 17,554; Rep., 31,916; Gr., 2,320; Pro., 1,599.
1880 (Pres.), Dem., 28,523; Rep., 54,979; Greenback, 3,950.
1884 (Pres.), Dem., 54,391; Rep., 76,912; Proh., 2,899.
1888 (Pres.), Dem., 80,542; Rep., 108,425; Proh., 9,429; U. Lab., 4,226.
1892 (Pres.), Dem., 24,943; Rep., 87,227; Peop., 83,134; Proh., 4,902.
1896 (Pres.), Dem. and Pop., 115,880; Rep., 102,304; Gold Dem., 2,885; Pro., 1,193; Nat., 797; Soc. L.,, 183.
1897 (Sup. Ct.), Dem. and Pop., 102,828; Rep., 89,009; N. D., 718; Pro., 1,625.
1900 (Gov.), Dem. and Pop., 113,018; Rep., 113,879; Soc. Dem., 674; Pro., 4,315; Pop., 1,095.
1900 (Pres.), Dem. and Pop., 114,013; Rep., 121,835; Soc. Dem., 823; Pro., 3,655; Pop., 1,104.
1902 (Gov.), Dem., 91,116; Rep., 96,471; Soc., 3,757; Pro., 3,397.
1903 (Sup. Judge), Dem., 87,864; Rep., 96,991; Soc., 2,595; Pro., 4,394.
1904 (Pres.), Dem., 51,876; Rep., 138,558; Soc., 7,412; Pop., 20,518; Pro., 6,328.
1904 (Gov.), Rep., 111,711; Fus., 102,568; Proh., 5,488; Soc., 5,122.
1906 (Gov.), Dem., 84,885; Rep., 97,858; Soc., 2,999; Pro., 5,106.
1908 (Pres.), Dem., 131,099; Rep., 126,997; Soc., 3,524; Pro., 5,179.
1908 (Gov.), Dem., 132,960; Rep., 121,076; Soc., 3,069; Pro., 4,464.
1910 (Gov.), Dem., 107,522; Rep., 122,883; Soc., 6,268.
1912 (Pres.), Dem., 109,008; Rep., 54,216; Soc., 72,689; Pro., 3,383.
1912 (Gov.), Dem., 123,997; Rep., 114,075; Soc., 9,964; Pro., 3,642.
1914 (Gov.), Dem., 120,206; Rep., 101,228; Prog., 8,655; Soc., 5,734; Pro., 2,873.
1916 (Pres.), Dem., 158,827; Rep., 117,771; Soc., 7,141; Pro., 2,897.
1916 (Gov.), Dem., 143,361; Rep., 137,701; Soc., 6,861; Pro., 4,215.
1916 (U. S. Sen.), Dem., 142,282; Rep., 131,059; Soc., 7,425; Pro., 4,429.
1918 (U. S. Sen.), Dem., 99,690; Rep., 120,086.
1918 (Gov.), Dem., 97,886; Rep., 3,409.
1920 (Pres.), Dem., 119,608; Rep., 247,498; Proh., 5,947; Soc., 9,600.
1920 (Pres.), Dem., 130,433; Rep., 152,863; Proh., 6,041; Pet., 88,905.

## NEVADA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Churchill | 506 | 873 | 831 | 531 | Mineral | 209 | 374 | 617 | 386 |
| Clark | 620 | 589 | 1,115 | 529 | Nye | 1,007 | 1,576 | 1,601 | 1,619 |
| Douglas | 147 | 503 | 301 | 337 | Ormsby | 413 | 592 | 610 | 534 |
| Elko | 1,029 | 1,369 | 2,020 | 1,072 | Pershing | 389 | 563 | | |
| Esmeralda | 347 | 466 | 1,135 | 711 | Storey | 272 | 324 | 465 | 403 |
| Eureka | 157 | 313 | 263 | 239 | Washoe | 2,357 | 4,189 | 3,341 | 3,225 |
| Humboldt | 532 | 660 | 1,681 | 1,004 | White Pine | 902 | 1,354 | 1,922 | 948 |
| Lander | 254 | 416 | 473 | 322 | | | | | |
| Lincoln | 366 | 373 | 634 | 202 | Total | 9,851 | 15,479 | 17,778 | 12,131 |
| Lyon | 344 | 945 | 769 | 669 | | | | | |

Governor (1922)—Scrugham, Dem., 15,437; Miller, Rep., 13,215.
U. S. Senator (1922)—Pittman, Dem., 18,201; Chandler, Rep., 10,670.

PAST VOTE OF NEVADA.

1872 (Pres.), Dem. and L., 6,236; Rep., 8,413; O'Conor, 29,408; Proh., 5,608.
1876 (Pres.), Dem., 9,308; Rep., 10,383.
1880 (Pres.), Dem., 8,619; Rep., 7,878.
1884 (Pres.), Dem., 5,578; Rep., 7,193; Greenback, 26.
1888 (Pres.), Dem., 5,149; Rep., 7,088; Proh., 41.
1892 (Pres.), Dem., 714; Rep., 2,711; Peop., 7,264; Proh., 89.
1896 (Pres.), Dem. and Peop., 8,376; Rep., 1,938.
1900 (Pres.), Dem., 6,376; Rep., 3,860.
1902 (Gov.), Dem., 6,529; Rep., 4,786.
1904 (Pres.), Dem., 3,982; Rep., 6,867; Pop., 344; Soc., 925.
1906 (Gov.), Dem., 8,686; Rep., 5,338; Soc., 815 (unofficial.)
1908 (Pres.), Dem., 11,212; Rep., 10,775; Soc., 2,203; Ind., 436; S. L., 271.
1910 (Gov.), Dem., 8,798; Rep., 10,435; Soc., 1,393.
1912 (Pres.), Dem., 7,986; Rep., 3,196; Prog., 5,620; Soc., 3,313.
1914 (U. S. Sen.), Dem., 8,078; Rep., 8,038; Soc., 5,451.
1914 (Gov.), Dem., 9,623; Rep., 8,530; Soc., 3,391.
1916 (Pres.), Dem., 17,778; Rep., 12,131; Soc., 3,069; Pro., 340.
1916 (U. S. Sen.), Dem., 12,868; Rep., 10,450; Soc., 9,572.
1918 (Gov.), Dem., 12,875; Rep., 11,845.
1918 (U. S. Sen.), Dem., 12,197; Rep., 8,053; Ind. (Anne Martin), 4,603; Soc., 710.
1920 (Pres.), Dem., 9,851; Rep., 15,479; Soc., 1,864.
1920 (U. S. Sen.), Dem., 10,402; Rep., 11,550; Ind., 4,981; Soc., 494.

## NEW HAMPSHIRE.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Belknap | 5,628 | 3,464 | 2,310 | 2,579 | Merrimack | 12,748 | 8,976 | 5,967 | 5,970 |
| Carroll | 4,214 | 2,279 | 2,003 | 2,259 | Rockingham | 13,811 | 6,582 | 5,637 | 5,866 |
| Cheshire | 6,644 | 3,374 | 2,779 | 3,337 | Strafford | 8,700 | 5,643 | 4,040 | 4,037 |
| Coos | 6,114 | 4,985 | 3,247 | 2,762 | Sullivan | 4,647 | 2,521 | 2,215 | 2,193 |
| Grafton | 9,650 | 6,102 | 4,644 | 4,795 | | | | | |
| Hillsborough | 23,040 | 18,736 | 10,939 | 9,927 | Total | 95,196 | 62,662 | 43,787 | 43,724 |

Governor (1922)—Brown, Dem., 70,160; Goodnow, Rep., 61,526.

PAST VOTE OF NEW HAMPSHIRE.

1872 (Pres.), Dem. and L., 31,425; Rep., 37,168.
1876 (Pres.), Dem., 38,510; Rep., 41,540.
1880 (Pres.), Dem., 40,797; Rep., 44,856; Greenback, 528.
1884 (Pres.), Dem., 39,198; Rep., 43,254; Proh., 1,571; Greenback, 552.
1888 (Pres.), Dem., 43,456; Rep., 45,728; Proh., 1,593; U. Lab., 42.
1892 (Pres.), Dem., 42,081; Rep., 45,658; Peop., 293; Proh., 1,297.
1896 (Pres.), Dem.-Peop., 21,650; Rep., 57,444; Nat. Dem., 3,420; Proh., 825.
1898 (Gov.), Dem., 35,653; Rep., 44,730; Pop., 104.
1900 (Gov.), Dem., 34,956; Rep., 53,891; S. D., 752; Pop., 375; Pro., 1,182.
1900 (Pres.), Dem., 35,489; Rep., 54,803; S. D., 790; Pro., 1,270.
1902 (Gov.), Dem., 33,844; Rep., 42,115; S. D., 1,057; Pro., 1,621.
1904 (Pres.), Dem., 33,994; Rep., 54,177; S. D., 1,090; Pro., 749; Pop., 81.
1904 (Gov.), Dem., 35,437; Rep., 51,171; Pro., 857; Soc., 943; Howls, 58.
1906 (Gov.), Dem., 37,672; Rep., 40,581; S. D., 1,011; Pro., 2,212.
1908 (Pres.), Dem., 33,655; Rep., 53,149; Soc., 1,299; Pro., 905; Ind., 584.
1908 (Gov.), Dem., 41,386; Rep., 44,630; Soc. D., 1,086; Pro., 895; Ind., 511.
1910 (Gov.), Dem., 37,737; Rep., 44,908; Soc., 1,022; Pro., 449.
1912 (Gov.), Dem., 34,203; Rep., 32,504; Prog., 14,401; Pro., 496; Soc., 1,674.
1912 (Pres.), Dem., 34,724; Rep., 32,927; Prog., 17,794; Soc., 1,981; Pro., 535.
1914 (Gov.), Dem., 33,674; Rep., 46,413; Prog., 2,572; Soc., 1,423.
1914 (U. S. Sen.), Dem., 36,382; Rep., 42,113; Prog., 1,938; Soc., 1,089.
1916 (Pres.), Dem., 43,781; Rep., 43,725; Soc., 1,318; Pro., 303.
1916 (Gov.), Dem., 38,853; Rep., 45,851; Soc., 1,199; Pro., 288; Prog., 48.
1918 (Gov.), Dem., 32,383; Rep., 38,228.
1918 (U. S. Sen.), Dem., 32,763; Rep., 37,783.
1920 (Pres.), Dem., 62,662; Rep., 95,196; Soc., 1,234.
1920 (U. S. Sen.), Dem., 65,035; Rep., 90,173; Soc., 1,004.
1920 (Gov.), Dem., 62,174; Rep., 93,273; Soc., 1,080.

## NEW JERSEY.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | | | | | 1916. | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Macaul'y, S. Tax. | Watkins, Proh. | Christensen, F.-L. | Debs, Soc. | Wilson, Dem. | Hughes, Rep. | Benson, Soc. | Hanly, Proh. |
| Atlantic | 21,260 | 5,755 | 18 | 280 | 18 | 389 | 5,467 | 9,713 | 122 | 133 |
| Bergen | 47,475 | 12,400 | 79 | 155 | 254 | 1,840 | 11,530 | 18,494 | 595 | 113 |
| Burlington | 17,898 | 7,532 | 16 | 319 | 32 | 228 | 6,535 | 8,803 | 115 | 158 |
| Camden | 40,771 | 17,892 | 22 | 715 | 70 | 2,467 | 14,010 | 18,318 | 1,101 | 350 |
| Cape May | 5,785 | 2,198 | 3 | 77 | 3 | 107 | 2,097 | 2,904 | 37 | 66 |
| Cumberland | 11,925 | 4,487 | 8 | 508 | 41 | 475 | 4,573 | 5,692 | 308 | 323 |
| Essex | 116,200 | 40,975 | 117 | 175 | 255 | 5,950 | 34,596 | 54,167 | 2,280 | 184 |
| Gloucester | 11,700 | 4,865 | 4 | 712 | 11 | 226 | 3,745 | 5,352 | 118 | 538 |
| Hudson | 101,872 | 64,000 | 70 | 96 | 696 | 5,495 | 44,663 | 42,518 | 1,811 | 73 |
| Hunterdon | 7,444 | 6,066 | 3 | 79 | 12 | 76 | 4,462 | 3,408 | 45 | 65 |
| Mercer | 29,625 | 15,700 | 25 | 73 | 42 | 1,119 | 10,621 | 14,213 | 460 | 154 |
| Middlesex | 29,320 | 11,600 | 13 | 139 | 88 | 849 | 9,975 | 11,851 | 185 | 103 |
| Monmouth | 28,838 | 12,975 | 11 | 162 | 56 | 291 | 10,729 | 11,624 | 103 | 120 |
| Morris | 20,675 | 7,250 | 12 | 284 | 86 | 575 | [illegible] | [illegible] | 214 | 172 |
| Ocean | 6,833 | 2,137 | 2 | 53 | 8 | 96 | 2,076 | 3,386 | 3 | 28 |
| Passaic | 42,700 | 11,900 | 54 | 107 | 218 | 4,150 | 13,340 | 18,754 | 1,561 | 128 |
| Salem | 7,625 | 3,475 | 1 | 252 | 9 | 98 | 3,353 | 4,080 | 68 | 84 |
| Somerset | 10,960 | 4,195 | 7 | 80 | 26 | 104 | 3,653 | 4,707 | 34 | 50 |
| Sussex | 5,225 | 3,512 | 7 | 96 | 2 | 42 | 3,093 | 2,461 | 70 | 42 |
| Union | 39,499 | 12,103 | 40 | 122 | 234 | 2,353 | 10,328 | 16,705 | 1,040 | 97 |
| Warren | 8,040 | 7,212 | 5 | 227 | 23 | 227 | 5,374 | 3,302 | 107 | 201 |
| Total | 611,679 | 258,229 | 517 | 4,711 | 2,173 | 27,217 | 211,018 | 268,982 | 10,405 | 3,182 |

Governor (1922)—Silzer, Dem., 427,206; Runyon, Rep., 383,312.
U. S. Senator (1922)—Edwards, Dem., 451,832; Frelinghuysen, Rep., 362,699.
Frelinghuysen campaigned as a "dry" and was against Soldier Bonus. Runyon spoke as a "dry."

### PAST VOTE OF NEW JERSEY.

1872 (Pres.), Dem., 76,800; Rep., 91,666; Lib. Rep., 344; Dem., (O'C.), 630.
1876 (Pres.), Dem., 115,962; Rep., 103,517; Gr., 714; Pro., 43.
1877 (Gov.), Dem., 97,837; Rep., 85,094; Gr., 5,058.
1880 (Pres.), Dem., 122,505; Rep., 120,555; Gr., 2,617; Proh., 191.
1884 (Pres.), Dem., 127,784; Rep., 123,435; Proh., 6,153; Greenback, 3,456.
1886 (Gov.), Dem., 109,939; Rep., 101,919; Proh., 19,808.
1888 (Pres.), Dem., 151,498; Rep., 144,344; Proh., 7,904.
1889 (Gov.), Dem., 138,245; Rep., 123,992; Proh., 6,853.
1892 (Pres.), Dem., 171,042; Rep., 156,068; So. L., 1,337; Proh., 8,131; Pop., 969.
1895 (Gov.), Dem., 136,000; Rep., 162,900; Proh., 6,661; Soc. L., 4,147; Pop., 1,901.
1896 (Pres.), Dem., 133,075; Rep., 221,367; Gold D., 6,373; Proh., 5,614; Soc. L., 3,985.
1898 (Gov.), Dem., 158,552; Rep., 164,051; Proh., 6,893; Soc. L., 5,458; Pop., 491.
1900 (Pres.), Dem., 164,808; Rep., 221,707; Proh., 7,183; Soc. D., 4,609; Pop., 669; Soc. L., 2,074; Peo., 669.
1901 (Gov.), Dem., 166,681; Rep., 183,814; Soc. D., 3,489; Soc. L., 1,918; Proh., 5,365.
1904 (Gov.), Dem., 179,719; Rep., 231,363; Proh., 6,687; Soc., 8,858; Soc. L., 2,526; Peo., 3,825.
1904 (Pres.), Dem., 164,566; Rep., 265,164; Soc., 9,587; Proh., 6,845; Soc. L., 2,680; Pop., 3,705.
1907 (Gov.), Dem., 186,300; Rep., 194,343; Proh., 5,255; Soc., 6,848; Soc. L., 1,568.
1908 (Pres.), Dem., 182,567; Rep., 265,326; Soc., 10,253; S. L., 1,196; Proh., 4,930; Ind., 2,916.
1910 (Gov.), Dem., 233,682; Rep., 184,626; Proh., 2,818; Soc., 10,134; S. L., 2,032.
1912 (Pres.), Dem., 178,289; Rep., 88,835; Prog., 145,410; Proh., 2,878; Soc., 15,801; S. L., 1,321.
1913 (Gov.), Dem., 173,148; Rep., 140,298; Prog., 41,132; Soc., 13,977; Nat. Prog., 3,427; S. L., 2,460; Ind., 875.
1916 (Pres.), Dem., 211,018; Rep., 268,982; Soc., 10,405; Proh., 3,182; Soc. L., 855.
1916 (U. S. Sen.), Dem., 170,019; Rep., 244,715; Soc., 13,358; Proh., 7,178; S. L., 1,826.
1916 (Gov.), Dem., 177,696; Rep., 247,343; Soc., 12,900; Proh., 5,873; Soc. L., 2,334.
1918 (U. S. Sen.), Dem., 151,454; Rep., 175,209; Soc., 13,358; Soc. Lab., 1,826; Proh., 7,478.
1919 (Gov.), Dem., 217,486; Rep., 202,976; Soc., 11,814; Ind. Soc., 3,243; Proh., 6,089; Single Tax, 1,246.
1920 (Pres.), Dem., 258,229; Rep., 611,620; Soc., 27,217; Proh., 4,711; F.-L., 3,173; Single Tax, 517; Soc. Lab., 923.

## NEW MEXICO.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Bernalillo | 4,960 | 4,806 | 2,394 | 2,711 | Quay | 1,213 | 1,801 | 1,539 | 598 |
| Chaves | 1,771 | 2,073 | 2,275 | 862 | Rio Arriba | 3,905 | 1,997 | 1,528 | 1,992 |
| Colfax | 3,338 | 2,708 | 2,006 | 1,835 | Roosevelt | 568 | 1,178 | 1,088 | 230 |
| Curry | 835 | 2,147 | 1,175 | 355 | Sandoval | 1,196 | 945 | 734 | 611 |
| De Baca | 410 | 678 | ..... | ..... | San Juan | 968 | 829 | 537 | 385 |
| Dona Ana | 2,627 | 1,318 | 1,078 | 1,606 | San Miguel | 5,540 | 3,490 | 2,231 | 2,932 |
| Eddy | 980 | 1,611 | 1,402 | 425 | Santa Fe | 3,586 | 2,006 | 1,406 | 1,830 |
| Grant | 2,226 | 1,870 | 2,305 | 1,869 | Sierra | 862 | 643 | 493 | 460 |
| Guadalupe | 1,584 | 1,227 | 1,172 | 1,067 | Socorro | 3,150 | 1,803 | 1,558 | 1,954 |
| Hidalgo | 443 | 547 | ..... | ..... | Taos | 2,530 | 1,363 | 910 | 1,320 |
| Lea | 255 | 735 | ..... | ..... | Torrance | 1,745 | 1,116 | 679 | 948 |
| Lincoln | 1,492 | 1,125 | 863 | 889 | Union | 2,924 | 2,273 | 1,996 | 1,495 |
| Luna | 829 | 998 | 796 | 418 | Valencia | 2,810 | 952 | 383 | 1,540 |
| McKinley | 1,188 | 768 | 550 | 669 | | | | | |
| Mora | 2,478 | 2,180 | 1,505 | 1,590 | Total | 57,634 | 46,668 | 33,527 | 31,152 |
| Otero | 1,227 | 1,094 | 824 | 561 | Railroad vote | ..... | ..... | 166 | 11 |

Governor (1922)—Hinkle, Dem., 60,317; Hill, Rep., 49,363.
U. S. Senator (1922)—Jones, Dem., 60,969; Davis, Rep., 48,721.

### PAST VOTE OF NEW MEXICO.

1910 (Const. Conv.), Dem., 17,528; Rep., 21,577; Soc., 1,070.
1911 (Gov.), Dem., 31,036; Rep., 28,019.
1912 (Pres.), Dem., 20,437; Rep., 17,733; Prog., 8,347; Soc., 2,859.
1914 (Cong.), Dem., 19,805; Rep., 23,812; Prog., 1,695; Soc., 1,101.
1916 (Pres.), Dem., 33,527; Rep., 31,152; Soc., 1,999; Pro., 112.
1916 (Gov.), Dem., 32,732; Rep., 31,524; Soc., 2,124.
1916 (U. S. Sen.), Dem., 33,982; Rep., 30,609; Soc., 2,033.
1920 (Pres.), Dem., 46,668; Rep., 57,634; Farm-Lab., 1,097; Soc., 2.
1920 (Gov.), Dem., 50,535; Rep., 54,161.
1921 (U. S. Sen.—to fill place of Sen. Fall), Bursum, Rep., 36,868; Hanna, Dem., 31,363; Seña, Ind., 2,906; Smith, Soc., 671.

## VOTING POPULATION IN NEW YORK STATE.

POPULATION 21 YEARS OF AGE AND OVER, BY SEX, CLASS OF POPULATION, AND CITIZENSHIP, FOR N. Y. STATE, 1920 AND 1910.

| Class of Population and Citizenship. | Population 21 Years of Age and Over. | | | Class of Population and Citizenship. | Population 21 Years of Age and Over. | | |
|---|---|---|---|---|---|---|---|
| | Male. | | Female, 1920. | | Male. | | Female, 1920. |
| | 1920. | 1910. | | | 1920. | 1910. | |
| Total | 3,255,503 | 2,836,773 | 3,259,178 | Native white | 1,858,523 | 1,562,358 | 1,974,329 |
| | | | | Native parentage | 1,055,138 | 909,494 | 1,086,508 |
| White | 3,177,406 | 2,783,371 | 3,183,943 | Foreign parentage | 592,373 | 487,165 | 647,467 |
| Negro | 69,259 | 45,877 | 73,285 | Mixed parentage | 211,012 | 165,699 | 240,354 |
| Indian | 1,604 | 1,706 | 1,366 | Foreign-born white | 1,318,883 | 1,221,013 | 1,209,614 |
| Chinese | 4,752 | 4,817 | 233 | Naturalized | 604,256 | 502,083 | 549,557 |
| Japanese | 1,979 | 987 | 317 | Having first papers | 214,958 | 131,085 | 19,140 |
| All other | 503 | 15 | 34 | Alien | 446,859 | 475,259 | 564,261 |
| | | | | Unknown | 52,810 | 112,586 | 76,656 |

Where there are no percentages, they are less than one-tenth of 1 per cent.

## NEW YORK—GOVERNOR AND U. S. SENATOR, 1922.

| Counties. | Governor, 1922. | | | | | | | U. S. Senator, 1922. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Miller, Rep. | Smith, Dem. | Cassidy, Soc. | Cassidy, Farm Lab. | Hinds, Proh. | Cassidy, (Both Emb) | Crowley, Soc. Lab. | Calder, Rep. | Copeland, Dem. | Lee, Soc., Farm Lab. | Hart, Proh. | Kuhn Soc. Lab. |
| Albany | 32,975 | 48,319 | 785 | 63 | 115 | ..... | 44 | 34,970 | 44,252 | 983 | 487 | 70 |
| Allegany | 8,733 | 2,894 | 192 | 13 | 154 | ..... | 6 | 7,548 | 2,957 | 214 | 650 | 15 |
| Bronx | 30,548 | 116,112 | 14,300 | 589 | 140 | 288 | 497 | 29,376 | 109,237 | 18,993 | 458 | 722 |
| Broome | 14,839 | 11,254 | 591 | 60 | 200 | ..... | 22 | 13,308 | 10,264 | 614 | 825 | 39 |
| Cattaraugus | 11,775 | 7,719 | 340 | 78 | 211 | ..... | 16 | 10,679 | 7,247 | 400 | 569 | 26 |
| Cayuga | 12,332 | 9,069 | 407 | 21 | 108 | ..... | 5 | 11,066 | 9,049 | 444 | 596 | 32 |
| Chautauqua | 19,258 | 9,034 | 787 | 136 | 259 | ..... | 48 | 17,686 | 7,309 | 969 | 936 | 135 |
| Chemung | 11,629 | 10,627 | 176 | 48 | 338 | ..... | 32 | 10,373 | 10,365 | 285 | 862 | 58 |
| Chenango | 8,373 | 3,323 | 62 | 8 | 128 | ..... | 3 | 6,872 | 3,640 | 83 | 466 | 6 |
| Clinton | 6,123 | 5,624 | 76 | 6 | 117 | ..... | 7 | 6,058 | 4,652 | 83 | 380 | 25 |
| Columbia | 6,934 | 6,507 | 99 | 9 | 66 | ..... | 5 | 6,472 | 6,414 | 121 | 197 | 11 |
| Cortland | 7,920 | 3,135 | 122 | 11 | 83 | ..... | 3 | 6,775 | 3,084 | 121 | 411 | 4 |
| Delaware | 9,465 | 4,498 | 107 | 13 | 208 | ..... | 14 | 7,780 | 5,126 | 115 | 448 | 14 |
| Dutchess | 13,298 | 11,944 | 819 | 65 | 77 | ..... | 24 | 13,079 | 11,128 | 723 | 374 | 28 |
| Erie | 58,606 | 71,496 | 10,673 | 934 | 288 | ..... | 214 | 61,241 | 53,781 | 9,206 | 1,072 | 348 |
| Essex | 5,489 | 2,993 | 99 | 5 | 35 | ..... | 2 | 5,253 | 2,280 | 87 | 174 | 15 |
| Franklin | 6,803 | 5,355 | 40 | 10 | 47 | ..... | 5 | 6,443 | 4,491 | 39 | 338 | 15 |
| Fulton | 8,740 | 4,665 | 279 | 53 | 132 | ..... | 28 | 9,492 | 3,407 | 276 | 366 | 24 |
| Genesee | 6,763 | 3,444 | 236 | 10 | 62 | ..... | 10 | 6,417 | 3,003 | 189 | 241 | 11 |
| Greene | 5,290 | 4,410 | 231 | 20 | 75 | ..... | 8 | 4,720 | 4,444 | 206 | 239 | 10 |
| Hamilton | 645 | 673 | ..... | ..... | 4 | ..... | 1 | 671 | 533 | 1 | 10 | ..... |
| Herkimer | 9,264 | 8,149 | 526 | 40 | 141 | ..... | 9 | 8,974 | 7,108 | 501 | 314 | 18 |
| Jefferson | 15,921 | 9,421 | 405 | 50 | 141 | ..... | 19 | 14,720 | 8,563 | 488 | 617 | 32 |
| Kings | 108,652 | 263,047 | 20,570 | 769 | 658 | 596 | 1,079 | 125,857 | 232,408 | 26,060 | 1,857 | 887 |
| Lewis | 4,457 | 2,803 | 11 | 2 | 27 | ..... | 4 | 4,028 | 2,630 | 20 | 150 | 3 |
| Livingston | 7,295 | 4,232 | 133 | 7 | 84 | ..... | 10 | 6,721 | 4,121 | 119 | 330 | 9 |
| Madison | 9,124 | 4,515 | 177 | 12 | 76 | ..... | 15 | 7,458 | 4,947 | 195 | 362 | 31 |
| Monroe | 47,119 | 47,434 | 7,393 | 469 | 333 | ..... | 110 | 48,799 | 42,890 | 6,873 | 931 | 159 |
| Montgomery | 8,052 | 8,697 | 347 | ..... | 84 | ..... | 19 | 8,047 | 7,176 | 315 | 331 | 38 |
| Nassau | 21,527 | 18,792 | 1,011 | 187 | 137 | ..... | 25 | 22,052 | 17,083 | 935 | 325 | 19 |
| New York | 97,472 | 271,181 | 18,587 | 685 | 532 | 713 | 598 | 95,640 | 252,565 | 26,376 | 1,742 | 863 |
| Niagara | 12,518 | 11,718 | 881 | 73 | 229 | ..... | 36 | 12,500 | 8,658 | 823 | 1,026 | 61 |
| Oneida | 22,621 | 24,599 | 1,041 | 82 | 194 | ..... | 51 | 24,078 | 20,788 | 1,038 | 673 | 73 |
| Onondaga | 39,440 | 39,639 | 1,829 | 281 | 120 | ..... | 88 | 35,966 | 38,821 | 2,140 | 915 | 150 |
| Ontario | 10,215 | 6,321 | 387 | 30 | 100 | ..... | 14 | 9,442 | 6,295 | 374 | 485 | 16 |
| Orange | 14,968 | 12,370 | 737 | 124 | 173 | ..... | 42 | 14,222 | 11,562 | 736 | 436 | 47 |
| Orleans | 5,890 | 2,950 | 268 | 10 | 80 | ..... | 10 | 5,574 | 2,558 | 231 | 196 | 9 |
| Oswego | 13,707 | 10,399 | 572 | 21 | 146 | ..... | 8 | 12,947 | 9,494 | 560 | 659 | 23 |
| Otsego | 9,451 | 5,864 | 333 | 26 | 303 | ..... | 13 | 7,795 | 6,505 | 363 | 623 | 22 |
| Putnam | 2,377 | 2,130 | 26 | 13 | 11 | ..... | 4 | 2,175 | 1,964 | 64 | 72 | 7 |
| Queens | 32,026 | 84,543 | 3,356 | 385 | 148 | 190 | 184 | 32,195 | 81,908 | 3,609 | 582 | 240 |
| Rensselaer | 19,931 | 28,350 | 1,180 | 107 | 97 | ..... | 70 | 20,879 | 26,328 | 1,207 | 397 | 90 |
| Richmond | 8,375 | 21,403 | 402 | 47 | 143 | 18 | 32 | 7,260 | 21,610 | 384 | 242 | 39 |
| Rockland | 6,708 | 7,302 | 548 | 54 | 40 | ..... | 26 | 5,839 | 7,580 | 564 | 151 | 29 |
| St. Lawrence | 17,997 | 8,980 | 239 | 15 | 101 | ..... | 33 | 17,090 | 7,700 | 259 | 492 | 40 |
| Saratoga | 10,417 | 10,711 | 171 | 37 | 165 | ..... | 8 | 10,172 | 9,003 | 246 | 652 | 31 |
| Schenectady | 11,902 | 16,117 | 2,042 | 188 | 318 | ..... | 64 | 10,925 | 14,901 | 2,517 | 900 | 75 |
| Schoharie | 4,939 | 3,614 | 27 | 6 | 183 | ..... | 1 | 4,012 | 3,911 | 37 | 333 | 4 |
| Schuyler | 3,633 | 2,357 | 91 | 2 | 75 | ..... | 4 | 3,278 | 2,303 | 88 | 183 | 7 |
| Seneca | 5,218 | 3,514 | 133 | 10 | 62 | ..... | 1 | 4,872 | 3,409 | 126 | 197 | 5 |
| Steuben | 13,842 | 9,959 | 476 | 88 | 320 | ..... | 15 | 12,098 | 9,352 | 529 | 829 | 33 |
| Suffolk | 15,679 | 13,981 | 638 | 143 | 194 | ..... | 28 | 15,077 | 12,929 | 630 | 630 | 44 |
| Sullivan | 5,064 | 5,282 | 424 | 106 | 82 | ..... | 25 | 4,780 | 4,844 | 522 | 200 | 35 |
| Tioga | 5,607 | 2,603 | 54 | 20 | 75 | ..... | 5 | 4,811 | 2,560 | 70 | 397 | 11 |
| Tompkins | 7,771 | 4,074 | 79 | 15 | 157 | ..... | 9 | 6,731 | 4,142 | 138 | 544 | 11 |
| Ulster | 12,736 | 10,890 | 173 | 34 | 389 | ..... | 34 | 12,063 | 9,822 | 225 | 895 | 29 |
| Warren | 5,347 | 4,969 | 54 | 29 | 76 | ..... | 4 | 5,508 | 3,835 | 119 | 235 | 19 |
| Washington | 9,962 | 6,141 | 193 | 14 | 49 | ..... | 11 | 9,481 | 5,255 | 208 | 396 | 26 |
| Wayne | 10,864 | 4,385 | 146 | 24 | 133 | ..... | 20 | 9,493 | 4,795 | 184 | 442 | 24 |
| Westchester | 44,899 | 46,671 | 3,776 | 524 | 238 | ..... | 73 | 44,763 | 43,315 | 3,789 | 789 | 112 |
| Wyoming | 7,472 | 2,841 | 61 | 4 | 48 | ..... | 3 | 6,643 | 2,693 | 68 | 275 | 7 |
| Yates | 4,728 | 1,627 | 23 | 2 | 52 | ..... | 1 | 4,177 | 1,673 | 37 | 220 | 7 |
| Total | 1,011,725 | 1,397,670 | 99,944 | 6,887 | 9,561 | 1,805 | 3,799 | 995,421 | 1,276,667 | 117,928 | 32,124 | 4,993 |

### THE 1922 VOTE FOR OTHER STATE OFFICERS.

**Lieutenant Governor**—Lunn, Dem., 1,244,036; Donovan, Rep., 1,070,075; Wiley, Soc., Farm-Lab., 117,269; Ramsdell, Proh., 20,195; DeLee, Soc. Lab., 5,539.

**Secretary of State**—Hamilton, Dem., 1,205,736; Joseph, Rep., 1,062,921; Randolph, Soc., Farm-Lab., 129,461; Estelle, Proh., 24,776; Phalor, Soc. Lab., 5,628.

**State Comptroller**—Fleming, Dem., 1,191,894; Mater, Rep., 1,066,871; Sheahan, Soc., Farm-Lab., 132,739; Dean, Proh., 21,611; Donohue, Soc. Lab., 7,078.

**State Treasurer**—Shuler, Dem., 1,174,218; Marshall, Rep., 1,084,405; Berman, Soc., Farm-Lab., 132,176; Pierson, Proh., 21,256; Archer, Soc. Lab., 5,959.

**Attorney General**—Sherman, Dem., 1,192,468; Rogers, Rep., 1,064,223; Wilcox, Soc., Farm-Lab., 130,286; Baldwin, Proh., 23,015; Ensign, Soc. Lab., 5,963.

**State Engineer and Surveyor**—La Du, Dem., 1,077,314; Cadle, Rep., 1,009,582; Steinmetz, Soc., Farm-Lab., 291,763; Passage, Proh., 19,852; Bickweat, Soc. Lab., 5,131.

### VOTE ON CONSTITUTIONAL AMENDMENTS, 1922.

New York State voters (1922) rejected the proposed Constitutional amendment, designed to increase the salaries of the Judges of the Court of Appeals, by 891,980 and 572,502.

By a vote of 819,628 to 554,654 approval was given to the amendment relating to the return of city bills to the Legislature. Under the amendment Mayors of cities are required to return special city bills to the clerk of the House from which they were sent. If the Legislature is not in session, the clerk, and not the Mayor, shall immediately transmit the bills to the Governor.

Approximately 1,000,000 registered voters failed to express themselves on the proposed amendments.

The proposed amendment increasing the salaries of Court of Appeals Judges was carried in only two counties, New York and Nassau. The amendment relating to the return of city bills was defeated in twenty-five counties, thirteen of which have cities.

## REGISTRATION IN NEW YORK STATE, 1922-1920.

The registration by counties in three years was as follows:

| Counties. | 1922. | 1921. | 1920. | Counties. | 1922. | 1921. | 1920. |
|---|---|---|---|---|---|---|---|
| Albany | 90,431 | 91,049 | 88,756 | Oneida | 68,229 | 70,167 | 72,359 |
| Allegany | 23,234 | 23,217 | 23,253 | Onondaga | 104,165 | 102,494 | 110,018 |
| Bronx | 174,971 | 188,746 | 199,358 | Ontario | 27,762 | 27,663 | 29,082 |
| Broome | 37,721 | 33,968 | *43,000 | Orange | 44,786 | 44,426 | 49,262 |
| Cattaraugus | 33,887 | 34,637 | 35,058 | Orleans | 15,020 | 13,971 | 15,889 |
| Cayuga | 30,737 | 33,235 | 31,897 | Oswego | 36,359 | 38,421 | 37,400 |
| Chautauqua | 48,095 | 46,895 | 53,819 | Otsego | †27,706 | 27,102 | 28,192 |
| Chemung | 30,127 | 30,352 | 32,787 | Putnam | 7,837 | 7,851 | 7,531 |
| Chenango | 20,788 | 20,951 | 21,359 | Queens | 129,443 | 135,687 | 145,106 |
| Clinton | 20,759 | 21,462 | 22,369 | Rensselaer | 58,000 | 59,756 | 59,228 |
| Columbia | 22,378 | 22,363 | 21,921 | Richmond | 32,088 | 33,972 | 30,336 |
| Cortland | 16,303 | 15,137 | 16,725 | Rockland | 24,851 | 25,246 | 23,454 |
| Delaware | 26,234 | 26,637 | 27,185 | St. Lawrence | 45,982 | 42,908 | 47,712 |
| Dutchess | 39,367 | 38,484 | 42,478 | Saratoga | 31,607 | 32,738 | 32,704 |
| Erie | 183,786 | 195,748 | 197,811 | Schenectady | 36,854 | 38,560 | 38,853 |
| Essex | *16,000 | 15,861 | 17,493 | Schoharie | 14,918 | 14,935 | 14,689 |
| Franklin | 21,911 | 20,809 | 21,800 | Schuyler | *8,900 | 8,612 | 8,833 |
| Fulton | 20,130 | 18,193 | 20,481 | Seneca | 13,489 | 13,423 | 13,573 |
| Genesee | 19,198 | 17,076 | 19,669 | Steuben | 42,175 | 38,873 | 43,201 |
| Greene | 16,968 | 16,936 | 15,932 | Suffolk | 59,994 | 59,052 | 58,034 |
| Hamilton | *2,450 | *2,400 | 2,518 | Sullivan | 21,139 | 20,463 | 19,561 |
| Herkimer | *30,200 | 30,553 | 30,240 | Tioga | 14,613 | 14,065 | 14,927 |
| Jefferson | 41,708 | 40,111 | 44,581 | Tompkins | 18,225 | 16,025 | 19,283 |
| Kings | 422,679 | 450,405 | 494,926 | Ulster | 39,812 | 43,185 | 43,364 |
| Lewis | 14,535 | 14,731 | 14,729 | Warren | 16,344 | 15,076 | 16,988 |
| Livingston | 21,230 | 20,975 | 20,934 | Washington | 26,098 | 25,305 | 26,371 |
| Madison | 22,023 | 22,095 | 22,554 | Wayne | 28,399 | 27,616 | 28,616 |
| Monroe | 125,132 | 119,054 | 135,449 | Westchester | 116,367 | 120,040 | 128,947 |
| Montgomery | 24,255 | 26,074 | 25,646 | Wyoming | 18,184 | 17,721 | 18,336 |
| Nassau | 68,960 | 61,770 | 61,049 | Yates | *11,629 | 11,506 | 11,711 |
| New York | 421,031 | 453,530 | 503,820 | | | | |
| Niagara | 36,277 | 37,248 | 40,706 | Total | 3,264,840 | 3,337,561 | 3,543,956 |

*Estimate. †Three districts missing.

## PAST VOTE OF NEW YORK.

1872 (Pres.), Dem., 387,221; Rep., 440,745; Pro., 201; Dem. (O'C.), 1,454; Lib. Rep., 80.

1873 (Sec. St.), Dem., 341,171; Rep., 330,180; Pro., 3,238.

1874 (Gov.), Dem., 416,391; Rep., 366,074; Pro., 11,768.

1875 (Sec. St.), Dem., 390,211; Rep., 375,401; Pro., 11,103.

1876 (Pres.), Dem., 522,043; Rep., 489,225; Pro., 2,359; Gr., 1,987.

1877 (Sec. St.), Dem., 383,062; Rep., 371,798; Pro., 7,230.

1879 (Gov.), Dem., 375,790; Tam., 77,566; Rep., 418,567; Gr., 20,286; Pro., 4,437.

1880 (Pres.), Dem., 534,511; Rep., 555,544; Gr., 12,373; Pro., 1,517.

1881 (Sec. St.), Dem., 403,893; Rep., 416,915; Gr., 16,018; Pro., 4,445.

1882 (Gov.), Dem., 535,318; Rep., 342,464; Gr., 11,974; Pro., 25,783.

1883 (Sec. St.), Dem., 427,525; Rep., 446,103; Gr., 7,221; Pro., 18,816.

1884 (Pres.), Dem., 563,048; Rep., 562,001; Gr., 17,002; Pro., 25,001.

1885 (Gov.), Dem., 501,465; Rep., 490,331; Gr., 2,130; Pro., 30,867.

1886 (Ct. App.), Dem., 468,455; Rep., 460,637; Gr., 2,181; Pro., 36,414.

1887 (Sec. St.), Dem., 469,888; Rep., 452,811; U. L., 70,055; Pro., 41,850; Prog. L., 7,622; Union L., 1,017; Gr., 953.

1888 (Pres.), Dem., 635,757; Rep., 648,759; United L., 2,668; Pro., 30,231; Union L., 626.

1888 (Gov.), Dem., 650,464; Rep., 631,293; Pro., 30,215; Soc., 3,348.

1889 (Sec. St.), Dem., 505,894; Rep., 485,367; Pro., 26,763.

1889 (Atty. Gen.), Dem., 499,480; Rep., 489,769; Pro., 26,863.

1891 (Gov.), Dem., 582,893; Rep., 534,956; U. L., 14,651; Pro., 30,353.

1892 (Pres.), Dem., 654,865; Rep., 609,350; Pop., 17,956; Pro., 38,190.

1893 (Sec. St.), Dem., 520,614; Rep., 545,098; Soc. L., 19,984; Pro., 34,241.

1894 (Gov.), Dem., 517,710; Rep., 673,818; Soc. L., 15,868; Pro., 23,526; Pop., 11,049; Ind., 27,202.

1895 (Sec. St.), Dem., 511,060; Rep., 601,205; Soc. L., 21,497; Pro., 23,239.

1896 (Pres.), Dem., 551,369; Rep., 819,838; Soc. L., 17,667; Pro., 16,052; Gold D., 18,950.

1897 (Ch. Jus.), Dem., 554,680; Rep., 493,791; Soc. L., 20,854; Pro., 19,653.

1898 (Gov.), Dem., 643,921; Rep., 661,717; Soc. L., 23,860; Pro., 18,383; Cit. Un., 2,002.

1900 (Pres.), Dem., 678,386; Rep., 821,992; Soc. L., 12,622; Pro., 22,043; Soc. D., 12,869.

1900 (Gov.), Dem., 693,733; Rep., 804,859; Soc. L., 13,493; Pro., 22,704.

1902 (Gov.), Dem., 656,347; Rep., 665,150; Gr., 15,886; Pro., 20,490; Soc., D., 23,400.

1904 (Pres.), Dem., 683,981; Rep., 859,513; Gr., 36,883; Pro., 20,787; Soc. L., 9,127; Pop., 7,459.

1904 (Gov.), Dem., 733,704; Rep., 813,264; Soc., 36,257; Pro., 20,568.

1906 (Gov.), Dem., 691,105; Rep., 749,002; Soc., 21,751; Pro., 15,985; Ind. L., 17,837.

1908 (Pres.), Dem., 667,468; Rep., 870,070; Soc., 38,451; Pro., 22,667; S. L., 3,877; Ind., 35,785.

1908 (Gov.), Dem., 735,189; Rep., 804,651; Soc., 33,994; Pro., 18,802; Soc. L., 3,655.

1910 (Gov.), Dem., 689,700; Rep., 622,299; Soc., 48,529; Ind. L., 48,470; Pro., 22,295; S. L., 5,717.

1912 (Pres.), Dem., 655,475; Rep., 455,428; Prog., 390,021; Soc., 63,381; Pro., 19,427; S. L., 4,251.

1912 (Gov.), Dem., 649,559; Rep., 444,105; Prog., 393,183; Soc., 56,917; Pro., 18,990; S. L., 4,461.

1914 (Gov.), Dem., 412,253; Rep., 686,701; Amer., 70,655; Ind. L., 125,252; No Party, 3,764; Pro., 54,189; Prog., 45,586; Soc., 37,793; S. L., 2,350.

1914 (U. S. Sen.), Dem., 571,010; Rep., 639,112; Prog., 61,977; Soc., 55,266; Pro., 27,813; S. L., 3,064.

1915—The revised State Constitution was rejected by a vote of 893,635 to 388,966.

1916 (Pres.), Dem., 759,426; Rep., 869,066; Soc., 45,944; Pro., 19,031; Amer., 10,172; S. L., 2,666.

1916 (Gov.), Dem., 686,362; Rep., 835,820; Soc., 52,560; Pro., 21,773; Prog., 6,669; Ind., 5,266; Amer., 22,165; Soc. L., 3,847.

1916 (U. S. Sen.), Dem., 605,933; Rep., 839,314; Soc., 61,167; Pro., 19,302; Ind. L., and Prog., 15,339.

1918 (Gov.), Dem., 1,009,936; Rep., 956,034; Pro., 38,794; Soc., 121,705; S. L., 5,183.

1918 (Lt. Gov.), Dem., 965,471; Rep., 930,066; Soc., 130,206; Pro., 48,142; Soc. L., 5,605.

1918 (Sec. St.), Dem., 886,306; Rep., 1,005,426; Soc., 134,520; Pro., 40,072; Soc. Lab., 5,405.

1920 (Pres.), Dem., 781,238; Rep., 1,871,167; Soc., 203,201; Proh., 19,653; F. L., 18,413; Soc. Lab., 4,841.

1920 (Gov.), Dem., 1,261,812; Rep., 1,335,878; Soc., 159,804; Proh., 35,509; F. L., 69,908; S. L., 5,015; scattering, 22; blank, 81,615; void, 13,084. Total, 2,962,645.

1920 (U. S. Sen.), Dem., 901,310; Rep., 1,434,393; Soc., 208,155; Proh., 159,623; F. L., 27,934; S. L., 7,822.

## NEW YORK CITY--GOVERNOR AND U. S. SENATOR, 1922.

*MANHATTAN (NEW YORK COUNTY).*

| Assembly District. | Governor, 1922. | | | | | | | U. S. Senator, 1922. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Smith, Dem. | Miller, Rep. | Cassidy, Soc. | Cassidy, Farm Lab. | Cassidy, (Both Emb) | Hinds, Proh. | Crowley, Soc. Lab. | Copeland, Dem. | Calder, Rep. | Lee, Soc. Farm Lab. | Hart, Proh. | Kuhn Soc. Lab. |
| 1st | 14,290 | 1,626 | 790 | 24 | 23 | 8 | 18 | 12,982 | 1,733 | 1,402 | 14 | 22 |
| 2d | 10,020 | 1,574 | 827 | 3 | ..... | 6 | 19 | 8,893 | 1,676 | 1,379 | 12 | 33 |
| 3d | 16,452 | 3,199 | 378 | 43 | 57 | 27 | 17 | 15,926 | 3,054 | 423 | 65 | 27 |
| 4th | 9,337 | 1,045 | 1,490 | ..... | ..... | 8 | 13 | 8,153 | 1,145 | 2,305 | 6 | 15 |
| 5th | 16,511 | 2,641 | 357 | 39 | 5 | 16 | 30 | 15,809 | 2,640 | 317 | 54 | 33 |
| 6th | 8,143 | 3,124 | 1,936 | 7 | 1 | 8 | 21 | 6,264 | 3,557 | 3,026 | 10 | 27 |
| 7th | 9,830 | 8,237 | 230 | 16 | 27 | 55 | 14 | 9,965 | 7,343 | 336 | 177 | 21 |
| 8th | 8,564 | 1,570 | 1,655 | 9 | 55 | 7 | 46 | 6,982 | 1,787 | 2,706 | 21 | 60 |
| 9th | 11,055 | 8,905 | 292 | 40 | 14 | 33 | 6 | 10,938 | 8,345 | 415 | 144 | 29 |
| 10th | 8,418 | 7,348 | 282 | 24 | 21 | 32 | 24 | 8,504 | 6,548 | 382 | 167 | 31 |
| 11th | 11,458 | 7,081 | 358 | 22 | 41 | 44 | 14 | 11,195 | 6,700 | 449 | 145 | 20 |
| 12th | 18,061 | 2,935 | 492 | 72 | 63 | 21 | 33 | 17,320 | 2,897 | 712 | 74 | 43 |
| 13th | 11,229 | 5,286 | 319 | 38 | 21 | 52 | 19 | 10,928 | 4,932 | 450 | 149 | 25 |
| 14th | 15,385 | 2,412 | 977 | 24 | 104 | 28 | 77 | 14,641 | 2,439 | 1,234 | 48 | 113 |
| 15th | 9,270 | 8,911 | 578 | 24 | 96 | 24 | 24 | 9,192 | 8,104 | 902 | 144 | 25 |
| 16th | 16,853 | 2,684 | 1,469 | 64 | 23 | 19 | 51 | 15,839 | 2,841 | 1,753 | 28 | 87 |
| 17th | 9,544 | 2,151 | 2,040 | 20 | 17 | 7 | 40 | 8,074 | 2,420 | 2,774 | 15 | 59 |
| 18th | 12,836 | 2,471 | 1,739 | 97 | 2 | 9 | 38 | 10,892 | 2,910 | 2,385 | 26 | 55 |
| 19th | 9,785 | 4,395 | 522 | 3 | 44 | 17 | 17 | 8,486 | 4,804 | 706 | 70 | 23 |
| 20th | 9,061 | 1,752 | 680 | 5 | 2 | 3 | 25 | 8,050 | 2,003 | 821 | 30 | 37 |
| 21st | 8,924 | 4,892 | 232 | 18 | 19 | 23 | 15 | 7,777 | 5,371 | 311 | 74 | 18 |
| 22d | 11,887 | 5,363 | 351 | 50 | 38 | 37 | 12 | 11,608 | 5,066 | 445 | 120 | 16 |
| 23d | 14,268 | 7,870 | 593 | 43 | 40 | 48 | 25 | 14,147 | 7,325 | 743 | 149 | 44 |
| Total | 271,181 | 97,472 | 18,587 | 685 | 713 | 532 | 598 | 252,565 | 95,640 | 26,376 | 1,742 | 863 |

*BROOKLYN (KINGS COUNTY).*

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1st | 10,080 | 4,381 | 225 | 13 | 15 | 23 | 18 | 9,041 | 4,910 | 277 | 75 | 3 |
| 2d | 12,863 | 5,851 | 2,275 | 29 | 38 | 29 | 40 | 11,269 | 6,284 | 2,997 | 89 | 65 |
| 3d | 8,854 | 1,394 | 239 | 18 | 11 | 9 | 11 | 7,996 | 2,016 | 231 | 23 | 18 |
| 4th | 11,980 | 2,939 | 695 | 35 | 57 | 17 | 27 | 10,151 | 4,095 | 992 | 29 | 32 |
| 5th | 11,596 | 6,896 | 510 | 43 | 22 | 40 | 16 | 10,497 | 7,579 | 556 | 135 | 25 |
| 6th | 9,557 | 3,211 | 1,779 | 56 | 134 | 14 | 58 | 7,730 | 4,218 | 2,379 | 46 | 68 |
| 7th | 10,875 | 2,490 | 215 | 39 | 92 | 30 | 36 | 9,955 | 3,082 | 312 | 86 | 46 |
| 8th | 9,962 | 1,918 | 159 | 13 | 1 | 16 | 6 | 8,464 | 3,126 | 168 | 39 | 11 |
| 9th | 14,074 | 6,325 | 696 | 10 | 9 | 40 | 25 | 12,767 | 7,178 | 735 | 117 | 35 |
| 10th | 11,974 | 6,679 | 260 | 19 | 10 | 37 | 15 | 10,523 | 7,762 | 260 | 133 | 21 |
| 11th | 13,144 | 8,577 | 293 | 12 | 29 | 26 | 24 | 12,003 | 9,260 | 343 | 160 | 29 |
| 12th | 14,142 | 7,078 | 439 | 22 | 61 | 42 | 22 | 11,647 | 9,159 | 465 | 139 | 25 |
| 13th | 8,248 | 1,507 | 759 | 11 | 30 | 5 | 28 | 7,067 | 2,151 | 971 | 16 | 34 |
| 14th | 8,546 | 1,229 | 1,424 | 4 | 5 | 5 | 29 | 6,984 | 1,872 | 1,966 | 19 | 52 |
| 15th | 10,355 | 2,023 | 246 | 52 | 28 | 19 | 13 | 9,544 | 2,569 | 254 | 43 | 19 |
| 16th | 14,688 | 4,359 | 1,216 | 136 | 51 | 15 | 44 | 13,121 | 5,055 | 1,678 | 50 | 72 |
| 17th | 10,384 | 7,645 | 600 | 34 | 9 | 44 | 23 | 9,583 | 7,901 | 722 | 166 | 29 |
| 18th | 13,850 | 6,775 | 1,835 | 25 | 200 | 36 | 39 | 12,284 | 7,375 | 2,504 | 127 | 61 |
| 19th | 7,267 | 1,762 | 1,075 | 14 | ..... | 12 | 28 | 6,202 | 2,406 | 1,247 | 14 | 43 |
| 20th | 16,438 | 6,434 | 664 | 89 | 74 | 32 | 39 | 15,206 | 7,302 | 770 | 64 | 45 |
| 21st | 12,448 | 11,524 | 551 | 22 | 103 | 57 | 27 | 11,486 | 11,918 | 754 | 200 | 28 |
| 22d | 14,695 | 6,028 | 1,878 | 58 | 79 | 38 | 58 | 13,228 | 6,574 | 2,411 | 78 | 75 |
| 23d | 7,027 | 1,627 | 2,537 | 15 | 1 | 10 | 32 | 5,667 | 2,065 | 3,068 | 9 | 51 |
| Total | 263,047 | 108,652 | 20,570 | 769 | 1,079 | 596 | 658 | 232,408 | 125,857 | 26,060 | 1,857 | 887 |

*BRONX.*

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1st | 16,856 | 2,954 | 1,479 | 253 | 89 | 13 | 65 | 16,143 | 2,840 | 2,102 | 37 | 110 |
| 2d | 19,676 | 5,456 | 1,836 | 55 | 81 | 17 | 58 | 18,945 | 5,007 | 2,437 | 79 | 89 |
| 3d | 11,736 | 2,267 | 2,217 | 62 | 16 | 7 | 80 | 10,376 | 2,430 | 3,035 | 13 | 112 |
| 4th | 10,373 | 2,119 | 2,804 | 37 | 13 | 10 | 58 | 8,947 | 2,208 | 3,826 | 20 | 93 |
| 5th | 11,927 | 2,522 | 2,547 | 32 | 6 | 19 | 78 | 10,461 | 2,671 | 3,430 | 27 | 121 |
| 6th | 13,728 | 3,919 | 715 | 27 | 34 | 31 | 44 | 13,440 | 3,704 | 780 | 72 | 43 |
| 7th | 12,564 | 2,608 | 1,975 | 95 | 4 | 13 | 74 | 11,687 | 2,551 | 2,526 | 32 | 104 |
| 8th | 19,252 | 8,705 | 727 | 28 | 45 | 30 | 40 | 19,238 | 7,965 | 857 | 178 | 50 |
| Total | 116,112 | 30,548 | 14,300 | 589 | 288 | 140 | 497 | 109,237 | 29,376 | 18,993 | 458 | 722 |

*QUEENS.*

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1st | 14,324 | 2,952 | 477 | 65 | 45 | 13 | 24 | 13,888 | 2,928 | 544 | 65 | 38 |
| 2d | 13,280 | 2,739 | 688 | 59 | ..... | 13 | 23 | 12,715 | 3,043 | 653 | 29 | 33 |
| 3d | 14,208 | 4,190 | 487 | 80 | 72 | 28 | 34 | 13,873 | 4,095 | 612 | 115 | 36 |
| 4th | 13,274 | 9,574 | 413 | 63 | 5 | 36 | 40 | 13,317 | 8,907 | 442 | 222 | 41 |
| 5th | 16,632 | 7,288 | 654 | 58 | 35 | 40 | 32 | 15,867 | 7,599 | 710 | 95 | 46 |
| 6th | 12,825 | 5,283 | 640 | 60 | 33 | 18 | 31 | 12,248 | 5,623 | 648 | 56 | 46 |
| Total | 84,543 | 32,026 | 3,359 | 385 | 190 | 148 | 184 | 81,908 | 32,195 | 3,609 | 582 | 240 |

*STATEN ISLAND (RICHMOND COUNTY).*

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1st | 11,475 | 4,605 | 200 | 20 | ..... | 29 | 17 | 11,612 | 4,010 | 187 | 85 | 16 |
| 2d | 9,928 | 3,770 | 202 | 27 | 18 | 114 | 15 | 9,998 | 3,250 | 197 | 157 | 23 |
| Total | 21,403 | 8,375 | 402 | 47 | 18 | 143 | 32 | 21,610 | 7,260 | 384 | 242 | 39 |

## NEW YORK--PRESIDENT AND GOVERNOR, 1920.

| COUNTIES. | PRESIDENT, 1920. | | | | | GOVERNOR, 1920. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Debs, Soc. | Watkins, Proh. | Christensen, F.-L. | Alfred E. Smith, Dem. | Nathan L. Miller, Rep. | J. D. Cannon, Soc. | G. F. Thompson, Proh. | D. F. Malone, F.-L. |
| Albany | 28,376 | 48,750 | 1,438 | 244 | 118 | 37,572 | 39,057 | 967 | 751 | 121 |
| Allegany | 2,799 | 10,898 | 513 | 441 | 22 | 2,886 | 10,428 | 495 | 588 | 30 |
| Bronx | 45,741 | 106,050 | 32,923 | 214 | 1,949 | 105,301 | 43,390 | 25,585 | 540 | 10,100 |
| Broome | 9,251 | 24,759 | 1,120 | 623 | 90 | 9,950 | 22,481 | 1,031 | 779 | 107 |
| Cattaraugus | 6,693 | 16,083 | 658 | 481 | 75 | 7,043 | 14,957 | 568 | 740 | 98 |
| Cayuga | 6,343 | 15,234 | 639 | 191 | 33 | 6,990 | 14,538 | 566 | 343 | 46 |
| Chautauqua | 6,781 | 27,618 | 3,143 | 869 | 62 | 8,380 | 25,254 | 2,705 | 1,176 | 108 |
| Chemung | 7,080 | 17,864 | 431 | 633 | 46 | 9,062 | 15,143 | 325 | 839 | 70 |
| Chenango | 3,735 | 10,116 | 68 | 282 | 14 | 3,197 | 9,866 | 53 | 293 | 36 |
| Clinton | 4,110 | 9,062 | 29 | 166 | 11 | 4,800 | 7,536 | 36 | 223 | 11 |
| Columbia | 5,203 | 9,284 | 211 | 95 | 15 | 5,613 | 8,763 | 188 | 268 | 48 |
| Cortland | 2,541 | 9,606 | 136 | 218 | 6 | 2,929 | 8,883 | 99 | 256 | 6 |
| Delaware | 4,528 | 11,719 | 150 | 269 | 27 | 4,171 | 10,895 | 112 | 392 | 104 |
| Dutchess | 9,938 | 21,152 | 882 | 167 | 71 | 12,022 | 18,212 | 758 | 310 | 129 |
| Erie | 40,436 | 99,762 | 15,111 | 1,430 | 521 | 62,315 | 82,730 | 12,222 | 1,947 | 544 |
| Essex | 2,218 | 8,042 | 47 | 61 | 9 | 2,822 | 7,660 | 33 | 139 | 37 |
| Franklin | 3,825 | 9,786 | 62 | 178 | 12 | 4,543 | 8,413 | 102 | 166 | 26 |
| Fulton | 3,192 | 10,946 | 888 | 436 | 35 | 4,036 | 9,863 | 800 | 588 | 36 |
| Genesee | 2,570 | 9,628 | 539 | 152 | 13 | 2,831 | 9,081 | 499 | 298 | 25 |
| Greene | 3,498 | 6,323 | 264 | 160 | 20 | 3,544 | 6,062 | 236 | 246 | 42 |
| Hamilton | 516 | 881 | 3 | 4 | 2 | 614 | 674 | 2 | 6 | 5 |
| Herkimer | 6,507 | 14,310 | 793 | 264 | 25 | 7,786 | 12,629 | 683 | 344 | 39 |
| Jefferson | 7,925 | 22,072 | 252 | 406 | 510 | 8,753 | 20,223 | 153 | 463 | 530 |
| Kings | 119,612 | 292,692 | 45,100 | 733 | 3,473 | 244,697 | 154,078 | 34,535 | 3,030 | 21,452 |
| Lewis | 2,673 | 5,906 | 24 | 76 | 10 | 2,731 | 5,444 | 22 | 93 | 11 |
| Livingston | 3,571 | 9,488 | 497 | 192 | 17 | 3,913 | 9,094 | 446 | 290 | 19 |
| Madison | 3,797 | 11,094 | 230 | 182 | 22 | 3,963 | 10,374 | 186 | 299 | 21 |
| Monroe | 28,523 | 73,809 | 11,089 | 1,324 | 678 | 38,280 | 64,871 | 9,883 | 2,383 | 824 |
| Montgomery | 5,911 | 12,835 | 476 | 134 | 26 | 7,252 | 11,390 | 394 | 225 | 46 |
| Nassau | 8,595 | 33,099 | 1,254 | 155 | 182 | 15,282 | 24,804 | 925 | 495 | 1,044 |
| New York | 135,249 | 275,013 | 46,049 | 463 | 7,079 | 268,316 | 136,580 | 34,223 | 1,117 | 19,852 |
| Niagara | 7,416 | 21,193 | 1,872 | 380 | 104 | 9,866 | 18,202 | 1,629 | 1,678 | 94 |
| Oneida | 15,560 | 36,311 | 2,297 | 412 | 78 | 19,744 | 32,181 | 2,038 | 638 | 89 |
| Onondaga | 23,308 | 57,008 | 4,707 | 640 | 163 | 29,493 | 51,406 | 4,043 | 1,173 | 132 |
| Ontario | 5,678 | 13,361 | 914 | 186 | 24 | 5,849 | 13,164 | 902 | 357 | 49 |
| Orange | 10,567 | 24,558 | 1,573 | 292 | 93 | 12,598 | 21,618 | 1,457 | 616 | 285 |
| Orleans | 2,266 | 8,305 | 620 | 176 | 30 | 2,487 | 7,793 | 598 | 319 | 41 |
| Oswego | 8,045 | 17,905 | 491 | 474 | 36 | 8,955 | 16,360 | 443 | 665 | 47 |
| Otsego | 6,275 | 12,112 | 134 | 391 | 36 | 5,751 | 11,646 | 83 | 537 | 82 |
| Putnam | 1,405 | 3,447 | 23 | 20 | 8 | 1,669 | 2,858 | 17 | 71 | 51 |
| Queens | 35,296 | 94,360 | 6,143 | 142 | 1,204 | 75,938 | 45,140 | 4,361 | 741 | 8,651 |
| Rensselaer | 20,224 | 28,810 | 1,849 | 278 | 116 | 23,774 | 25,451 | 1,526 | 434 | 89 |
| Richmond | 9,373 | 17,844 | 712 | 111 | 170 | 15,352 | 10,541 | 426 | 282 | 908 |
| Rockland | 5,057 | 11,169 | 498 | 80 | 67 | 6,817 | 8,874 | 388 | 219 | 281 |
| St. Lawrence | 7,213 | 24,651 | 372 | 282 | 56 | 8,023 | 22,644 | 325 | 325 | 58 |
| Saratoga | 6,905 | 16,222 | 351 | 290 | 73 | 9,038 | 13,239 | 216 | 575 | 129 |
| Schenectady | 8,741 | 19,208 | 4,941 | 509 | 66 | 12,177 | 16,255 | 4,068 | 877 | 120 |
| Schoharie | 3,697 | 5,572 | 30 | 215 | 12 | 3,107 | 5,699 | 26 | 312 | 48 |
| Schuyler | 1,231 | 3,827 | 151 | 138 | 9 | 1,157 | 3,727 | 134 | 118 | 17 |
| Seneca | 3,023 | 6,260 | 250 | 135 | 12 | 3,268 | 6,094 | 233 | 265 | 12 |
| Steuben | 7,401 | 18,335 | 1,217 | 784 | 52 | 8,015 | 17,020 | 1,113 | 1,167 | 59 |
| Suffolk | 8,852 | 26,737 | 596 | 233 | 118 | 13,667 | 20,383 | 435 | 790 | 601 |
| Sullivan | 3,623 | 8,029 | 671 | 98 | 26 | 4,419 | 6,777 | 499 | 236 | 143 |
| Tioga | 2,406 | 6,772 | 83 | 223 | 16 | 2,152 | 6,551 | 64 | 295 | 39 |
| Tompkins | 3,487 | 9,508 | 288 | 250 | 21 | 4,056 | 8,812 | 249 | 300 | 19 |
| Ulster | 8,759 | 19,001 | 301 | 455 | 76 | 10,174 | 16,129 | 189 | 774 | 198 |
| Warren | 3,227 | 9,009 | 189 | 101 | 20 | 4,764 | 6,815 | 117 | 232 | 40 |
| Washington | 4,124 | 13,647 | 162 | 123 | 24 | 5,486 | 11,522 | 81 | 227 | 58 |
| Wayne | 4,289 | 13,333 | 304 | 241 | 18 | 3,982 | 13,026 | 295 | 406 | 32 |
| Westchester | 28,060 | 76,020 | 6,097 | 435 | 485 | 44,367 | 58,795 | 4,691 | 702 | 1,938 |
| Wyoming | 2,442 | 9,134 | 294 | 194 | 21 | 2,635 | 8,554 | 292 | 247 | 19 |
| Yates | 1,571 | 5,638 | 52 | 122 | 6 | 1,496 | 5,229 | 34 | 304 | 2 |
| Total | 781,238 | 1,871,167 | 203,201 | 19,653 | 18,413 | 1,261,812 | 1,335,878 | 159,804 | 35,509 | 69,908 |

## CAMPAIGN EXPENSES IN 1922 IN NEW YORK STATE.

The Republican State Committee in the last campaign received $374,169.34 and spent $350,376. The largest contributors included:

W. H. Childs, George K. Morris, Chairman of the State committee, Thomas Cochran, C. M. Warner, Thomas G. Cromwell, George F. Baker, John D. Rockefeller and John D. Rockefeller, jr., $5,000 each.

Union League Club, $7,500; W. H. Woodin, $3,500; William Nelson Cromwell, $3,000.

Ogden L. Mills, Edwin S. Marston, Eliot C. Bacon, George Whitney, George B. Agnew, jr., George F. Baker, jr., Otto H. Kahn, Felix M. Warburg, R. Fulton Cutting and Charles D. Hillis, national committeeman, $2,500 each. Mrs. Whitelaw Reid, $2,000.

The Democrats put their State expenditures under two committees—The Democratic State Committee and the State Democratic Finance Committee. The former received $38,614.69 and spent $39,685.77. The latter received $45,257.84 and spent $44,921.24.

The principal contributors were William Randolph Hearst and John Ringling, $5,000 each; James W. Fleming, $3,500.

The Independent Citizens Committee for the Democratic ticket, $28,100. Thomas L. Chadbourne, Herbert H. Lehman, Fred L. Crocker, Charles W. Appleton and George W. Sweeney, $1,000 each. Jacob Ruppert, $500 and Edmond Guggenheim, $250.

Frederick A. Wallis, Chairman of the Finance Committee, loaned the committee $23,098, which amount he was paid back.

The Socialist State Committee received $1,936 and spent $1,841. The largest contributor was the American Labor Party, $1,500.

## REGISTRATION IN NEW YORK CITY, 1922.

Men—Manhattan, 278,843; Bronx, 117,350; Brooklyn, 281,842; Queens, 87,046; Richmond, 21,293—total, 786,374.

Women—Manhattan, 142,188; Bronx, 57,621; Brooklyn, 140,837; Queens, 42,397; Richmond, 11,095—total, 394,138.

## NORTH CAROLINA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Alamance | 5,255 | 4,619 | 2,476 | 2,278 | Jones | 964 | 385 | 712 | 233 |
| Alexander | 2,045 | 2,643 | 954 | 1,187 | Lee | 2,327 | 1,143 | 1,054 | 573 |
| Alleghany | 1,409 | 1,201 | 796 | 641 | Lenoir | 2,560 | 1,153 | 1,666 | 667 |
| Anson | 3,175 | 433 | 2,046 | 301 | Lincoln | 3,331 | 3,137 | 1,521 | 1,369 |
| Ashe | 3,431 | 3,808 | 1,898 | 1,939 | Macon | 2,177 | 2,050 | 1,146 | 1,069 |
| Avery | 397 | 2,503 | 360 | 1,158 | Madison | 1,340 | 3,616 | 972 | 1,965 |
| Beaufort | 3,522 | 2,266 | 1,957 | 1,274 | Martin | 2,561 | 530 | 1,472 | 281 |
| Bertie | 1,840 | 212 | 1,461 | 116 | McDowell | 2,809 | 2,561 | 1,274 | 1,218 |
| Bladen | 1,939 | 1,064 | 1,261 | 651 | Mecklenburg | 11,313 | 3,421 | 4,508 | 1,257 |
| Brunswick | 1,253 | 1,362 | 810 | 989 | Mitchell | 697 | 2,153 | 462 | 1,298 |
| Buncombe | 10,167 | 8,017 | 4,229 | 3,830 | Montgomery | 2,321 | 2,304 | 1,222 | 1,196 |
| Burke | 3,262 | 3,592 | 1,621 | 1,474 | Moore | 2,679 | 2,297 | 1,337 | 1,047 |
| Cabarrus | 4,418 | 5,148 | 2,080 | 2,314 | Nash | 4,031 | 1,556 | 2,189 | 826 |
| Caldwell | 2,931 | 3,298 | 1,725 | 1,659 | New Hanover | 4,102 | 712 | 2,355 | 492 |
| Camden | 540 | 142 | 368 | 86 | Northampton | 2,305 | 165 | 1,518 | 45 |
| Carteret | 2,070 | 2,315 | 1,165 | 1,246 | Onslow | 1,557 | 853 | 1,197 | 785 |
| Caswell | 1,239 | 505 | 849 | 338 | Orange | 1,993 | 1,737 | 1,230 | 1,158 |
| Catawba | 5,404 | 5,935 | 2,569 | 2,624 | Pamlico | 1,286 | 1,008 | 710 | 527 |
| Chatham | 3,186 | 2,906 | 1,839 | 1,501 | Pasquotank | 1,736 | 507 | 1,177 | 270 |
| Cherokee | 1,761 | 2,506 | 1,362 | 1,362 | Pender | 1,580 | 699 | 970 | 400 |
| Chowan | 1,091 | 209 | 610 | 91 | Perquimans | 1,042 | 487 | 645 | 288 |
| Clay | 755 | 911 | 400 | 453 | Person | 1,646 | 1,566 | 953 | 917 |
| Cleveland | 5,181 | 2,953 | 2,764 | 1,497 | Pitt | 4,196 | 864 | 2,839 | 719 |
| Columbus | 3,111 | 1,783 | 2,143 | 1,327 | Polk | 1,361 | 1,326 | 679 | 750 |
| Craven | 3,413 | 731 | 1,780 | 542 | Randolph | 5,110 | 6,297 | 2,747 | 3,031 |
| Cumberland | 3,233 | 1,972 | 1,971 | 1,217 | Richmond | 3,341 | 1,124 | 1,553 | 650 |
| Currituck | 1,000 | 86 | 945 | 87 | Robeson | 6,183 | 2,220 | 2,894 | 1,453 |
| Dare | 825 | 632 | 470 | 363 | Rockingham | 4,507 | 3,605 | 2,316 | 1,957 |
| Davidson | 4,797 | 5,960 | 2,675 | 2,801 | Rowan | 6,421 | 4,888 | 3,053 | 2,320 |
| Davie | 1,624 | 2,591 | 971 | 1,245 | Rutherford | 5,101 | 4,015 | 2,445 | 1,870 |
| Duplin | 3,398 | 2,697 | 1,824 | 1,527 | Sampson | 2,426 | 5,353 | 1,369 | 2,727 |
| Durham | 4,646 | 3,550 | 2,463 | 1,837 | Scotland | 1,705 | 306 | 938 | 137 |
| Edgecombe | 3,343 | 24 | 2,028 | 135 | Stanly | 3,843 | 4,312 | 2,110 | 1,941 |
| Forsyth | 8,123 | 6,792 | 4,115 | 3,585 | Stokes | 1,999 | 2,926 | 1,569 | 1,852 |
| Franklin | 2,742 | 589 | 2,057 | 396 | Surry | 3,547 | 5,170 | 2,029 | 2,977 |
| Gaston | 7,148 | 5,803 | 3,019 | 2,542 | Swain | 1,434 | 2,239 | 829 | 1,128 |
| Gates | 796 | 327 | 826 | 309 | Transylvania | 1,542 | 1,680 | 821 | 841 |
| Graham | 644 | 915 | 476 | 460 | Tyrrell | 718 | 532 | 416 | 392 |
| Granville | 2,622 | 833 | 1,713 | 648 | Union | 4,168 | 1,404 | 2,662 | 702 |
| Greene | 1,649 | 439 | 1,066 | 294 | Vance | 2,461 | 816 | 1,451 | 558 |
| Guilford | 9,615 | 7,920 | 4,616 | 3,670 | Wake | 8,020 | 3,653 | 4,627 | 2,461 |
| Halifax | 3,429 | 524 | 2,312 | 299 | Warren | 1,865 | 295 | 1,217 | 227 |
| Hartnett | 3,919 | 3,311 | 1,992 | 1,603 | Washington | 1,116 | 971 | 651 | 486 |
| Haywood | 4,229 | 3,000 | 2,403 | 1,523 | Watauga | 1,721 | 2,631 | 1,141 | 1,352 |
| Henderson | 2,496 | 3,337 | 1,166 | 1,795 | Wayne | 4,794 | 2,822 | 2,625 | 1,446 |
| Hertford | 1,104 | 221 | 977 | 209 | Wilkes | 2,843 | 6,451 | 1,632 | 3,470 |
| Hoke | 1,266 | 166 | 780 | 110 | Wilson | 3,496 | 1,374 | 2,052 | 730 |
| Hyde | 1,134 | 530 | 840 | 277 | Yadkin | 1,350 | 3,301 | 879 | 1,721 |
| Iredell | 6,470 | 4,402 | 3,335 | 2,078 | Yancey | 2,280 | 2,596 | 1,273 | 1,082 |
| Jackson | 2,385 | 2,355 | 1,306 | 1,288 | | | | | |
| Johnston | 6,030 | 5,588 | 3,468 | 2,857 | Total | 305,447 | 232,848 | 168,383 | 120,890 |

State Corporation Com. (1922)—Lee, Dem., 225,803; Hoover, Rep., 140,992.

### PAST VOTE OF NORTH CAROLINA.

1900 (Gov.), Dem., 186,650; Rep., 126,296; Pro., 358.
1900 (Pres.), Dem., 157,752; Rep., 133,081; Peo., 830; Pro., 1,086.
1902 (Jus. Sup. Ct.), Dem., 132,339; Rep., 71,275.
1904 (Gov.), Dem., 128,761; Rep., 79,505; Pro., 237; Soc., 109.
1904 (Pres.), Dem., 124,121; Rep., 81,442; Peo., 819; Pro., 361; Soc., 124.
1908 (Pres.), Dem., 136,995; Rep., 114,937; Pro., 360; Soc., 337.
1908 (Gov.), Dem., 145,102; Rep., 107,760; Soc., 310.
1910 (Aud.), Dem., 140,531; Rep., 94,017.
1912 (Pres.), Dem., 144,507; Rep., 29,319; Prog., 69,130; Soc., 1,025; Pro., 117.
1912 (Gov.), Dem., 149,975; Rep., 43,625; Prog., 49,930; Soc., 944.
1914 (U. S. Sen.), Dem., 121,342; Rep., 87,101.
1916 (Pres.), Dem., 168,383; Rep., 120,890; Soc., 509; Pro., 53.
1916 (Gov.), Dem., 167,161; Rep., 120,157; Soc., 509.
1920 (Pres.), Dem., 305,447; Rep., 232,848; Soc., 446; Proh., 17.
1920 (Gov.), Dem., 308,151; Rep., 230,175.

## NORTH DAKOTA.

(Presidential vote, 1920.)

| Counties. | Harding, Rep. | Cox, Dem. | Counties. | Harding, Rep. | Cox, Dem. | Counties. | Harding, Rep. | Cox, Dem. |
|---|---|---|---|---|---|---|---|---|
| Adams | 1,377 | 347 | Griggs | 1,739 | 520 | Renville | 1,828 | 512 |
| Barnes | 5,155 | 1,101 | Hettinger | 1,846 | 327 | Richland | 5,679 | 1,347 |
| Benson | 3,545 | 673 | Kidder | 1,855 | 336 | Rolette | 2,129 | 535 |
| Billings | 786 | 59 | La Moure | 3,004 | 645 | Sargent | 2,786 | 673 |
| Bottineau | 3,459 | 964 | Logan | 1,589 | 144 | Sheridan | 1,776 | 134 |
| Bowman | 1,192 | 321 | McHenry | 3,532 | 848 | Sioux | 776 | 163 |
| Burke | 1,911 | 448 | McIntosh | 1,783 | 79 | Slope | 1,142 | 235 |
| Burleigh | 4,310 | 890 | McKenzie | 2,524 | 499 | Stark | 3,541 | 532 |
| Cass | 10,881 | 2,852 | McLean | 3,724 | 748 | Steele | 2,222 | 339 |
| Cavalier | 3,783 | 964 | Mercer | 1,796 | 171 | Stutsman | 5,505 | 1,405 |
| Dickey | 2,822 | 754 | Morton | 4,612 | 632 | Towner | 2,190 | 473 |
| Divide | 2,389 | 495 | Mountrail | 2,785 | 774 | Trail | 3,676 | 523 |
| Dunn | 1,962 | 428 | Nelson | 3,127 | 501 | Walsh | 4,470 | 1,990 |
| Eddy | 1,525 | 578 | Oliver | 956 | 92 | Ward | 6,119 | 2,289 |
| Emmons | 2,896 | 243 | Pembina | 3,928 | 1,405 | Wells | 3,100 | 467 |
| Foster | 1,583 | 371 | Pierce | 2,102 | 293 | Williams | 3,753 | 1,336 |
| Golden Valley | 1,169 | 283 | Ramsey | 3,991 | 937 | | | |
| Grand Forks | 7,636 | 2,544 | Ransom | 3,010 | 783 | Total | 160,072 | 37,422 |
| Grant | 2,245 | 289 | | | | | | |

NORTH DAKOTA—*Continued.*

(Presidential vote, 1916.)

| Counties. | Wilson, Dem. | Hughes, Rep. | Counties. | Wilson, Dem. | Hughes, Rep. | Counties. | Wilson, Dem. | Hughes, Rep. |
|---|---|---|---|---|---|---|---|---|
| Adams | 532 | 469 | Griggs | 668 | 521 | Renville | 1,012 | 532 |
| Barnes | 1,678 | 1,467 | Hettinger | 661 | 856 | Richland | 1,772 | 2,097 |
| Benson | 922 | 1,210 | Kidder | 650 | 604 | Rolette | 762 | 600 |
| Billings | 276 | 306 | La Moure | 990 | 1,045 | Sargent | 868 | 1,050 |
| Bottineau | 1,471 | 1,294 | Logan | 260 | 567 | Sheridan | 310 | 807 |
| Bowman | 685 | 374 | McHenry | 1,456 | 1,394 | Sioux | 200 | 232 |
| Burke | 922 | 518 | McIntosh | 270 | 950 | Slope | 867 | 516 |
| Burleigh | 1,267 | 1,182 | McKenzie | 1,316 | 692 | Stark | 953 | 1,409 |
| Cass | 3,303 | 3,093 | McLean | 1,210 | 1,054 | Steele | 515 | 676 |
| Cavalier | 1,149 | 1,502 | Mercer | 353 | 730 | Stutsman | 1,866 | 1,644 |
| Dickey | 920 | 1,037 | Morton | 1,835 | 2,785 | Towner | 769 | 665 |
| Divide | 950 | 707 | Mountrail | 1,262 | 740 | Trail | 664 | 1,423 |
| Dunn | 1,028 | 566 | Nelson | 861 | 1,013 | Walsh | 2,003 | 1,670 |
| Eddy | 650 | 505 | Oliver | 327 | 346 | Ward | 2,791 | 1,743 |
| Emmons | 609 | 1,090 | Pembina | 1,400 | 1,469 | Wells | 810 | 1,226 |
| Foster | 662 | 549 | Pierce | 789 | 703 | Williams | 1,769 | 903 |
| Golden Valley | 497 | 499 | Ramsey | 1,331 | 1,169 | | | |
| Grand Forks | 2,814 | 2,159 | Ransom | 1,121 | 1,093 | Total | 55,206 | 53,471 |

Governor (1922)—Lemke, Ind. Rep.-Non.-Part., 81,048; Nestos, Rep., 110,321.
U. S. Senator (1922)—O'Connor, Dem.-Ind., 93,699; Frazier, Rep.-Non-Part., 102,499.
Nestos and O'Connor are classed as Independents, or anti-Non-Partisan leaguers; while Frazier and Lemke are Non-Partisans.

PAST VOTE OF NORTH DAKOTA.

1874 (Cong.), Dem., 2,189; Rep., 4,597.
1876 (Cong.), Dem., 2,413; Rep., 6,199.
1878 (Cong.), Dem., 8,493; Rep., 10,455.
1880 (Cong.), Dem., 9,340; Rep., 18,796; Ind., 290.
1882 (Cong.), Dem., 9,034; Rep., 38,151; Ind., 54.
1884 (Cong.), Dem., 3,352; Rep., 28,906.
1886 (Cong.), Dem., 15,540; Rep., 23,290.
1889 (Gov.), Dem., 12,733; Rep., 25,305.
1890 (Gov.), Dem., 12,604; Rep., 19,053; F. A., 4,821.
1892 (Gov.), Fus., 18,995; Rep., 17,236.
1892 (Pres.), Pop., 17,700; Rep., 17,519; Pro., 899.
1894 (Gov.), Dem., 8,188; Rep., 23,723; Pop., 9,354.
1896 (Pres.), Dem., 20,686; Rep., 26,335; Pro., 358.
1898 (Gov.), Fus., 19,496; Rep., 27,308.
1900 (Gov.), Fus., 22,275; Rep., 34,052; Pro., 560; Soc. D., 425; Peo., 213.
1900 (Pres.), Fus., 20,519; Rep., 35,891; Pro., 731; Soc. D., 528; Pop., 110.
1902 (Gov.), Dem., 17,566; Rep., 31,621; Soc., 1,139.
1904 (Pres.), Fus., 14,273; Rep., 52,595; Soc., 2,005; Pro., 1,137; Pop., 165.
1904 (Gov.), Dem., 16,744; Rep., 47,828; Pro., 1,388; Soc., 1,700.
1906 (Gov.), Fus., 34,420; Rep., 29,359; Soc., 975.
1908 (Pres.), Fus., 32,885; Rep., 57,680; Soc., 2,421; Pop., 165; Ind., 38; Pro., 1,549.
1908 (Gov.), Fus., 49,346; Rep., 47,093; Soc., 490.
1910 (Gov.), Dem., 47,003; Rep., 45,015.
1912 (Pres.), Dem., 29,555; Rep., 23,090; Prog., 25,726; Soc., 6,966; Pro., 1,243.
1912 (Gov.), Dem., 31,544; Rep., 39,811; Pro., 9,406; Soc., 6,835.
1914 (Gov.), Dem., 34,809; Rep., 44,260; Soc., 5,188; Prog., 3,817.
1914 (U. S. Sen.), Dem., 29,918; Rep., 48,583; Prog., 2,597; Soc., 5,468.
1916 (Pres.), Dem., 55,206; Rep., 53,471; Soc., 5,716; Pro., 997.
1916 (Gov.), Dem., 20,351; Rep., 87,665; Soc., 2,615.
1916 (U. S. Sen.), Dem., 40,988; Rep., 57,714; Soc., 8,472.
1918 (Gov.), Dem., 36,783; Rep., 54,517.
1920 (Pres.), Dem., 37,422; Rep., 160,072; Soc., 8,282.
1920 (Gov.), Dem.-Ind., 112,488; Rep.-N. P., 117,118.
1920 (U. S. Sen.), Dem.-Ind., 88,495; Rep.-N. P., 130,614.

## OHIO.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Adams | 4,194 | 4,974 | 2,887 | 2,819 | Hardin | 5,817 | 8,071 | 4,304 | 4,119 |
| Allen | 11,658 | 13,978 | 7,905 | 5,713 | Harrison | 2,473 | 5,053 | 1,911 | 2,517 |
| Ashland | 5,705 | 5,951 | 4,000 | 2,534 | Henry | 2,829 | 5,738 | 3,252 | 2,482 |
| Ashtabula | 5,413 | 14,099 | 5,306 | 6,608 | Highland | 5,654 | 7,570 | 3,964 | 3,727 |
| Athens | 6,523 | 11,016 | 4,101 | 5,554 | Hocking | 4,082 | 4,335 | 2,907 | 2,357 |
| Auglaize | 4,792 | 6,752 | 4,124 | 2,763 | Holmes | 3,211 | 2,065 | 2,846 | 955 |
| Belmont | 13,347 | 14,761 | 7,911 | 7,526 | Huron | 4,398 | 9,348 | 4,136 | 4,048 |
| Brown | 5,317 | 4,009 | 3,959 | 2,227 | Jackson | 4,878 | 5,949 | 2,922 | 3,116 |
| Butler | 16,437 | 14,998 | 10,806 | 5,850 | Jefferson | 8,064 | 13,038 | 5,250 | 6,658 |
| Carroll | 1,755 | 4,392 | 1,672 | 2,086 | Knox | 6,361 | 8,178 | 4,578 | 3,646 |
| Champaign | 4,775 | 7,285 | 3,338 | 3,695 | Lake | 2,711 | 7,465 | 2,596 | 2,887 |
| Clark | 14,097 | 19,869 | 8,848 | 8,715 | Lawrence | 3,955 | 7,616 | 2,821 | 4,363 |
| Clermont | 6,245 | 6,857 | 4,247 | 3,549 | Licking | 10,679 | 11,924 | 8,183 | 5,935 |
| Clinton | 3,598 | 6,947 | 2,602 | 3,620 | Logan | 4,904 | 8,521 | 3,483 | 4,345 |
| Columbiana | 9,774 | 16,846 | 7,788 | 8,118 | Lorain | 8,640 | 18,125 | 7,658 | 6,868 |
| Coshocton | 5,617 | 6,154 | 4,269 | 2,831 | Lucas | 30,452 | 52,449 | 30,779 | 16,711 |
| Crawford | 8,467 | 7,082 | 6,014 | 2,673 | Madison | 3,769 | 5,397 | 2,667 | 2,809 |
| Cuyahoga | 70,518 | 148,857 | 71,523 | 51,287 | Mahoning | 14,941 | 29,736 | 13,013 | 11,256 |
| Darke | 8,459 | 9,552 | 6,186 | 4,322 | Marion | 8,065 | 11,320 | 5,273 | 4,264 |
| Defiance | 3,723 | 5,987 | 3,359 | 2,565 | Medina | 3,120 | 6,846 | 2,984 | 2,754 |
| Delaware | 5,241 | 7,700 | 3,754 | 3,461 | Meigs | 3,606 | 6,541 | 2,628 | 3,184 |
| Erie | 4,831 | 8,755 | 5,152 | 4,170 | Mercer | 4,404 | 5,692 | 3,803 | 2,065 |
| Fairfield | 8,610 | 7,572 | 6,172 | 3,380 | Miami | 8,076 | 13,122 | 5,582 | 5,772 |
| Fayette | 3,812 | 5,446 | 2,616 | 2,772 | Monroe | 3,861 | 2,825 | 3,322 | 1,504 |
| Franklin | 48,452 | 59,691 | 34,103 | 24,107 | Montgomery | 38,433 | 46,493 | 24,339 | 19,683 |
| Fulton | 2,049 | 6,111 | 2,507 | 2,933 | Morgan | 2,157 | 4,127 | 1,833 | 2,136 |
| Gallia | 2,562 | 5,388 | 2,577 | 2,860 | Morrow | 2,858 | 4,484 | 2,345 | 2,062 |
| Geauga | 1,081 | 3,722 | 1,245 | 1,806 | Muskingum | 9,437 | 13,862 | 6,328 | 7,597 |
| Greene | 4,016 | 8,600 | 2,913 | 4,458 | Noble | 2,909 | 4,197 | 2,175 | 2,290 |
| Guernsey | 6,888 | 8,764 | 4,312 | 4,228 | Ottawa | 2,867 | 4,336 | 3,347 | 1,793 |
| Hamilton | 77,598 | 112,590 | 51,990 | 64,030 | Paulding | 2,739 | 4,549 | 2,313 | 2,647 |
| Hancock | 6,386 | 9,746 | 5,416 | 4,268 | Perry | 5,917 | 7,685 | 3,860 | 3,953 |

OHIO—*Continued.*

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Pickaway | 5,645 | 5,273 | 3,820 | 2,629 | Trumbull | 6,815 | 17,343 | 6,091 | 6,167 |
| Pike | 2,799 | 3,075 | 2,091 | 1,616 | Tuscarawas | 10,167 | 11,908 | 7,608 | 5,404 |
| Portage | 5,405 | 8,231 | 4,269 | 3,142 | Union | 3,286 | 6,544 | 2,747 | 3,187 |
| Preble | 4,933 | 6,258 | 3,387 | 2,881 | Van Wert | 4,899 | 7,495 | 3,753 | 3,802 |
| Putnam | 4,673 | 5,157 | 4,294 | 2,243 | Vinton | 2,124 | 2,559 | 1,433 | 1,420 |
| Richland | 9,349 | 10,940 | 6,985 | 4,886 | Warren | 3,956 | 7,464 | 2,937 | 3,610 |
| Ross | 7,063 | 9,330 | 5,154 | 4,857 | Washington | 6,286 | 9,279 | 5,267 | 4,745 |
| Sandusky | 5,295 | 8,933 | 5,264 | 3,557 | Wayne | 7,751 | 8,932 | 5,930 | 3,676 |
| Scioto | 7,682 | 11,871 | 4,808 | 6,356 | Williams | 4,183 | 7,000 | 3,552 | 3,132 |
| Seneca | 8,175 | 10,064 | 6,451 | 4,301 | Wood | 4,965 | 12,042 | 5,796 | 5,034 |
| Shelby | 5,642 | 5,452 | 3,801 | 2,352 | Wyandot | 4,443 | 4,560 | 3,250 | 2,078 |
| Stark | 18,437 | 37,483 | 15,316 | 14,159 | | | | | |
| Summit | 27,857 | 43,721 | 19,343 | 11,593 | Total | 780,037 | 1,182,022 | 604,361 | 514,858 |

Governor (1922)—Donahey, Dem., 821,948; Thompson, Rep., 803,300.
U. S. Senator (1922)—Pomerene, Dem., 744,588; Fess, Rep., 794,159.
Ohio voters, in 1922, rejected, by a majority of 187,000, a proposed Constitutional amendment legalizing wine and b
Florence E. Allen was elected in 1922 an Associate Judge of the Ohio Supreme Court.

PAST VOTE OF OHIO.

1902 (Sec. St.), Dem., 315,706; Rep., 436,171; Soc., 14,270; Proh., 12,568; S. L., 2,983.
1903 (Gov.), Dem., 361,748; Rep., 475,560; Soc., 13,495; Proh., 13,502; S. L., 2,071.
1904 (Pres.), Dem., 347,674; Rep., 600,095; Soc., 36,260; Proh., 19,339; Soc. L., 2,633; Pop., 1,392.
1905 (Gov.), Dem., 473,264; Rep., 430,617; Soc., 17,795; Proh., 13,061; S. L., 1,808.
1906 (Sec. St.), Dem., 351,676; Rep., 408,066; Soc., 18,432; Proh., 11,970; S. L., 2,211.
1908 (Pres.), Dem., 502,721; Rep., 572,312; Soc., 32,795; Proh., 11,402; S. L., 721; Pop., 162; Ind., 439.
1908 (Gov.), Dem., 552,569; Rep., 533,197; Soc., 28,573; Proh., 7,665; S. L., 797; Ind., 397.
1910 (Gov.), Dem., 477,077; Rep., 376,700; Soc., 60,637; Proh., 7,129; S. L., 2,920.
1912 (Pres.), Dem., 423,152; Rep., 277,066; Prog., 229,327; Soc., 89,930; Proh., 11,459; S. L., 2,623.
1912 (Gov.), Dem., 439,323; Rep., 272,500; Prog., 217,903; Soc., 87,709; Proh., 16,607; S. L., 2,689.
1914 (Gov.), Dem., 493,367; Rep., 524,625; Prog., 60,971; Soc., 51,688.
1914 (U. S. Sen.), Dem., 423,742; Rep., 526,115; Prog., 67,509; Soc., 58,803.
1916 (Pres.), Dem., 604,361; Rep., 514,858; Soc., 38,092; Proh., 8,080.
1916 (Gov.), Dem., 566,201; Rep., 561,002; Soc., 36,908; Proh., 7,347.
1916 (U. S. Sen.), Dem., 570,868; Rep., 535,346; Soc., 38,187; Proh., 12,060; Ind., 2,965.
1918 (Gov.), Dem., 486,403; Rep., 470,459.
1920 (Pres.), Dem., 780,037; Rep., 1,182,022; Soc., 57,147; Proh., 294; Single Tax, 2,153.
1920 (Gov.), Dem., 918,962; Rep., 1,039,835; Soc., 42,889; Single Tax, 1,497.
1920 (U. S. Sen.), Dem., 782,650; Rep., 1,134,953; Single Tax, 2,647.

## OKLAHOMA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Adair | 1,560 | 2,020 | 1,190 | 1,010 | Lincoln | 2,968 | 5,254 | 2,258 | 3,387 |
| Alfalfa | 1,350 | 3,004 | 1,390 | 1,378 | Logan | 2,210 | 4,606 | 1,701 | 2,270 |
| Atoka | 2,103 | 2,077 | 1,479 | 925 | Love | 1,650 | 711 | 1,125 | 266 |
| Beaver | 1,068 | 1,965 | 1,382 | 917 | McClain | 2,310 | 1,728 | 1,541 | 680 |
| Beckham | 2,343 | 1,743 | 1,850 | 527 | McCurtain | 2,598 | 1,959 | 1,763 | 795 |
| Blaine | 1,292 | 2,782 | 1,214 | 1,339 | McIntosh | 2,635 | 2,353 | 1,743 | 896 |
| Bryan | 4,496 | 3,127 | 2,974 | 1,267 | Major | 780 | 1,920 | 762 | 946 |
| Caddo | 3,581 | 4,818 | 2,735 | 2,272 | Marshall | 1,589 | 1,487 | 1,352 | 449 |
| Canadian | 3,274 | 3,873 | 2,200 | 1,590 | Mayes | 1,987 | 2,447 | 1,574 | 1,229 |
| Carter | 6,003 | 3,555 | 2,919 | 1,013 | Murray | 1,418 | 1,359 | 1,305 | 458 |
| Cherokee | 1,859 | 2,522 | 1,594 | 1,379 | Muskogee | 6,377 | 5,159 | 4,004 | 2,532 |
| Choctaw | 2,529 | 2,088 | 1,945 | 957 | Noble | 1,467 | 2,465 | 1,346 | 1,243 |
| Cimarron | 460 | 626 | 387 | 238 | Nowata | 1,699 | 2,678 | 1,355 | 1,322 |
| Cleveland | 2,383 | 2,280 | 1,753 | 885 | Okfuskee | 1,643 | 1,764 | 1,337 | 660 |
| Coal | 1,797 | 1,748 | 1,118 | 821 | Oklahoma | 11,797 | 15,314 | 7,871 | 5,291 |
| Comanche | 2,988 | 3,286 | 2,130 | 1,221 | Okmulgee | 4,492 | 5,368 | 2,406 | 1,860 |
| Cotton | 2,262 | 1,810 | 1,500 | 685 | Osage | 3,801 | 4,567 | 2,052 | 1,527 |
| Craig | 2,903 | 3,091 | 1,901 | 1,647 | Ottawa | 3,922 | 5,269 | 1,875 | 1,642 |
| Creek | 5,406 | 7,928 | 3,496 | 2,820 | Pawnee | 1,988 | 2,982 | 1,491 | 1,396 |
| Custer | 2,263 | 3,224 | 1,771 | 1,507 | Payne | 3,240 | 4,578 | 2,140 | 1,767 |
| Delaware | 1,240 | 2,050 | 1,223 | 837 | Pittsburg | 5,364 | 5,363 | 3,441 | 1,914 |
| Dewey | 967 | 1,735 | 992 | 796 | Pontotoc | 3,800 | 2,365 | 2,418 | 911 |
| Ellis | 842 | 1,786 | 960 | 983 | Pottawatomie | 5,314 | 5,357 | 3,276 | 2,042 |
| Garfield | 3,656 | 6,615 | 2,347 | 2,854 | Pushmataha | 1,365 | 1,863 | 1,059 | 645 |
| Garvin | 4,096 | 2,915 | 2,697 | 804 | Roger Mills | 2,450 | 2,850 | 1,148 | 538 |
| Grady | 4,370 | 3,413 | 3,243 | 1,272 | Rogers | 937 | 1,189 | 1,900 | 1,435 |
| Grant | 1,879 | 3,204 | 1,699 | 1,513 | Seminole | 1,860 | 3,389 | 1,444 | 872 |
| Greer | 1,850 | 1,019 | 1,675 | 365 | Sequoyah | 2,503 | 3,192 | 1,632 | 1,179 |
| Harmon | 1,120 | 635 | 1,091 | 147 | Stephens | 2,814 | 2,033 | 2,343 | 607 |
| Harper | 751 | 1,404 | 798 | 662 | Texas | 1,367 | 1,750 | 1,349 | 807 |
| Haskell | 2,192 | 2,672 | 1,486 | 976 | Tillman | 2,640 | 1,540 | 2,250 | 625 |
| Hughes | 3,581 | 2,976 | 2,187 | 1,219 | Tulsa | 9,994 | 14,494 | 4,497 | 3,857 |
| Jackson | 2,694 | 1,340 | 2,096 | 409 | Wagoner | 1,376 | 1,431 | 1,040 | 799 |
| Jefferson | 2,821 | 1,728 | 1,739 | 493 | Washington | 2,122 | 2,065 | 1,839 | 1,727 |
| Johnston | 2,119 | 1,945 | 1,724 | 756 | Washita | 2,800 | 4,102 | 2,107 | 958 |
| Kay | 4,543 | 5,949 | 2,340 | 2,482 | Woods | 1,542 | 2,818 | 1,417 | 1,358 |
| Kingfisher | 1,743 | 3,214 | 1,364 | 1,728 | Woodward | 1,441 | 2,482 | 1,130 | 1,092 |
| Kiowa | 2,510 | 2,616 | 2,279 | 1,017 | | | | | |
| Latimer | 1,200 | 1,410 | 950 | 663 | Total | 215,808 | 243,464 | 148,115 | 98,299 |
| Le Flore | 3,757 | 4,928 | 2,576 | 1,940 | | | | | |

Governor (1922)—Walton, Dem., 280,304; Fields, Rep., 230,417; Enfield, Soc., 3,936.

PAST VOTE OF OKLAHOMA.

1908 (Pres.), Dem., 122,406; Rep., 110,558; Soc., 21,729; Pop., 434; Ind., 244.
1910 (Gov.), Dem., 120,218; Rep., 99,527; Soc., 24,707.
1912 (Pres.), Dem., 119,156; Rep., 90,786; Soc., 42,262; Proh., 2,185.
1914 (Gov.), Dem., 100,597; Rep., 95,904; Prog., 4,189; Soc., 52,703; Ind., 289.
1914 (U. S. Sen.), Dem., 119,443; Rep., 73,392; Prog., 3,966; Soc., 52,229.
1916 (Pres.), Dem., 148,115; Rep., 98,299; Soc., 45,212; Proh., 1,675; Prog., 234.
1918 (Gov.), Dem., 104,132; Rep., 82,865.
1920 (Pres.), Dem., 215,808; Rep., 243,464; Soc., 25,679.
1920 (U. S. Sen.), Dem., 217,677; Rep., 247,824.

## OREGON.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Baker | 3,495 | 2,173 | 3,897 | 2,541 | Lane | 7,7 | 3,991 | 5,880 | 7,253 |
| Benton | 3,752 | 1,709 | 2,488 | 2,902 | Lincoln | 1 | 763 | 915 | 1,167 |
| Clakamas | 6,928 | 3,664 | 5,334 | 6,349 | Linn | 4 | 2 | 4,675 | 4,524 |
| Clatsop | 3,498 | 1,672 | 2,239 | 2,568 | Malheur | 2 | 4 | 1,937 | 1,682 |
| Columbia | 2,007 | 939 | 1,451 | 2,023 | Marion | 8 | 2 | 5,699 | 8,316 |
| Coos | 3,272 | 2,289 | 3,352 | 3,209 | Morrow | 1,1 | 0 | 830 | 748 |
| Crook | 872 | 532 | 2,699 | 1,675 | Multnomah | 44,80 | 7 | 35,755 | 41,458 |
| Curry | 599 | 279 | 512 | 541 | Polk | 2,709 | 718 | 2,844 | 2,899 |
| Deschutes | 1,649 | 1,066 | | | Sherman | 893 | 423 | 747 | 717 |
| Douglas | 4,402 | 2,375 | 3,679 | 3,922 | Tillamook | 1,664 | 825 | 1,175 | 1,547 |
| Gilliam | 821 | 494 | 870 | 557 | Umatilla | 4,979 | 3,258 | 4,600 | 3,664 |
| Grant | 1,310 | 500 | 1,210 | 941 | Union | 2,826 | 2,464 | 3,086 | 2,253 |
| Harney | 1,026 | 475 | 1,239 | 872 | Wallowa | 1,564 | 861 | 1,960 | 1,198 |
| Hood River | 1,449 | 755 | 1,188 | 1,314 | Wasco | 2,698 | 1,426 | 2,287 | 2,243 |
| Jackson | 4,382 | 2,464 | 4,874 | 3,538 | Washington | 4,947 | 2,238 | 3,363 | 4,888 |
| Jefferson | 623 | 297 | 904 | 581 | Wheeler | 797 | 227 | 570 | 629 |
| Josephine | 1,606 | 828 | 1,656 | 1,660 | Yamhill | 4,102 | 2,346 | 3,342 | 4,010 |
| Klamath | 2,742 | 900 | 1,853 | 1,631 | | | | | |
| Lake | 1,136 | 346 | 971 | 793 | Total | 143,592 | 80,019 | 120,087 | 126,813 |

Governor (1922)—Pierce, Dem., 133,392; Olcott, Rep., 99,155.

Oregon voters, in 1922, adopted the initiative measure known as the Compulsory School Bill. The bill, sponsored originally by the Scottish Rite Masons, was taken up by the Ku Klux Klan as its main issue. It is said the bill will close parochial schools. The purpose of the bill was stated on the official ballot as follows:

"Requiring any parent or guardian or other person having control, charge or custody of a child over eight and under sixteen years of age, from and after Sept. 1, 1926, to send such child to a public school during the entire school year, excepting (a) children physically unable; (b) children who have completed the eighth grade; (c) children between the ages of eight and ten living more than three miles from a public school, except where transportation is furnished; (d) children taught by parent or private teacher."

PAST VOTE OF OREGON.

1872 (Pres.), Dem. and L., 7,742; Rep., 11,818.
1876 (Pres.), Dem., 14,157; Rep., 15,214.
1880 (Pres.), Dem., 19,955; Rep., 20,619; Greenback, 245.
1884 (Pres.), Dem., 24,604; Rep., 26,860; Proh., 492; Greenback, 726.
1888 (Pres.), Dem., 26,522; Rep., 33,291; Proh., 1,677; U. L., 363.
1892 (Pres.), Dem., 14,243; Rep., 35,002; Proh., 2,281; Peo., 26,955.
1896 (Pres.), Dem.-Peo., 46,739; Rep., 48,779; Proh., 919; Nat. Dem., 977.
1900 (Pres.), Rep., 46,526; Fus., 33,386; Proh., 2,536; Soc. D., 1,494; Pop., 275.
1904 (Pres.), Dem., 17,521; Rep., 60,445; Soc., 7,619; Proh., 3,806; Pop., 753.
1908 (Pres.), Dem., 38,049; Rep., 62,530; Soc., 7,339; Proh., 3,682; Ind., 289.
1912 (Pres.), Dem., 47,064; Rep., 34,673; Prog., 37,600; Soc., 13,343; Proh., 4,360.
1916 (Pres.), Dem., 120,087; Rep., 116,183; Soc., 9,711; Proh., 4,729; Prog., 310.
1918 (Gov.), Dem., 65,400; Rep., 81,067.
1918 (U. S. Sen.), Dem., 64,303; Rep., 82,360; Soc., 5,373.
1920 (Pres.), Dem., 80,019; Rep., 143,592; Proh., 3,595; Soc., 9,801; Soc. Lab., 1,515.
1920 (U. S. Sen.), Dem., 100,133; Rep., 116,696; Soc., 6,949; Ind., 4,456; Ind. Lab., 1,782.

PAST VOTE OF PENNSYLVANIA.

1876 (Pres.), Dem., 366,204; Rep., 384,148; Gr., 7,204; Proh., 1,318.
1878 (Gov.), Dem., 297,137; Rep., 319,490; Gr., 81,758; Proh., 3,759.
1880 (Pres.), Dem., 407,428; Rep., 444,704; Gr., 20,668; Proh., 1,939.
1880 (Pres.), 407,502; Rep., 444,713; Greenback, 20,648.
1884 (Pres.), Dem., 392,785; Rep., 473,804; Proh., 15,283; Greenback, 16,992.
1888 (Pres.), Dem., 447,004; Rep., 526,269; Proh., 20,966; U. Lab., 3,876.
1892 (Pres.), Dem., 452,264; Rep., 516,011; Proh., 25,123; Peo., 8,714.
1896 (Pres.), Dem.-Peo., 433,228; Rep., 728,300; Proh., 20,147; Nat. Dem., 11,000.
1900 (Pres.), Dem., 424,232; Pop., 638; Rep., 712,665; Soc. D., 4,831; Proh., 27,908; Soc. L., 2,936.
1902 (Gov.), Dem., 436,457; Rep., 592,867; S. L., 5,157; Cit., 450; Soc., 21,910; Anti-Mach., 9,549; Proh., 23,327; Bal. Ref., 4,971.
1904 (Pres.), Dem., 335,430; Rep., 840,949; S. L., 2,211; Ind., 2,568; Soc., 21,863; Proh., 33,717.
1906 (Gov.), Dem., 301,747; Rep., 506,392; Soc., 15,169; Proh., 24,793; Comiv., 6,094; Linc., 145,657; Ref., 784; U. L., 3,675; Cit., 4,610.
1907 (Treas.), Dem., 312,737; Rep., 499,965; Proh., 39,830; Soc., 14,346.
1908 (Pres.), Dem., 418,785; Rep., 745,779; Soc., 33,913; Proh., 36,694; Soc. L., 1,222; Ind., 1,067.
1910 (Gov.), Dem., 129,395; Rep., 412,658; Key., 382,127; Proh., 17,445; Indus., 802; Soc., 53,053.
1912 (Pres.), Dem., 345,619; Rep., 273,305; Prog., 447,426; Soc., 83,164; Proh., 19,533; Soc. L., 704.
1914 (Gov.), Dem., 312,553; Rep., 534,898; Wash., 140,329; Soc., 40,115; Proh., 17,467; Key., 37,847; Pers. L., 17,956; Bull M., 4,431; R. Prog., 6,473; Indus., 533.
1916 (Pres.), Dem., 521,784; Rep., 703,734; Soc., 42,637; Proh., 28,525; S. L., 417.
1916 (U. S. Sen.), Dem., 450,106; Rep., 680,451; Soc., 45,385; Proh., 30,089.
1918 (Gov.), Dem., 307,154; Rep.. 552,447; Soc., 18,706; Proh., 27,360.
1920 (Pres.), Dem., 503,202; Rep., 1,218,215; Soc., 70,021; Proh., 42,612; F.-L., 15,642; Soc. Lab., 753; Single Tax, 803.
1920 (U. S. Sen.), Dem., 484,362; Rep., 1,067,989; Proh., 132,610; Soc., 67,316; Lab., 27,401; Single Tax, 2,110.
1920 (State Treas.), Dem., 472,895; Rep., 1,149,245; Soc., 67,472; Proh., 66,285; Lab.. 27,443; Single Tax, 2,231.

## PENNSYLVANIA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | | | | 1916. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Debs, Soc. | Watkins, Proh. | Christensen, F.-L. | Wilson, Dem. | Hughes, Rep. | Benson, Soc. | Hanly, Proh. | Reimer, Ind. |
| Adams | 5,323 | 3,852 | 85 | 81 | 6 | 3,963 | 3,290 | 82 | 184 | ..... |
| Allegheny | 138,908 | 40,278 | 16,262 | 3,670 | 1,312 | 52,833 | 77,483 | 7,815 | 2,052 | 81 |
| Armstrong | 8,995 | 3,262 | 2.0 | 427 | 84 | 3,590 | 6,024 | 316 | 364 | 2 |
| Beaver | 11,691 | 4,771 | 1,164 | 816 | 101 | 5,805 | 6,864 | 904 | 526 | 4 |
| Bedford | 5,800 | 2,594 | 80 | 189 | 736 | 3,263 | 3,729 | 238 | 112 | ..... |
| Berks | 22,221 | 18,361 | 5,674 | 288 | 24 | 19,267 | 11,937 | 3,146 | 393 | 26 |
| Blair | 15,035 | 5,668 | 389 | 582 | 4,671 | 7,002 | 9,893 | 491 | 519 | 30 |
| Bradford | 11,947 | 2,825 | 161 | 943 | 19 | 3,655 | 6,178 | 200 | 707 | 2 |
| Bucks | 14,130 | 6,867 | 405 | 224 | 42 | 7,494 | 9,280 | 238 | 172 | 4 |
| Butler | 10,467 | 3,829 | 214 | 1,103 | 25 | 4,544 | 5,458 | 211 | 1,351 | 3 |
| Cambria | 19,629 | 6,961 | 834 | 635 | 2,603 | 9,416 | 10,688 | 725 | 593 | 8 |
| Cameron | 1,364 | 497 | 9 | 130 | 3 | 452 | 713 | 15 | 25 | ..... |
| Carbon | 7,900 | 5,030 | 280 | 86 | 40 | 4,099 | 4,275 | 179 | 138 | 2 |
| Centre | 7,615 | 4,142 | 75 | 485 | 52 | 4,120 | 4,392 | 122 | 146 | ..... |
| Chester | 18,129 | 7,004 | 277 | 599 | 37 | 8,514 | 11,845 | 204 | 295 | 6 |
| Clarion | 4,615 | 3,487 | 126 | 406 | 22 | 3,269 | 2,595 | 175 | 278 | 1 |
| Clearfield | 9,615 | 5,987 | 657 | 1,163 | 948 | 6,180 | 5,676 | 816 | 624 | 3 |
| Clinton | 4,303 | 2,976 | 259 | 228 | 111 | 2,967 | 2,794 | 344 | 82 | 3 |
| Columbia | 6,238 | 6,965 | 81 | 363 | 14 | 5,785 | 3,013 | 116 | 272 | 1 |
| Crawford | 10,032 | 4,175 | 423 | 1,419 | 33 | 5,814 | 5,487 | 526 | 590 | 3 |
| Cumberland | 8,579 | 6,455 | 92 | 476 | 68 | 6,432 | 5,296 | 167 | 421 | 3 |
| Dauphin | 26,094 | 11,990 | 628 | 776 | 419 | 11,483 | 13,954 | 841 | 470 | 4 |
| Delaware | 34,126 | 9,602 | 697 | 670 | 153 | 7,742 | 16,315 | 212 | 464 | 1 |
| Elk | 5,267 | 2,093 | 178 | 390 | 30 | 2,186 | 2,829 | 225 | 163 | 2 |
| Erie | 19,465 | 6,311 | 1,833 | 2,801 | 87 | 9,641 | 8,833 | 1,000 | 1,035 | 21 |
| Fayette | 20,186 | 13,358 | 1,204 | 770 | 81 | 10,416 | 9,838 | 849 | 425 | 1 |
| Forest | 993 | 389 | 58 | 320 | 2 | 463 | 617 | 110 | 113 | 9 |
| Franklin | 8,376 | 5,020 | 177 | 246 | 33 | 5,336 | 5,674 | 325 | 276 | 1 |
| Fulton | 1,292 | 1,231 | 11 | 24 | 13 | 1,199 | 802 | 11 | 11 | ..... |
| Greene | 4,253 | 5,592 | 51 | 124 | 2 | 3,930 | 2,096 | 67 | 83 | 1 |
| Huntingdon | 5,232 | 1,784 | 64 | 199 | 441 | 2,181 | 3,806 | 169 | 162 | ..... |
| Indiana | 8,616 | 1,936 | 354 | 947 | 131 | 2,398 | 4,887 | 381 | 808 | 3 |
| Jefferson | 7,970 | 3,060 | 386 | 437 | 83 | 3,253 | 4,332 | 445 | 341 | 2 |
| Juniata | 2,112 | 1,443 | 13 | 54 | 6 | 1,497 | 1,254 | 32 | 24 | 1 |
| Lackawanna | 40,593 | 24,581 | 971 | 746 | 125 | 15,727 | 17,658 | 598 | 764 | 11 |
| Lancaster | 29,549 | 9,521 | 636 | 797 | 29 | 10,016 | 20,292 | 551 | 1,117 | 20 |
| Lawrence | 9,448 | 2,720 | 854 | 1,586 | 50 | 3,966 | 5,134 | 602 | 680 | 3 |
| Lebanon | 8,778 | 3,016 | 246 | 301 | 55 | 3,821 | 5,876 | 211 | 320 | ..... |
| Lehigh | 18,032 | 10,863 | 829 | 262 | 311 | 11,920 | 10,588 | 890 | 300 | 4 |
| Luzerne | 49,419 | 23,473 | 1,891 | 555 | 190 | 19,999 | 25,348 | 1,249 | 575 | 8 |
| Lycoming | 10,570 | 5,853 | 695 | 1,470 | 34 | 6,640 | 6,010 | 1,087 | 728 | 8 |
| McKean | 7,830 | 2,505 | 328 | 699 | 36 | 3,161 | 4,300 | 87 | 348 | 3 |
| Mercer | 11,575 | 4,823 | 1,009 | 1,677 | 102 | 6,390 | 5,866 | 425 | 766 | 4 |
| Mifflin | 3,872 | 2,400 | 156 | 124 | 15 | 1,965 | 2,105 | 777 | 95 | 1 |
| Monroe | 3,278 | 3,396 | 33 | 114 | 3 | 3,348 | 1,456 | 217 | 65 | ..... |
| Montgomery | 31,963 | 12,239 | 1,180 | 303 | 106 | 13,658 | 20,431 | 721 | 257 | 5 |
| Montour | 2,296 | 1,872 | 21 | 77 | 5 | 1,530 | 1,068 | 16 | 48 | 1 |
| Northampton | 14,227 | 9,086 | 508 | 299 | 71 | 11,000 | 9,610 | 457 | 588 | 4 |
| Northumberland | 17,288 | 9,854 | 1,797 | 590 | 37 | 9,333 | 8,722 | 1,012 | 305 | 12 |
| Perry | 3,787 | 2,314 | 20 | 86 | 28 | 2,348 | 2,575 | 30 | 50 | 1 |
| Philadelphia | 307,825 | 90,151 | 17,305 | 1,831 | 1,208 | 90,800 | 194,163 | 4,716 | 874 | 48 |
| Pike | 1,319 | 880 | 36 | 31 | 6 | 971 | 598 | 14 | 20 | ..... |
| Potter | 4,036 | 1,106 | 251 | 342 | 12 | 1,733 | 2,386 | 243 | 179 | ..... |
| Schuylkill | 30,259 | 18,746 | 1,313 | 356 | 168 | 13,396 | 17,806 | 909 | 239 | 7 |
| Snyder | 2,751 | 964 | 56 | 34 | 4 | 1,249 | 1,797 | 48 | 20 | ..... |
| Somerset | 12,436 | 2,912 | 490 | 492 | 67 | 2,957 | 6,008 | 527 | 306 | 2 |
| Sullivan | 1,620 | 1,061 | 10 | 122 | 1 | 1,037 | 888 | 21 | 74 | ..... |
| Susquehanna | 6,572 | 2,905 | 80 | 320 | 15 | 3,145 | 3,891 | 28 | 263 | 3 |
| Tioga | 9,718 | 1,258 | 60 | 613 | 11 | 2,294 | 5,347 | 91 | 316 | 4 |
| Union | 3,305 | 1,155 | 38 | 128 | 2 | 1,272 | 1,902 | 44 | 57 | 1 |
| Venango | 7,718 | 2,669 | 283 | 1,032 | 38 | 3,938 | 3,856 | 553 | 1,060 | 3 |
| Warren | 7,791 | 2,180 | 312 | 1,669 | 10 | 2,628 | 3,413 | 346 | 749 | 5 |
| Washington | 18,514 | 8,827 | 1,157 | 836 | 268 | 7,747 | 10,367 | 1,056 | 587 | 2 |
| Wayne | 5,164 | 1,589 | 69 | 229 | 6 | 2,019 | 2,869 | 52 | 197 | 1 |
| Westmoreland | 27,077 | 12,845 | 3,338 | 1,866 | 166 | 13,829 | 15,285 | 2,591 | 1,017 | 17 |
| Wyoming | 3,208 | 1,247 | 25 | 200 | 4 | 1,444 | 1,698 | 41 | 74 | 1 |
| York | 19,879 | 14,396 | 603 | 754 | 27 | 16,314 | 12,276 | 730 | 1,268 | 10 |
| | 1,218,215 | 503,202 | 70,021 | 42,612 | 15,642 | 521,784 | 703,734 | 42,637 | 28,525 | 417 |

Governor (1922)—McSparran, Dem., 581,625; Pinchot, Rep., 831,696; Wilson, Soc., 31,748; Repp, Proh., 14,151; Thomas, Indust., 3,137; Dix, Single Tax, 1,845.

U. S. Senator (1922)—Shull, Dem., 434,583; Reed, Rep., 802,146; Sehl, Soc., 33,004; Robinson, Proh., 41,935; Burke, Prog., 127,180; Schoales, Single Tax, 3,596.

Pinchot campaigned as a "dry."

### PAST VOTE OF RHODE ISLAND.

1872 (Pres.), Dem., 5,329; Rep., 13,665.
1876 (Pres.), Dem., 10,712; Rep., 15,787; Gr., 68; Proh., 60.
1878 (Gov.), Dem., 8,255; Rep., 11,454.
1880 (Pres.), Dem., 10,779; Rep., 18,195; Gr., 236; Proh., 20.
1881 (Gov.), Dem. 4,756; Rep., 10,849.
1882 (Gov.), Dem., 5,311; Rep., 10,056; Gr., 120.
1884 (Pres.), Dem., 12,391; Rep., 19,030; Proh., 928; Gr., 422.
1888 (Pres.), Dem., 17,530; Rep., 21,969; Proh., 1,251.
1892 (Pres.), Dem., 24,336; Rep., 26,975; Proh., 1,654; Peop., 228.
1896 (Pres.), Dem.Peop., 14,459; Rep., 37,437; Proh., 1,161; Nat. Dem., 1,166.
1900 (Gov.), Dem., 17,184; Rep., 26,043; Soc., 2,858; Proh., 1,848; Soc. L., 2,858.
1900 (Pres.), Dem., 19,812; Rep., 33,784; Soc., 1,426; Proh., 1,529.
1901 (Gov.), Dem., 19,038; Rep., 25,575; Proh., 1,945; Soc. L., 1,120.
1902 (Gov.), Dem., 32,279; Rep., 24,541; Soc.,1,283; Proh., 1,689.
1903 (Gov.), Dem., 30,578; Rep., 29,275; Soc. L., 943; Proh., 930.
1904 (Gov.), Dem., 32,965; Rep., 33,821.

PAST VOTE OF RHODE ISLAND—*Continued.*

1904 (Pres.), Dem., 24,839; Rep., 41,605; Proh., 768; Soc., 956; Soc. L., 488.
1905 (Gov.), Dem., 25,816; Rep., 31,311; Soc., 1,367 Proh., 882; Soc., 364.
1906 (Gov.), Dem., 33,195; Rep., 31,877; Soc., 395; Proh., 714; Soc. L., 320.
1907 (Gov.), Dem., 33,300; Rep., 31,005; Proh., 831; Soc., 681; Soc. L., 289.
1908 (Pres.), Dem., 24,706; Rep., 43,942; Soc., 1,365; Proh., 1,016; Soc. L., 207; Ind., 814.
1909 (Gov.), Dem., 25,209; Rep., 37,043; Proh., 1,358; Soc., 857; Soc. L., 234.
1910 (Gov.), Dem., 32,990; Rep., 33,540.
1911 (Gov.), Dem., 30,575; Rep., 37,969; Soc., 1,392; Proh., 912; Soc. L., 307.
1912 (Pres.), Dem., 30,312; Rep., 27,703; Prog., 16,878; Soc., 2,049; Proh., 616; Soc. L., 236.
1912 (Gov.), Dem., 32,725; Rep., 34,133; Prog., 8,457; Soc., 1,913; Proh., 687; Soc. L., 257.
1914 (Gov.), Dem., 32,182; Rep., 41,996; Prog., 1,286; Soc., 1,691; Proh., 622; Soc. L., 276.
1916 (Pres.), Dem., 40,394; Rep., 44,858; Soc., 1,914; Proh., 470; Soc. L., 180.
1916 (Gov.), Dem., 36,158; Rep., 49,524; Soc., 2,167; Proh., 518; Soc. L., 201.
1916 (U. S. Sen.), Dem., 47,048; Rep., 39,211; Soc., 1,996; Proh., 454; Soc. L., 168.
1918 (U. S. Sen.), Dem., 37,573; Rep., 42,055; Soc., 1,628.
1918 (Gov.), Dem., 36,031; Rep., 42,682; Soc., 1,648.
1920 (Pres.), Dem., 55,062; Rep., 107,463; Soc., 4,351; Proh., 510; Soc. L., 495; Single Tax, 100.
1920 (Gov.), Dem., 55,963; Rep., 109,138; Soc., 3,292; Soc. L., 449.

## RHODE ISLAND.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Bristol | 3,626 | 1,611 | 1,292 | 1,574 | Washington | 6,510 | 1,943 | 2,221 | 2,837 |
| Kent | 7,284 | 3,112 | 2,632 | 4,038 | | | | | |
| Newport | 9,425 | 2,628 | 2,932 | 4,003 | Total | 107,463 | 55,062 | 40,394 | 44,858 |
| Providence | 80,618 | 45,768 | 31,314 | 32,406 | | | | | |

Governor (1922)—Flynn, Dem., 81,804; Gross, Rep., 74,971.
U. S. Senator (1922)—Gerry, Dem., 82,737; Beekman, Rep., 69,694; Bartholomew, Law and Order, 5,317

## SOUTH CAROLINA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | | 1916. | | Counties. | 1920. | | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Ind. Rep. | Harding, Reg. Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Ind. Rep. | Harding, Reg. Rep. | Wilson, Dem. | Hughes, Rep. |
| Abbeville | 868 | ..... | 13 | 900 | 8 | Hampton | 623 | ..... | ..... | 852 | ..... |
| Aiken | 1,649 | 13 | 51 | 1,750 | 26 | Horry | 1,709 | 2 | 47 | 1,638 | ..... |
| Allendale | 440 | ..... | 11 | ..... | ..... | Jasper | 219 | ..... | ..... | 243 | ..... |
| Anderson | 2,489 | ..... | 33 | 2,609 | 6 | Kershaw | 1,156 | ..... | 42 | 989 | 14 |
| Bamberg | 688 | ..... | ..... | 820 | ..... | Lancaster | 1,633 | ..... | 10 | 1,426 | 1 |
| Barnwell | 721 | ..... | 25 | 1,454 | 21 | Laurens | 2,263 | 4 | 31 | 1,895 | 14 |
| Beaufort | 265 | 134 | 15 | 376 | 5 | Lee | 734 | ..... | 18 | 779 | 14 |
| Berkeley | 548 | ..... | 24 | 457 | 6 | Lexington | 1,813 | ..... | 59 | 2,060 | 31 |
| Calhoun | 631 | 7 | 34 | 665 | 41 | Marion | 808 | ..... | 1 | 1,010 | 3 |
| Charleston | 2,929 | 19 | 354 | 1,929 | 129 | Marlborough | 960 | ..... | 5 | 1,071 | 2 |
| Cherokee | 1,771 | 24 | 24 | 1,271 | 13 | McCormick | 557 | ..... | ..... | 637 | 2 |
| Chester | 1,237 | ..... | 22 | 1,182 | 17 | Newberry | 2,015 | 5 | 28 | 1,719 | 19 |
| Chesterfield | 2,066 | ..... | 14 | 1,883 | 3 | Oconee | 1,249 | 8 | 62 | 885 | 59 |
| Clarendon | 902 | ..... | ..... | 894 | 18 | Orangeburg | 2,526 | 32 | 252 | 2,641 | 159 |
| Colleton | 990 | ..... | 15 | 974 | 31 | Pickens | 955 | 13 | 50 | 1,139 | 7 |
| Darlington | 1,262 | ..... | 18 | 1,462 | 5 | Richland | 2,434 | ..... | 295 | 2,283 | 292 |
| Dillon | 1,003 | ..... | 5 | 972 | ..... | Saluda | 1,111 | ..... | 3 | 1,227 | 1 |
| Dorchester | 874 | ..... | 58 | 716 | 44 | Spartanburg | 4,584 | 26 | 156 | 4,503 | 112 |
| Edgefield | 976 | ..... | ..... | 959 | 5 | Sumter | 1,150 | 9 | 185 | 1,357 | 142 |
| Fairfield | 737 | ..... | 15 | 726 | ..... | Union | 2,162 | 12 | 4 | 1,476 | 6 |
| Florence | 1,763 | ..... | 79 | 1,912 | 26 | Williamsburg | 895 | ..... | 12 | 1,213 | 57 |
| Georgetown | 245 | 16 | 22 | 470 | 2 | York | 1,583 | ..... | 35 | 1,393 | 23 |
| Greenville | 4,409 | 20 | 124 | 3,384 | 81 | | | | | | |
| Greenwood | 1,568 | ..... | 15 | 1,636 | 13 | Total | 64,170 | 366 | 2,244 | 61,837 | 1,558 |

Governor (1922)—McLeod, Dem., 34,065. No opposition.

PAST VOTE OF SOUTH CAROLINA.

1872 (Pres.), Dem. and L., 22,703; Rep., 72,290.
1876 (Pres.), Dem., 90,906; Rep., 91,870.
1880 (Pres.), Dem., 112,312; Rep., 58,071; Gr., 566.
1884 (Pres.), Dem., 69,890; Rep., 21,733.
1888 (Pres.), Dem., 65,825; Rep., 13,740.
1892 (Pres.), Dem., 54,698; Rep., 13,384; Peop., 2,410.
1896 (Pres.), Dem.-Peop., 58,801; Rep., 9,313; Nat. Dem., 824.
1900 (Pres.), Dem., 47,236; Rep., 3,579.
1902 (Gov.), Dem., 31,817; no opposition.
1904 (Pres.), Dem., 52,563; Rep., 2,554; Soc., 22; Pop., 1.
1906 (Gov.), Dem., 30,251; Rep., 32.
1908 (Pres.), Dem., 62,288; Rep., 3,963; Soc., 101; Ind., 45.
1908 (Gov.), Dem., 61,060; no opposition.
1910 (Gov.), Dem., 30,832; Soc., 70.
1912 (Pres.), Dem., 48,355; Rep., 536; Prog., 1,293; Soc., 164.
1912 (Gov.), Dem., 44,122; Soc., 208.
1914 (Gov.), Dem., 34,606; Soc., 84.
1914 (U. S. Sen.), Dem., 32,950; Soc., 89.
1916 (Pres.), Dem., 61,837; Rep., 1,558; Prog., 164; Soc., 135; Prog. Rep., 258.
1916 (Gov.), Dem., 60,393; Ind., 1,078; Soc., 162; Prog., 34.
1918 (Gov.), Dem., 25,267.
1920 (Pres.), Dem., 64,170; Rep., 2,244; Ind. Rep., 366; Soc., 26.
1920 (Gov.), Dem., 58,050; no opposition.
1920 (U. S. Sen.), Dem., 64,388; no opposition.

## SOUTH DAKOTA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep.* | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Aurora | 999 | 445 | 793 | 735 | Hyde | 699 | 233 | 305 | 438 |
| Beadle | 3,912 | 943 | 1,828 | 1,662 | Jackson | 593 | 206 | 279 | 283 |
| Bennett | 135 | 186 | 222 | 67 | Jerauld | 1,021 | 351 | 589 | 612 |
| Bon Homme | 1,845 | 965 | 1,378 | 1,231 | Jones | 601 | 256 | ... | ... |
| Brookings | 2,608 | 564 | 1,385 | 1,638 | Kingsbury | 2,311 | 481 | 1,096 | 1,339 |
| Brown | 5,470 | 1,364 | 2,676 | 2,659 | Lake | 2,363 | 398 | 1,027 | 1,398 |
| Brule | 1,029 | 571 | 975 | 729 | Lawrence | 2,969 | 1,199 | 2,157 | 2,074 |
| Buffalo | 150 | 90 | 182 | 80 | Lincoln | 2,774 | 441 | 936 | 1,591 |
| Butte | 1,729 | 677 | 930 | 537 | Lyman | 1,044 | 463 | 1,052 | 981 |
| Campbell | 1,118 | 67 | 663 | 644 | Marshall | 1,541 | 266 | 885 | 808 |
| Charles Mix | 2,027 | 1,365 | 2,011 | 1,450 | McCook | 1,859 | 565 | 1,021 | 1,194 |
| Clark | 1,742 | 437 | 1,016 | 1,226 | McPherson | 1,407 | 170 | 224 | 992 |
| Clay | 1,873 | 907 | 1,207 | 1,000 | Meade | 1,879 | 894 | 1,224 | 858 |
| Coddington | 2,679 | 867 | 1,344 | 1,550 | Mellette | 526 | 261 | 136 | 379 |
| Corson | 1,456 | 484 | 641 | 503 | Miner | 1,399 | 651 | 880 | 1,006 |
| Custer | 774 | 383 | 488 | 392 | Minnehaha | 8,195 | 3,235 | 3,494 | 4,318 |
| Davison | 2,574 | 1,105 | 1,375 | 1,516 | Moody | 1,048 | 371 | 898 | 973 |
| Day | 2,724 | 436 | 907 | 1,758 | Pennington | 2,539 | 1,807 | 1,339 | 1,108 |
| Deuel | 1,619 | 158 | 584 | 908 | Perkins | 1,313 | 417 | 939 | 890 |
| Dewey | 871 | 335 | 379 | 352 | Potter | 1,076 | 255 | 408 | 512 |
| Douglas | 1,245 | 386 | 597 | 815 | Roberts | 2,314 | 452 | 1,191 | 1,259 |
| Edmunds | 1,483 | 285 | 634 | 894 | Sanborn | 1,038 | 517 | 898 | 711 |
| Fall River | 1,241 | 680 | 922 | 668 | Spink | 3,917 | 785 | 1,622 | 1,660 |
| Faulk | 1,353 | 346 | 629 | 759 | Stanley | 596 | 394 | 381 | 254 |
| Grant | 1,817 | 350 | 772 | 1,098 | Sully | 534 | 147 | 268 | 281 |
| Gregory | 1,828 | 744 | 1,242 | 1,434 | Tripp | 1,803 | 968 | 1,311 | 1,074 |
| Haakon | 709 | 393 | 475 | 399 | Turner | 2,692 | 604 | 1,134 | 1,573 |
| Hamlin | 1,316 | 337 | 692 | 1,039 | Union | 1,917 | 841 | 1,313 | 1,108 |
| Hand | 1,516 | 655 | 905 | 801 | Walworth | 1,404 | 478 | 590 | 761 |
| Hanson | 865 | 348 | 712 | 767 | Yankton | 2,557 | 1,147 | 1,438 | 1,429 |
| Harding | 639 | 178 | 597 | 520 | Ziebach | 500 | 177 | 211 | 275 |
| Hughes | 1,312 | 433 | 536 | 611 | | | | | |
| Hutchinson | 2,100 | 243 | 519 | 1,636 | Total | 110,692 | 35,938 | 59,191 | 64,217 |

Governor (1922)—Crill, Dem., 50,252; McMaster, Rep., 78,813; Alice L. Daly, Non.-Part., 46,775. South Dakota, in 1922, voted for a blue-law Sunday, and refused to engage in the banking business.

### PAST VOTE OF SOUTH DAKOTA.

1892 (Pres.), Dem., 9,081; Rep., 34,888; Peop., 26,544.
1896 (Pres.), Dem.-Peop., 41,225; Rep., 41,042; Proh., 683.
1900 (Pres.), Dem., 39,544; Rep., 54,530; Proh., 1,542; Soc., 169; Peop., 339.
1904 (Pres.), Dem., 21,969; Rep., 72,083; Pro., 2,965; Soc., 3,138; Pop., 1,840.
1904 (Gov.), Dem., 24,772; Rep., 68,661; Soc., 3,028; Pop., 1,114; Pro., 2,961.
1906 (Gov.), Dem., 19,923; Rep., 48,709; Pro., 3,398; Soc., 2,542.
1908 (Pres.), Dem., 40,223; Rep., 67,352; Soc., 2,846; Pro., 4,039; Soc. L., 321; Ind., 88.
1908 (Gov.), Dem., 44,837; Rep., 62,945; Pro., 3,536; Soc., 2,542.
1910 (Gov.), Dem., 36,937; Rep., 59,826.
1912 (Pres.), Dem., 48,942; Prog., 58,811; Soc., 4,662; Pro., 3,910.
1912 (Gov.), Dem., 53,850; Prog., 57,160; Soc., 3,479; Pro., 3,339.
1914 (Gov.), Dem., 34,540; Rep., 49,138; Pro., 2,072; Soc., 2,684; Ind., 9,725.
1914 (U. S. Sen.), Dem., 48,076; Rep., 44,244; Pro., 2,406; Soc., 2,674; Ind., 2,104.
1916 (Pres.), Dem., 59,942; Rep., 64,217; Soc., 3,760; Pro., 1,774.
1916 (Gov.), Dem., 50,545; Rep., 72,789; Soc., 3,556; Pro., 1,630.
1918 (Gov.), Dem., 17,398; N. P., 25,269; Rep., 48,983; Soc., 714; Ind., 1,351.
1918 (U. S. Sen.), Dem., 36,210; Rep., 51,198; Ind., 5,560.
1920 (Pres.), Dem., 35,938; Rep., 110,692; F.-L., N. P., 34,707; Proh., 900.
1920 (Gov.), Dem., 31,870; Rep., 102,592; N. P., 43,426.
1920 (U. S. Sen.), Dem., 36,833; Rep., 92,267; N. P., 44,309; Ind., 10,032; Ind., 738.

### PAST VOTE OF TENNESSEE.

1878 (Gov.), Dem., 89,018; Rep., 42,328; Gr., 15,196.
1880 (Pres.), Dem., 128,191; Rep., 107,677; Gr., 5,917; Pro., 43.
1880 (Gov.), Debt Paying Dem., 79,003; Rep., 103,971; Gr., 3,614; No Credit Dem., 57,546.
1882 (Gov.), Debt Paying Dem., 120,637; Rep., 93,168; Gr., 9,180; No Credit Dem., 4,814.
1884 (Pres.), Dem., 133,270; Rep., 124,094; Gr., 957; Pro., 1,151.
1886 (Sup. Judge), Dem., 156,150; Rep., 122,431.
1886 (Gov.), Dem., 126,628; Rep., 109,835.
1888 (Gov.), Dem., 156,799; Rep., 139,014; Pro., 6,893.
1888 (Pres.), Dem., 158,779; Rep., 138,988; U. L., 48; Pro., 5,969.
1890 (Gov.), Dem., 113,549; Rep., 76,081; Pro., 11,082.
1892 (Gov.), Dem., 127,247; Rep., 100,629; I. Dem., 31,515; Pro., 5,427.
1892 (Pres.), Dem., 138,874; Rep., 100,331; Pop., 23,447; Pro., 4,851.
1894 (Gov.), Dem., 104,356; Rep., 105,104; Pop., 23,092.
1896 (Pres.), Dem., 163,651; Pop., 4,525; Rep., 148,773; Gold D., 1,951; Pro., 3,098.
1898 (Gov.), Dem.-Pop., 105,640; Rep., 72,611; Pop., 1,722; Pro., 2,411.
1900 (Gov.), Dem.-Pop., 145,708; Rep., 119,831; Pop., 1,269; Pro., 3,378; Soc. L., 257.
1900 (Pres.), Dem.-Pop., 144,751; Rep., 121,194; Pro., 3,914; Soc. D., 415; Pop., 1,360.
1902 (Gov.), Dem.-Pop., 98,954; Rep., 59,002; Pro., 2,193.
1904 (Pres.), Dem.-Pop., 131,653; Rep., 105,369; Pop., 2,401; Pro., 1,889; Soc., 1,354.
1904 (Gov.), Dem., 131,503; Rep., 103,409; Soc., 1,109.
1906 (Gov.), Dem.-Pop., 101,166; Rep., 92,804; Soc., 1,169.
1908 (Pres.), Dem.-Pop., 135,819; Rep., 118,519; Soc., 1,882; Pro., 268; Pop., 1,081; Ind., 232.
1910 (Gov.), Dem., 121,674; Rep., 133,999; Soc., 1,704.
1912 (Pres.), Dem., 130,335; Rep., 59,444; Prog., 53,725; Soc., 3,492; Pro., 825.
1912 (Gov.), Dem., 114,369; Rep., 123,828; Soc., 4,464; Pro., 2,702.
1914 (Gov.), Dem., 136,816; Rep., 115,821; Soc., 1,671.
1916 (Pres.), Dem., 152,955; Rep., 116,257; Soc., 2,542; Pro., 147.
1916 (Gov.), Dem., 146,759; Rep., 117,819; Soc., 2,070.
1916 (U. S. Sen.), Dem., 143,718; Rep., 118,138; Soc., 2,187.
1918 (Gov.) Dem., 99,706; Rep., 60,623.
1920 (Pres.), Dem., 206,558; Rep., 219,829; Soc., 2,239.

## TENNESSEE.

(Presidential vote. 1920. 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Anderson | 3,258 | 748 | 540 | 1,733 | Lawrence | 3,843 | 2,610 | 1,787 | 1,837 |
| Bedford | 2,056 | 2,182 | 2,578 | 1,327 | Lewis | 446 | 403 | 387 | 414 |
| Benton | 1,514 | 1,914 | 1,313 | 805 | Lincoln | 1,081 | 2,463 | 2,791 | 552 |
| Bledsoe | 1,198 | 482 | 423 | 681 | Loudon | 1,872 | 686 | 424 | 710 |
| Blount | 5,540 | 1,550 | 1,017 | 2,462 | Macon | 3,208 | 1,066 | 950 | 1,600 |
| Bradley | 2,255 | 1,058 | 795 | 1,482 | McMinn | 2,800 | 1,636 | 1,090 | 1,726 |
| Campbell | 3,368 | 659 | 485 | 1,691 | McNairy | 3,212 | 1,868 | 1,461 | 1,616 |
| Cannon | 697 | 830 | 936 | 456 | Madison | 2,614 | 5,262 | 2,660 | 1,194 |
| Carroll | 4,741 | 3,215 | 2,005 | 2,222 | Marion | 2,662 | 1,874 | 1,155 | 1,432 |
| Carter | 6,059 | 674 | 498 | 2,961 | Marshall | 753 | 1,320 | 1,653 | 462 |
| Cheatham | 569 | 1,219 | 1,117 | 439 | Maury | 1,376 | 2,689 | 2,169 | 720 |
| Chester | 2,612 | 1,236 | 864 | 646 | Meigs | 915 | 712 | 541 | 608 |
| Claiborne | 1,081 | 1,103 | 1,053 | 1,398 | Monroe | 2,580 | 1,840 | 1,263 | 1,470 |
| Clay | 1,144 | 772 | 689 | 578 | Montgomery | 1,780 | 2,564 | 1,981 | 1,015 |
| Cocke | 3,294 | 929 | 595 | 1,504 | Moore | 90 | 497 | 722 | 72 |
| Coffee | 821 | 2,043 | 1,840 | 494 | Morgan | 2,248 | 816 | 563 | 1,265 |
| Crockett | 2,326 | 2,252 | 1,608 | 1,144 | Obion | 1,307 | 4,547 | 3,170 | 598 |
| Cumberland | 1,485 | 558 | 429 | 924 | Overton | 1,539 | 1,779 | 1,512 | 1,030 |
| Davidson | 6,801 | 13,352 | 8,958 | 3,168 | Perry | 747 | 692 | 663 | 483 |
| Decatur | 1,608 | 1,149 | 887 | 893 | Pickett | 896 | 607 | 418 | 501 |
| De Kalb | 2,572 | 1,893 | 1,407 | 1,343 | Polk | 1,018 | 775 | 767 | 892 |
| Dickson | 1,420 | 2,096 | 2,105 | 1,008 | Putnam | 2,729 | 2,996 | 2,307 | 1,383 |
| Dyer | 1,167 | 3,181 | 1,997 | 459 | Rhea | 1,340 | 1,049 | 661 | 768 |
| Fayette | 346 | 2,294 | 1,812 | 117 | Roane | 1,989 | 852 | 669 | 1,395 |
| Fentress | 1,808 | 604 | 348 | 925 | Robertson | 1,191 | 3,046 | 2,107 | 733 |
| Franklin | 1,558 | 3,504 | 2,469 | 711 | Rutherford | 1,857 | 3,331 | 2,941 | 1,116 |
| Gibson | 3,209 | 5,943 | 3,699 | 1,462 | Scott | 2,537 | 3,221 | 206 | 1,486 |
| Giles | 2,225 | 3,129 | 3,209 | 1,488 | Sequatchie | 509 | 545 | 235 | 238 |
| Grainger | 2,758 | 895 | 843 | 1,529 | Sevier | 6,007 | 405 | 302 | 2,859 |
| Greene | 5,077 | 2,924 | 2,255 | 3,059 | Shelby | 8,597 | 15,986 | 10,967 | 4,515 |
| Grundy | 447 | 745 | 736 | 319 | Smith | 1,981 | 3,150 | 2,196 | 941 |
| Hamblen | 1,571 | 1,301 | 741 | 795 | Stewart | 849 | 2,366 | 1,712 | 591 |
| Hamilton | 10,793 | 9,910 | 5,840 | 4,709 | Sullivan | 3,591 | 4,327 | 2,602 | 1,776 |
| Hancock | 1,740 | 384 | 387 | 1,229 | Sumner | 1,268 | 3,674 | 2,488 | 612 |
| Hardeman | 895 | 2,272 | 1,729 | 490 | Tipton | 906 | 2,829 | 2,036 | 299 |
| Hardin | 3,078 | 1,407 | 979 | 1,811 | Trousdale | 574 | 955 | 688 | 217 |
| Hawkins | 2,650 | 1,381 | 1,147 | 1,755 | Unicoi | 2,584 | 547 | 226 | 961 |
| Haywood | 161 | 2,068 | 1,677 | 61 | Union | 2,607 | 423 | 389 | 1,490 |
| Henderson | 3,118 | 1,217 | 982 | 1,387 | Van Buren | 226 | 337 | 405 | 151 |
| Henry | 1,957 | 4,613 | 2,988 | 1,393 | Warren | 1,010 | 1,986 | 1,857 | 632 |
| Hickman | 1,470 | 1,362 | 1,479 | 1,026 | Washington | 4,859 | 2,261 | 1,831 | 2,744 |
| Houston | 385 | 790 | 627 | 207 | Wayne | 2,505 | 635 | 517 | 1,626 |
| Humphreys | 674 | 1,534 | 1,148 | 452 | Weakley | 3,741 | 4,395 | 3,639 | 1,785 |
| Jackson | 1,187 | 1,097 | 1,506 | 740 | White | 1,458 | 1,974 | 1,407 | 590 |
| Jefferson | 3,583 | 741 | 520 | 1,689 | Williamson | 946 | 2,004 | 2,036 | 608 |
| Johnson | 3,627 | 291 | 263 | 1,812 | Wilson | 1,560 | 2,726 | 2,535 | 841 |
| Knox | 12,015 | 6,805 | 4,214 | 5,836 | | | | | |
| Lake | 354 | 1,165 | 727 | 130 | Total | 219,829 | 206,558 | 153,282 | 116,223 |
| Lauderdale | 1,190 | 2,312 | 1,579 | 532 | | | | | |

Governor (1922)—Peay, Dem., 141,274; Taylor, Rep., 102,770.
U. S. Senator (1922)—McKellar, Dem., 150,633; Sanders, Rep., 71,184.
Peay campaigned on a promise to reduce taxes and destroy the back tax machine.

## TEXAS.

(Presidential vote, 1920.)

| Counties. | Cox, Dem. | Harding, Rep. | Counties. | Cox, Dem. | Harding, Rep. | Counties. | Cox, Dem. | Harding, Rep. |
|---|---|---|---|---|---|---|---|---|
| Anderson | 2,355 | 323 | Camp | 661 | 156 | Dickens | 433 | 109 |
| Andrews | 74 | 9 | Carson | 428 | 242 | Dimmitt | 231 | 108 |
| Angelina | 1,661 | 205 | Cass | 1,563 | 1,446 | Donley | 766 | 206 |
| Aransas | 146 | 49 | Castro | 158 | 113 | Duval | 392 | 86 |
| Archer | 449 | 169 | Chambers | 240 | 278 | Eastland | 2,942 | 941 |
| Armstrong | 405 | 87 | Cherokee | 2,233 | 478 | Ector | 100 | 24 |
| Atascosa | 531 | 218 | Childress | 1,206 | 162 | Edwards | 201 | 297 |
| Austin | 538 | 568 | Clay | 1,324 | 453 | Ellis | 4,081 | 819 |
| Bailey | | | Cochran | | | El Paso | 4,143 | 4,070 |
| Bandera | 311 | 249 | Coke | 444 | 57 | Erath | 1,914 | 358 |
| Bastrop | 1,088 | 484 | Coleman | 1,445 | 355 | Falls | 1,878 | 585 |
| Baylor | 632 | 145 | Collin | 4,045 | 1,337 | Fannin | 3,461 | 1,103 |
| Bee | 545 | 283 | Collingsworth | 640 | 307 | Fayette | 932 | 1,121 |
| Bell | 3,595 | 483 | Colorado | 765 | 478 | Fisher | 743 | 152 |
| Bexar | 6,928 | 9,131 | Comal | 181 | 765 | Floyd | 841 | 167 |
| Blanco | 426 | 378 | Comanche | 1,633 | 930 | Foard | 491 | 101 |
| Borden | 89 | 4 | Concho | 405 | 151 | Fort Bend | 27 | 79 |
| Bosque | 1,556 | 569 | Cooke | 2,170 | 1,003 | Franklin | | |
| Bowie | 2,396 | 1,032 | Coryell | 1,542 | 444 | Freestone | 1,463 | 378 |
| Brazoria | 1,184 | 1,234 | Cottle | 472 | 125 | Frio | 421 | 101 |
| Brazos | 1,281 | 277 | Crane | | | Gaines | 134 | 9 |
| Brewster | 210 | 125 | Crockett | 89 | 80 | Galveston | 2,933 | 1,620 |
| Briscoe | 262 | 39 | Crosby | 572 | 146 | Garza | 392 | 28 |
| Brooks | 127 | 37 | Culberson | 40 | 8 | Gillespie | 137 | 1,270 |
| Brown | 1,708 | 397 | Dallam | 478 | 195 | Glasscock | 91 | 25 |
| Burleson | 981 | 142 | Dallas | 14,390 | 4,983 | Goliad | 448 | 512 |
| Burnet | 795 | 241 | Dawson | 296 | 74 | Gonzales | 1,299 | 748 |
| Caldwell | 1,240 | 269 | Deaf Smith | 459 | 205 | Gray | 529 | 251 |
| Calhoun | 363 | 95 | Delta | 1,081 | 316 | Grayson | 5,241 | 2,125 |
| Callahan | 804 | 213 | Denton | 1,257 | 900 | Gregg | 1,050 | 257 |
| Cameron | 920 | 910 | De Witt | 971 | 1,277 | Grimes | 1,027 | 214 |

TEXAS—*Continued.*

| Counties. | Cox, Dem. | Harding, Rep. |
|---|---|---|
| Guadalupe | 560 | 1,990 |
| Hale | 1,279 | 351 |
| Hall | 922 | 194 |
| Hamilton | 1,075 | 422 |
| Hansford | 124 | 54 |
| Hardeman | 967 | 251 |
| Hardin | 999 | 202 |
| Harris | 14,808 | 7,725 |
| Harrison | 2,134 | 377 |
| Hartley | 144 | 81 |
| Haskell | 1,127 | 254 |
| Hays | 1,075 | 242 |
| Hemphill | 417 | 253 |
| Henderson | 1,684 | 538 |
| Hidalgo | 2,409 | 1,108 |
| Hill | 3,254 | 1,022 |
| Hockley | ..... | ..... |
| Hood | 697 | 175 |
| Hopkins | 2,548 | 837 |
| Houston | 1,475 | 385 |
| Howard | 703 | 107 |
| Hudspeth | 97 | 37 |
| Hunt | 4,397 | 880 |
| Hutchinson | 135 | 106 |
| Irion | 148 | 45 |
| Jack | 566 | 254 |
| Jackson | 562 | 355 |
| Jasper | 793 | 89 |
| Jeff Davis | 91 | 41 |
| Jefferson | 4,246 | 1,110 |
| Jim Hogg | 70 | 23 |
| Jim Wells | 304 | 168 |
| Johnson | 3,041 | 661 |
| Jones | 1,792 | 270 |
| Karnes | 642 | 481 |
| Kaufman | 3,070 | 573 |
| Kendall | 142 | 846 |
| Kent | 214 | 45 |
| Kerr | 612 | 464 |
| Kimble | 299 | 150 |
| King | 157 | ..... |
| Kinney | 98 | 137 |
| Kleberg | 455 | 172 |
| Knox | 773 | 159 |
| Lamar | 3,765 | 639 |
| Lamb | 264 | 136 |
| Lampasas | 778 | 227 |
| La Salle | 252 | 53 |
| Lavaca | 1,249 | 100 |
| Lee | 712 | 322 |
| Leon | 1,124 | 220 |
| Liberty | ..... | ..... |
| Limestone | 2,165 | 408 |
| Lipscomb | 350 | 425 |
| Live Oak | 234 | 108 |
| Llano | 665 | 184 |
| Loving | ..... | ..... |
| Lubbock | 1,180 | 204 |
| Lynn | 538 | 76 |
| Madison | 650 | 63 |
| Marion | 430 | 392 |
| Martin | 136 | 33 |
| Mason | 304 | 294 |
| Matagorda | 992 | 968 |
| Maverick | 173 | 296 |
| McCulloch | 780 | 210 |
| McLennan | 4,975 | 1,656 |
| McMullen | 72 | 34 |
| Medina | 519 | 772 |
| Menard | 197 | 203 |
| Midland | 271 | 68 |
| Milam | 2,598 | 371 |
| Mills | 669 | 247 |
| Mitchell | 694 | 89 |
| Montague | 1,714 | 474 |
| Montgomery | 935 | 203 |
| Moore | 101 | 13 |
| Morris | 669 | 164 |
| Motley | 345 | 40 |
| Nacogdoches | 1,794 | 238 |
| Navarro | 3,328 | 820 |
| Newton | 420 | 58 |
| Nolan | 923 | 176 |
| Nueces | 1,246 | 381 |
| Ochiltree | 280 | 135 |
| Oldham | 139 | 52 |
| Orange | 1,055 | 179 |
| Palo Pinto | 1,645 | 342 |
| Panola | 1,086 | 268 |
| Parker | 1,765 | 496 |
| Parmer | 189 | 140 |
| Pecos | 386 | 394 |
| Polk | 816 | 255 |
| Potter | 1,374 | 358 |
| Presidio | 238 | 122 |
| Raines | 462 | 189 |
| Randall | 360 | 183 |
| Real | 177 | 134 |
| Reagan | 49 | 4 |
| Red River | 2,263 | 798 |
| Reeves | 457 | 91 |
| Refugio | 227 | 357 |
| Roberts | 173 | 60 |
| Robertson | 1,634 | 225 |
| Rockwall | 873 | 104 |
| Runnels | 1,197 | 331 |
| Rusk | 1,555 | 745 |
| Sabine | 637 | 97 |
| San Augustine | 658 | 121 |
| San Jacinto | 320 | 7 |
| San Patricio | 620 | 308 |
| San Saba | 874 | 180 |
| Schleicher | 211 | 81 |
| Scurry | 801 | 151 |
| Shackelford | 342 | 116 |
| Shelby | 1,700 | 150 |
| Sherman | 170 | 77 |
| Smith | 2,965 | 707 |
| Somervell | 198 | 92 |
| Starr | 418 | 89 |
| Stephens | 643 | 142 |
| Sterling | 152 | 17 |
| Stonewall | 356 | 134 |
| Sutton | 190 | 104 |
| Swisher | 443 | 149 |
| Tarrant | 12,431 | 3,485 |
| Taylor | 1,932 | 300 |
| Terrell | 155 | 95 |
| Terry | 270 | 39 |
| Throckmorton | 399 | 72 |
| Titus | 1,094 | 509 |
| Tom Green | 1,264 | 256 |
| Travis | 3,541 | 1,203 |
| Trinity | 643 | 124 |
| Tyler | 1,063 | 115 |
| Upshur | 1,222 | 616 |
| Upton | 46 | 25 |
| Uvalde | 743 | 247 |
| Val Verde | 418 | 296 |
| Van Zandt | 1,958 | 728 |
| Victoria | 686 | 781 |
| Walker | 788 | 404 |
| Waller | 674 | 167 |
| Ward | 181 | 79 |
| Washington | 796 | 684 |
| Webb | 633 | 467 |
| Wharton | 836 | 852 |
| Wheeler | 516 | 198 |
| Wichita | 3,812 | 1,487 |
| Wilbarger | 1,118 | 335 |
| Willacy | 53 | 9 |
| Williamson | 2,677 | 818 |
| Wilson | 753 | 821 |
| Winkler | 17 | 2 |
| Wise | 2,031 | 579 |
| Wood | 1,643 | 798 |
| Yoakum | 79 | 9 |
| Young | 1,214 | 209 |
| Zapata | 50 | 98 |
| Zavalla | 264 | 101 |
| Total | 288,767 | 114,538 |

President (1920) Black and Tan, Rep., 27,247; American Party, 47,968; Socialist, 8.121.

Governor (1920) Neff, Dem., 289,188; Culbertson, Rep., 90,217; Capers, Black and Tan, 26,091; McGregor, Amer., 69,380; Rhodes, Soc., 6,796.

Governor (1922)—Neff, Dem., 296,372; Atwell, Rep., 67,148.

U. S. Senator (1922)—Mayfield, Dem., 242,388; Peddy, Ind. Dem. and Rep., 124,142.

PAST VOTE OF TEXAS.

1872 (Pres.), Dem. and L., 66,500; Rep., 47,406.

1876 (Pres.), Dem., 104.755; Rep., 44,800.

1880 (Pres.), Dem., 156,428; Rep., 57,893; Gr., 27,405.

1884 (Pres.), Dem., 225,309; Rep., 93,141; Proh., 3,534; Gr., 3,321.

1888 (Pres.), Dem., 234,883; Rep., 88,280; Proh., 4,749; U. Lab., 29,459.

1892 (Pres.), Dem., 239,148; Rep., 81,444; Peop., 99,418; Proh., 2,165.

1896 (Pres.), Dem.-Peop., 361,224; Rep., 158,894; Nat. Dem., 4,853; Proh., 1,722.

1900 (Pres.), Dem., 267,337; Rep., 121,173; Pop., 20,976; Proh., 2,644; Soc. Dem., 1,846; Soc. L., 162.

1902 (Gov.), Dem., 269,676; Rep., 65,906; Pop., 12,387; Proh., 8,768.

1904 (Pres.), Dem., 167,200; Rep., 51,242; Pop., 8,062; Proh., 4,292; Soc., 2,791; Soc. L., 421.

1906 (Gov.), Dem., 243,942; Rep., 42,169; Proh., 6,910; Soc., 7,198; S. L., 4,919 (unofficial).

1908 (Pres.), Dem., 216,737; Rep., 65,602; Soc., 7,870; Proh., 1,634; S. L., 176; Pop., 994; Ind., 115.

1910 (Gov.), Dem., 173,993; Rep., 26,107; Proh., 6,179; Soc., 11,638; S. L., 347.

1912 (Pres.), Dem., 221,589; Rep., 28,853; Prog., 26,755; Soc., 25,743; Proh., 1,130; Soc. L., 442.

1912 (Gov.), Dem., 233,811; Rep., 22,612 Prog., 16,333; Soc., 25,270; Proh., 2,413; S. L., 414.

1914 (Gov.), Dem., 229,167; Rep., 21,291; Soc., 16,785; Prog., 3,964.

1916 (Pres.), Dem., 286,514; Rep., 64,999; Soc., 18,969; Proh., 1,985.

1916 (U. S. Sen.), Dem., 301,757; Rep., 48,717; Soc., 18,954; Proh., 1,757.

1916 (Gov.), Dem., 284,767; Rep., 49,631; Soc., 18,870; Proh., 3,726.

1918 (Gov.), Hobby, Dem., 148,982; Boynton, Rep., 26,713; Simpson, Soc., 1,660.

1918 (U. S. Sen.), Sheppard, Dem., 248,742; Flanagan, Rep., 36,164; Smith, Soc., 12,362.

1919 (Woman Suff. Amend.), for, 141,773; against, 166,983.

1919 (Proh. Amend.), for 159,723; against, 140,099.

1920 (Pres.), Dem., 289,688; Rep., 115,640; Amer., 47,669; Soc., 8,194; Ind. Rep., 27,515.

## UTAH.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. | | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Beaver | 741 | 1,056 | 1,291 | 842 | Rich | 322 | 449 | 454 | 325 |
| Box Elder | 2,330 | 3,421 | 2,957 | 2,415 | Salt Lake | 19,249 | 27,841 | 30,707 | 17,593 |
| Cache | 4,239 | 5,063 | 5,305 | 3,756 | San Juan | 260 | 523 | 448 | 213 |
| Carbon | 1,559 | 1,675 | 1,478 | 1,301 | Sanpete | 2,406 | 3,741 | 3,382 | 2,918 |
| Daggett | 32 | 94 | ..... | ..... | Sevier | 1,425 | 2,506 | 2,052 | 1,720 |
| Davis | 1,632 | 2,463 | 2,131 | 1,641 | Summit | 874 | 1,503 | 1,495 | 1,195 |
| Duchesne | 822 | 1,523 | 1,443 | 687 | Tooele | 916 | 1,387 | 1,528 | 1,124 |
| Emery | 1,029 | 1,285 | 1,406 | 896 | Uintah | 817 | 1,354 | 1,459 | 712 |
| Garfield | 393 | 1,023 | 843 | 516 | Utah | 6,377 | 7,752 | 8,235 | 5,201 |
| Grand | 278 | 306 | 306 | 213 | Wasatch | 665 | 1,061 | 885 | 817 |
| Iron | 561 | 1,399 | 1,156 | 825 | Washington | 1,008 | 1,138 | 1,397 | 703 |
| Juab | 1,308 | 1,692 | 2,221 | 1,248 | Wayne | 224 | 396 | 393 | 225 |
| Kane | 186 | 501 | 329 | 304 | Weber | 5,239 | 7,122 | 8,139 | 4,720 |
| Millard | 1,167 | 2,199 | 1,804 | 1,293 | | | | | |
| Morgan | 397 | 544 | 484 | 464 | Total | 56,639 | 81,555 | 84,145 | 54,137 |
| Piute | 283 | 538 | 417 | 269 | | | | | |

U. S. Senator (1922)—King, Dem., 58,749; Bamberger, Rep., 58,188; Stoney, Soc., 2,561; Stoney, Farm.-Lab., 1,314.

### PAST VOTE OF UTAH.

1896 (Pres.), Dem. and Pop., 64,517; Rep., 13,484; Gold D., 21.
1898 (Cong.), Dem., 35,296; Rep., 29,361; Pop., 2,878.
1900 (Pres.), Dem., 45,006; Rep., 47,139; Proh., 209; Soc., 720; Soc. L., 106.
1902 (Cong.), Dem., 38,196; Rep., 43,710; Soc., 2,936.
1902 (Jus. Sup. Ct.), Young Dem., 38,433; Rep., 43,214; Soc., 3,069.
1904 (Pres.), Dem., 33,413; Rep., 62,446; Soc., 5,767.
1904 (Gov.), Dem., 49,447; Rep., 47,600.
1906 (Cong.), Dem., 27,021; Rep., 42,566; Soc., 3,010; Amer., 11,411.
1908 (Cong.), Dem., 35,981; Rep., 57,432; Soc., 4,372; Amer., 13,488.
1908 (Pres.), Dem., 42,601; Rep., 61,015; Soc., 4,895; Ind., 87.
1910 (Cong.), Dem., 32,730; Rep., 50,604; Soc., 4,857; Amer., 14,042.
1912 (Pres.), Dem., 36,579; Rep., 42,100; Prog., 24,174; Soc., 9,023; S. L., 509.
1912 (Gov.), Dem., 36,076; Rep., 42,552; Prog., 23,591; Soc., 8,797; S. L., 479.
1914 (U. S. Sen.), Rep., 56,281; Fus., 53,128; Soc., 5,257.
1916 (Pres.), Dem., 84,145; Rep., 51,137; Soc., 4,460; Pro., 149; S. L., 141.
1916 (Gov.), Dem., 78,308; Rep., 59,522; Soc., 4,391; Prog., 204.
1916 (U. S. Sen.), Dem., 80,895; Rep., 56,862; Soc., 4,497; Prog., 162.
1920 (Pres.), Dem., 56,639; Rep., 81,555; Soc., 3,159; F. L., 4,475.
1920 (Gov.), Dem., 54,913; Rep., 83,518; Soc., 2,843; F. L., 2,300.
1920 (U. S. Sen.), Dem., 56,280; Rep., 82,566; Soc., 3,995; F. L., 3,017.

## VERMONT.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Addison | 4,515 | 503 | 874 | 2,762 | Orange | 3,713 | 938 | 1,379 | 2,151 |
| Bennington | 4,172 | 1,615 | 1,590 | 2,602 | Orleans | 4,400 | 738 | 1,047 | 2,758 |
| Caledonia | 5,537 | 1,694 | 1,887 | 3,027 | Rutland | 8,940 | 3,192 | 2,785 | 5,926 |
| Chittenden | 7,215 | 3,564 | 2,772 | 3,786 | Washington | 6,418 | 1,953 | 2,732 | 4,216 |
| Essex | 1,243 | 552 | 544 | 734 | Windham | 5,551 | 1,302 | 1,698 | 3,375 |
| Franklin | 4,869 | 2,342 | 2,107 | 2,496 | Windsor | 8,400 | 1,714 | 2,216 | 4,236 |
| Grand Isle | 928 | 354 | 434 | 407 | | | | | |
| Lamoille | 2,311 | 458 | 643 | 1,474 | Total | 68,212 | 20,919 | 22,708 | 40,250 |

Governor (1922)—Jackson, Dem., 17,059; Proctor, Rep.-Proh., 51,104.
U. S. Senator (1922)—Mayo, Dem., 21,371; Greene, Rep., 45,246; Greene, Proh., 2,423.

### PAST VOTE OF VERMONT.

1876 (Pres.), Dem., 20,350; Rep., 44,428.
1878 (Gov.), Dem., 17,247; Rep., 37,312; Gr., 2,635.
1880 (Pres.), Dem., 18,316; Rep., 45,567; Gr., 1,215.
1882 (Gov.), Dem., 14,467; Rep., 35,839; Gr., 1,543.
1884 (Pres.), Dem., 17,331; Rep., 39,514; Gr., 785; Proh., 1,752.
1886 (Gov.), Dem., 17,187; Rep., 37,709; Gr., 644; Proh., 1,541.
1888 (Gov.), Dem., 19,527; Rep., 48,522; Proh., 1,372.
1888 (Pres.), Dem., 16,788; Rep., 45,192; Proh., 1,460.
1890 (Gov.), Dem., 19,290; Rep., 33,462; Proh., 1,161.
1892 (Pres.), Dem., 16,325; Rep., 37,992; Proh., 1,451; Pop., 43.
1894 (Gov.), Dem., 14,142; Rep., 42,663; Pop., 740; Proh., 457.
1896 (Gov.), Dem., 14,855; Rep., 53,246; Pop., 8,313; Proh., 755.
1896 (Pres.), Dem., 10,179; Pop., 458; Rep., 51,127; Gold D., 1,331; Proh., 733.
1898 (Gov.), Dem., 14,686; Rep., 38,555; Proh., 1,075.
1900 (Gov.), Dem., 17,129; Rep., 48,441; Soc. D., 567; Proh., 950.
1900 (Pres.), Dem., 12,849; Rep., 42,568; Proh., 368; Pop., 367.
1902 (Gov.), Dem., 7,364; Rep., 31,864; Proh., 2,498; Ind. Lic. Refo., 2,498.
1904 (Gov.), Dem., 16,566; Rep. 48,115; Soc., 769; Proh., 1,175.
1904 (Pres.), Dem., 9,777; Rep., 40,459; Soc. D., 859; Proh., 792.
1906 (Gov.), Dem., 26,912; Rep., 42,392; Soc. D., 512; Proh., 733.
1908 (Pres.), Dem., 11,496; Rep., 39,552; Proh., 799; Ind., 804.
1908 (Gov.), Dem., 15,953; Rep., 45,598; Soc. D., 547; Proh., 918; Ind., 1,351.
1910 (Gov.), Dem., 17,425; Rep., 35,263; Proh., 1,044; Soc., 1,055.
1912 (Pres.), Dem., 15,350; Rep., 23,305; Prog., 22,070; Proh., 1,154; Soc., 928.
1912 (Gov.), Dem., 20,001; Rep., 26,237; Prog., 15,269; Proh., 1,735; Soc., 1,210.
1914 (Gov.), Dem., 16,191; Rep., 36,972; Prog., 6,929; Proh., 1,074; Soc., 899.
1914 (U. S. Sen.), Rep., 35,137; Prog.-Dem.-Proh., 26,776; Soc., 702.
1916 (Pres.), Dem., 22,708; Rep., 40,250; Soc., 798; Proh., 709.
1916 (Gov.), Dem., 15,789; Rep., 43,265; Proh., 876; Soc., 920.
1916 (U. S. Sen.), Dem., 14,956; Rep., 47,362; Soc., 1,336.
1918 (Gov.), Dem., 13,859; Rep., 28,358.
1920 (Pres.), Dem., 20,919; Rep., 68,212; Proh., 774.
1920 (Gov.), Dem., 18,917; Rep. and Proh., 67,674.
1920 (U. S. Sen.), Dem., 19,580; Rep., 69,650.

## VIRGINIA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | |
|---|---|---|---|---|
| | Cox, Dem. | Harding, Rep. | Wilson, Dem. | Hughes, Rep. |
| Accomac | 2,026 | 409 | 1,745 | 299 |
| Albemarle | 1,587 | 541 | 1,376 | 223 |
| Alleghany | 663 | 736 | 544 | 432 |
| Amelia | 389 | 179 | 403 | 80 |
| Amherst | 1,094 | 168 | 1,142 | 93 |
| Appomattox | 837 | 190 | 700 | 133 |
| Arlington | 835 | 997 | 515 | 412 |
| Augusta | 2,106 | 1,707 | 1,751 | 845 |
| Bath | 343 | 362 | 387 | 219 |
| Bedford | 1,774 | 583 | 1,628 | 298 |
| Bland | 403 | 478 | 356 | 420 |
| Botetourt | 1,331 | 1,240 | 900 | 775 |
| Brunswick | 866 | 125 | 772 | 82 |
| Buchanan | 675 | 1,078 | 720 | 827 |
| Buckingham | 749 | 311 | 625 | 181 |
| Campbell | 1,341 | 375 | 1,007 | 185 |
| Caroline | 665 | 308 | 637 | 198 |
| Carroll | 1,265 | 2,520 | 858 | 1,424 |
| Charles City | 119 | 82 | 139 | 57 |
| Charlotte | 1,266 | 364 | 856 | 237 |
| Chesterfield | 964 | 302 | 699 | 141 |
| Clarke | 774 | 154 | 599 | 49 |
| Craig | 381 | 315 | 569 | 200 |
| Culpeper | 973 | 330 | 849 | 184 |
| Cumberland | 413 | 114 | 446 | 73 |
| Dickenson | 903 | 1,067 | 650 | 753 |
| Dinwiddie | 636 | 186 | 592 | 85 |
| Elizabeth City | 675 | 439 | 411 | 132 |
| Essex | 319 | 101 | 302 | 77 |
| Fairfax | 1,598 | 987 | 1,179 | 472 |
| Fauquier | 1,365 | 568 | 1,204 | 367 |
| Floyd | 497 | 1,355 | 472 | 893 |
| Fluvanna | 562 | 146 | 513 | 81 |
| Franklin | 1,765 | 1,381 | 1,481 | 1,094 |
| Frederick | 1,337 | 875 | 1,194 | 366 |
| Giles | 1,104 | 877 | 839 | 596 |
| Gloucester | 677 | 283 | 582 | 142 |
| Goochland | 384 | 212 | 413 | 193 |
| Grayson | 1,781 | 2,153 | 967 | 1,244 |
| Greene | 306 | 414 | 221 | 239 |
| Greensville | 424 | 111 | 392 | 76 |
| Halifax | 2,103 | 586 | 1,781 | 493 |
| Hanover | 903 | 224 | 760 | 102 |
| Henrico | 1,078 | 388 | 690 | 140 |
| Henry | 871 | 698 | 851 | 567 |
| Highland | 379 | 474 | 370 | 310 |
| Isle of Wight | 759 | 245 | 679 | 140 |
| James City | 207 | 61 | 127 | 34 |
| King George | 249 | 253 | 223 | 217 |
| King and Queen | 347 | 181 | 271 | 127 |
| King William | 353 | 176 | 342 | 119 |
| Lancaster | 404 | 138 | 461 | 58 |
| Lee | 1,592 | 2,162 | 1,287 | 1,569 |
| Loudoun | 1,725 | 757 | 1,490 | 404 |
| Louisa | 684 | 312 | 710 | 263 |
| Lunenburg | 818 | 208 | 814 | 110 |
| Madison | 499 | 431 | 572 | 348 |
| Mathews | 624 | 216 | 549 | 90 |
| Mecklenburg | 1,619 | 264 | 1,317 | 222 |
| Middlesex | 438 | 170 | 373 | 155 |
| Montgomery | 969 | 1,160 | 765 | 891 |
| Nansemond | 690 | 248 | 663 | 70 |
| Nelson | 973 | 392 | 1,063 | 249 |
| New Kent | 190 | 109 | 192 | 69 |
| Norfolk | 1,824 | 813 | 1,612 | 684 |
| Northampton | 954 | 217 | 802 | 109 |
| Northumberland | 536 | 221 | 503 | 111 |
| Nottoway | 821 | 154 | 608 | 91 |
| Orange | 718 | 258 | 608 | 153 |
| Page | 846 | 1,126 | 842 | 613 |
| Patrick | 1,154 | 1,230 | 872 | 815 |
| Pittsylvania | 2,715 | 1,162 | 2,012 | 801 |
| Powhatan | 263 | 140 | 233 | 112 |
| Prince Edward | 774 | 189 | 668 | 108 |
| Prince George | 375 | 127 | 282 | 75 |
| Princess Anne | 610 | 105 | 515 | 67 |
| Prince William | 786 | 393 | 754 | 192 |
| Pulaski | 1,814 | 1,710 | 1,057 | 721 |
| Rappahannock | 418 | 210 | 401 | 84 |
| Richmond | 321 | 206 | 329 | 180 |
| Roanoke | 1,286 | 955 | 850 | 460 |
| Rockbridge | 1,365 | 1,054 | 1,049 | 601 |
| Rockingham | 2,068 | 2,464 | 1,996 | 1,641 |
| Russell | 1,704 | 1,772 | 1,570 | 1,410 |
| Scott | 1,671 | 2,449 | 1,319 | 1,743 |
| Shenandoah | 2,077 | 2,683 | 1,440 | 1,425 |
| Smyth | 1,516 | 1,883 | 1,134 | 1,321 |
| Southampton | 1,314 | 250 | 1,045 | 128 |
| Spotsvylvania | 440 | 380 | 398 | 249 |
| Stafford | 459 | 599 | 444 | 422 |
| Surry | 397 | 92 | 429 | 90 |
| Sussex | 548 | 166 | 486 | 96 |
| Tazewell | 1,770 | 2,408 | 1,108 | 1,591 |
| Warren | 720 | 293 | 583 | 214 |
| Warwick | 152 | 109 | 97 | 53 |
| Washington | 2,251 | 2,672 | 1,863 | 1,717 |
| Westmoreland | 396 | 133 | 338 | 126 |
| Wise | 2,587 | 3,238 | 1,468 | 1,862 |
| Wythe | 1,465 | 2,104 | 1,334 | 1,370 |
| York | 281 | 92 | 247 | 51 |
| CITIES. | | | | |
| Alexandria | 1,417 | 921 | 1,038 | 364 |
| Bristol | 784 | 344 | 489 | 184 |
| Buena Vista | 262 | 154 | 158 | 92 |
| Charlesville | 1,041 | 351 | 618 | 117 |
| Clifton Forge | 727 | 274 | 455 | 104 |
| Danville | 1,888 | 551 | 1,151 | 229 |
| Fredericksburg | 581 | 299 | 380 | 173 |
| Hampton | 601 | 152 | 350 | 56 |
| Harrisonburg | 594 | 704 | ..... | ..... |
| Hopewell | 97 | 41 | ..... | ..... |
| Lynchburg | 2,096 | 609 | 1,465 | 353 |
| Newport News | 1,703 | 1,450 | 939 | 465 |
| Norfolk | 5,953 | 2,380 | 3,234 | 963 |
| Petersburg | 2,072 | 485 | 1,155 | 161 |
| Portsmouth | 3,228 | 1,061 | 1,368 | 376 |
| Radford | 402 | 245 | 206 | 115 |
| Richmond | 14,878 | 4,515 | 6,987 | 1,210 |
| Roanoke | 4,715 | 2,329 | 2,246 | 610 |
| Staunton | 931 | 705 | 511 | 311 |
| Suffolk | 761 | 303 | 437 | 158 |
| Williamsburg | 166 | 62 | 97 | 21 |
| Winchester | 736 | 540 | 468 | 196 |
| Total | 141,670 | 87,456 | 102,824 | 49,358 |

U. S. Senator (1922)—Swanson, Dem., 116,393; McGavock, Rep., 42,903.

Virginia voters (1922) defeated, by more than 51,000 majority against, the proposal for a Constitutional convention.

### PAST VOTE OF VIRGINIA.

1872 (Pres.), Dem. and L., 91,654; Rep., 93,468.
1876 (Pres.), Dem., 139,670; Rep., 95,558.
1880 (Pres.), Dem., 128,586 (Readjusters included in Dem., 31,674); Rep., 84,020.
1884 (Pres.), Dem., 145,497; Rep., 139,356; Proh., 138.
1888 (Pres.), Dem., 151,979; Rep., 150,449.
1892 (Pres.), Dem., 163,977; Rep., 113,256; Peop., 12,275; Proh., 2,798.
1896 (Pres.), Dem., 154,709; Rep., 135,368; Gold D., 2,129; Pro., 2,350; Soc. L., 108.
1897 (Gov.), Dem., 109,655; Rep., 56,840; Pro., 2,743; Soc. L., 528; Ind., 414.
1900 (Pres.), Dem., 146,080; Rep., 115,865; Pro., 2,150.
1901 (Gov.), Dem., 116,682; Rep., 81,366; Pro., 1,896; Soc., 280 and 285.
1904 (Pres.), Dem., 80,648; Rep., 47,880; Pro., 1,383; Soc., 218; Soc. L., 56; Pop., 359.
1905 (Gov.), Dem., 83,544; Rep., 45,795; Soc., 453.
1908 (Pres.), Dem., 82,946; Rep., 52,573; Soc., 255; Pro., 1,111; Soc. L., 256; Pop., 225; Ind., 51.
1909 (Gov.), Dem., 68,750; Rep., 36,249; Soc. L., 1,377.
1912 (Pres.), Dem., 90,332; Rep., 23,288; Prog., 21,777; Soc., 820; Pro., 709; Soc. L., 50.
1913 (Gov.), Dem., 66,518; Soc., 3,789; Soc. L., 2,110.
1916 (Pres.), Dem., 102,824; Rep., 49,358; Soc., 1,062; Pro., 683; Soc. L., 67.
1916 (Gov.), Dem., 66,518; Soc., 3,789.
1916 (U. S. Sen.), Dem., 133,056.
1917 (Gov.), Dem., 64,226; Rep., 24,957; Soc., 629.
1918 (U. S. Sen.), Dem., 40,403, no opposition.
1920 (Pres.), Dem., 141,670; Rep., 87,456; Proh., 826; Soc., 807; F.-L., 240.
1920 (U. S. Sen.), Dem., 184,646; Rep., 17,576.
1921 (Gov.), Dem., 141,481; Rep., 67,116; "Lily Black" Rep., 5,230.

## WASHINGTON.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Adams | 1,525 | 515 | 1,294 | 1,237 | Lincoln | 3,038 | 1,395 | 2,827 | 2,356 |
| Asotin | 1,210 | 497 | 1,136 | 1,004 | Mason | 997 | 383 | 779 | 764 |
| Benton | 2,001 | 975 | 1,351 | 1,460 | Okanogan | 2,784 | 1,260 | 2,924 | 1,896 |
| Chelan | 3,885 | 1,540 | 2,704 | 3,011 | Pacific | 2,607 | 871 | 1,537 | 2,688 |
| Clallam | 1,775 | 489 | 1,339 | 1,475 | Pend Oreille | 1,079 | 651 | 1,080 | 916 |
| Clarke | 4,852 | 2,941 | 3,728 | 4,419 | Pierce | 22,048 | 8,259 | 18,940 | 16,780 |
| Columbia | 1,376 | 612 | 1,164 | 1,148 | San Juan | 833 | 196 | 669 | 591 |
| Cowlitz | 2,267 | 801 | 1,282 | 2,113 | Skagit | 5,320 | 1,840 | 4,936 | 4,142 |
| Douglas | 1,587 | 918 | 1,916 | 1,125 | Skamania | 409 | 247 | 451 | 489 |
| Ferry | 592 | 505 | 913 | 581 | Snohomish | 10,793 | 3,056 | 8,390 | 8,265 |
| Franklin | 839 | 571 | 1,110 | 671 | Spokane | 26,219 | 13,412 | 21,339 | 19,503 |
| Garfield | 869 | 370 | 728 | 845 | Stevens | 3,282 | 1,452 | 3,184 | 2,684 |
| Grant | 1,378 | 684 | 1,563 | 1,205 | Thurston | 3,899 | 1,367 | 2,658 | 3,223 |
| Grays Harbor | 5,920 | 3,378 | 4,992 | 5,024 | Wahkiakum | 494 | 164 | 340 | 490 |
| Island | 883 | 285 | 855 | 804 | Walla Walla | 5,957 | 2,338 | 4,456 | 4,429 |
| Jefferson | 1,128 | 322 | 861 | 1,094 | Whatcom | 9,157 | 2,288 | 5,629 | 7,632 |
| King | 58,584 | 17,369 | 52,362 | 38,959 | Whitman | 6,344 | 2,806 | 5,888 | 4,933 |
| Kitsap | 4,989 | 1,350 | 3,479 | 2,638 | Yakima | 11,571 | 4,062 | 6,136 | 7,188 |
| Kittitas | 2,837 | 1,119 | 2,609 | 2,310 | | | | | |
| Klickitat | 1,649 | 745 | 1,478 | 1,570 | Total | 223,137 | 84,298 | 183,388 | 167,208 |
| Lewis | 6,160 | 2,212 | 4,318 | 5,186 | | | | | |

U. S. Senator (1922)—Dill, Dem., 130,347; Poindexter, Rep., 126,410; Duncan, Farm.-Lab., 35,326. Washington voters, in 1922, repealed the poll tax measure.

PAST VOTE OF WASHINGTON.

1882 (Cong.), Dem., 8,244; Rep., 11,252.
1884 (Cong.), Dem., 20,995; Rep., 20,847.
1886 (Cong.), Dem., 23,272; Rep., 21,080; Pro., 2,875.
1888 (Cong.), Dem., 18,920; Rep., 26,201; Pro., 1,137.
1889 (Gov.), Dem., 24,732; Rep., 33,711.
1890 (Cong.), Dem., 22,831; Rep., 29,153; Pro., 2,819.
1892 (Pres.), Dem., 29,802; Rep., 36,460; Pop., 19,165; Pro., 2,542.
1894 (Cong.), Dem., 14,160; Rep., 34,812; Pop., 25,140; Pro., 209.
1896 (Pres.), Fus., 51,646; Rep., 39,153; Gold D., 1,688; Pro., 968; Nat., 148.
1898 (Jus. Sup. Ct.), Fus., 32,339; Rep., 40,363; Soc. L., 1,323.
1900 (Pres.), Dem., 44,833; Rep., 57,456; Pro., 2,363; Soc. D., 2,006; Soc. L., 866.
1900 (Gov.), Dem., 51,944; Rep., 49,860; Pro., 2,103; Soc. D., 1,670; Soc. L., 843.
1904 (Gov.), Dem., 59,119; Rep., 75,278; Soc., 7,420; Pro., 2,782; Soc. L., 1,070.
1904 (Pres.), Dem., 28,098; Rep., 101,540; Soc., 10,023; Pro., 3,229; Soc. L., 1,592; Pop., 669.
1908 (Pres.), Dem., 58,601; Rep., 102,062; Soc., 14,177; Pro., 4,700; Pop., 669; Ind., 248.
1912 (Pres.), Dem., 86,840; Rep., 70,445; Prog., 113,698; Soc., 40,134; Pro., 9,810; Soc. L., 1,872.
1912 (Gov.), Dem., 97,251; Rep., 96,629; Prog., 77,792; Soc., 37,155; Pro., 8,163; Soc. L., 1,369.
1914 (U. S. Sen.), Dem., 91,733; Rep., 130,479; Prog., 83,282; Soc., 30,234; Pro., 9,551.
1916 (Pres.), Dem., 182,993; Rep., 166,399; Soc., 22,544; Pro., 6,823; Soc. L., 700.
1916 (Gov.), Dem., 181,642; Rep., 167,802; Soc., 21,117; Pro., 3,514; Prog., 2,894; Soc. L., 623.
1916 (U. S. Sen.), Dem., 185,339; Rep., 202,287; Soc., 21,709; Pro., 4,411; Prog., 1,441.
1920 (Pres.), Dem., 84,298; Rep., 223,137; F.-L., 77,246; Soc., 8,913; Soc. L., 1,321.
1920 (Gov.), Dem., 66,079; Rep., 210,662; F.-L., 121,371; Proh., 3,790; Soc. L., 1,296.
1920 (U. S. Sen.), Dem., 68,488; Rep., 217,069; F.-L., 99,309.

## WEST VIRGINIA.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Barbour | 3,763 | 2,777 | 1,848 | 2,083 | Monongalia | 6,773 | 3,442 | 2,227 | 3,412 |
| Berkeley | 5,259 | 4,399 | 2,938 | 2,802 | Monroe | 3,001 | 2,521 | 1,609 | 1,584 |
| Boone | 2,674 | 2,529 | 1,397 | 1,504 | Morgan | 1,817 | 713 | 666 | 1,208 |
| Braxton | 4,274 | 4,269 | 2,957 | 2,332 | McDowell | 12,198 | 5,068 | 3,692 | 7,086 |
| Brooke | 3,060 | 2,129 | 1,261 | 1,422 | Nicholas | 3,691 | 3,564 | 2,467 | 2,056 |
| Cabell | 13,170 | 12,845 | 6,446 | 5,728 | Ohio | 15,735 | 10,287 | 6,074 | 7,349 |
| Calhoun | 1,671 | 1,773 | 1,317 | 936 | Pendleton | 1,581 | 1,814 | 1,276 | 888 |
| Clay | 1,981 | 1,533 | 1,047 | 1,021 | Pleasants | 1,657 | 1,449 | 899 | 876 |
| Doddridge | 3,135 | 1,140 | 1,061 | 1,803 | Pocahontas | 2,836 | 2,541 | 1,849 | 1,550 |
| Fayette | 10,561 | 9,003 | 5,377 | 5,511 | Preston | 6,729 | 2,150 | 1,694 | 3,338 |
| Gilmer | 1,635 | 1,854 | 1,695 | 943 | Putnam | 3,223 | 2,578 | 1,837 | 1,925 |
| Grant | 2,417 | 492 | 391 | 1,438 | Raleigh | 7,668 | 5,916 | 3,319 | 3,791 |
| Greenbrier | 4,850 | 4,994 | 3,170 | 2,601 | Randolph | 4,158 | 4,676 | 3,024 | 2,162 |
| Hampshire | 1,214 | 2,221 | 2,181 | 745 | Ritchie | 4,377 | 2,050 | 1,657 | 2,225 |
| Hancock | 2,768 | 1,435 | 891 | 1,434 | Roane | 4,232 | 3,082 | 2,186 | 2,406 |
| Hardy | 1,354 | 2,014 | 1,425 | 701 | Summers | 3,611 | 3,552 | 2,389 | 1,781 |
| Harrison | 13,784 | 10,206 | 5,970 | 6,262 | Taylor | 3,649 | 2,111 | 1,672 | 2,002 |
| Jackson | 4,330 | 2,843 | 2,032 | 2,474 | Tucker | 2,498 | 1,961 | 1,388 | 1,531 |
| Jefferson | 2,168 | 3,944 | 2,544 | 1,181 | Tyler | 3,654 | 1,762 | 1,336 | 1,900 |
| Kanawha | 23,781 | 19,284 | 10,276 | 10,096 | Upshur | 4,936 | 1,418 | 1,019 | 2,553 |
| Lewis | 4,618 | 3,310 | 2,248 | 2,263 | Wayne | 3,754 | 4,490 | 2,989 | 2,215 |
| Lincoln | 3,339 | 2,649 | 2,113 | 2,104 | Webster | 1,562 | 1,942 | 1,513 | 854 |
| Logan | 4,304 | 5,588 | 3,270 | 2,107 | Wetzel | 3,619 | 4,103 | 2,797 | 1,910 |
| Marion | 11,494 | 8,734 | 5,493 | 4,443 | Wirt | 1,680 | 1,376 | 1,072 | 951 |
| Marshall | 7,208 | 4,814 | 2,937 | 3,699 | Wood | 10,463 | 8,839 | 4,817 | 4,521 |
| Mason | 4,912 | 3,177 | 2,336 | 2,454 | Wyoming | 2,950 | 1,825 | 1,199 | 1,484 |
| Mercer | 8,613 | 7,986 | 4,336 | 4,788 | | | | | |
| Mineral | 3,646 | 2,516 | 1,747 | 1,965 | Total | 282,007 | 220,789 | 140,403 | 143,124 |
| Mingo | 3,972 | 4,934 | 2,472 | 3,223 | | | | | |

U. S. Senator (1922)—Neely, Dem., 198,853; Sutherland, Rep., 185,046; Holt, Soc., 4,895.

PAST VOTE OF WEST VIRGINIA.

1872 (Pres.), Dem., 29,537; Rep., 32,283; Lib. Rep., 86; Dem. (O'C.), 600.
1876 (Pres.), Dem., 56,565; Rep., 42,001; Gr., 1,373.
1880 (Pres.), Dem., 57,391; Rep., 46,243; Gr., 9,079.
1882 (Judge), Dem., 46,661; Rep., 43,440.
1884 (Pres.), Dem., 67,317; Rep., 63,096; Gr., 805; Pro., 939.
1886 (Cong.), Dem., 65,184; Rep., 64,279; Pro., 1,492.
1888 (Pres.), Dem., 79,664; Rep., 77,791; U. L., 1,064; Pro., 669.
1892 (Pres.), Dem., 84,467; Rep., 80,293; Pop., 4,166; Pro., 2,145.
1896 (Pres.), Dem., 92,927; Rep., 104,414; Gold D., 677; Pro., 1,203.
1900 (Pres.), Dem., 98,791; Rep., 119,851; Pro., 1,585; Soc. D., 187; Pop., 274.
1904 (Pres.), Dem., 110,850; Rep., 132,608; Pro., 4,413; Soc., 1,572; Pop., 337.
1908 (Pres.), Dem., 111,418; Rep., 137,869; Soc., 3,679; Pro., 5,139; Pop., 16; Ind., 46.
1908 (Gov.), Dem., 118,909; Rep., 130,807; Soc., 3,308; Pro., 4,967.
1912 (Pres.), Dem., 113,197; Rep., 56,754; Prog., 79,112; Soc., 15,248; Pro., 4,517.
1912 (Gov.), Dem., 119,173; Rep., 127,942; Soc., 14,900; Pro., 5,816.
1916 (Pres.), Dem., 110,403; Rep., 143,124; Soc., 6,150.
1916 (Gov.), Dem., 143,324; Rep., 140,569.
1916 (U. S. Sen.), Dem., 138,585; Rep., 144,243; Soc., 4,881.
1918 (U. S. Sen.), Dem., 97,715; Rep., 115,216; Soc., 2,288.
1920 (Pres.), Dem., 220,789; Rep., 282,007; Soc., 5,618; Proh., 1,528.
1920 (Gov.), Dem., 184,762; Rep., 242,327; N. P., 81,330; Soc., 2,695.

## WISCONSIN.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | | Counties. | 1920. | | 1916. | |
|---|---|---|---|---|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. | | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Adams | 1,528 | 393 | 824 | 957 | Marinette | 6,138 | 1,331 | 2,205 | 2,767 |
| Ashland | 4,005 | 1,083 | 1,582 | 1,998 | Marquette | 2,436 | 689 | 923 | 1,377 |
| Barron | 6,887 | 745 | 1,863 | 2,746 | Milwaukee | 73,253 | 689 | 34,812 | 27,831 |
| Bayfield | 2,536 | 594 | 996 | 1,320 | Monroe | 6,784 | 985 | 1,991 | 3,013 |
| Brown | 8,867 | 3,870 | 5,771 | 4,132 | Oconto | 4,735 | 1,029 | 1,892 | 2,570 |
| Buffalo | 3,082 | 300 | 1,043 | 1,492 | Oneida | 2,425 | 849 | 1,054 | 1,089 |
| Burnett | 2,025 | 190 | 638 | 1,007 | Outagamie | 11,140 | 3,121 | 4,442 | 5,302 |
| Calumet | 3,730 | 609 | 1,382 | 1,979 | Ozaukee | 3,523 | 835 | 1,577 | 1,610 |
| Chippewa | 6,750 | 1,109 | 2,233 | 3,324 | Pepin | 1,317 | 265 | 622 | 766 |
| Clark | 6,246 | 750 | 1,614 | 3,371 | Pierce | 4,441 | 646 | 1,650 | 1,945 |
| Columbia | 7,389 | 1,227 | 2,299 | 3,395 | Polk | 4,796 | 749 | 1,713 | 2,080 |
| Crawford | 3,602 | 1,104 | 1,764 | 1,883 | Portage | 5,527 | 2,678 | 3,000 | 2,520 |
| Dane | 23,030 | 4,879 | 9,859 | 6,931 | Price | 2,990 | 554 | 1,049 | 1,620 |
| Dodge | 11,357 | 2,314 | 4,519 | 4,887 | Racine | 14,406 | 3,795 | 5,081 | 4,495 |
| Door | 3,817 | 385 | 1,204 | 1,656 | Richland | 3,951 | 922 | 1,845 | 2,051 |
| Douglas | 7,250 | 2,119 | 2,940 | 3,007 | Rock | 16,152 | 2,447 | 4,015 | 7,011 |
| Dunn | 5,596 | 495 | 1,447 | 2,556 | Rusk | 2,609 | 445 | 926 | 989 |
| Eau Claire | 7,856 | 1,194 | 2,290 | 2,922 | St. Croix | 5,601 | 1,647 | 2,352 | 2,731 |
| Florence | 912 | 98 | 162 | 412 | Sauk | 8,074 | 954 | 2,257 | 3,779 |
| Fond du Lac | 12,550 | 3,429 | 5,021 | 5,781 | Sawyer | 1,668 | 304 | 562 | 550 |
| Forest | 1,429 | 379 | 637 | 738 | Shawano | 5,836 | 529 | 1,367 | 3,445 |
| Grant | 9,767 | 1,977 | 3,459 | 4,718 | Sheboygan | 11,994 | 1,902 | 3,885 | 5,562 |
| Green | 5,464 | 636 | 1,687 | 2,422 | Taylor | 2,707 | 288 | 845 | 1,544 |
| Green Lake | 3,455 | 893 | 1,352 | 1,647 | Trempealeau | 4,746 | 718 | 1,578 | 2,138 |
| Iowa | 5,428 | 945 | 2,230 | 2,271 | Vernon | 5,694 | 634 | 1,830 | 2,912 |
| Iron | 1,714 | 275 | 475 | 672 | Vilas | 903 | 261 | 467 | 531 |
| Jackson | 3,652 | 413 | 963 | 1,866 | Walworth | 8,437 | 1,629 | 2,449 | 3,988 |
| Jefferson | 8,865 | 1,895 | 3,645 | 3,785 | Washburn | 2,023 | 353 | 644 | 938 |
| Juneau | 4,383 | 756 | 1,442 | 2,292 | Washington | 5,919 | 1,328 | 2,732 | 2,892 |
| Kenosha | 9,810 | 1,718 | 2,814 | 3,537 | Waukesha | 8,667 | 2,767 | 4,192 | 3,768 |
| Kewanee | 2,667 | 598 | 2,011 | 1,104 | Waupaca | 8,302 | 888 | 1,720 | 4,492 |
| La Crosse | 10,067 | 2,588 | 4,123 | 3,597 | Waushara | 4,176 | 485 | 1,015 | 2,345 |
| La Fayette | 4,893 | 1,362 | 2,059 | 2,544 | Winnebago | 12,035 | 3,398 | 5,242 | 5,923 |
| Langlade | 4,059 | 1,637 | 1,755 | 1,538 | Wood | 6,863 | 1,053 | 2,625 | 2,954 |
| Lincoln | 3,713 | 842 | 1,282 | 2,189 | *Soldier vote* | ..... | ..... | 1,090 | 1,087 |
| Manitowac | 8,374 | 2,010 | 4,338 | 4,224 | | | | | |
| Marathon | 11,356 | 2,144 | 3,677 | 5,838 | Total | 498,576 | 113,422 | 193,042 | 221,323 |

Governor (1922)—Bentley, Ind. Dem., 51,061; John J. Blaine, Rep., 367,929; Arnold, Soc., 39,570; Welles, Proh., 21,438; Dietrick, Soc. Lab., 1,444.
U. S. Senator (1922)—Hooper, Dem., 63,818; La Follette, Rep., 379,494; Bucknam, Proh., 11,204; Koeppel, Soc. Lab., 1,656.

PAST VOTE OF WISCONSIN.

1888 (Pres.), Dem., 155,232; Rep., 176,553; U. L., 8,552; Proh., 14,277.
1890 (Gov.), Dem., 160,388; Rep., 132,068; U. L., 5,447; Proh., 11,246.
1892 (Pres.), Dem., 177,335; Rep., 170,791; Pop., 9,909; Proh., 13,132.
1894 (Gov.), Dem., 142,250; Rep., 196,150; Pop., 25,604; Proh., 11,240.
1895 (Sup. Ct.), Dem., 116,024; Rep., 106,935; Proh., 9,089.
1896 (Pres.), Dem., 165,523; Rep., 268,135; Gold D., 4,584; Proh., 7,509; Nat., 346.
1898 (Gov.), Dem., 135,353; Rep., 173,137; Pop., 8,577; Proh., 8,078.
1900 (Gov.), Dem., 160,764; Rep., 264,420; Proh., 9,707; Soc. D., 6,590; Soc. L., 7,095.
1900 (Pres.), Dem., 159,285; Rep., 265,866; Soc. L., 524; Proh., 10,124; Soc. D., 7,095.
1902 (Gov.), Dem., 145,818; Rep., 193,417; Soc. D., 15,970; Proh., 9,647; Soc. L., 791.
1904 (Gov.), Dem., 175,263; Rep., 226,995; Soc., 29,116; U. Rep., 11,926.
1904 (Pres.), Dem., 124,107; Rep., 280,164; Soc., 28,220; Proh., 9,770; Soc. L., 223; Pop., 530.
1906 (Gov.), Dem., 103,311; Rep., 183,558; Soc. L., 24,437; Proh., 8,211; Soc. D., 455.
1908 (Gov.), Dem., 65,977; Rep., 242,935; Soc., 28,583; Proh., 11,760; Soc. L., 293.
1908 (Pres.), Dem., 166,632; Rep., 247,747; Soc., 28,170; Proh., 11,564; Soc. L., 314.
1910 (Gov.), Dem., 110,442; Rep., 161,619; Proh., 7,450; Soc., 39,547; Soc. L., 430.
1912 (Pres.), Dem., 164,409; Rep., 130,870; Prog., 58,861; Proh., 8,467; Soc. L., 698.
1912 (Gov.), Dem., 167,316; Rep., 179,360; Soc., 34,368; Proh., 2,757; Soc. L., 433.
1914 (Gov.), Dem., 119,937; Rep., 141,181; Prog., 32,738; Proh., 6,279; Soc. D., 26,797; Soc. L., 358.
1914 (U. S. Sen.), Dem., 134,925; Rep., 133,966; Soc. D., 29,744; Prog., 9,276.
1916 (Pres.), Dem., 193,042; Rep., 221,323; Soc., 27,846; Proh., 7,166.
1916 (Gov.), Dem., 164,555; Rep., 229,889; Soc., 30,649; Proh., 9,193.
1916 (U. S. Sen.), Dem., 135,144; Rep., 251,303; Soc., 28,908; Proh., 8,528.
1918 (Gov.), Dem., 112,576; Rep., 155,799.
1920 (Pres.), Dem., 113,422; Rep., 498,576; Soc., 85,041; Proh., 8,647.
1920 (Gov.), Dem., 247,746; Rep., 366,247; Proh., 6,047; Soc., 71,126.
1920 (U. S. Sen.), Dem., 89,265; Rep., 281,576; Soc., 66,172; Proh., 5,107.

## WYOMING.

(Presidential vote, 1920, 1916.)

| Counties. | 1920. | | 1916. | |
|---|---|---|---|---|
| | Harding, Rep. | Cox, Dem. | Wilson, Dem. | Hughes, Rep. |
| Albany | 1,769 | 1,145 | 1,571 | 1,313 |
| Big Horn | 2,157 | 1,082 | 1,493 | 1,239 |
| Campbell | 1,027 | 493 | 690 | 448 |
| Carbon | 1,871 | 1,039 | 1,661 | 1,217 |
| Converse | 1,561 | 679 | 879 | 766 |
| Crook | 934 | 451 | 1,181 | 846 |
| Fremont | 2,194 | 994 | 1,752 | 1,407 |
| Goshen | 1,496 | 552 | 1,096 | 770 |
| Hot Springs | 1,212 | 529 | 760 | 523 |
| Johnson | 1,202 | 525 | 812 | 814 |
| Laramie | 3,399 | 1,810 | 2,759 | 2,428 |
| Lincoln | 2,443 | 1,154 | 2,378 | 1,126 |
| Natrona | 2,957 | 1,153 | 1,377 | 912 |
| Niobrara | 969 | 345 | 599 | 533 |
| Park | 1,630 | 666 | 1,146 | 1,092 |
| Platte | 1,405 | 694 | 1,276 | 806 |
| Sheridan | 2,645 | 1,192 | 2,906 | 1,914 |
| Sweetwater | 1,744 | 1,216 | 1, 96 | 1,287 |
| Uinta | 1,194 | 914 | 1,295 | 822 |
| Washakie | 609 | 333 | 455 | 344 |
| Weston | 1,073 | 463 | 734 | 791 |
| Total | 35,091 | 17,429 | 28,316 | 21,698 |

Governor (1922)—Ross, Dem., 31,110; Hay, Rep., 30,387; Spurrier, Soc., 689.
U. S. Senator (1922)—Kendrick, Dem., 35,734; Mondell, Rep., 26,627; Guthrie, Soc., 612.

## CONGRESSIONAL (HOUSE) ELECTIONS. 1922.

### ALABAMA.

1. McDuffie, Dem., 13,960; unopposed.
2. Tyson, Dem., 9,255; unopposed.
3. Steagall, Dem., 9,141; Toberts, Rep., 987.
4. Jeffers, Dem., 9,976; Harper, Rep., 2,265.
5. Dowling, Dem., 10,411; Russell, Rep., 2,539.
6. Oliver, Dem., 4,864; unopposed.
7. Allgood, Dem., 18,576; Noojin, Rep., 11,130.
8. Almon, Dem., 12,303; Hotchkiss, Rep., 478.
9. Huddleston, Dem., 11,300; Lemon, Rep., 630.
10. Bankhead, Dem., 13,803; McMurray, Rep., 8,631.

### ARIZONA.

At Large—Hayden, Dem., 45,121; Mrs. Emma M. Guild, Rep., 14,601.

### ARKANSAS.

1. Driver, Dem., 2,410; unopposed.
2. Oldfield, Dem., 4,915; Hout, Rep., 811.
3. Tillman, Dem., 5,327; unopposed.
4. Wingo, Dem., 7,280; Tilles, Rep., 1,886.
5. Ragon, Dem., 6,191; White, Rep., 963.
6. Sawyer, Dem., 3,397; unopposed.
7. Parks, Dem., 2,610; unopposed.

### CALIFORNIA.

1. Lea, Dem., unopposed.
2. Raker, Dem., unopposed.
3. Curry, Rep., 71.316; Steely, Dem., 6,561.
4. Kahn, Rep., Dem., 39,383; Ernst, Soc., 333.
5. Nolan, Rep., 40,064; unopposed.
6. MacLafferty, Rep., 59,858; Brunk, Dem., 22,711; Beals, Soc., 7,616.
7. Barbour, Rep., unopposed.
8. Free, Rep., unopposed.
9. Lineberger Rep., 66,265; Randall, Proh., 45,794.
10. Osborne, Rep., unopposed.
11. Swing, Rep., unopposed.

### COLORADO.

1. Valle, Rep., 32,939; Hilliard, Dem., 25,477.
2. Timberlake, Rep., 43,601; Worth, Dem., 32,443.
3. Hardy, Rep., 43,508; Horn, Dem., 39,500.
4. Taylor, Dem., 30,331; Vincent, Rep., 16,876.

### CONNECTICUT.

1. Fenn, Rep., 40,124; Dutton, Dem., 35,003.
2. Freeman, Rep., 31,484; Jodoin, Dem., 24,732.
3. Tilson, Rep., 36,247; Whitney, Dem., 31,674.
4. Merritt, Rep., 35,274; McNeil, Dem., 28,992.
5. O'Sullivan, Dem., 27,359; Glynn, Rep., 27,055.

### DELAWARE.

At Large—Boyce, Dem., 39,123; Layton, Rep., 32,577; Houck, Forward Party, 908.

### FLORIDA.

1. Drane, Dem., 14,371; Gober, Rep., 2,961.
2. Clark, Dem., 6,931; unopposed.
3. Smithwick, Dem., 7,564; Hancock, Rep., 1.
4. Sears, Dem., 15,678; McCay, Rep., 3,362.

### GEORGIA.

1. Moore, Dem., 5,579; Anderson, Rep., 426; Clarke, 196.
2. Park, Dem., 5,449; unopposed.
3. Crisp, Dem., 7,298; unopposed.
4. Wright, Dem., 4,777; unopposed.
5. Upshaw, Dem., 4,646; Wilensky, Rep., 347.
6. Wise, Dem., 6,961; unopposed.
7. Lee, Dem., 7,584; unopposed.
8. Brand, Dem., 5,148; unopposed.
9. Bell, Dem., 11,088; Brinkman, 538; Gaston, 101.
10. Vinson, Dem., 4,639; unopposed.
11. Larkford, Dem., 6,882; unopposed.
12. Larsen, Dem., 5,020; unopposed.

### IDAHO.

1. French, Rep., 24,167; Waters, Dem., 13,673; Deal, Prog., 13,673.
2. Smith, Rep., 33,206; Whitaker, Dem., 19,875; Dunning, Prog., 16,450.

### ILLINOIS.

1. Madden, Rep., 23,895; Mayer, Dem., 15,999; Hallbeck, Soc., 427; Kennedy, Farmer-Labor, 120.
2. Mann, Rep., 58,694; Bloch, Dem., 38,487; Johnson, Soc., 3,055; Emmerson, Farmer-Labor, 637.
3. Sproul, Rep., 48,486; Crane, Dem., 47,335; Foster, Soc., 2,537; Stone, Farmer-Labor, 978.
4. Rainey, Dem., 32,403; Dobler, Rep., 13,328; Krouse, Soc., 1,119.
5. Sabath, Dem., 20,377; Gartenstein, Rep., 9,007; Sambrowski, Soc., 1,130; Riordan, Farmer-Labor, 132.
6. Buckley, Dem., 58,928; Gorman, Rep., 58,886; Martin, Soc., 4,341.
7. Michaelson, Rep., 69,367; Padden, Dem., 61,035; Collins, Soc., 7,276; Gilfoy, Farmer-Labor, 1,665.
8. Kunz, Dem., 18,749; DeCola, Rep., 9,311; Stockbridge, Soc., 542; Cahill, Farmer-Labor, 93.
9. Britten, Rep., 26,143; Prendergast, Dem., 16,223; Anderson, Soc., 1,176.
10. Chindblom, Rep., 52,721; Wiedinger, Dem., 6,723; Scanlan, Soc., 2,141; Dahms, Farmer-Labor, 551.
11. Reid, Rep., 46,893; O'Brien, Dem., 18,816; Raymond, Soc., 966.
12. Fuller, Rep., 46,893; Dowdall, Dem., 11,733; Hale, Soc., 1,838.
13. McKenzie, Rep., 30,064; Curtis, Dem., 12,319; Gebhant, Soc., 561.
14. Graham, Rep., 34,946; Mayer, Dem., 21,541; Nelson, Soc., 979; Mardis, Farmer-Labor, 857.
15. King, Rep., 36,547; Craig, Dem., 23,298; Nelson, Soc., 977.
16. Hull, Rep., 39,372; Black, Dem., 30,395; Lofthouse, Soc., 972; Smith, Farmer-Labor, 643.
17. Funk, Rep., 27,466; Gillespie, Dem., 22,233; Abbott, Soc., 389.
18. Holaday, Rep., 35,880; Dennis, Dem., 30,123; Miller, Soc., 542; Mulhall, Farmer-Labor, 1,557.
19. Moore, Rep., 39,596; Meeker, Dem., 31,529; Hefner, Soc., 763.
20. Rainey, Dem., 31,330; Shaw, Rep., 26,541.
21. Major, Dem., 37,661; Wheeler, Rep., 33,086; McDonald, Farmer-Labor, 4,438; Rahn, Soc., 1,194.
22. Miller, Rep., 34,224; Campbell, Dem., 31,539; Thomas, Farmer-Labor, 4,980; Malloway, Soc., 1,174.
23. Arnold, Dem., 38,908; Brooks, Rep., 34,610; Cawley, Soc., 556.
24. Williams, Rep., 29,141; Woodard, Dem., 28,252.
25. Denison, Rep., 37,907; Caldwell, Dem., 28,697; McCoolum, Farm.-Labor, 1,943; Harris, Soc., 1,170.

At Large—Yates, Rep., 943,684; Murphy, Dem., 662,059; Wenschoff, Soc., 36,311; Carr, Farmer-Labor, 32,595.

At Large—Rathbone, Rep., 911,599; Gorman, Dem., 666,583; Laflin, Soc., 35,655; Olinger, Farmer-Labor, 30,756.

To fill vacancy in the Sixty-seventh Congress.

At Large—Mrs. Winnifred Mason Huck, Rep., 865,991; Albert, Dem., 710,716; Hartline, Soc., 36,120; Donovan, Farmer-Labor, 32,890.

### INDIANA.

1. Wilson, Dem., 42,807; Luhring, Rep., 35,835; Hollis, Soc., 1,276.
2. Greenwood, Dem., 43,632; Bland, Rep., 42,752; Monarch, Soc., 1,751.
3. Gardner, Dem., 43,344; Lambdin, Rep., 37,202; McMillen, Soc., 4,070.
4. Canfield, Dem., 43,749; Benham, Rep., 41,825.
5. Sanders, Rep., 38,759; Bidaman, Dem., 37,748; Reinbolt, Soc., 1,750.

6. Elliott, Rep., 39,281; Clifton, Dem., 36,818.
7. Moores, Rep., 49,629; Turk, Dem., 41,118; Lambert, Soc., 1,394.
8. Vestal, Rep., 43,470; Tyndall, Dem., 39,169; Becker, Soc., 6,970.
9. Purnell, Rep., 46,919; Moffett, Dem., 42,074; Leese, Soc., 2,040.
10. Wood, Rep., 45,590; Spooner, Dem., 30,835; Field, Soc., 623.
11. Cook, Dem., 45,389; Kraus, Rep., 39,285.
12. Fairfield, Rep., 36,045; Brandstrator, Dem., 34,457.
13. Hickey, Rep., 50,003; Miss Esther O'Keefe, Dem., 43,053.

IOWA.

1. Kopp, Rep., 26,651; Lindley, Dem., 14,056; Saarman, Ind., 302.
2. Hull, Rep., 27,450; Cook, Dem., 26,620; Macintosh, Ind., 367.
3. Robinson, Rep., 34,518; Hageman, Dem., 24,304; Bikelberg, Ind., 1,100.
4. Haugen, Rep., 32,586; Schanke, Dem., 24,532.
5. Cole, Rep., 33,607; Smith, Dem., 15,525.
6. Ramseyer, Rep., 28,702; Craven, Dem., 17,489; Reid, Ind., 213.
7. Dowell, Rep., 34,012; Robb, Dem., 19,987; Gay, Ind., 606.
8. Towner, Rep., 30,551; Daughton, Dem., 23,487.
9. Green, Rep., 31,757; Richards, Dem., 19,722.
10. Dickinson, Rep., 41,290; Mrs. Jett W. Douglas, Dem., 16,781.
11. Boies, Rep., 36,050; Gillette, Dem., 24,027.

KANSAS.

1. Anthony, Rep., 39,463; Gragg, Dem., 22,480.
2. Little, Rep., 41,482; Thompson, Dem., 34,816.
3. Sproul, Rep., 38,321; Stephens, Dem., 37,829; Snyder, Soc., 2,018.
4. Hoch, Rep., 29,657; Austin, Dem., 17,294; McGill, Soc., 887.
5. Strong, Rep., 32,064; Hatfield, Dem., 24,881.
6. White, Rep., 33,464; Boyd, Dem., 26,666; Brethauer, Soc., 1,731.
7. Tincher, Rep., 47,515; Allphin, Dem., 32,159; Colglazier, Soc., 1,825.
8. Ayres, Dem., 37,581; Bird, Rep., 22,721.

KENTUCKY.

1. Barkley, Dem., 10,668; McCain, Rep., 4,961.
2. Kincheloe, Dem., 15,933; Jolly, Rep., 8,897.
3. Thomas, Dem., 22,499; Moats, Rep., 15,639.
4. Johnson, Dem., 19,142; Woodruff, Farmer-Labor, 1,429.
5. Thatcher, Rep., 38,806; Lewis, Rep., 35,124; Young, Farmer-Labor, 5,154.
6. Rouse, Dem., 18,131; Keller, Farmer-Labor, 9,197; Brinkman, Soc., 1,028.
7. Cantrill, Dem., 9,389; unopposed.
8. Gilbert, Dem., 21,296; Kincaid, Rep., 15,802.
9. Fields, Dem., 24,116; Stricklin, Rep., 12,961.
10. Langley, Rep., 17,067; Hatcher, Dem., 13,668.
11. Robsion, Rep., 25,086; Sipple, Dem., 11,396; Seavy, Farmer-Labor, 2,670.

LOUISIANA.

1. O'Conner, Dem., 14,760; unopposed.
2. Dupre, Dem., 12,287; unopposed.
3. Martin, Dem., 1,954; unopposed.
4. Sandlin, Dem., 3,618; unopposed.
5. Wilson, Dem., 2,345; unopposed.
6. Favrot, Dem., 3,317; unopposed.
7. Lazaro, Dem., 3,069; unopposed.
8. Aswell, Dem., 2,987; unopposed.

MAINE.

(Election Sept. 11, 1922.)

1. Beedy, Rep., 26,050; Donohue, Dem., 18,312.
2. White, Rep., 25,719; McIntyre, Dem., 22,150.
3. Nelson, Rep., 30,655; Tebbetts, Dem., 21,828.
4. Hersey, Rep., 18,641; Sewall, Dem., 11,997.

MARYLAND.

1. Goldsborough, Dem., 27,117; Butler, Rep., 21,534.
2. Tydings, Dem., 36,565; Blakeney, Rep., 31,053; Champlin, Soc., 867; O'Brien, Labor, 774.
3. Hill, Rep., 27,740; Dimarco, Dem., 12,454; Neistadt, Soc., 687; Reynolds, Labor, 357.
4. Linthicum, Dem., 33,322; Wolf, Rep., 18,972; Taylor, Soc., 767; Dirner, Labor, 966.
5. Mudd, Rep., 23,764; Roberts, Dem., 21,112; Guillotti, Labor, 450; Helyer, Ind., 484; Gannon, Peoples, 1,015.
6. Zihlman, Rep., 22,261; Mish, Dem., 20,838; Weber, Soc., 770.

MASSACHUSETTS.

1. Treadway, Rep., 26,229; Cassidy, Dem., 25,529.
2. Gillett, Rep., 28,639; Kerigan, Dem., 19,376.
3. Paige, Rep., 26,944; O'Connell, Dem., 19,311; Oliver, Consumers Non-Partisan League, 1,549.
4. Winslow, Rep., 32,942; Dyer, Dem., 29,399.
5. Rogers, Rep., 33,673; Barrett, Dem., 18,936.
6. Andrew, Rep., 36,126; Pettingell, Dem., 10,895.
7. Connery, Dem., 30,493; Butler, Rep., 23,978.
8. Dallinger, Rep., 42,248; Daly, Dem., 21,893.
9. Underhill, Rep., 31,229; Healey, Dem., 22,867.
10. Tague, Dem., 21,029; Jenkins, Rep., 5,422.
11. Tinkham, Rep., 33,396; Brickley, Dem., 21,999.
12. Gallivan, Dem., 42,779; Rice, Rep., 13,575.
13. Luce, Rep., 50,710; unopposed.
14. Frothingham, Rep., 41,490; Murray, Dem., 24,014.
15. Greene, Rep., 25,179; Cartier, Dem., 18,662.
16. Gifford, Rep., 23,862; Doran, Dem., 20,021.

MICHIGAN.

1. Clancy, Dem., 22,996; Shepherd, Rep., 17,722; Schlenter, Soc., 686; Oberly, Farm.-Lab., 125.
2. Michener, Rep., 31,509; Helme, Dem., 23,393.
3. J. M. C. Smith, Rep., 23,869; G. B. Smith, Dem., 15,226.
4. Ketcham, Rep., 26,050; Carr, Dem., 13,772.
5. Mapes, Rep., 25,853; Taylor, Dem., 10,501.
6. Hudson, Rep., 46,791; Adair, Dem., 29,241; Bell, Farm.-Lab., 243.
7. Cramton, Rep., 35,328; Kane, Dem., 13,431; Kaumeier, Soc., 119
8. Vincent, Rep., 33,864; Vought, Dem., 19,538.
9. McLaughlin, Rep., 21,703; Henderson, Soc., 980.
10. Woodruff, Rep., 23,792; unopposed.
11. Scott, Rep., 24,390; Rayburn, Dem., 10,823.
12. James, Rep., 26,228; Kappler, Dem., 6,784.
13. McLeod, Rep., 28,871; Fitch, Dem., 11,948; Caspar, Soc., 526.

MINNESOTA.

1. Anderson, Rep., 36,698; Lynn, Dem., 27,316.
2. Clague, Rep., 47,591; unopposed.
3. Davis, Rep., 42,708; Lillian Cox Gault, Dem., 18,262.
4. Keller, Rep., 33,259; Doty, Dem., 20,187; McCartney, Wet Ind., 3,243.
5. Newton, Rep., 45,221; Coan, Ind., 38,760.
6. Knutson, Rep., 37,179; Seeberger, Farm.-Lab., 19,354; Knutsen, Dem., 4,544.
7. Kvale, Ind. and Farm.-Lab., 42,832; Volstead Rep., 28,918.
8. Larson, Rep., 32,420; Carss, Ind., 28,757.
9. Wefald, Farm.-Lab., 35,551; Steenerson, Rep., 27,590.
10. Schall, Rep., 53,424; Rutledge, Ind., 12,843.

MISSISSIPPI.

1. Rankin, Dem., 9,407; Therrell, Rep., 23.
2. Lowrey, Dem., 7,985; McDonough, Rep., 450.
3. Humphreys, Dem., 4,403; Montgomery, Rep., 136.
4. Busby, Dem., 9,260; DeKay, Rep., 170.
5. Collins, Dem., 11,336; Smith, Rep., 388; Lange, Ind., 49.
6. Wilson, Dem., 12,640; McGowan, Rep., 238.
7. Quin, Dem., 5,842; Turley, Rep., 159.
8. Collier, Dem., 5,609; Rice, Rep., 57.

MISSOURI.

1. Romjue, Dem., 30,108; Millspaugh, Rep., 23,579.
2. Lozier, Dem., 34,041; Keister, Rep., 21,016.
3. Milligan, Dem., 25,997; Lawrence, Rep., 23,019.
4. Faust, Rep., 28,110; Spratt, Dem., 26,394.
5. Jost, Dem., 62,702; Ellis, Rep., 53,262.
6. Dickensen, Dem., 27,036; Atkeson, Rep., 23,492.
7. Major, Dem., 36,950; Patterson, Rep., 35,627.
8. Roach, Rep., 25,927; Moss, Dem., 21,559.
9. Cannon, Dem., 30,063; Hukreide, Rep., 23,058.
10. Newton, Rep., 91,829; Alexander, Dem., 46,704.
11. Hawes, Dem., 24,839; Bogy, Rep., 17,188.
12. Dyer, Rep., 15,667; Israel, Dem., 11,679.
13. Wolff, Dem., 23,622; Rhodes, Rep., 21,870.
14. Fullbright, Dem., 37,896; Hays, Rep., 34,513.
15. Manlove, Rep., 32,843; Lee, Dem., 28,000.
16. Rubey, Dem., 25,989; Bennett, Rep., 22,153.

MONTANA.

1. Evans, Dem., 36,589; McCormick, Rep., 26,684; Mrs. Lulu F. Dawley, Soc., 876.
2. Leavitt, Rep., 46,499; Moss, Dem., 39,147.

NEBRASKA.

1. Morehead, Dem., 25,079; Anderson, Rep. 23,075; Tidd, Prog., 1,607; Barton, Proh., 1,224,
2. Sears, Rep., 26,308; Hanley, Dem., 25,215. Harrop, Prog., 3,048.
3. Howard, Dem., 34,843; Evans, Rep., 32,930; Havokest, Prog., 4,252.
4. McLaughlin, Rep., 29,743; Cummins, Dem., 25,504; Schmidt, Prog., 3,934.
5. Shallenberger, Dem., 26,423; Andrews, Rep., 25,456; Franklin, Prog., 6,250.
6. Simmons, Rep., 41,558; Beal, Dem., 35,784; Smith, Prog., 3,672.

To fill vacancies in Sixty-seventh Congress.

1. Thorpe, Rep., 25,866; Parriott, Dem., 22,015.
6. Humphry, Rep., 40,079; Maupin, Dem., 32,348; Minert, Prog., 6,716.

NEVADA.

Richards, Dem., 15,991; Miller, Rep., 12,084.

NEW HAMPSHIRE.

1. Rogers, Dem., 36,793; Scammon, Rep., 30,694.
2. Wason, Rep., 31,570; Barry, Dem., 27,980.

NEW JERSEY.

1. Patterson, Rep., 46,505; Wescott, Dem., 29,381; McCormick, Soc., 958.
2. Bacharach, Rep., 50,925; Stevens, Dem., 22,007.
3. Geran, Dem., 44,337; Appleby, Rep., 43,809.
4. Browne, Dem., 32,422; Hutchinson, Rep., 28,934.
5. Ackerman, Rep., 43,460; Sayre, Dem., 32,039; McLoughlin, Soc., 1,016.
6. Perkins, Rep., 41,564; Shields, Dem., 37,561.
7. Seger, Rep., 26,613; Cadmus, Dem., 21,190; Hubschmitt, Soc., 745; Santhouse, Soc.-Lab., 196.
8. McNulty, Dem., 40,379; Coon, Rep., 27,936; Mead, Soc., 709.
9. Minahan, Dem., 21,276; Parker, Rep., 19,182.
10. Lehlbach, Rep., 28,570; Cahill, Dem., 21,211.
11. Eagan, Dem., 39,957; Olpp, Rep., 18,399; Reilly, Soc., 964; Eypper, Ind., 461.
12. C. F. X. O'Brien, Dem., 51,596; W. A. O'Brien, Rep., 17,372; Bausch, Soc., 486.

NEW MEXICO.

At Large—Morrow, Dem., 59,254; Mrs. Adelina Otero-Warren, Rep., 49,635.

NEW YORK.

1. Bacon, Rep., 47,191; Baltazzi, Dem. and Farm.-Lab., 32,224; Wolff, Soc., 1,443; Simons, Proh., 1,121.
2. Kindred, Dem., 60,306; Hopkins, Rep., 19,560; Flanagan, Soc. and Farm.-Lab., 3,839.
3. Lindsay, Dem., 21,513; Kissel, Rep., 8,547; Passage, Soc. and Farm.-Lab., 2,716; Oakley, Proh., 91.
4. Cullen, Dem., 27,100; Picon, Rep., 7,104; Gieper, Soc. and Farm.-Lab., 995; Vogel, Proh., 231.
5. Black, Dem., 33,840; Kline, Rep., 25,917; Weil, Soc. and Farm.-Lab., 1,412; McNichol, Proh., 428.
6. Stengle, Dem., 31,363; Lee, Rep., 28,240; Mina Eskanazi, Soc. and Farm.-Lab., 4,713; Moore, Proh., 570.
7. Quayle, Dem., 21,688; Hogan, Rep., 14,772; Oneal, Soc. and Farm.-Lab., 3,807; Brown, Proh., 250.
8. Cleary, Dem., 34,622; Bond, Rep., 19,745; Berenberg, Soc. and Farm.-Lab., 6,804; Howell, Proh., 256.
9. O'Connell, Dem., 38,833; Peterson, Rep., 23,251; Robinson, Soc. and Farm.-Lab., 4,526; Mershon, Proh., 266.
10. Celler, Dem., 20,210; Volk, Rep., 17,099; De-Hunt, Soc. and Farm.-Lab., 6,522; Cook, Proh., 262.
11. Riordan, Dem., 29,134; Handy, Rep., 12,889; Dearing, Soc. and Farm.-Lab., 781; Colvin, Proh., 291.
12. Dickstein, Dem., 11,027; London, Soc. and Farm.-Lab., 5,900; Zeltner, Rep., 1,183.
13. Sullivan, Dem., 11,424; Firstman, Rep., 3,041; Lefkowitz, Soc. and Farm.-Lab., 2,659.
14. Perlman, Rep., 8,782; Knott, Dem., 8,173; Panken, Soc. and Farm.-Lab., 6,459; Guthrie, Proh., 94.
15. Boylan, Dem., 20,382; Ryan, Rep., 12,205; Kaye, Soc. and Farm.-Lab., 752; Lewis, Proh., 192.
16. Cockran, Dem., 23,370; O'Connor, Rep., 8,277; Jessie W. Hughan, Soc. and Farm.-Lab., 1,517; Livingston, Proh., 239.
17. Mills, Rep., 21,274; Metz, Dem., 19,355; DeVoe, Soc. and Farm.-Lab., 1,150; McAusland, Proh., 341.
18. Carew, Dem., 24,248; Schwartz, Rep., 8,398; Howe, Soc. and Farm.-Lab., 3,535; Burnham, Proh., 122.
19. Marx, Dem., 29,798; Chandler, Rep., 26,172; Zausner, Soc. and Farm.-Lab., 2,556; Youngs, Proh., 561.
20. LaGuardia, Rep., 8,492; Frank, Dem., 8,324; Karlin, Soc. and Farm.-Lab., 5,260.
21. Weller, Dem., 32,393; Ansorge, Rep., 32,053; Crosswaith, Soc. and Farm.-Lab., 2,054; Mamie Colvin, Proh., 636.
22. Griffin, Dem., 29,544; Connolly, Rep., 7,188; Bohm, Soc. and Farm.-Lab., 3,752; White, Proh., 117.
23. Oliver, Dem., 50,382; Rossdale, Rep., 25,154; Ninfo, Soc. and Farm.-Lab., 12,411; Boeder, Proh., 239.
24. Ganly, Dem., 40,058; Fairchild, Rep., 35,656; Umetader, Soc. and Farm.-Lab., 8,873.
25. Wainwright, Rep., 33,674; Osborn, Dem., 27,412; Wessling, Soc. and Farm.-Lab., 2,083.
26. Fish, Rep., Farm.-Lab. and Proh., 34,633; Pendell, Dem., 20,831; Perkins, Soc., 1,258.
27. Ward, Rep., 30,154; Burns, Dem. and Farm.-Lab., 27,937; Coons, Proh., 5,830; Fogelson, Soc., 953.
28. Corning, Dem., 54,570; Winchester, Rep., 42,531; Wensley, Soc., 1,564.
29. Parker, Rep. and Proh., 45,895; Faxon, Dem., 28,726; Beucher, Soc., 1,274.
30. Crowther, Rep. and Proh., 32,225; Derry, Dem., 25,261; Gerrity, Soc., 2,941.
31. Snell, Rep., Farm.-Lab. and Proh., 28,205; Sharp, Dem., 17,257; Bly, Soc., 488.
32. Mott, Rep. and Proh., 44,091; Daley, Dem., 22,279; Seitz, Soc., 1,039; Corbett, Farm.-Lab., 308.
33. Snyder, Rep., 31,978; Sisson, Dem., 30,118; Letson, Soc., 1,431; Harrison, Farm.-Lab. and Proh., 987.
34. Clarke, Rep. and Proh., 40,902; Wheeler, Dem., 23,323; Breckenridge, Soc., 1,018.
35. Magee, Rep., 47,119; Thomson, Dem., 37,785; Sandcr, Soc., 2,124.
36. Taber, Rep. and Proh., 43,633; Sims, Dem., 22,980.
37. Stalker, Rep. and Proh., 42,144; Smith, Dem. and Farm.-Lab., 28,290; Wisman, Soc., 821.
38. Jacobstein, Dem., 35,319; Pierson, Rep., 33,690; Moses, Soc., 5,101.
39. Sanders, Rep., 37,852; White, Dem., and Farm-Lab., 22,585; Allis, Proh., 2,100.
40. Dempsey, Rep. and Farm.-Lab., 41,754; Clancy, Dem., 21,590; Slacer, Proh., 2,530.
41. MacGregor, Rep., 25,342; Greiner, Dem., 16,301; Ehrenfried, Soc., 4,067.
42. Mead, Dem. and Farm.-Lab., 25,070; Schwendler, Rep., 12,494; Griesinger, Soc., 2,913.
43. Reed, Rep. and Proh., 40,374; Garfield, Dem., 15,261; Axelsohn, Soc., 1,265; Sanbury, Farm.-Lab., 356.

NORTH CAROLINA.

1. Ward, Dem., 10,201; Cramer, Rep., 2,421.
2. Kitchin, Dem., 8,533; unopposed.
3. Abernethy, Dem., 14,161; Hood, Rep., 6,925.
4. Pou, Dem., 16,205; Hester, Rep., 8,086.
5. Stedman, Dem., 33,694; Mrs. Lucy B. Patterson, Rep., 20,380.
6. Lyon, Dem., 14,996; McDonald, Rep., 5,266.
7. Hammer, Dem., 20,629; Love, Rep., 13,592.
8. Doughton, Dem., 31,340; Campbell, Rep., 24,235.
9. Bulwinkle, Dem., 29,649; Shuford, 28,115.
10. Weaver, Dem., 37,626; Fisher, Rep., 28,192.

NORTH DAKOTA.

1. Burtness, Rep., 45,959; unopposed.
2. Young, Rep., 36,528; Deemey, Prog., 15,834.
3. Sinclair, Rep., 31,880; Hughes, Dem., 17,859.

OHIO.

1. Longworth, Rep., 45,253; Strickler, Dem., 30,945; Hutchings, Farm.-Lab., 3,094.
2. Stephens, Rep., 39,898; Quane, Dem., 30,051; Herbst, Farm.-Lab., 4,001.
3. Fitzgerald, Rep., 52,111; Good, Dem., 46,127; Woodward, Soc., 2,280.
4. Cable, Rep., 43,251; Goeke, Dem., 35,916; White, Proh., 421.
5. Thompson, Rep., 31,700; Kniffin, Dem., 28,067.
6. Kearns, Rep., 32,416; Gableman, Dem., 28,939.
7. Brand, Rep., 53,182; Zimmerman, Dem., 38,522.
8. Cole, Rep., 37,065; Hartman, Dem., 34,105.
9. Sherwood, Dem., 45,059; Chalmers, Rep., 42,712.
10. Foster, Rep., 30,341; Sharp, Dem., 17,811.
11. Underwood, Dem., 29,058; Ricketts, Rep., 27,162.
12. Speaks, Rep., 47,265; Valentine, Dem., 37,875; Geminden, Soc., 632.
13. Begg, Rep., 38,994; Overmeyer, Dem., 30,199.
14. Davey, Dem., 49,935; Whittemore, Rep., 46,087.
15. Moore, Rep., 32,894; Alexander, Dem., 30,120.
16. McSweeney, Dem., 43,590; Hines, Rep., 39,881.
17. Morgan, Rep., 42,331; Ashbrook, Dem., 41,745.
18. Murphy, Rep., 41,572; Huffman, Dem., 25,449; Carey, Ind., 5,907.
19. Cooper, Rep., 40,492; Kilpatrick, Dem., 27,836.
20. Mooney, Dem., 23,469; Norton, Rep., 17,968; Willett, Soc., 1,381; Coward, Soc. Lab., 198.
21. Crosser, Dem., 18,645; Gahn, Rep., 14,024; Kuhlmann, Soc., 997; Kalee, Soc. Lab., 185.
22. Burton, Rep., 57,781; Zoul, Dem., 20,511; Washburn, Soc., 401.

OKLAHOMA.

1. Howard, Dem., 39,295; Chandler, Rep., 32,478.
2. Hastings, Dem., 32,678; Alice M. Robertson, Rep., 19,617; Gibson, Soc., 328.
3. Carter, Dem., 45,066; Jones, Rep., 15,032; Misenheimer, Soc., 631.
4. McKeown, Dem., 39,254; Pringey, Rep., 20,525; Standard, Soc., 400.
5. Swank, Dem., 46,126; Stone, Rep., 27,001; Johnson, Soc., 330.
6. Thomas, Dem., 30,531; Gensman, Rep., 22,758; Kolachny, Soc., 578.
7. McClintic, Dem., 28,954; Roe, Rep., 11,443; Conley, Soc., 823.
8. Garber, Rep., 28,047; Harris, Dem., 26,102; Geist, Soc., 636.

OREGON.

1. Hawley, Rep., 64,567; unopposed.
2. Sinnott, Rep., 22,861; Graham, Dem., 15,789.
3. Watkins, Dem., 36,688; McArthur, Rep., 35,696; Duncan, Ind., 2,530; Johns, Ind., 2,259.

PENNSYLVANIA.

1. Vare, Rep., 46,846; Flanagan, Dem., 8,227; Braderman, Soc., 790; Owens, Single Tax, 136.
2. Graham, Rep. and Proh., 31,470; Ellen D. Davis, Dem., 4,737; Helen Murphy, Soc., 513; Macauley, Single Tax, 140.
3. Ransley, Rep., 33,058; Carroll, Dem., 5,507; Wait, Soc., 552; Haggerty, Single Tax, 66.
4. Edmonds, Rep. and Proh., 28,757; Willing, Dem., 8,954; Eiser, Soc., 967; Kittie Robinson, Single Tax, 104.
5. Connolly, Rep., 31,238; Sweeney, Dem., 7,717; Close, Soc., 1,344; Bergen, Voters' League, 335; Wingert, Single Tax, 146; Connolly, Welfare, 119.
6. Walsh, Rep., 44,159; Sterrett, Dem., 13,629; Quick, Soc., 1,048; Carson, Proh., 1,183; Mayer, Single Tax, 127.
7. Darrow, Rep. and Proh., 31,680; Graham, Dem., 9,472; Toplis, Soc., 1,041; McCormick, Single Tax, 173.
8. Butler, Rep., 30,349; Ellis, Dem., 18,306; Vernon, Soc., 411; Julia Hazard, Proh., 570.
9. Watson, Rep., 32,052; Freed, Dem., 18,083; Young, Soc., 758; Rambo, Proh., 943.
10. Griest, Rep., 33,545; Musser, Dem., 30,017.
11. Watres, Rep. and Proh., 23,266; McLane, Dem., 22,540.
12. Casey, Dem., Soc. and Un. Labor, 35,953; Coughlin, Rep. and Proh., 30,532.
13. Brumm, Rep. and Proh., 23,218; Ditchey, Dem., 19,305; Foley, Soc., 1,341.
14. Croll, Dem., 31,592; Gernerd, Rep., 29,617; Snyder, Soc., 4,294.
15. McFadden, Rep. and Proh., 20,399; Carroll, Dem., 11,498.
16. Kless, Rep. and Proh., 17,498; Rook, Dem., 12,014; McGowan, Soc., 1,104.
17. Cummings, Dem. and Soc., 22,588; Kline, Rep. and Proh., 16,796.
18. Beers, Rep. and Proh., 24,675; Alexander, Dem., 20,069; Sheets, Soc., 390.
19. Sites, Dem., 33,570; Kreider, Rep. and Proh., 28,115; Young, Soc., 973.
20. Wertz, Rep. and Proh., 12,276; Bailey, Dem. and Soc., 11,969; McCloskey, Labor, 2,337; Palmer, Roosevelt, 2,671.
21. Kurtz, Rep. and Proh., 13,106; Brumbaugh, Dem., 11,425; Rothrock, Soc., and Labor 3,050.
22. Gladfelter, Dem., 22,181; Haines, Rep. and Proh., 17,694; Barnhart, Soc., 498.
23. Swoope, Rep. and Soc., 16,928; Snyder, Dem., 14,292; Kane, Proh., 4,041.
24. Kendall, Rep. and Proh., 18,261; Boyd, Dem., 12,937; Lepley, Soc., 1,985; Green, Union, 604.
25. Temple, Rep., Proh. and Soc., 14,098; Faddis, Dem., 12,242.
26. Phillips, Rep., 17,730; Cobler, Dem. and Proh., 15,533; Turner, Soc., 1,141.
27. Strong, Rep., 18,682; Leonard, Dem., 12,927; Johns, Soc., 1,588; Anderson, Proh., 1,638.
28. Bixler, Rep. and Proh., 23,521; Bordwell, Dem., 11,604; Motsinger, Soc., 890.
29. Shreve, Rep. and Proh., 19,043; Crosby, Dem., 11,917; Tillotson, Soc., 1,338.
30. Kent, Dem., 25,644; Kirkpatrick, Rep., 17,844; Druckenmiller, Soc., 613.
31. Wyant, Rep. and Proh., 17,421; Cramer, Dem., 13,081; Eckard, Soc., 2,146.
32. Porter, Rep., 19,942; O'Donnell, Dem., 5,938; Marshall, Soc., 1,277; Gamble, Proh., 1,310.
33. Kelly, Rep., Dem. and Proh., 21,899; Adams, Soc., 3,106.
34. Morin, Rep., 15,499; McNair, Dem. and Proh., 5,134; Jerling, Soc., 657.
35. Magee, Rep., 16,227; Manley, Dem. and Proh., 12,838; Miller, Soc., 1,043.
36. Campbell, Rep., Dem. and Proh., 20,783; Nooning, Soc., 1,880.

RHODE ISLAND.

1. Burdict, Rep., 25,734; O'Shaunessy, Dem., 21,408.
2. Aldrich, Rep., 26,422; Cantwell, Dem., 23,876.
3. O'Connell, Dem., 36,268; Gill, Rep., 21,808.

SOUTH CAROLINA.

1. Logan, Dem., 5,992; Blomgren, Rep., 383.
2. Byrnes, Dem., 4,163; unopposed.
3. Dominick, Dem., 3,822; unopposed.
4. McSwain, Dem., 8,346; Norwood, Ind., 228.
5. Stevenson, Dem., 4,015; unopposed.
6. Gasque, Dem., 3,642; unopposed.
7. Fulmer, Dem., 4,411; Etheredge, Ind., 68.

SOUTH DAKOTA.

1. Christopherson, Rep., 30,761; Hasvold, Non-Partisan, 15,354; Stedronsky, Dem., 14,376.
2. Johnson, Rep., 35,258; Lockhart, Non-Partisan, 16,946; Ryan, Dem., 1,380.
3. Williamson, Rep., 16,980; Philip, Dem., 13,566; Smith, Non-Partisan, 4,115.

TENNESSEE.

1. Reece, Rep., 17,050; Fugate, Dem., 5,085.
2. Taylor, Rep., 14,988; Reynolds, Dem., 8,330.
3. McReynolds, Dem., 19,962; Burnett, Rep., 13,688.
4. Hull, Dem., 19,756; Clouse, Rep., 11,306.
5. Davis, Dem., 11,634; unopposed.
6. Byrns, Dem., 19,596; unopposed.
7. Salmon, Dem., 13,662; Vest, Rep., 3,818.
8. Browning, Dem., 16,571; Scott, Rep., 12,328.
9. Garrett, Dem., 15,282; Tatum, Rep., 2,819.
10. Fisher, Dem., 10,407; Phelan, Rep., 1,279.

To fill vacancy in Sixty-seventh Congress.

7. Turner, Dem., 12,914; Williams, Rep., 2,053.

TEXAS.

1. Black, Dem., 18,038; unopposed.
2. Box, Dem., 17,216; unopposed.
3. Sanders, Dem., 17,896; unopposed.
4. Rayburn, Dem., 18,193; unopposed.
5. Summers, Dem., 27,184; unopposed.
6. Johnson, Dem., 14,968; unopposed.
7. Briggs, Dem., 11,329; unopposed.
8. Garrett, Dem., 13,328; unopposed.
9. Mansfield, Dem., 9,362; Wilson, Rep., 7,430.
10. Buchanan, Dem., 9,938; unopposed.
11. Conally, Dem., 15,321; unopposed.
12. Lanham, Dem., 22,624; unopposed.
13. Williams, Dem., 24,772; unopposed.
14. Wurzbach, Rep., 19,170; Hertzberg, Dem., 14,870.
15. Garner, Dem., 18,648; unopposed.
16. Hudspeth, Dem., 9,827; unopposed.
17. Blanton, Dem., 24,746; unopposed.
18. Jones, Dem., 11,720; unopposed.

UTAH.

1. Colton, Rep., 33,188; Welling, Dem., 27,801; Watters, Soc. and F.-L., 1,949.
2. Leatherwood, Rep., 28,591; Dunbar, Dem., 26,145; Locke, Soc. and F.-L., 1,939.

VERMONT.

1. Fleetwood, Rep. and Proh., 19,359; Kennedy, Dem., 17,819.
2. Dale, Rep. and Proh., 25,979; Wilson, Dem., 7,170.

VIRGINIA.

1. Bland, Dem., 8,639; Wise, Rep., 1,492; Jones, Soc., 207.
2. Deal, Dem., 7,377; Stevenson, Rep., 1,045; Forman, Soc., 101.
3. Montague, Dem., 7,746; Ward, Rep., 847.
4. Drewry, Dem., 5,737; Rogers, Rep., 822; Gill, Soc., 97.
5. Hooker, Dem., 11,458; Smith, Rep., 4,699.
6. Woodrum, Dem., 9,505; McWane, Rep., 2,688.
7. Harrison, Dem., 12,954; Paul, Rep., 7,481.
8. Moore, Dem., 8,702; Wiley, Rep., 1,741.
9. Peery, Dem., 32,163; Hassinger, Rep., 29,227.
10. Tucker, Dem., 8,635; Martin, 2,521.

WASHINGTON.

1. Miller, Rep., 29,579; Snyder, Dem., 13,127; Nelson, F.-L., 8,862.
2. Hadley, Rep., 29,906; Clise, Dem., 10,608; Tyler, F.-L., 10,150.
3. Johnson, Rep., 45,326; Phillips, F.-L., 14,118.
4. Summers, Rep., 29,697; C. R. Hill, Dem., 10,337; Bowles, F.-L., 3,292.
5. Webster, Rep., 26,982; S. B. Hill, Dem., 24,810; Vaughan, F.-L., 3,095.

WEST VIRGINIA.

1. Rosenbloom, Rep., 28,644; Kenny, Dem., 25,794.
2. Allen, Dem., 27,320; Bowers, Rep., 24,764.
3. Reed, Rep., 32,066; Morton, Dem., 31,382.
4. Johnson, Dem., 32,355; Woodyard, Rep., 31,448.
5. Lilly, Dem., 35,354; Goodykoontz, Rep., 33,267.
6. Taylor, Dem., 42,320; Echols, Rep., 34,901.

WISCONSIN.

1. Cooper, Rep., 32,958; Nielsen, Soc., 2,179.
2. Voigt, Rep., 32,494; Schanen, Dem., 7,667.
3. Nelson, Rep., 33,002; Martha Riley, Ind. Dem., 8,379.
4. Schafer, Rep., 19,179; Melms, Soc., 18,548; Drezdzon, Dem., 3,918.
5. Berger, Soc., 30,045; Strafford, Rep., 26,274.
6. Lampert, Rep., 34,365; Cavanaugh, Ind. Dem., 5,572.
7. Beck, Rep., 27,371; Jolivette, Ind. Dem., 3,923.
8. Browne, Rep., 33,860; Marth, Ind. Soc., 2,946.
9. Schneider, Rep., 35,117; Graass, Ind. Rep., 22,015.
10. Frear, Rep., 29,781; Swenson, Soc., 444.
11. Peavy, Rep., 36,636; unopposed.

WYOMING.

At Large—Winter, Rep., 30,885; Rose, Dem., 27,017; Hastings, Soc., 857.

## SUMMARY OF ELECTORAL VOTE SINCE 1789.

**1789.** Previous to 1804, each electo voted for two candidates for President. The one who received the largest number of votes was declared President, and the one who received the next largest number of votes was declared Vice-President. The electoral votes for the first President of the United States were: George Washington, 69; John Adams, of Massachusetts 34; John Jay, of New York, 9; R. H. Harrison, of Maryland, 6; John Rutledge, of South Carolina, 6; John Hancock, of Massachusetts, 4; George Clinton, of New York, 3; Samuel Huntington, of Connecticut, 2; John Milton, of Georgia, 2; James Armstrong, of Georgia; Benjamin Lincoln, of Massachusetts, and Edward Telfair, of Georgia, 1 vote each. Vacancies (votes not cast), 4. George Washington was chosen President and John Adams Vice-President.

**1792.** George Washington, Federalist, received 132 votes; John Adams, Federalist, 77; George Clinton, of New York, Republican, 5; Thomas Jefferson, of Virginia, Republican, 4; Aaron Burr, of New York, Republican, 1 vote. Vacancies, 3. George Washington was chosen President and John Adams Vice-President.

**1796.** John Adams, Federalist, 71; Thomas Jefferson, Republican, 68; Thomas Pinckney of South Carolina, Federalist, 59; Aaron Burr, of New York, Republican, 30; Samuel Adams, of Massachusetts Republican, 15; Oliver Elisworth, of Connecticut, Independent, 11; George Clinton, of New York, Republican, 7; John Jay, of New York, Federalist, 5; James Iredell, of North Carolina, Federalist, 3; George Washington, of Virginia; John Henry, of Maryland, and S. Johnson, of North Carolina, all Federalists, 2 votes each; Charles Cotesworth Pinckney, of South Carolina, Federalist, 1 vote. John Adams was chosen President and Thomas Jefferson Vice-President.

**1800.** Thomas Jefferson, Republican, 73: Aaron Burr, Republican, 73; John Adams, Federalist, 65; Charles C. Pinckney, Federalist, 64: John Jay, Federalist, 1 vote. There being a tie vote for Jefferson and Burr, the choice devolved upon the House of Representatives. Jefferson received the votes of ten States, which, being the larges vote cast for a candidate, elected him President. Burr received the votes of four States, which, being the next largest vote, elected him Vice-President. There were 2 blank votes.

**1804.** The Constitution of the United States having been amended, the electors at this election voted for a President and a Vice-President, instead of for two candidates for President. The result was as follows: For President, Thomas Jefferson, Republican, 162; Charles C. Pinckney, Federalist, 14. For Vice-President, George Clinton, Republican, 162; Rufus King, of New York, Federalist, 14. Jefferson was chosen President and Clinton Vice-President.

**1808.** For President, James Madison, of Virginia, Republican, 122; Charles C. Pinckney, of South Carolina, Federalist, 47; George Clinton, of New York, Republican, 6. For Vice-President, George Clinton, Republican, 113; Rufus King, of New York, Federalist, 47; John Langdon, of New Hampshire, 9; James Madison, 3; James Monroe, 3. Vacancy, 1. Madison was chosen President and Clinton Vice-President.

**1812.** For President, James Madison, Republican, 128; De Witt Clinton, of New York, Federalist, 89. For Vice-President, Elbridge Gerry, Republican, of Massachusetts, 131; Jared Ingersoll, of Pennsylvania, Federalist, 86. Vacancy, 1. Madison was chosen President and Gerry Vice-President.

**1816.** For President, James Monroe, of Virginia, Republican, 183; Rufus King, of New York, Federalist, 34. For Vice-President, Daniel D. Tompkins, of New York, Republican, 183; John Eager Howard, of Maryland, Federalist, 22 James Ross, of Pennsylvania, 5; John Marshall, of Virginia, 4; Robert G. Harper, of Maryland, 3. Vacancies, 4. Monroe was chosen President and Tompkins Vice-President.

**1820.** For President, James Monroe, of Virginia, Republican, 231; John Q. Adams, of Massachusetts, Republican, 1. For Vice-President, Daniel D. Tompkins, Republican, 218: Richard Stockton, of New Jersey, 8; Daniel Rodney, of Delaware, 4; Robert G. Harper, of Maryland, and Richard Rush, of Pennsylvania, 1 vote each. Vacancies, 3. James Monroe was chosen President and Daniel D. Tompkins Vice-President.

**1824.** For President, Andrew Jackson, of Tennessee, Republican, 99; John Quincy Adams, of Massachusetts, Republican, 84; Henry Clay, of Kentucky, Republican, 37; William H. Crawford, of Georgia, Republican, 41. For Vice-President, John C. Calhoun, of South Carolina, Republican, 182; Nathan Sanford, of New York, Republican, 30; Nathaniel Macon, of North Carolina, Republican, 24; Andrew Jackson, of Tennessee, Republican, 13; Martin Van Buren, of New York, Republican, 9; Henry Clay, of Kentucky, Republican, 2; Calhoun was chosen Vice-President.

*There was no choice in the Electoral College in 1824 for President, and the election was thrown into the House of Representatives, which chose John Quincy Adams for President, he receiving 87 votes, as against 71 for Jackson and 54 for Crawford.*

**1828.** For President, Andrew Jackson, of Tennessee, Democrat, 178; John Quincy Adams, of Massachusetts, National Republican, 83. For Vice-President, John C. Calhoun, of South Carolina, Democrat 171; Richard Rush, of Pennsylvania, National Republican, 83; William Smith, of South Carolina, Democrat, 7.

**1832.** For President, Andrew Jackson, of Tennessee, Democrat, 219; Henry Clay, of Kentucky, National Republican, 49; John Floyd, of Georgia, Independent, 11; William Wirt, of Maryland, Anti-Mason, 7. For Vice-President, Martin Van Buren, of New York, Democrat, 189; John Sergeant, of Pennsylvania, National Republican, 49; Henry Lee, of Massachusetts, Independent, 11; Amos Ellmaker, of Pennsylvania, Anti-Mason, 7; William Wilkins, of Pennsylvania, Democrat, 30.

**1836.** For President, Martin Van Buren, of New York, Democrat, 170; Wm. Henry Harrison, of Ohio, Whig, 73; Hugh L. White, of Tennessee, Whig, 26; Daniel Webster, of Massachusetts, Whig, 14; Willie P. Mangum, of North Carolina, Whig, 11. For Vice-President, Richard M. Johnson, of Kentucky, Democrat, 147; F. Granger, of New York, Whig, 77; John Tyler, of Virginia, Whig, 47; William Smith, of Alabama, Democrat, 23.

**1840.** For President, William Henry Harrison, of Ohio, Whig, 234; Martin Van Buren, of New York, Democrat, 60. For Vice-President, John Tyler, of Virginia, Whig, 234; Richard M. Johnson, of Kentucky, Democrat, 48; Littleton W. Tazew ll, of Virginia, Democrat, 11; James K. Polk, of Tennessee, Democrat, 1.

**1844.** For President, J. K. Polk, of Tennessee, Democrat, 170; H. Clay, of Kentucky, Whig, 105. For Vice-President, G. M. Dallas, of Pennsylvania, Democrat, 170; T. Frelinghuysen, of New Jersey, Whig, 105.

**1848.** For President, Zachary Taylor, of Louisiana, Whig, 163; Lewis Cass, of Michigan, Democrat, 127. For Vice-President, Millard Fillmore, of New York, Whig, 163; William O. Butler, of Kentucky, Democrat, 127.

**1852.** For President, Franklin Pierce, of New Hampshire, Democrat, 254; Winfield Scott, of New Jersey, Whig 42. For Vice-President, W. R. King, Ala., Dem., 254; W. A. Graham, N. Car., Whig, 42.

### ELECTORAL AND POPULAR VOTES.

| Yr. Elec tion. | Candidates for President. | State. | Polit-ical Party | Popular Vote. | Plu-rality. | Elec toral Vote | Candidates for Vice-President. | State. | Polit-ical Party. | Elec toral Vote |
|---|---|---|---|---|---|---|---|---|---|---|
| 1856 | *James Buchanan... | Pa... | Dem... | 1,927,995 | 536,440 | 174 | *J. C. Breckinridge. | Ky.. | Dem... | 174 |
| | John C. Fremont... | Cal. | Rep.. | 1,391,555 | ..... | 114 | William L. Dayton. | N. J. | Rep... | 114 |
| | Millard Filimo e.... | N Y. | Amer.. | 934,816 | ..... | 8 | A. J. Donelson..... | Tenn. | Amer.. | 8 |
| 1860 | *Abraham Lincoln.. | Ill .. | Rep. .. | 1,866,352 | 491,195 | 180 | *Hannibal Hamlin.. | Me.. | Rep. .. | 180 |
| | Stephen A. Douglas. | Ill. .. | Dem... | 1,375,157 | ..... | 12 | H. V. Johnson..... | Ga... | Dem... | 12 |
| | J. C. Breckinridge.. | Ky .. | Dem... | 845,763 | ..... | 72 | Joseph Lane. ..... | Ore.. | Dem... | 72 |
| | John Bell..... | Tenn. | Union . | 589,581 | ..... | 39 | Edward Everett.... | Mass. | Union . | 39 |
| 1864 | *Abraham Lincoln.. | Ill. .. | Rep. .. | 2,216,067 | 407,342 | 212 | *Andrew Johnson... | Tenn. | Rep. .. | 212 |
| | Geo. B. McClellan.. | N. J. | Dem... | 1,808 725 | ..... | 21 | Geo. H. Pendleton.. | Ohio. | Dem... | 21 |
| 1868 | *Ulysses S. Grant... | Ill. .. | Rep. .. | 3,015,071 | 305,456 | 214 | *Schuyler Colfax. .. | Ind.. | Rep. .. | 214 |
| | Horatio Seymour... | N.Y. | Dem... | 2,709,615 | ..... | 80 | F. P. Blair, Jr..... | Mo.. | Dem... | 80 |

ELECTORAL AND POPULAR VOTES—*Continued.*

| Yr. Election. | Candidates for President. | State. | Political Party. | Popular Vote. | Plurality. | Electoral Vote | Candidates for Vice-President. | State. | Political Party. | Electoral Vote |
|---|---|---|---|---|---|---|---|---|---|---|
| 1872 | *Ulysses S. Grant | Ill | Rep. | 3,597,070 | 762,991 | 286 | *Henry Wilson | Mass. | Rep. | 286 |
| | Horace Greeley | N.Y. | D.& L. | 2,834,079 | | | B. Gratz Brown | Mo. | D. & L. | 47 |
| | Charles O'Conor | N.Y. | Dem. | 29,408 | | | John Q. Adams | Mass. | Dem. | |
| | James Black | Pa. | Temp. | 5,608 | | | John Russell | Mich. | Temp. | |
| | Thos. A. Hendricks | Ind. | Dem. | | | 42 | George W. Julian | Ind. | Lib. | 5 |
| | B. Gratz Brown | Mo. | Dem. | | | 18 | A. H. Colquitt | Ga. | Dem. | 5 |
| | Charles J. Jenkins | Ga. | Dem. | | | 2 | John M. Palmer | Ill. | Dem. | 3 |
| | David Dav.s | Ill. | Ind. | | | 1 | T. E. Bramlette | Ky. | Dem. | 3 |
| | | | | | | | W. S. Groesbeck | Ohio | Dem. | 1 |
| | | | | | | | Willis B. Machen | Ky. | Dem. | 1 |
| | | | | | | | N. P. Banks | Mass. | Lib. | 1 |
| 1876 | Samuel J. Tild n | N.Y. | Dem. | 4,284,885 | 250,935 | 184 | T. A. Hendricks | Ind. | Dem. | 184 |
| | *Rutherf'd B. Hayes | Ohio | Rep. | 4,033,950 | | 185 | *Wm. A. Wheeler | N.Y. | Rep. | 185 |
| | Peter Cooper | N.Y. | Gre'nb. | 81,740 | | | Samuel F. Cary | Ohio | Gre'nb. | |
| | Green Clay Smith | Ky. | Proh. | 9,522 | | | Gideon T. Stewart | Ohio | Proh. | |
| | James B. Walker | Ill. | Amer. | 2,636 | | | D. Kirkpatrick | N.Y. | Amer. | |
| 1880 | *James A. Garfield | Ohio | Rep. | 4,449 053 | 7,023 | 214 | *Chester A. Arthur | N.Y. | Rep. | 214 |
| | W. S. Hancock | Pa. | Dem. | 4,442,030 | | 155 | William H. English | Ind. | Dem. | 155 |
| | James B. Weaver | Iowa | Gre'nb. | 307,306 | | | B. J. Chambers | Tex. | Gre'nb. | |
| | Neal Dow | Me. | Proh. | 10,305 | | | H. A. Thompson | Ohio | Proh | |
| | John W. Phelps | Vt. | Amer. | 707 | | | S. C. Pomeroy | Kan. | Amer | |
| 1884 | *Grover Cleveland | N.Y. | Dem. | 4,911,017 | 62,683 | 219 | *T. A. Hendricks | Ind. | Dem. | 219 |
| | James G. Blaine | Me. | Rep. | 4,848,334 | | 182 | John A. Logan | Ill. | Rep. | 182 |
| | John P. St. John | Kan. | Proh. | 151,809 | | | William Daniel | Md. | Proh. | |
| | Benjamin F. Butler | Mass. | Gre'nb. | 133,825 | | | A. M. West | Miss. | Gre'nb. | |
| | P. D. Wigginton | Cal. | Amer. | | | | | | | |
| 1888 | Grover Cleveland | N.Y. | Dem. | 5,540,050 | 95,713 | 168 | Al'en G. Thurman | Ohio | Dem. | 168 |
| | *Benj. Harrison | Ind. | Rep. | 5,444,337 | | 233 | *Levi P. Morton | N.Y. | Rep. | 233 |
| | Clinton B. Fisk | N. J. | Proh. | 259,129 | | | John A. Brooks | Mo. | Proh. | |
| | Alson J. Streeter | Ill. | U. L. | 146,897 | | | C. E. Cunningham | Ark. | U. L. | |
| | R. H. Cowdry | Ill. | U'd L. | 2,418 | | | W. H. T. Wakefield | Kan | U'd L. | |
| | James L. Curtis | N.Y. | Amer. | 1,591 | | | James B. Greer | Tenn. | Amer. | |
| 1892 | *Grover Cleveland | N.Y. | Dem. | 5,554,414 | 363,612 | 277 | *Adlai E.Stevenson | Ill. | Dem. | 277 |
| | Benjamin Harrison | Ind. | Rep. | 5,190,802 | | 145 | Whitelaw Reid | N.Y. | Rep. | 145 |
| | James B. Weaver | Iowa | Peop. | 1,027,329 | | 22 | James G. Field | Va. | Peop. | 22 |
| | John Bidwell | Cal. | Proh. | 271,058 | | | James B. Cranfill | Tex. | Proh. | |
| | Simon Wing | Mass. | Soc. L. | 21,164 | | | Chas. H. Matchett | N.Y. | Soc. L. | |
| 1896 | *Wm. McKinley | Ohio | Rep. | 7,035,638 | 567,692 | 271 | *Garret A. Hobart | N. J. | Rep. | 271 |
| | William J. Bryan | Neb. | Dem. } | 6,467,946 | | 176 | Arthur Sewall | Me. | Dem. | 149 |
| | William J. Bryan | Neb. | Peop. } | | | | Thomas E. Watson | Ga. | Peop. | 27 |
| | Joshua Levering | Md. | Proh. | 141,676 | | | Hale Johnson | Ill. | Proh. | |
| | John M. Palmer | Ill. | N.Dem | 131,529 | | | Simon B. Buckner | Ky. | N.Dem | |
| | Chas. H. Matchett | N.Y. | Soc. L. | 36,274 | | | Matthew Maguire | N. J. | Soc. L. | |
| | Charles E. Bentley | Neb. | Nat. | 13,969 | | | James H. Southgate | N. C. | Nat. | |
| 1900 | *Wm. McKinley | Ohio | Rep. | 7,219,530 | 861 459 | 292 | *Theo. Roosevelt | N.Y. | Rep. | 292 |
| | William J. Bryan | Neb. | Dem P. | 6,358,071 | | 155 | Adlai E. Stevenson | Ill. | Dem P. | 155 |
| | John G. Woolley | Ill. | Proh. | 209,166 | | | Henry B. Metcalf | Ohio | Proh. | |
| | Wharton Barker | Pa. | MP. | 50,232 | | | Ignatius Donnelly | Minn. | MP. | |
| | Eugene V. Debs | Ind. | Soc.D | 94,768 | | | Job Harriman | Cal. | Soc D. | |
| | Jos. F. Malloney | Mass. | Soc. L. | 39,739 | | | Valentine Remmel | Pa. | Soc. L. | |
| | J. F. R. Leonard | Iowa | U. C. | 1,059 | | | John G. Woolley | Ill. | U. C. | |
| | Seth H. Ellis | Ohio | U. R. | 5,698 | | | Sam T. Nicholson | Pa. | U. R. | |
| 1904 | *Theo. Roosevelt | N.Y. | Rep. | 7,628,834 | 2,544,343 | 336 | *Chas. W. Fairbanks | Ind. | Rep. | 336 |
| | Alton B. Parker | N.Y. | Dem. | 5,084,491 | | 140 | Henry G. Davis | W.Va | Dem. | 140 |
| | Eugene V. Debs | Ind. | Soc. | 402,400 | | | Benjamin Hanford | N.Y. | Soc. | |
| | Silas C. Swallow | Pa. | Proh. | 259,257 | | | George W. Carroll | Tex. | Proh. | |
| | Thomas E. Watson | Ga. | Peop. | 114,753 | | | Thomas H. Tibbles | Neb. | Peop. | |
| | Chas. H. Corregan | N.Y. | Soc. L. | 31,249 | | | William W. Cox | Ill. | Soc. L. | |
| 1908 | *William H. Taft | Ohio | Rep. | 7,679,006 | 1,269,900 | 321 | * James S. Sherman | N.Y. | Rep. | 321 |
| | William J. Bryan | Neb | Dem. | 6,409,106 | | 162 | John W. Kern | Ind. | Dem. | 162 |
| | Eugene V. Debs | Ind. | Soc. | 420,820 | | | Benjamin Hanford | N.Y. | Soc. | |
| | Eugene W. Chafin | Ariz. | Proh. | 252,683 | | | Aaron S. Watkins | Ohio | Proh. | |
| | Thomas E. Watson | Ga. | Peop. | 29,100 | | | Samuel Williams | Ind. | Peop. | |
| | August Gillhaus | N.Y. | Soc. L. | 13,825 | | | Donald L. Munro | Va. | Soc. L. | |
| | Thomas L. Hisgen | Mass. | Ind. | 83,562 | | | John Temple Graves | Ga. | Ind. | |
| 1912 | *Woodrow Wilson | N.J. | Dem | 6,286,214 | 2,802,292 | 435 | *Thos. R. Marshall | Ind. | Dem. | 435 |
| | William H. Taft | Ohio | Rep. | 3,483,922 | | 8 | †Nicholas M. Butler | N.Y. | Rep. | 8 |
| | Theo. Roosevelt | N.Y. | Prog. | 4,126,020 | | 88 | Hiram W. Johnson | Cal. | Prog. | 88 |
| | Eugene V. Debs | Ind. | Soc. | 897,011 | | | Emil Seidel | Wis. | Soc. | |
| | Eugene W. Chafin | Ariz. | Proh. | 208,923 | | | Aaron S. Watkins | Ohio | Proh. | |
| | Arthur E. Reimer | Mass. | Soc. L. | 29,259 | | | August Gillhaus | N.Y. | Soc. L. | |
| 1916 | *Woodrow Wilson | N.J. | Dem. | 9,129,606 | 591,385 | 277 | *Thos. R. Marshall | Ind. | Dem. | 277 |
| | Charles E. Hughes | N.Y. | Rep. | 8,538,221 | | 254 | Chas. W. Fairbanks | Ind. | Rep. | 254 |
| | Allan J. Benson | N.Y. | Soc. | 585,113 | | | Geo. R. Kirkpatrick | N.J. | Soc. | |
| | J. Frank Hanly | Ind. | Proh. | 220,506 | | | Ira Landrith | Mass. | Proh. | |
| | Arthur E. Reimer | Mass. | Soc. L. | 14,180 | | | Caleb Harrison | Ill. | Soc. L. | |
| 1920 | *Warren G. Harding | Ohio | Rep. | 16,152,200 | 7,004,847 | 404 | *Calvin Coolidge | Mass. | Rep. | 404 |
| | James M. Cox | Ohio | Dem. | 9,147,353 | | 127 | F. D. Roosevelt | N. Y. | Dem. | 127 |
| | Eugene V. Debs | Ind. | Soc. | 919,799 | | | Seymour Stedman | Ill. | Soc. | |
| | P. P. Christensen | Utah | F.-L. | 265,411 | | | Max S. Hayes | Ohio | F.-L. | |
| | A. S Watkins | | Proh. | 189,408 | | | | | | |
| | W. W. Cox | Mo. | Soc. L. | 31,175 | | | Aug. Gillhaus | N Y. | Soc. L | |

*The candidates starred were elected. †J. S. Sherman, Convention nominee, died October 30.

## PARTY STRENGTH IN CONGRESS.

### FEDERALISTS AND REPUBLICANS.

| Congress. | | Federalists. | | Republicans. | | President. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | Senate. | House. | Senate. | House. | | |
| 1st. | 1789–1791 | 24 | 53 | 2 | 12 | Washington. | In Colonial and Revolutionary Days the Americans were either Whigs (Liberals), or Tories (Conservatives). John Adams called it a division between the Court party and the Country party. There was, however, no party organization, and the Colonists were mostly Whigs. The rulers sent from England were the Tories. In the Revolution, the people were divided between Patriots (Whigs), and Loyalists (Tories). Immediately after the Revolution, the people became either Nationalists (Republicans), or Federalists, according as they favored States' rights, or a strongly centralized government. The Federalists were stronger in the big States, such as Va., Pa., and Mass. The Republicans also were called Democrats, or Democratic-Republicans. |
| 2nd. | 1791–1793 | 17 | 55 | 13 | 14 | Washington. | |
| 3rd. | 1793–1795 | 18 | 51 | 12 | 54 | Washington. | |
| 4th. | 1795–1797 | 19 | 47 | 13 | 59 | Washington. | |
| 5th. | 1797–1799 | 21 | 52 | 11 | 54 | Adams. | |
| 6th. | 1799–1801 | 19 | 58 | 13 | 48 | Adams. | |
| 7th. | 1801–1803 | 13 | 35 | 19 | 71 | Jefferson. | |
| 8th. | 1803–1805 | 10 | 39 | 24 | 103 | Jefferson. | |
| 9th. | 1805–1807 | 7 | 30 | 27 | 112 | Jefferson. | |
| 10th. | 1807–1809 | 7 | 28 | 31 | 110 | Jefferson. | |
| 11th. | 1809–1811 | 10 | 47 | 24 | 95 | Madison. | |
| 12th. | 1811–1813 | 6 | 36 | 30 | 105 | Madison. | |
| 13th. | 1813–1815 | 9 | 67 | 27 | 115 | Madison. | |
| 14th. | 1815–1817 | 12 | 61 | 26 | 122 | Madison. | |
| 15th. | 1817–1819 | 10 | 57 | 34 | 128 | Monroe. | |
| 16th. | 1819–1821 | 10 | 42 | 36 | 145 | Monroe. | |
| 17th. | 1821–1823 | 7 | 58 | 41 | 129 | Monroe. | |
| 18th. | 1823–1825 | 8 | 72 | 40 | 141 | Monroe. | |
| 19th. | 1825–1827 | 10 | 79 | 38 | 134 | Adams. | |
| 20th. | 1827–1829 | 11 | 85 | 37 | 128 | Adams. | |

### DEMOCRATS AND WHIGS.

| Congress. | | Democrats. | | Whigs. | | President. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | Senate. | House. | Senate. | House. | | |
| 21st. | 1829–1831 | 38 | 142 | 10 | 71 | Jackson. | The Whig party at first included National Republicans, Nullifiers, Anti-Masons, and Federalists. It finally went to pieces, as a party, on the slavery issue, and its last Presidential candidate was Gen. Scott, in 1852, who carried but four States —Mass., Vt., Ky., and Tenn. The Democratic party gradually absorbed the various pro-Slavery and States' rights elements. In the 25th Congress there were 5 Independents in the Senate and 13 in the House; in the 26th, 2 in the Senate and 6 in the House; in the 30th, 4 in the House. In the 29th Congress there were 6 Native Americans in the House as Independents. |
| 22nd. | 1831–1833 | 35 | 130 | 13 | 83 | Jackson. | |
| 23rd. | 1833–1835 | 30 | 147 | 18 | 93 | Jackson. | |
| 24th. | 1835–1837 | 33 | 144 | 19 | 98 | Jackson. | |
| 25th. | 1837–1839 | 29 | 109 | 18 | 120 | Van Buren. | |
| 26th. | 1839–1841 | 29 | 124 | 20 | 112 | Van Buren. | |
| 27th. | 1841–1843 | 20 | 106 | 28 | 134 | Harrison–Tyler. | |
| 28th. | 1843–1845 | 23 | 142 | 29 | 81 | Tyler. | |
| 29th. | 1845–1847 | 32 | 142 | 24 | 77 | Polk. | |
| 30th. | 1847–1849 | 34 | 109 | 21 | 115 | Polk. | |
| 31st. | 1849–1851 | 33 | 116 | 25 | 107 | Taylor–Fillmore. | |
| 32nd. | 1851–1853 | 36 | 140 | 23 | 88 | Fillmore. | |
| 33rd. | 1853–1855 | 39 | 157 | 18 | 73 | Pierce. | |

### DEMOCRATS AND REPUBLICANS.

| Congress. | | Democrats. | | Republicans. | | President. | Independents in Congress (Not Counted in Regular Table). S stands for Senate; H, for House. |
|---|---|---|---|---|---|---|---|
| | | Senate. | House. | Senate. | House. | | |
| 34th. | 1855–1857 | 41 | 83 | 16 | 108 | Pierce. | Americans, S., 5; H., 43. |
| 35th. | 1857–1859 | 38 | 93 | 26 | 113 | Buchanan. | Americans, S., 2; H., 23. Ind. Dem., H., 8. |
| 36th. | 1859–1861 | 36 | 87 | 26 | 114 | Buchanan. | Americans, S., 2; H., 24. Ind. Dem., H., 6. |
| 37th. | 1861–1863 | 8 | 43 | 31 | 105 | Lincoln. | Unionists, S., 10; H., 30. |
| 38th. | 1863–1865 | 12 | 80 | 39 | 103 | Lincoln. | ..... |
| 39th. | 1865–1867 | 10 | 46 | 42 | 145 | Lincoln; Johnson. | ..... |
| 40th. | 1867–1869 | 12 | 48 | 54 | 174 | Johnson. | ..... |
| 41st. | 1869–1871 | 11 | 73 | 61 | 170 | Grant. | ..... |
| 42nd. | 1871–1873 | 17 | 105 | 51 | 133 | Grant. | Liberal Rep., S., 6; H., 5. |
| 43rd. | 1873–1875 | 19 | 88 | 51 | 198 | Grant. | Liberal Rep., S., 4; H., 5. |
| 44th. | 1875–1877 | 29 | 181 | 47 | 107 | Grant. | Ind., H., 3. |
| 45th. | 1877–1879 | 36 | 156 | 39 | 137 | Hayes. | Ind., S., 1. |
| 46th. | 1879–1881 | 43 | 156 | 33 | 133 | Hayes. | ..... |
| 47th. | 1881–1883 | 37 | 130 | 37 | 152 | Garfield–Arthur. | Ind., S., 2. Greenback, H., 11. |
| 48th. | 1883–1885 | 36 | 200 | 40 | 119 | Arthur. | Greenback, H., 6. |
| 49th. | 1885–1887 | 34 | 183 | 42 | 139 | Cleveland. | Greenback, H., 3. |
| 50th. | 1887–1889 | 37 | 169 | 39 | 152 | Cleveland. | Ind., H., 4. |
| 51st. | 1889–1891 | 37 | 161 | 45 | 169 | Harrison. | ..... |
| 52nd. | 1891–1893 | 39 | 235 | 47 | 88 | Harrison. | Ind., S., 2. Farmers' Alliance, H., 9. |
| 53rd. | 1893–1895 | 44 | 218 | 37 | 127 | Cleveland. | Ind., S., 4; H., 11. |
| 54th. | 1895–1897 | 39 | 104 | 43 | 248 | Cleveland. | Ind., S., 6; H., 7. |
| 55th. | 1897–1899 | 34 | 130 | 47 | 202 | McKinley. | Silver and Pop., S., 8; H., 25. |
| 56th. | 1899–1901 | 26 | 159 | 50 | 189 | McKinley. | Silver and Pop., S., 10; H., 8. |
| 57th. | 1901–1903 | 29 | 151 | 53 | 198 | McKinley–Roosevelt. | Pop. and Ind., S., 8; H., 8. |
| 58th. | 1903–1905 | 33 | 178 | 57 | 208 | Roosevelt. | Union Labor, H., 2. |
| 59th. | 1905–1907 | 32 | 136 | 58 | 250 | Roosevelt. | ..... |
| 60th. | 1907–1909 | 31 | 166 | 60 | 220 | Roosevelt. | ..... |
| 61st. | 1909–1911 | 32 | 175 | 60 | 214 | Taft. | Unionist, H., 1. |
| 62nd. | 1911–1913 | 42 | 227 | 49 | 162 | Taft. | Soc., H., 1. |
| 63rd. | 1913–1915 | 51 | 290 | 45 | 127 | Wilson. | Progressive, H., 18. |
| 64th. | 1915–1917 | 55 | 230 | 41 | 201 | Wilson. | Prog., H., 5. Ind., H., 1. Soc., H., 1. |
| 65th. | 1917–1919 | 51 | 209 | 42 | 212 | Wilson. | Prog., S., 1.; H., 3. Soc., H., 1. Ind., H., 2. |
| 66th. | 1919–1921 | 47 | 190 | 49 | 240 | Wilson. | Ind., H., 2. Proh., H., 1. |
| 67th. | 1921–1923 | 37 | 132 | 59 | 300 | Harding. | Soc., H., 1. |
| 68th. | 1923–1925 | 42 | 206 | 53 | 223 | Harding. | F.L., S., 1; Soc., H., 1; F.L., H., 1; Ind., H., 1. |

### PARTY STRENGTH IN EARLY CONGRESSES.

The figures as to party strength in the First to the Twentieth, and also in the Twenty-first to the Thirty-first Congresses are slightly at variance as between different political authorities. The data in the table above are as nearly correct as possible.

## APPORTIONMENT OF CONGRESSIONAL REPRESENTATION.

(Ratios under the Constitution and at each census, 1790 to 1910, by States. Source: Reports of the Bureau of the Census, Department of Commerce.)

| State. | Ratios Under Constitution and Censuses. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Constitution. | 1790. | 1800. | 1810. | 1820. | 1830. | 1840. | 1850. | 1860. | 1870. | 1880. | 1890. | 1900. | 1910. |
| | 30,000. | 33,000. | 33,000. | 35,000. | 40,000. | 47,700. | 70,680. | 93,423. | 127,381. | 131,425. | 151,911. | 173,901. | 194,182. | 211,877. |
| | Representation. | | | | | | | | | | | | | |
| Alabama | | | | 1 | 3 | 5 | 7 | 7 | 6 | 8 | 8 | 9 | 9 | 10 |
| Arizona | | | | | | | | | | | | | | 1 |
| Arkansas | | | | | | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 7 |
| California | | | | | | | 2 | 2 | 3 | 4 | 6 | 7 | 8 | 11 |
| Colorado | | | | | | | | | | 1 | 1 | 2 | 3 | 4 |
| Connecticut | 5 | 7 | 7 | 7 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Delaware | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Florida | | | | | | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 |
| Georgia | 3 | 2 | 4 | 6 | 7 | 9 | 8 | 8 | 7 | 9 | 10 | 11 | 11 | 12 |
| Idaho | | | | | | | | | | | 1 | 1 | 1 | 2 |
| Illinois | | | | 1 | 1 | 3 | 7 | 9 | 14 | 19 | 20 | 22 | 25 | 27 |
| Indiana | | | | 1 | 3 | 7 | 10 | 11 | 11 | 13 | 13 | 13 | 13 | 13 |
| Iowa | | | | | | | 2 | 2 | 6 | 9 | 11 | 11 | 11 | 11 |
| Kansas | | | | | | | | | 1 | 3 | 7 | 8 | 8 | 8 |
| Kentucky | | 2 | 6 | 10 | 12 | 13 | 10 | 10 | 9 | 10 | 11 | 11 | 11 | 11 |
| Louisiana | | | | 1 | 3 | 3 | 4 | 4 | 5 | 6 | 6 | 6 | 7 | 8 |
| Maine | | | | 7 | 7 | 8 | 7 | 6 | 5 | 5 | 4 | 4 | 4 | 4 |
| Maryland | 6 | 8 | 9 | 9 | 9 | 8 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 |
| Massachusetts | 8 | 14 | 17 | 13 | 13 | 12 | 10 | 11 | 10 | 11 | 12 | 13 | 14 | 16 |
| Michigan | | | | | | 1 | 3 | 4 | 6 | 9 | 11 | 12 | 12 | 13 |
| Minnesota | | | | | | | | 2 | 2 | 3 | 5 | 7 | 9 | 10 |
| Mississippi | | | | 1 | 1 | 2 | 4 | 5 | 5 | 6 | 7 | 7 | 8 | 8 |
| Missouri | | | | | 1 | 2 | 5 | 7 | 9 | 13 | 14 | 15 | 16 | 16 |
| Montana | | | | | | | | | | | 1 | 1 | 1 | 2 |
| Nebraska | | | | | | | | | 1 | 1 | 3 | 6 | 6 | 6 |
| Nevada | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| New Hampshire | 3 | 4 | 5 | 6 | 6 | 5 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 |
| New Jersey | 4 | 5 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 7 | 7 | 8 | 10 | 12 |
| New Mexico | | | | | | | | | | | | | | 1 |
| New York | 6 | 10 | 17 | 27 | 34 | 40 | 34 | 33 | 31 | 33 | 34 | 34 | 37 | 43 |
| North Carolina | 5 | 10 | 12 | 13 | 13 | 13 | 9 | 8 | 7 | 8 | 9 | 9 | 10 | 10 |
| North Dakota | | | | | | | | | | | 1 | 1 | 2 | 3 |
| Ohio | | | 1 | 6 | 14 | 19 | 21 | 21 | 19 | 20 | 21 | 21 | 21 | 22 |
| Oklahoma | | | | | | | | | | | | | 5 | 8 |
| Oregon | | | | | | | | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| Pennsylvania | 8 | 13 | 18 | 23 | 26 | 28 | 24 | 25 | 24 | 27 | 28 | 30 | 32 | 36 |
| Rhode Island | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| So. Carolina | 5 | 6 | 8 | 9 | 9 | 9 | 7 | 6 | 4 | 5 | 7 | 7 | 7 | 7 |
| South Dakota | | | | | | | | | | | 2 | 2 | 2 | 3 |
| Tennessee | | 1 | 3 | 6 | 9 | 13 | 11 | 10 | 8 | 10 | 10 | 10 | 10 | 10 |
| Texas | | | | | | | 2 | 2 | 4 | 6 | 11 | 13 | 16 | 18 |
| Utah | | | | | | | | | | | | 1 | 1 | 2 |
| Vermont | | 2 | 4 | 6 | 5 | 5 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 |
| Virginia | 10 | 19 | 22 | 23 | 22 | 21 | 15 | 13 | 11 | 9 | 10 | 10 | 10 | 10 |
| Washington | | | | | | | | | | | 1 | 2 | 3 | 5 |
| West Virginia | | | | | | | | | | 3 | 4 | 4 | 5 | 6 |
| Wisconsin | | | | | | | 2 | 3 | 6 | 8 | 9 | 10 | 11 | 11 |
| Wyoming | | | | | | | | | | | 1 | 1 | 1 | 1 |
| Total | 65 | 106 | 142 | 186 | 213 | 242 | 232 | 237 | 243 | 293 | 332 | 357 | 391 | 435 |

### NOTES ON THE ABOVE TABLE.

Since the taking of the Census of 1920 there have been several efforts in the House of Representatives to legislate toward an increase in membership, based on the growth of population. Up to the end of 1922 none of these efforts had succeeded. The chief objection to enlarging the House is that it would make that body too large and cumbersome.

Membership of House under census of 1850 was increased from 233 to 234 by act of July 30, 1852; membership under census of 1860 was increased from 233 to 241 by act of March 4, 1862; membership under census of 1870 was originally fixed at 283, but increased to 292 by act of May 30, 1872.

Representation such as shown in table was assigned after apportionment under censuses, as follows: (1790) Tenn.; (1800) Ohio; (1810) Ala., Del., Ind., La., Miss.; (1830) Ark., Mich.; (1840) Cal., Fla., Iowa, Texas, Wis.; (1850) Minn., Ore.; (1860) Neb., Nev.; (1870) Col.; (1880) Idaho, Mont., S. D, N. D., Wash., Wyo.; (1890) Utah; (1900) Okla.

Ariz. and N. Mex. were included in apportionment under 1910 census, in anticipation of becoming States.

Maine's apportionment of seven members under 1810 census was included in the 20 members originally assigned to Mass. but credited to Maine after it became a State, March 15, 1820.

The ratio under the Constitution was one Representative in Congress for each 30,000 of population. Thereafter, the ratios, as determined by the decennial censuses, were as follows: 1790 and 1800, one to each 33,000; 1810, one in each 35,000; 1820, one in each 40,000; 1830, one in each 47,700; 1840, one in each 70,680; 1850, one in each 93,423; 1860, one in each 127,381; 1870, one in each 131,425; 1880, one in each 151,911; 1890, one in each 173,901; 1900, one in each 194,182; 1910, one in each 211,877.

Of the thirteen Original States the present quotas are the same as under the Constitution in Connecticut, Delaware, Maryland, and Virginia. The original quotas in the other Original States were as follows: Georgia, 3; Massachusetts, 8; New Hampshire, 3; New Jersey, 4; New York, 6; North Carolina, 5; Pennsylvania, 8; Rhode Island, 1; Carolina, 5.

## PAST POLITICAL COMPLEXION OF THE STATES (1828-1920).

R, Republican; W, Whig; D, Democratic; U, Union; A, American; A. M., Anti-Mason; N. R., National Republican; P, Populist; Pr., Progressive.

| STATE. | 1828. | 1832. | 1836. | 1840. | 1844. | 1848. | 1852. | 1856. | 1860. | 1864. | 1868. | 1872. | 1876. | 1880. | 1884. | 1888. | 1892. | 1896. | 1900. | 1904. | 1908. | 1912. | 1916. | 1920. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | D. | D. | D. | D. | D. | D. | D. | D. | D. | ..... | R. | R. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. |
| Arizona | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | D. | D. | R. |
| Arkansas | ..... | ..... | D. | D. | D. | D. | D. | D. | D. | ..... | R. | R. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. |
| California | ..... | ..... | ..... | ..... | ..... | ..... | D. | D. | R. | R. | R. | R. | R. | D.*g* | R. | R. | D.*h* | R.*i* | R. | R. | R. | Pr.*n* | D. | R. |
| Colorado | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R.*a* | R. | R. | R. | P. | D. | D. | R. | D. | D. | D. | R. |
| Connecticut | R. | N.R. | D. | W. | W. | W. | D. | R. | R. | R. | R. | R. | D. | R. | D. | D. | D. | R. | R. | R. | R. | D. | R. | R. |
| Delaware | R. | N.R. | W. | W. | W. | W. | D. | D. | D. | D. | D. | R. | D. | D. | D. | D. | D. | R. | R. | R. | R. | D. | R. | R. |
| Florida | ..... | ..... | ..... | ..... | ..... | W. | D. | D. | D. | ..... | R. | R. | R. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. |
| Georgia | D. | D. | W. | W. | D. | W. | D. | D. | D. | ..... | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. |
| Idaho | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | P. | D. | D. | R. | R. | D. | D. | R. |
| Illinois | D. | D. | D. | D. | D. | D. | D. | D. | R. | R. | R. | R. | R. | R. | R. | R. | D. | R. | R. | R. | R. | D. | R. | R. |
| Indiana | D. | D. | W. | W. | D. | D. | D. | D. | R. | R. | R. | R. | D. | R. | D. | R. | D. | R. | R. | R. | R. | D. | R. | R. |
| Iowa | ..... | ..... | ..... | ..... | ..... | D. | D. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | D. | R. | R. |
| Kansas | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | R. | R. | R. | R. | R. | R. | P. | D. | R. | R. | R. | D. | R. | R. |
| Kentucky | D. | N.R. | W. | W. | W. | W. | W. | D. | U. | D. | D. | D. | D. | D. | D. | D. | D. | R.*b* | D. | D. | D. | D. | D. | D. |
| Louisiana | D. | D. | D. | W. | D. | W. | D. | D. | ..... | D. | R. | R. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. |
| Maine | R. | D. | D. | W. | D. | D. | D. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | D. | R. | R. |
| Maryland | R. | N.R. | W. | W. | W. | W. | D. | A. | D. | R. | D. | D. | D. | D. | D. | D. | D. | R. | R. | D.*j* | D.*k* | D. | R. | R. |
| Massachusetts | R. | N.R. | W. | W. | W. | W. | W. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | D. | R. | R. |
| Michigan | ..... | ..... | D. | W. | D. | D. | D. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R.*c* | R. | R. | R. | R. | Pr. | R. | R. |
| Minnesota | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | Pr. | R. | R. |
| Mississippi | D. | D. | D. | W. | D. | D. | D. | D. | D. | ..... | R. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. |
| Missouri | D. | D. | D. | D. | D. | D. | D. | D. | D. | R. | R. | D. | D. | D. | D. | D. | D. | D. | D. | R. | R. | D. | D. | R. |
| Montana | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | D. | D. | R. | R. | D. | D. | R. |
| Nebraska | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | R. | R. | R. | R. | R. | R. | D. | R. | R. | R. | D. | D. | R. |
| Nevada | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | R. | R. | R. | R. | R. | R. | P. | D. | R. | R. | R. | D. | D. | R. |
| New Hampshire | R. | D. | D. | D. | D. | D. | D. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | D. | D. | R. |
| New Jersey | R. | D. | W. | W. | W. | W. | D. | D. | D. | D. | D. | R. | D. | D. | D. | D. | D. | R. | R. | R. | R. | D. | R. | R. |
| New Mexico | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | D. | R. | R. |
| New York | D. | D. | D. | W. | D. | W. | D. | R. | R. | R. | D. | R. | D. | R. | D. | R. | D. | R. | R. | R. | R. | D. | R. | R. |
| North Carolina | D. | D. | D. | W. | W. | W. | D. | D. | D. | ..... | R. | R. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. |
| North Dakota | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | P.*d* | R. | R. | R. | R. | D. | D. | R. |
| Ohio | D. | D. | W. | W. | W. | D. | D. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R.*e* | R. | R. | R. | R. | D. | D. | R. |
| Oklahoma | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | D. | D. | R. |
| Oregon | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | D. | R. | R. | R. | R. | R. | R.*f* | R. | R. | R. | R. | D. | R. | R. |
| Pennsylvania | D. | D. | D. | W. | D. | W. | D. | D. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | Pr. | R. | R. |
| Rhode Island | R. | N.R. | D. | W. | W. | W. | D. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | D. | R. | R. |
| South Carolina | D. | W. | W. | D. | D. | D. | D. | D. | D. | ..... | R. | R. | R. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. |
| South Dakota | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | D. | R. | R. | R. | Pr. | R. | R. |
| Tennessee | D. | D. | W. | W. | W. | W. | W. | D. | U. | ..... | R. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | R. |
| Texas | ..... | ..... | ..... | ..... | ..... | D. | D. | D. | D. | ..... | ..... | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. | D. |
| Utah | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | D. | R. | R. | R. | R. | D. | R. |
| Vermont | R. | A.M. | W. | W. | W. | W. | W. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. | R. |
| Virginia | D. | D. | D. | D. | D. | D. | D. | D. | U. | ..... | ..... | R. | D. | D. | D. | D. | R. | D. | D. | D. | D. | D. | D. | D. |
| Washington | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | D. | R. | R. | R. | Pr. | D. | R. |
| West Virginia | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | R. | R. | D. | D. | D. | D. | D. | R. | R. | R. | R. | D. | R.*g* | R. |
| Wisconsin | ..... | ..... | ..... | ..... | ..... | D. | D. | R. | R. | R. | R. | R. | R. | R. | R. | R. | D. | R. | R. | R. | R. | D. | R. | R. |
| Wyoming | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | R. | D. | R. | R. | R. | D. | D. | R. |

*a* Electors chosen by the Legislature. *b* Rep., 12; Dem., 1. *c* Rep., 9; Dem., 5. *d* Rep., 1; Dem., 1. *e* Rep., 22; Dem., 1. *f* Rep., 3; People, 1. *g* Dem., 5; Rep., 1. *h* Dem., 8; Rep., 1. *i* Dem., 1; Rep., 8. *j* Dem., 7; Rep., 1. *k* Dem., 6; Rep., 2. *n* Dem., 2; Prog., 11. *q* Hughes, 7; Wilson, 1

## ELECTORAL VOTE FOR PRESIDENT, BY PARTIES AND STATES.

| STATE. | 1892. | | | 1896. | | 1900. | | 1904. | | 1908. | | 1912. | | | | 1916. | | 1920. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | R. | D. | P. | R. | D.P | R. | D. | R. | D. | R. | D. | R. | D. | P. | T'l. | R. | D. | R. | D. |
| Alabama | .... | 11 | .... | .... | 11 | .... | 11 | .... | 11 | .... | 11 | .... | 12 | .... | 12 | .... | 12 | .... | 12 |
| Arizona | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 3 | .... | 3 | .... | 3 | 3 | .... |
| Arkansas | .... | 8 | .... | .... | 8 | .... | 8 | .... | 9 | .... | 9 | .... | 9 | .... | 9 | .... | 9 | .... | 9 |
| California | 1 | 8 | .... | 8 | 1 | 9 | .... | 10 | .... | 10 | .... | .... | 2 | 11 | 13 | .... | 13 | 13 | .... |
| Colorado | .... | .... | 4 | .... | 4 | .... | 4 | .... | 5 | .... | 5 | .... | 6 | .... | 6 | .... | 6 | 6 | .... |
| Connecticut | .... | 6 | .... | 6 | .... | 6 | .... | 7 | .... | 7 | .... | .... | 7 | .... | 7 | 7 | .... | 7 | .... |
| Delaware | .... | 3 | .... | 3 | .... | 3 | .... | 3 | .... | 3 | .... | .... | 3 | .... | 3 | 3 | .... | 3 | .... |
| Florida | .... | 4 | .... | .... | 4 | .... | 4 | .... | 5 | .... | 5 | .... | 6 | .... | 6 | .... | 6 | .... | 6 |
| Georgia | .... | 13 | .... | .... | 13 | .... | 13 | .... | 13 | .... | 13 | .... | 14 | .... | 14 | .... | 14 | .... | 14 |
| Idaho | .... | .... | 3 | .... | 3 | .... | 3 | 3 | .... | 3 | .... | .... | 4 | .... | 4 | .... | 4 | 4 | .... |
| Illinois | .... | 24 | .... | 24 | .... | 24 | .... | 27 | .... | 27 | .... | .... | 29 | .... | 29 | 29 | .... | 29 | .... |
| Indiana | .... | 15 | .... | 15 | .... | 15 | .... | 15 | .... | 15 | .... | .... | 15 | .... | 15 | 15 | .... | 15 | .... |
| Iowa | 13 | .... | .... | 13 | .... | 13 | .... | 13 | .... | 13 | .... | .... | 13 | .... | 13 | 13 | .... | 13 | .... |
| Kansas | .... | .... | 10 | .... | 10 | 10 | .... | 10 | .... | 10 | .... | .... | 10 | .... | 10 | .... | 10 | 10 | .... |
| Kentucky | .... | 13 | .... | 12 | 1 | .... | 13 | .... | 13 | .... | 13 | .... | 13 | .... | 13 | .... | 13 | .... | 13 |
| Louisiana | .... | 8 | .... | .... | 8 | .... | 8 | .... | 9 | .... | 9 | .... | 10 | .... | 10 | .... | 10 | .... | 10 |
| Maine | 6 | .... | .... | 6 | .... | 6 | .... | 6 | .... | 6 | .... | .... | 6 | .... | 6 | 6 | .... | 6 | .... |
| Maryland | .... | 8 | .... | 8 | .... | 8 | .... | 1 | 7 | 2 | 6 | .... | 8 | .... | 8 | .... | 8 | 8 | .... |
| Massachus'ts. | 15 | .... | .... | 15 | .... | 15 | .... | 16 | .... | 16 | .... | .... | 18 | .... | 18 | 18 | .... | 18 | .... |
| Michigan | 9 | 5 | .... | 14 | .... | 14 | .... | 14 | .... | 14 | .... | .... | .... | 15 | 15 | 15 | .... | 15 | .... |
| Minnesota | 9 | .... | .... | 9 | .... | 9 | .... | 11 | .... | 11 | .... | .... | .... | 12 | 12 | 12 | .... | 12 | .... |
| Mississippi | .... | 9 | .... | .... | 9 | .... | 9 | .... | 10 | .... | 10 | .... | 10 | .... | 10 | .... | 10 | .... | 10 |
| Missouri | .... | 17 | .... | .... | 17 | .... | 17 | 18 | .... | 18 | .... | .... | 18 | .... | 18 | 18 | .... | 18 | .... |
| Montana | 3 | .... | .... | .... | 3 | .... | 3 | 3 | .... | 3 | .... | .... | 4 | .... | 4 | .... | 4 | 4 | .... |
| Nebraska | 8 | .... | .... | .... | 8 | 8 | .... | 8 | .... | .... | 8 | .... | 8 | .... | 8 | .... | 8 | 8 | .... |
| Nevada | .... | .... | 3 | .... | 3 | .... | 3 | 3 | .... | .... | 3 | .... | 3 | .... | 3 | .... | 3 | 3 | .... |
| N. Hampshire | 4 | .... | .... | 4 | .... | 4 | .... | 4 | .... | 4 | .... | .... | 4 | .... | 4 | .... | 4 | 4 | .... |
| New Jersey | .... | 10 | .... | 10 | .... | 10 | .... | 12 | .... | 12 | .... | .... | 14 | .... | 14 | 14 | .... | 14 | .... |
| New Mexico | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 3 | .... | 3 | .... | 3 | 3 | .... |
| New York | .... | 36 | .... | 36 | .... | 36 | .... | 39 | .... | 39 | .... | .... | 45 | .... | 45 | 45 | .... | 45 | .... |
| No. Carolina | .... | 11 | .... | .... | 11 | .... | 11 | .... | 12 | .... | 12 | .... | 12 | .... | 12 | .... | 12 | .... | 12 |
| No. Dakota | 1 | 1 | 1 | 3 | .... | 3 | .... | 4 | .... | 4 | .... | .... | 5 | .... | 5 | .... | 5 | 5 | .... |
| Ohio | 22 | 1 | .... | 23 | .... | 23 | .... | 23 | .... | 23 | .... | .... | 24 | .... | 24 | 24 | .... | 24 | .... |
| Oklahoma | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 7 | .... | 10 | .... | 10 | .... | 10 | 10 | .... |
| Oregon | 3 | .... | 1 | 4 | .... | 4 | .... | 4 | .... | 4 | .... | .... | 5 | .... | 5 | 5 | .... | 5 | .... |
| Pennsylvania | 32 | .... | .... | 32 | .... | 32 | .... | 34 | .... | 34 | .... | .... | .... | 38 | 38 | 38 | .... | 38 | .... |
| Rhode Island | 4 | .... | .... | 4 | .... | 4 | .... | 4 | .... | 4 | .... | .... | 5 | .... | 5 | 5 | .... | 5 | .... |
| So. Carolina | .... | 9 | .... | .... | 9 | .... | 9 | .... | 9 | .... | 9 | .... | 9 | .... | 9 | .... | 9 | .... | 9 |
| South Dakota | 4 | .... | .... | .... | 4 | 4 | .... | 4 | .... | 4 | .... | .... | .... | 5 | 5 | 5 | .... | 5 | .... |
| Tennessee | .... | 12 | .... | .... | 12 | .... | 12 | .... | 12 | .... | 12 | .... | 12 | .... | 12 | .... | 12 | 12 | .... |
| Texas | .... | 15 | .... | .... | 15 | .... | 15 | .... | 18 | .... | 18 | .... | 20 | .... | 20 | .... | 20 | .... | 20 |
| Utah | .... | .... | .... | .... | 3 | 3 | .... | 3 | .... | 3 | .... | 4 | .... | .... | 4 | .... | 4 | 4 | .... |
| Vermont | 4 | .... | .... | 4 | .... | 4 | .... | 4 | .... | 4 | .... | 4 | .... | .... | 4 | 4 | .... | 4 | .... |
| Virginia | .... | 12 | .... | .... | 12 | .... | 12 | .... | 12 | .... | 12 | .... | 12 | .... | 12 | .... | 12 | .... | 12 |
| Washington | 4 | .... | .... | .... | 4 | 4 | .... | 5 | .... | 5 | .... | .... | .... | 7 | 7 | .... | 7 | 7 | .... |
| West Virginia | .... | 6 | .... | 6 | .... | 6 | .... | 7 | .... | 7 | .... | .... | 8 | .... | 8 | 7 | 1 | 8 | .... |
| Wisconsin | .... | 12 | .... | 12 | .... | 12 | .... | 13 | .... | 13 | .... | .... | 13 | .... | 13 | 13 | .... | 13 | .... |
| Wyoming | 3 | .... | .... | .... | 3 | 3 | .... | 3 | .... | 3 | .... | .... | 3 | .... | 3 | .... | 3 | 3 | .... |
| Total | 145 | 277 | 22 | 271 | 176 | 292 | 155 | 336 | 140 | 321 | 162 | 8 | 435 | 88 | 531 | 254 | 277 | 404 | 127 |
| Plurality | .... | 132 | .... | 95 | .... | 137 | .... | 196 | .... | 159 | .... | .... | 347 | .... | .... | .... | 23 | 277 | .... |

Arizona became a State February 14, 1912. New Mexico was admitted January 6, 1912.
The electoral vote for Vice President in 1896 was: Republican, 271; Democratic, 149; Populist, 27.

## GOVERNORS OF THE STATES.

| STATE. | Governor. | Term Yrs. | Expires. | STATE. | Governor. | Term Yrs. | Expires. |
|---|---|---|---|---|---|---|---|
| Ala | W. W. Brandon, D | 4 | Jan. 1927 | N. J | G. S. Silzer, D | 3 | Jan. 1926 |
| Ariz | G. W. P. Hunt, D | 2 | Jan. 1925 | N. M | Jas. F. Hinkle, D | 2 | Jan. 1925 |
| Ark | Thos. C. McRae, D | 2 | Jan. 1925 | N. Y | Alfred E. Smith, D | 2 | Jan. 1925 |
| Cal | F. W. Richardson, R | 4 | Jan. 1927 | N. C | Cameron Morrison, D | 4 | Jan. 1925 |
| Colo | Wm. E. Sweet, D | 2 | Jan. 1925 | N. D | R. A. Nestos, R | 2 | Jan. 1925 |
| Conn | Chas. A. Templeton, R | 2 | Jan. 1925 | Ohio | A. V. Donahey, D | 2 | Jan. 1925 |
| Del | Wm. D. Denney, R | 4 | Jan. 1925 | Okla | J. C. Walton, D | 4 | Jan. 1927 |
| Fla | Cary Hardee, D | 4 | Jan. 1925 | Ore | Walter M. Pierce, D | 4 | Jan. 1927 |
| Ga | C. M. Walker, D | 2 | June 1925 | Pa | Gifford Pinchot, R | 4 | Jan. 1927 |
| Idaho | Chas. C. Moore, R | 2 | Jan. 1925 | R. I | Wm. S. Flynn, D | 2 | Jan. 1925 |
| Ill | Len Small, R | 4 | Feb. 1925 | S. C | Thos. G. McLeod, D | 2 | Jan. 1925 |
| Ind | W. T. McCray, R | 4 | Jan. 1925 | S. D | W. H. McMaster, R | 2 | Jan. 1925 |
| Iowa | N. E. Kendall, R | 2 | Jan. 1925 | Tenn | Austin Peay, D | 2 | Jan. 1925 |
| Kan | Jonathan M. Davis, D | 2 | Jan. 1925 | Tex | Pat M. Neff, D | 2 | Jan. 1925 |
| Ky | Edwin P. Morrow, R | 4 | Jan. 1924 | Utah | Chas. R. Mabey, R | 4 | Jan. 1925 |
| La | John M. Parker, D | 4 | May 1924 | Vt | Redfield Proctor, R | 2 | Jan. 1925 |
| Me | Percival P. Baxter, R | 2 | Jan. 1925 | Va | E. Lee Trinkle, D | 4 | Feb. 1926 |
| Md | Albert C. Ritchie, D | 4 | Jan. 1924 | Wash | Louis F. Hart, R | 4 | Jan. 1925 |
| Mass | Channing H. Cox, R | 2 | Jan. 1925 | W. Va | E. F. Morgan, R | 4 | Mar. 1925 |
| Mich | Alex J. Groesbeck, R | 2 | Jan. 1925 | Wis | John J. Blaine, R | 2 | Jan. 1925 |
| Minn | J. A. O. Preus, R | 2 | Jan. 1925 | Wyo | W. B. Ross, D | 4 | Jan. 1927 |
| Miss | Lee M. Russell, D | 4 | Jan. 1924 | Alaska | Scott C. Bone, R | 4 | June 1925 |
| Mo | Arthur M. Hyde, R | 4 | Jan. 1925 | Hawaii | W. R. Farrington | 4 | June 1925 |
| Mont | Jos. M. Dixon, R | 4 | Jan. 1925 | Philip's | Gen. Leonard Wood, R | indf. | |
| Neb | Chas. W. Bryan, D | 2 | Jan. 1925 | P. R | E. M. Reily | indf. | |
| Nev | J. G. Scrugham, D | 4 | Jan. 1927 | Virg Isl | S. E. W. Kittelle | | |
| N. H | Fred H. Brown, D | 2 | Jan. 1925 | | | | |

## QUALIFICATIONS FOR VOTING, BY STATES.

| State. | Previous Resid. Required. | | | | Special Qualifications Required (Other Than Citizenship). | Persons Disqualified (Other Than Felons, Idiots and Insane). |
|---|---|---|---|---|---|---|
| | State. | C'nty. | Town or City. | Elec. D Pre. or Ward. | | |
| Ala. | 2 yrs. | 1 yr. | 3 mos. | 3 mos. | Property, or able to read and write, and employment. Poll tax. | Bribery, malfeasance, election crimes, vagrants, tramps (convicted). |
| Ariz. | 1 yr. | 30 dys | 30 dys | 30 dys | Declarants | Persons under guardianship. |
| Ark. | 1 yr. | 6 mos. | 1 mo. | 1 mo. | Poll tax | |
| Cal. | 1 yr. | 90 dys | ..... | 30 dys | Ability to read Constitution and write name. | Bribery, malfeasance, dueling, Chinese. |
| Col. | 1 yr. | 90 dys | 30 dys | 10 dys | | Persons under guardianship. |
| Conn. | 1 yr. | ..... | 6 mos. | ..... | Good moral character, ability to read Constitution. | Bribery, dueling. |
| Del. | 1 yr. | 3 mos. | ..... | 30 dys | | Bribery, paupers. |
| Fla. | 1 yr. | 6 mos. | ..... | 30 dys | Ability to read Constitution and write name. | Bettors on election, bribery, dueling, under guardianship, malfeasance. |
| Ga. | 1 yr. | 6 mos. | ..... | ..... | Ability to read | Delinquent taxpayers. |
| Idaho. | 6 mos. | 30 dys | 3 mos. | 10 dys | Must be registered | Election crimes, teachers of polygamy, persons having guardians. |
| Ill. | 1 yr. | 90 dys | 30 dys | 30 dys | | Penitentiary convicts. |
| Ind. | 6 mos. | 60 dys | 30 dys | 30 dys | Declarants | |
| Iowa. | 6 mos. | 60 dys | 10 dys | 10 dys | | |
| Kan. | 6 mos. | 30 dys | 30 dys | 30 dys | | Bribery, persons under guardianship, duelists, dishonorably discharged officials. |
| Ky. | 1 yr. | 6 mos. | 60 dys | 60 dys | Must be registered | Bribery. |
| La. | 2 yrs. | 1 yr. in | Parish | 3 mos. | Property or ability to read and write. | Inmates of charitable institutions except soldiers' homes interdicted persons. |
| Me. | 3 mos. | ..... | ..... | ..... | Ability to read Constitution and write name. | Bribery, paupers, persons under guardianship, Indians not taxed |
| Md. | 1 yr. | 6 mos. | 6 mos. | 1 day. | Citizens who can read | Bribery, election crimes. |
| Mass. | 1 yr. | 6 mos. | 6 mos. | 6 mos. | Ability to read Constitution and write name. Poll tax. | Election crimes, paupers, persons under guardianship. |
| Mich. | 6 mos. | 20 dys | 20 dys | 20 dys | Civilized Indians may vote | Tribal Indians. |
| Minn. | 6 mos. | 30 dys | 30 dys | 30 dys | Civilized Indians may vote | Persons under guardianship, uncivilized Indians. |
| Miss. | 2 yrs. | 1 yr. | 1 yr. | 1 yr. | Ability to read or explain Constitution. Poll tax. | Bribery, dueling, delinquent taxpayers. |
| Mo. | 1 yr. | 60 dys | 60 dys | 60 dys | Declarants | Soldiers and sailors, paupers. |
| Mont. | 1 yr. | 30 dys | 30 dys | 30 dys | | Indians. |
| Neb. | 6 mos. | 40 dys | 10 dys | 10 dys | | U. S. soldiers and sailors. |
| Nev. | 6 mos. | 30 dys | 30 dys | 30 dys | | Dueling, Indians on reservations, Chinese. |
| N. H. | 6 mos. | 6 mos. | 6 mos. | 6 mos. | Ability to read Constitution and write name. | Paupers, non-taxpayers. |
| N. J. | 1 yr. | 5 mos. | ..... | ..... | | Paupers. |
| N. M. | 1 yr. | 90 dys | 30 dys | 30 dys | | Untaxed Indians. |
| N. Y. | 1 yr. | 4 mos. | 30 dys | 30 dys | New voters must be able to read and write English. | Bettors on elections, bribery. |
| N. C. | 1 yr. | 4 mos. | ..... | 4 mos. | Must be registered | |
| N. D. | 1 yr. | 90 dys | ..... | 30 dys | Civilized Indians may vote | Persons under guardianship, U. S. soldiers and sailors. |
| Ohio. | 1 yr. | 30 dys | 20 dys | 20 dys | | U. S. soldiers and sailors. |
| Okla. | 1 yr. | 6 mos. | 30 dys | 30 dys | Must be registered | Non-native Indians, persons kept in poor houses, except Federal and Confederate soldiers. |
| Ore. | 6 mos. | No specified time | | | 30 days in district required in school elections. Property. | Soldiers and sailors, Chinese. Registration required. |
| Pa. | 1 yr. | ..... | ..... | 2 mos. | | Bribery, election crimes, non-taxpayers. |
| R. I. | 2 yrs. | ..... | 6 mos. | ..... | Property, $134 or $7 per annum. | Bribery, paupers, persons under guardianship, Indians of Narragansett tribe. |
| S. C. | 2 yrs. (6 mos publi | 1 yr. for m cschoo | 4 mos. inisters l teach | 4 mos. and ers.) | Ability to read and write, or owns and pays taxes on $300 or more of property. | Bribery, election crimes, paupers, duelists. |
| S. D. | 1 yr. | 90 dys | 30 dys | 30 dys | | Persons under guardianship. |
| Tenn. | 1 yr. | 6 mos. | ..... | ..... | Poll tax | |
| Tex. | 1 yr. | 6 mos. | 6 mos. | 6 mos. | Declarants. Poll tax | Bribery, dueling, paupers, U. S. soldiers and sailors. |
| Utah. | 1 yr. | 4 mos. | ..... | 60 dys | | Election crimes. |
| Vt. | 1 yr. | 3 mos. | 3 mos. | 3 mos. | Good behavior; must take freeman's oath. | Election bribery. |
| Va. | 2 yrs. | 1 yr. | 1 yr. | 30 dys | Poll tax | Bribery, dueling, paupers. |
| Wash. | 1 yr. | 90 dys | 30 dys | 30 dys | Ability to read and write English. | Untaxed Indians. |
| W. Va. | 1 yr. | 60 dys | 10 dys | ..... | | Bribery, paupers, U. S. soldiers and sailors. |
| Wis. | 1 yr. | 10 dys | 10 dys | 10 dys | Civilized Indians may vote | Bettors on election, dueling, persons under guardianship. |
| Wyo. | 1 yr. | 60 dys | 10 dys | 10 dys | Ability to read Constitution, unless physically disabled. | |

Arizona and Oklahoma—Questions upon bond issues or special assessments submitted to vote of property taxpayers.

Alaska—Must have been one year in Territory and six months in precinct, to vote

Idaho—Chinese and Indians not taxed are disqualified.

Louisiana—Special qualifications—Must have paid a poll tax two years unless over sixty and be an enrolled voter.

Massachusetts—Must be in election district, precinct or ward C., LG., S. & R. Does not apply to those over sixty or physically disqualified. Naturalized must be United States residents for two years before voting.

Mississippi—Time in election district, precinct or ward—ministers six months.

North Carolina—Special qualifications—Must be registered. Those over fifty and those just coming of age need not pay poll tax.

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Texas—In city or town elections only taxpayers to vote on expenditures of money or assumption of debt.

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- MERCANTILE ..... ☐
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- PAYROLL HOLD-UP..... ☐

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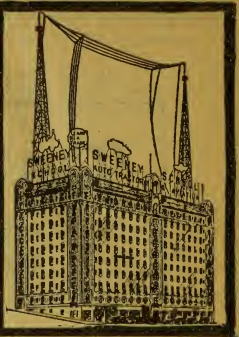

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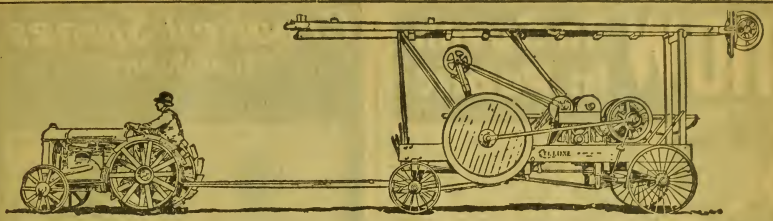

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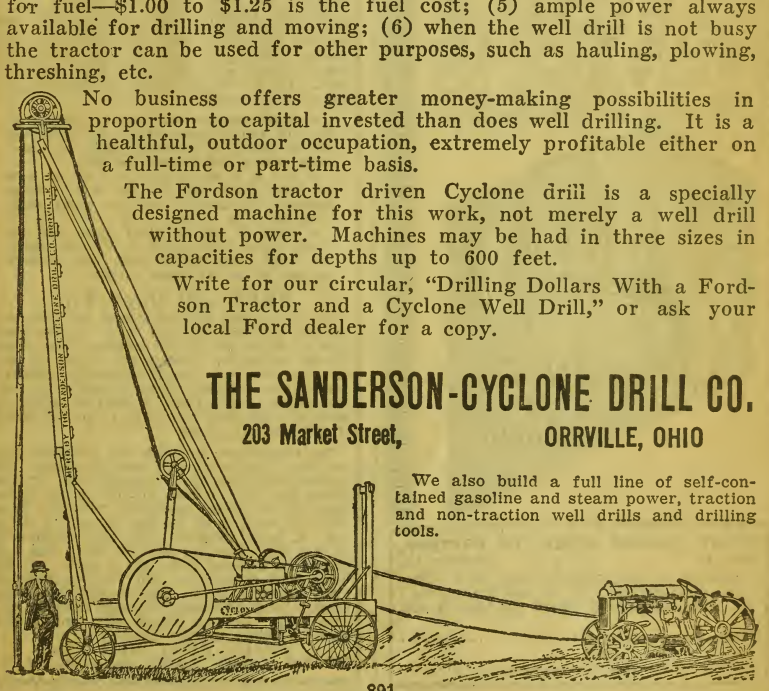

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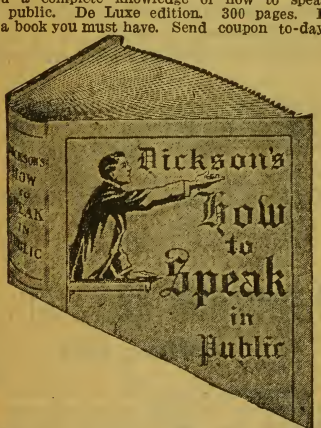


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## Try This Test Now

*Correct answers shown in panel at the right.*

**1. Would You Write—**

| | | |
|---|---|---|
| Between you and I | or | Between you and ME |
| I HOPE it would come | or | I WISH it would come |
| WHO shall I call | or | WHOM shall I call |
| It's just AS I said | or | It's just LIKE I said |
| How MANY are there | or | How MUCH are there |
| I WOULD like to go | or | I SHOULD like to go |
| The FIRST TWO lessons | or | The TWO FIRST lessons |
| He sat AMONG the three | or | He sat BETWEEN the three |
| The wind blows COLD | or | The wind blows COLDLY |
| You will FIND ONLY one | or | You will ONLY FIND one |

**2. How Do You Say—**

| | | | | |
|---|---|---|---|---|
| evening | EV-en-ing | or | EVE-ning |
| ascertain | AS-cer-tain | or | as-CER-tain |
| hospitable | HOS-pi-ta-ble | or | hos-PIT-able |
| abdomen | AB-do-men | or | ab-DO-men |
| mayorally | MAY-or-al-ty | or | may-OR-al-ty |
| amenable | a-ME-na-ble | or | a-MEN-able |
| acclimate | AC-cli-mate | or | ac-CLI-mate |
| profound | PRO-found | or | pro-FOUND |
| beneficiary | ben-e-fi-shEE-ary | or | ben-e-FISH-ary |
| culinary | CUL-lina-ry | or | CU-li-na-ry |

**3. Do You Spell It—**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| superCede | or | superSede | | repEtition | or | repItition |
| recEIve | or | recIEve | | sepArate | or | sepErate |
| reprEIve | or | reprIEve | | aCoModate | or | aCCoMModate |
| donkEYS | or | donkIES | | traffiCing | or | traffiCking |
| factorIES | or | factorYs | | aCSeSible | or | aCCeSSible |

Sherwin Cody

### *Answers*

1

Between you and me
I wish it would come
Whom shall I call
It's just as I said
How many are there
I should like to go
The first two lessons
He sat among the three
The wind blows cold
You will find only one

2

EVE-ning
AS-cer-tain
HOS-pi-ta-ble
ab-DO-men
MAY-or-al-ty
a-ME-na-ble
ac-CLI-mate
pro-FOUND
ben-e-FISH-ary
CU-li-na-ry

3

supersede
receive
reprieve
donkeys
factories
repitition
separate
accommodate
trafficking
accessible

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